USER MANUAL

PageGate Version 9 Documentation

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At its most basic level, PageGate is a communication program that translates inputs to turn them in to outputs, usually in the form of messages. Put another way, PageGate allows you to receive and collect data in a variety of formats to deliver as SMS, email, and pages, among many other formats to your recipients.

Beyond that basic explanation, however, PageGate is a sophisticated messaging application. The heart of the program is a high throughput messaging engine that has the ability to support multiple connectors that can send SMS, pages and Email as well as more complex forms of communication such as GET/POST to both request data from or push data to an API.

PageGate supports several front-end interfaces (APIs) that can be used alone or in conjunction with each other. This allows PageGate to receive messages from many sources simultaneously, and deliver them to recipients such as cell phones, alphanumeric pagers and email addresses, among many others. These APIs tell PageGate who a message needs to go to, who or what sent the message, what the message should say and when the message should be sent.

For example, PageGate's GUI Client API is a program that can be installed on any workstation that has UNC/network access to the PageGate server's shared database. This provides a graphical messaging interface for users on workstations and can be incredibly useful for dispatching messages.

As another example, PageGate's GetASCII API allows the program to monitor a directory or series of directories on the local system or a network path for text/ASCII formatted files. The module also provides a command line executable for other programs to pass messaging commands to. This module is used by network performance monitoring programs such as SolarWinds Network Performance Monitor/Orion and Paessler's PRTG and is also used by many computer automated dispatch platforms as well.

For more information on all of PageGate's APIs, have a look at the <u>Accepting Messages</u> section of the documentation.

Once PageGate knows that a message needs to be delivered, it supports many delivery protocols for sending messages to many devices and receiving systems. It can send messages to cell phones, alphanumeric pagers, email addresses, web servers, PIMs and chat clients, among others.

For more information on how PageGate can deliver messages, have a look at the <u>Sending Messages</u> section of the manual.

As an example of a simple configuration, PageGate can accept messages from a dispatcher, who manually enters messages into PageGate's GUI Client application to send those messages to cell phones, pagers and email addresses.

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In a more complex example, PageGate can be simultaneously receiving hundreds of messages from multiple sources such as email, webpages, monitored serial ports for alarm systems, manual dispatchers and integration with other applications while also delivering them through up to sixteen concurrent outbound communication sessions implementing multiple protocols to multiple sources.

PageGate can be installed to run on a single non-dedicated workstation, or using its modular architecture, PageGate can actually be installed across a dozen or more computers for a truly high-performance messaging gateway system.

What's New

Take advantage of the powerful and efficient PageGate version 9!

New Protocol: AWS SNS

PageGate now supports using the Amazon Web Services Simple Notification System for message delivery.

• Enhanced Web API, REST API and webform support

Updated support for multiple authentication styles and custom templates allow PageGate to interact with nearly any Web API, REST API or webform and to both send and receive information. This allows you to interact more fully with ticket tracking systems, records management systems, SMS delivery systems and many, many others!

HTTP Request input method

PageGate has a new HTTP data receiver that can receive input from nearly any API or protocol that offers an HTTP request like HTTP GET, HTTP POST and WCTP, which allows you to receive JSON, XML, HTML, WCTP and similar data submissions via HTTP/S request.

• TCP Server Module

This module allows PageGate to run a TCP server/listener, enabling it to accept TCP packets from any source, which is incredibly useful for loT integration.

• <u>UDP Server Module</u>

This module allows PageGate to run a UDP server/listener, enabling it to accept UDP packets from any source, which is incredibly useful for loT integration.

• TAP-IP Server Module

This module allows PageGate to accept the TAP protocol by TCP.

Log Monitoring Feature

PageGate's log monitor feature allows it to scan through its own log files and trigger certain behaviors, like executing a script and/or writing a file to a directory, based on your search criteria.

Integrated filters and enhanced two-way messaging

In version 9, we've integrated filter support in to PG Admin, allowing you to call on filters at every level of the input and output processes PageGate offers. Combined with the addition of the new HTTP data receiver, it's never been easier to make web requests in to PageGate!

• Enhanced support for cellular hardware and infrastructure

PageGate version 9 has continued to build on previous versions' hardware support and can use any style of <u>cellular hardware</u> you may need to interact with, from cellular gateways on virtual machines to cellular modems connected to physical servers.

Accepting Messages

PageGate is designed to easily integrate with other applications by providing a range of front-end APIs. Once integrated, your application(s) will be able to send messages to the recipients and groups that have been configured in the software, and even send messages through PageGate for recipients that aren't configured in the program's database with PageGate's Ad-Hoc Messaging feature.

PageGate supports the following integration methods:

GUI Client

The PageGate GUI Client is a Windows based program that can be installed both on the PageGate server and on workstations that have network access to the PageGate server's database. Recipients and groups configured in the PageGate Admin display in the recipient list, which allows a user to select them to send a message immediately or schedule a message to go out at a later time.

Accepting HTTP Requests

PageGate has an HTTP data receiver that can receive input from nearly any API or protocol that offers an HTTP return like HTTP GET, HTTP POST and WCTP, which allows you to receive JSON, XML, HTML, WCTP and similar data submissions via HTTP/S request.

API Polling

This method allows PageGate to request information from an API using a webform, HTTP GET or HTTP POST method. The information collected from the APIs is then fed through the GetASCII interface and filter scripts for parsing and, as a result, require the GetASCII interface and, optionally, filter pack.

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GetASCII - Command Line / ASCII Interface

This API is capable of monitoring a directory or series of directories on the local hard drive or across the network for ASCII/text file output and also provides a command line interface for other applications to use. Anything that has the ability to output an ascii formatted file (even a log file) or the ability to execute an external program can be integrated with this API. This module allows many 'off the shelf' and custom applications, such as SolarWinds' Network Performance Monitor, Paessler's PRTG and several CAD programs, among many others, to deliver messages when a dispatch is sent.

PageGate Filter Pack

The PageGate Filter Pack allows you to modify any input from any API based on nearly any selection criteria of your choosing. PageGate has the ability to write messages as files for the GetAscii API to process, which allows you to take input from any API and pass it through the filter pack's script(s). The filter pack also allows you to read any plaintext content generated by another application; whether that's another program's log files, XML or HTML content, delimited text or anything that can be read as plaintext.

GetMail - Email Interface (Includes SMTP server)

This API unlocks the ability to receive email in to PageGate by enabling the receiving functions of PageGate's mail server engine. This API provides the ability to host your own messaging domain or sub-domain as well as unlocking an email forwarding feature associated with your recipients and groups. This API also allows PageGate to function as an SMTP/Email receiver for any installation of NotePager Pro, allowing satellite offices to submit messages for processing with a centralized, master server.

GetWeb - Webserver and CGI Interface

Also known as the GetWeb Interface, this API allows PageGate to integrate with a web server to provide a website messaging interface. This allows you to host messaging websites on your local intranet or, if GetWeb is interfaced with an outward facing web server, on the internet. Web Developers can also use this web server interface to send GET/POST requests to notify PageGate when a message needs to be sent, who the message should go to, who sent the message and what the message should say. This interface can also be used to enable PageGate to receive notifications from applications running on different platforms (Unix, Mac, etc.).

• GetSerial - Serial Port (physical or virtual) Interface

Also known as the GetSerial Interface, this API allows PageGate to monitor a serial/RS232 port (physical or virtual) for raw data ASCII strings to be parsed in to outbound messages. When a data string is sent to a monitored serial port, GetSerial pattern matches sections of the data string to parse information for messaging.

• TCP Server Module

This interface allows PageGate to function as a TCP server to receive TCP packets from anything capable of sending TCP packets to a hostname or host IP address. Messages

received by this API are output to a directory as a text file that is then read in by the GetASCII API.

UDP Server Module

This interface allows PageGate to function as a UDP server to receive UDP packets from anything capable of sending UDP packets to a hostname or host IP address. Messages received by this API are output to a directory as a text file that is then read in by the GetASCII API.

Serial to ASCII Module

This is a companion module for GetSerial and unlocks the ability to monitor additional serial/RS232 ports (physical or virtual), up to 16. This module requires the GetAscii API to function.

GetTAP - TAP Interface

Also known as the GetTAP Interface, this API allows PageGate to monitor a serial port or answer a modem call to receive TAP transmitted pages. This allows PageGate to function as a TAP receiver or a TAP terminal for any devices and systems that can transmit that protocol, such as a Zetron or Motorola messaging terminal as well as a few CAD systems. This also allows PageGate to function as a TAP receiver for any installation of NotePagerPro, allowing satellite offices to submit messages for processing with a centralized, master server.

TAP to ASCII Module

This is a companion module for GetTAP and unlocks the ability to monitor additional serial/RS232 ports or modems, up to 16. This module requires the GetAscii API to function.

• TAP over TCP/IP Server Module

This API allows you to receive the TAP protocol by TCP/IP instead of by serial or modem line. This module requires the GetAscii API to function.

• SNPP Server Module

This API allows PageGate to function as an SNPP server to receive this protocol from any source that can send it. Messages received by this API are output to a directory as a text file that is then read in with the GetAscii API. This also allows PageGate to function as an SNPP receiver for any installation of NotePager Pro, allowing satellite offices to submit messages for processing with a centralized, master server. This module requires the GetAscii API to function.

TouchTone Server Module (DTMF)

This API provides the ability to monitor a voice modem to answer calls and receive DTMF signals and output them as text to a file for the GetAscii API to process. This module requires the GetAscii API to function.

• Registry Polling

The GetAscii API can accept messages that are passed to it via the Windows registry.

Windows Messages

This option enables other software to send new messages to the <u>GetAscii</u> interface by sending it a 'Windows Message'. Windows Messages can be sent by using the SendMessage() Windows API call.

• Direct Database Access

PageGate uses an MSJet database that can be linked to other databases by ODBC expression.

Sending Messages

PageGate has the ability to send messages in a variety of formats to a variety of sources. You can send text messages to phones, pages to pagers, email to email addresses, update webpages with a CGI GET or POST statement, among other methods.

So, to send messages, you first need to know what type of messages you want to send.

How to send SMS/text messages

How to send Email

How to send pages

Communicating with chat servers, web APIs and other delivery methods

Since reliability is incredibly important, PageGate has a <u>failover system</u> that allows you to automatically fail over from one method of communication to another in the event of delivery failure. For more information on how to configure a fail over, have a look at the <u>Failover Scenarios</u> section of the documentation.

This is the complete list of supported delivery protocols.

- <u>AWSSNS</u> (Amazon Web Services Simple Notification Service)
 A method used to communicate with the Amazon Web Services (AWS) API to deliver messages through their Simple Notification System (SNS).
- <u>SNPP</u> (Simple Network Paging Protocol)
 A standard message delivery protocol for internet communication to a wireless provider.
- <u>WCTP</u> (Wireless Communications Transfer Protocol)
 A standard message delivery for Internet communications to a wireless provider (both HTTP and HTTPS are supported).
- <u>SMTP</u> (Simple Mail Transport Protocol)

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The protocol used to deliver email.

• <u>GSM-AT</u> (Global System for Mobile communication AT Command Set)
A method used to communicate with a cellular modem or other connected wireless device that provides a COM port in Windows and supports the AT command set for SMS delivery.

• <u>GSM-AT-IP</u> (Global System for Mobile communication AT Command Set over IP)
A method used to communicate with a cellular modem, router, gateway or other connected wireless device that accepts a command set by TCP for SMS delivery.

HTTPGET

The GET method of passing CGI parameters to a web API.

HTTPPOST

The POST method of passing CGI parameters to a web API.

XMPP (Extensible Messaging and Presence Protocol)

A method used to communicate with a variety of notification and chat programs, su

A method used to communicate with a variety of notification and chat programs, such as Jabber.

• TAP (Telocator Alphanumeric Protocol)

The standard message delivery protocol for analog modem, or direct serial communications to paging providers and terminals.

• <u>TAP-IP</u> (Telocator Alphanumeric Protocol delivered by TCP/IP)
This protocol is used to send messages to a receiving TAP system, normally paging transmitters, by TCP/IP.

• Touch-Tone/DTMF (Dual Tone Multi-Frequency)

A way to deliver touch tone messages to older numeric-only pagers and similar equipment.

<u>FAX</u> (Facsimile Machines)

Message delivery to destination Fax machines via faxmodem.

FAXSrv (Microsoft Fax Server)

This protocol allows PageGate to integrate with a Microsoft fax server for facsimile messages.

RawSerial

Transmission of message text over a standard serial/RS232 port (direct connect or via modem).

RawTCP

Transmission of message text to a host via a TCP/IP connection

File

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Output a message as an ascii formatted file to a specified directory.

UCP (Universal Computer Protocol)

A delivery protocol for analog modem, or direct serial communications to a wireless provider.

For a detailed and contextualized breakdown of what these protocols mean for delivering your messages, have a look at the How PageGate Sends Messages section of the documentation.

SMS (text message) Delivery Methods

Sending SMS is relatively easy and it can be done in a few ways, some of which are hardware based and some of which are internet based.

Typically speaking, hardware methods of SMS delivery tend to be more reliable as they do not rely on an internet connection but SMS delivery services and carrier enterprise systems can be incredibly reliable methods of delivery.

• Carrier Public Gateways

Most carriers support an email-to-SMS system as a free, public service and PageGate supports the ability to send SMTP/Email messages . We try to keep an up to date listing of known carrier domains on our support site.

However, due to the nature of email delivery, this method can be somewhat unreliable and delayed. While this is a viable method of SMS delivery, we don't recommend using it as the primary method.

For more information, see the <u>Carrier Public Gateways</u> section of the documentation.

• Cellular Hardware

On the hardware side of things, there are cellular modems and gateways. These devices have an interface PageGate can use to send and receive SMS just like a cell phone does.

Cellular modems are easier to use with physical systems as they connect by USB and/or RS-232.

Cellular gateways are easier to use in virtual environments as they can be reached via TCP by Telnet or SSH.

For more information, including make and model recommendations, have a look at the <u>Using Cellular Hardware</u> section of the documentation.

• General SMS delivery services

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SMS delivery services are companies that provide a messaging API for you to deliver traffic through and you typically license your SMS services through them, though not every SMS delivery service is intended for use in every environment.

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

General messaging services are designed to be accessible to anyone and are incredibly easy to register and configure for the end user, though they are typically intended for lower volume environments. These services include Amazon Web Services SNS, Twilio, MessageBird and similar.

Some companies provide SMS services as an integrated part of a telephony or VOIP solution and PageGate can easily trigger messages through their API. These services include API Daze, Teli and similar.

High volume messaging services are designed for implementations that will need to send 100,000+ messages per month. Contracts are negotiated with the high volume service and PageGate uses their API to trigger messages. These services include Bandwidth, Teli, Infobip and similar.

For more information, have a look at the <u>General SMS Delivery Services</u> section of the documentation.

Public Safety delivery services

Some SMS delivery services are designed to work with public safety dispatching to provide mapping, geopositional and other key data to first responders. These services include Active911, I Am Responding, CodeMessaging and similar.

For more information, have a look at the <u>Public Safety Delivery Services</u> section of the documentation.

• Medical Industry delivery services

Some SMS delivery services are designed to work with hospitals, clinics and other medical services to provide HIPAA compliant secure messaging. These services include TigerConnect, QliqSOFT and similar.

For more information, have a look at the <u>Medical Industry Delivery Services</u> section of the documentation.

Carrier Enterprise Systems

The major North American carriers each have their own respective enterprise messaging platforms. Verizon has EMAG (Enterprise Messaging Access Gateway), AT&T has FirstNet, Sprint has EMG (Enterprise Messaging Gateway), and so on.

<u>Note for Public Safety</u>: Verizon offers free access to dispatch related public safety organizations if you ONLY message Verizon phones through EMAG. Enabling inter-carrier operability requires a paid contract.

PageGate supports the protocols necessary to use these platforms to send your SMS.

For more information, see the <u>Carrier Enterprise Systems</u> section of the documentation. Carrier Public Gateways

Most carriers support an email-to-SMS system as a free, public service and PageGate supports the ability to send SMTP/Email messages. We try to keep an up to date listing of known carrier domains on our support site.

However, due to the nature of email delivery, this method can be somewhat unreliable and delayed. While this is a viable method of SMS delivery, we don't recommend using it as the primary method due to the potential delays and missed messages inherent to it.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

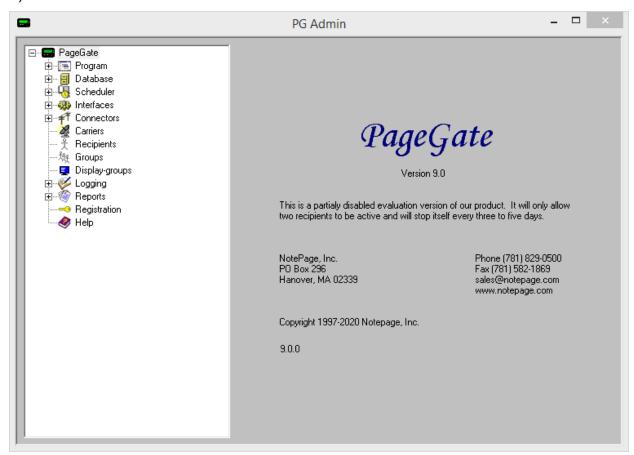
Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

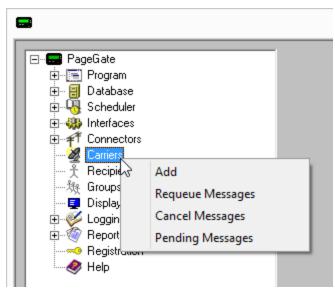
1

Step 1: Configure the Carrier as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: The name of the carrier.

Protocol: SMTP

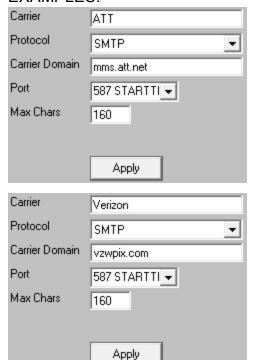
Host: The domain (part after the @) of the carrier host. For a list of known hosts, please see the <u>SMTP Delivery</u> section of our site.

Port: When relaying SMTP, specify the port required by your SMTP server.

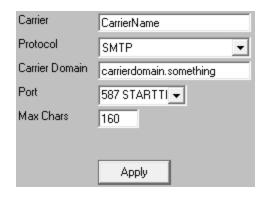
When using direct SMTP, set the port to 25.

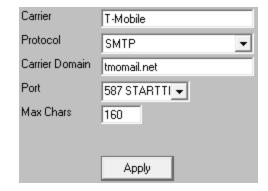
Max Chars: 160

EXAMPLES:



- 4) Go to Carriers YourNewCarrier Advanced
- 5) Specify the following:





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When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers YourNewCarrier Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com



9) Click Apply.

Step 2: Create Recipients tied to the Carrier

Failover

Username

Password

Max PIN Length

Priority

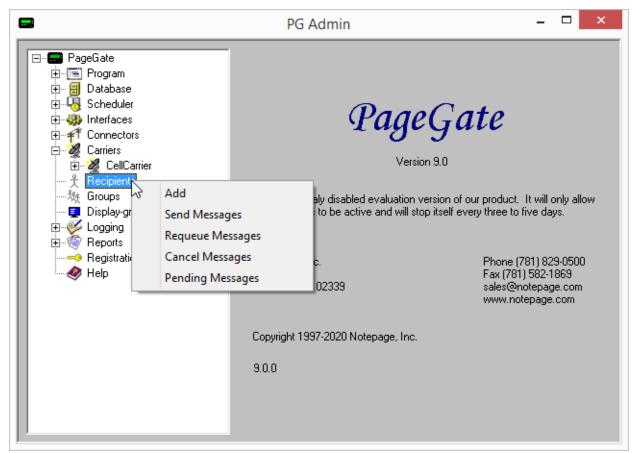
(none)

Deliver directly to destination server

Apply

mailbox@address.here

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

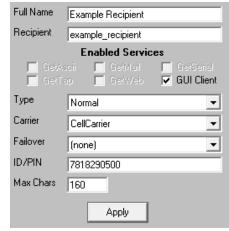
Carrier: The recipient's cell phone carrier

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.



Cellular Hardware

Cellular hardware is the most reliable and efficient method of delivering SMS. By using cellular hardware, you're removing PageGate's reliance on your internet connection to deliver your messages which means that your internet connection could go down and your messages would still be delivered. It's also incredibly important to note that allowing PageGate to interact with cellular hardware is the only method of configuring a two-way-messaging-system with SMS.

SMS capable cellular hardware comes in two varieties: cellular gateway/router and cellular modem.

Cellular Gateways/Routers

Cellular routers and gateways can be accessed via TCP by Telnet or SSH. You don't have to connect these devices to a PC, they just need to be connected to your network and configured appropriately to receive messaging commands.

Good examples of cellular routers/gateways are:

- Multitech's MTR-LNA7, MTR-LVW2 and MTR-LAT1
- Airlink's GX450, RV50, RV55 and LX40
- Microhard IP4nGii
- Cisco Series 800, 900

For clientele in the UK and EU regions

- ConiuGo GmbH 700600150S
- ConiuGo GmbH 700600160S
- ConiuGo GmbH 700600170S

For information on how to configure TCP accessible cellular hardware, have a look at the Creating a GSM-AT-IP Carrier steps.

Cellular Modems

A cellular modem connects to a PC by USB or RS232 and provides a COM port in the operating system.

If PageGate is running in a virtual environment, you can also connect a cellular modem to a COM port virtualizer that provides the COM port to the virtual machine. This grants PageGate access to the cellular modem, which allows it to send and receive text messages just like a cell phone does.

Good examples of cellular modem are:

- Multitech's MTC-H5 and MTR-LNA4
- US Robotics' USR3500
- Microhard's IP4NG
- AirPrime 73xx and 75xx
- Skyus-DS
- BlueOcean GSM and GPRS series
- Duxbury 120 and 180
- Siemens MTC45MC, MTC45TC, TC35, TC65
- Wavecom Fastrack GSM Modems

For information on how to configure RS232 or USB connected cellular hardware, have a look at the Creating a GSM-AT Carrier steps.

General SMS Delivery Services

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

SMS delivery services are companies that provide a messaging API for you to deliver traffic through and you typically license your SMS services through them, though not every SMS delivery service is intended for use in every environment.

Most SMS delivery services offer at least one API that PageGate can use to send messages and some services offer multiple methods that can be used for failover and redundancy. PageGate supports the following delivery methods for internet or local network SMS delivery services:

• HTTP POST and HTTP GET

These methods are used to interact with Web and REST APIs, whether those are internet or local network based. Any SMS service or application that can accept a web form, POST or GET methods can be used for messaging with this protocol.

Typically speaking, there will be a few variables needed to set things up; things like account number, API key and authentication credentials

Examples:

- AWS SNS
- Twilio
- MessageBird
- API Daze

SMTP

Some delivery services offer the ability to email messages in to their platform can can be used for messaging with this protocol.

Services that support this delivery method will have an email domain you'll deliver your traffic through. For configuration steps, please see the <u>Creating a Relayed SMTP Carrier</u> section.

If your SMS delivery service supports multiple API hosts or delivery methods, you can configure them for failover and redundancy. For more information, see the <u>Failover Scenarios</u> section of the documentation.

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

Configuring AWS SNS

Step 1: Create an Amazon Web Services Account

- 1) Go to https://aws.amazon.com/
- 2) Click an AWS Create Account
- 3) Enter the email address and password.
- 4) Enter payment information (required by Amazon)
- 5) Choose your support plan.

Step 2: Create an Access Key for PageGate to use

Creating an access key can be done by providing PageGate access to the root account and password or you can tie the AWS SNS permissions to a specific user account..

If you want PageGate to use the root account, you would do the following:

- 1) Log in to your AWS account.
- 2) In the upper right hand corner, click on your account's name and select 'My Security Credentials'
- 3) Click 'Create new Access Key'
- 4) Copy the 'Access Key ID' and 'Secret Access Key' values as we'll need both in PageGate.

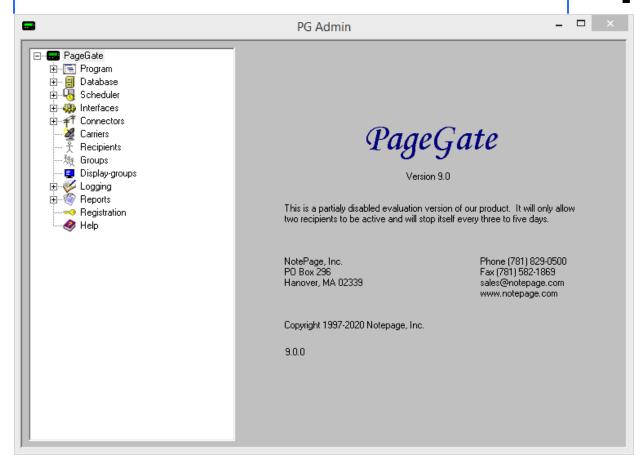
1

If you want to grant the ability to use AWS SNS to an existing account, you would do the following:

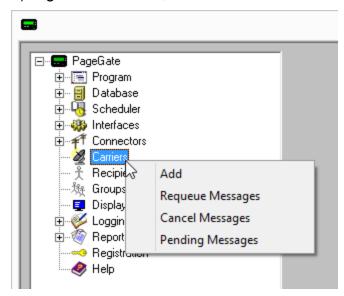
- 1) Log in to your AWS account.
- 2) In the upper right hand corner, click on your account's name and select 'My Security Credentials'
- 3) On the left hand side, click 'Users'
- 4) Select the user in question.
- 5) Click 'Add Permissions'
- 6) Select 'Attach existing policies directly'
- 7) In the 'Filter policies' field, enter: SNS
- 8) Check 'AmazonSNSFullAccess'
- 9) Click Next.
- 10) Click 'Add Permissions'
- 11) Select the 'Security Credentials' tab for that user.
- 12) Click 'Create Access Key'
- 13) Copy the 'Access Key ID' and 'Secret Access Key' values as we'll need both in PageGate.

Step 3: Configure AWS SNS in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

Carrier: AWSSNS Protocol: AwsSns

Host: Please see Amazon's SNS documentation

https://docs.aws.amazon.com/sns/latest/dg/sns-supported-

regions-countries.html

The 'Endpoint' value is what you will use in the this field.

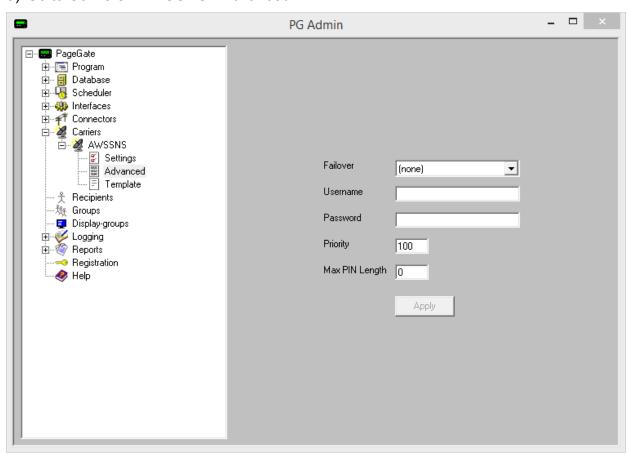
Examples:

sns.us-east-1.amazonaws.com

sns.us-west-2.amazonaws.com

Max Chars: 160

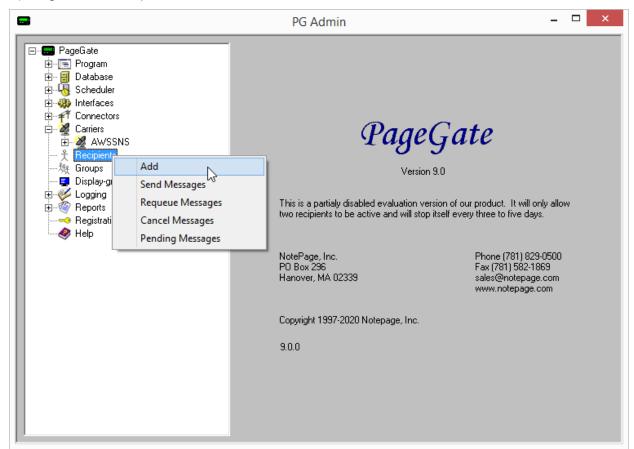
- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers AWSSNS Advanced



- 6) Enter the Access Key ID value in the Username field.
- 7) Enter the Secret Access Key value in the Password field.
- 8) Click Apply.

Step 4: Create Recipients tied to the AWSSNS method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

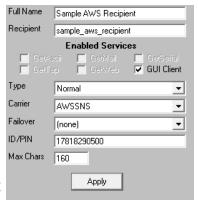
Type: Normal

Carrier: AWSSNS

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

NOTE: For messaging in North America, it is imperative that you provide the 1 in front of the phone number. AWS SNS treats the first character of the phone number as the country



code and you can unintentionally send international SMS if you do not provide the 1.

Correct Incorrect 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring Tw ilio

Step 1: Create a Twilio Account

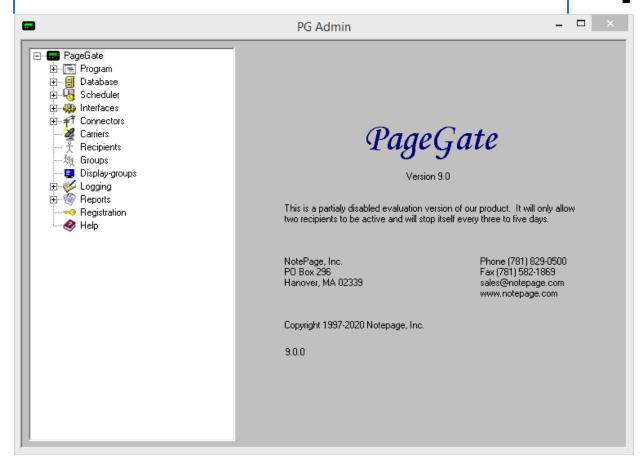
- 1) Go to https://www.twilio.com/
- 2) Click Sign Up
- 3) Create your Twilio Account

Step 2: Create an Access Key for PageGate to use

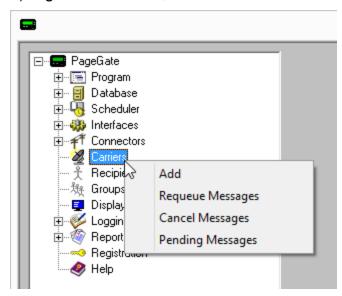
- 1) Log in to your Twilio account.
- 2) On the left hand side, click Settings, then API Keys.
- 3) Click 'Create new API Key'
- 4) In 'Friendly Name', enter: PageGate
- 5) Leave 'Key Type' set to: Standard
- 6) Click 'Create API Key'
- 7) Copy the SID and SECRET values as we'll need both for PageGate.

Step 3: Configure Twilio in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

Carrier: Twilio

Protocol: HTTPPOST

Host: api.twilio.com/2010-04-

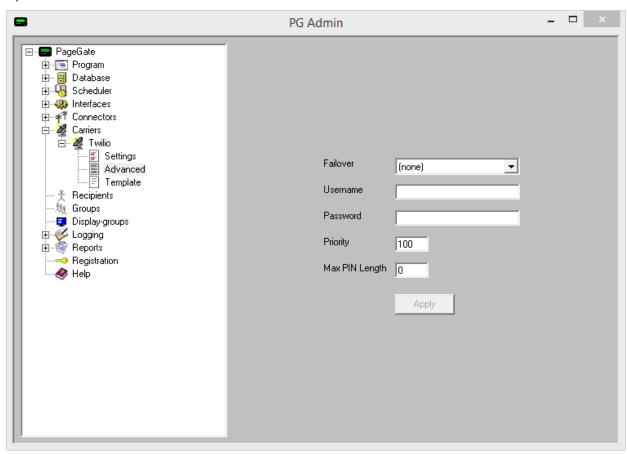
01/Accounts/YourAccountSID/Messages

NOTE: Your account SID is part of the host address.

Port: 443

Max Chars: 160

- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers Twilio Advanced



Carrier

Host

Port

Protocol

Max Chars

Twilio

443

160

HTTPPOST

Apply

api.twilio.com/2010-04-01/Acc

- 6) Enter the SID in 'Username'.
- 7) Enter the SECRET value in 'Password'.
- 8) Click Apply.
- 9) Go to Carriers Twilio Template
- 10) Specify the following in the 'Text' section and click Apply:

|To|%RecipientId%|

1

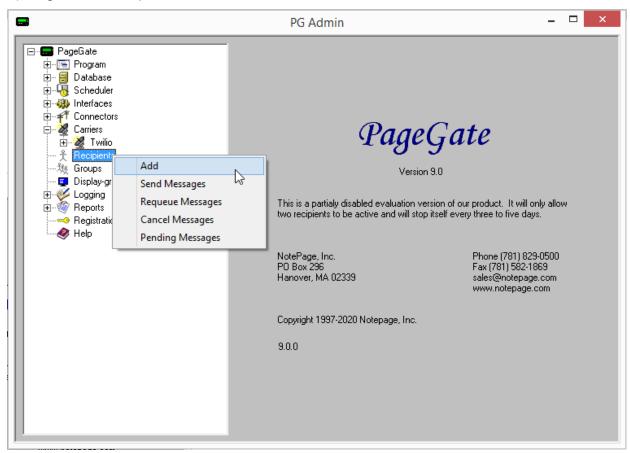
|From|The Phone Number of your Twilio Account in international format. Example: +17818290500|

|Body|%Message%|



Step 4: Create Recipients tied to the Twilio method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

1

✓ GUI Client

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters,

underscores and dashes.

Type: Normal Carrier: Twilio

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

Correct Incorrect 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring MessageBird



Enabled Services

Full Name Sample Twilio Recipient

Recipient sample_twilio_recipient

Step 1: Create a MessageBird Account

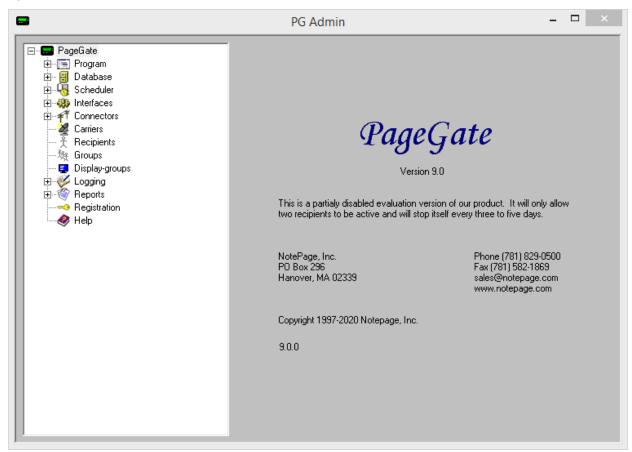
- 1) Go to https://messagebird.com/en/
- 2) Click Sign Up
- 3) Create your MessageBird Account
- 4) In 'Select an interface' section, select REST APIs
- 5) In 'Select a product to try first' section, select SMS API
- 6) In 'Select a use case', select Send SMS
- 7) In 'Get your free test credits', enter your cell phone number for confirmation.
- 8) Enter your verification code.
- 9) Click 'Skip'

Step 2: Create an Access Key for PageGate to use

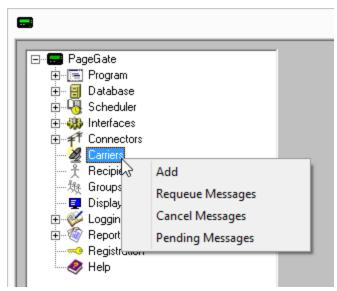
- 1) Log in to your MessageBird account.
- 2) On the right side, under Your API Keys, click Manage API Keys.
- 3) On the left side, click API access
- 4) Click 'Show Key' next to the account you want PageGate to use.
- 5) Copy the Key.

Step 3: Configure MessageBird in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

Carrier: MessageBird

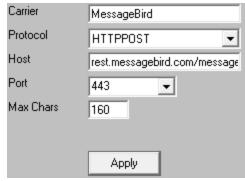
Protocol: HTTPPOST

Host:

rest.messagebird.com/messages

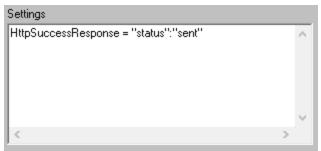
Port: 443

Max Chars: 160



- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers MessageBird Template
- 6) Specify the following in the 'Settings' section:

HttpSuccessResponse = "status": "sent"



7) Specify the following in the 'Text' section:

|Authorization|AccessKeyPasteYourAccessKeyHere|

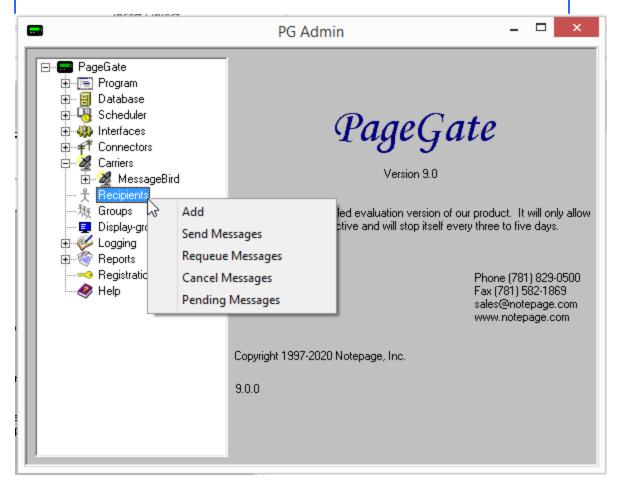
|recipients|%RecipientId%| |originator|%Sender%| |body|%Message%|



8) Click Apply

Step 4: Create Recipients tied to the MessageBird method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: MessageBird

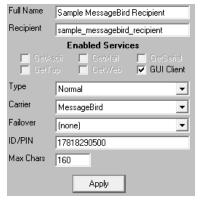
Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

Correct Incorrect 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

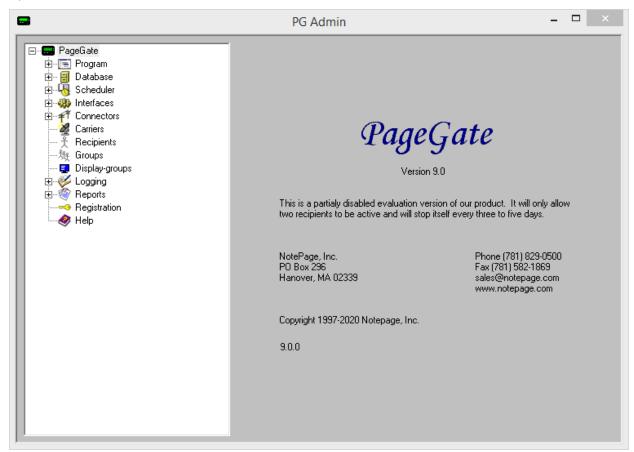
3) Click Apply.



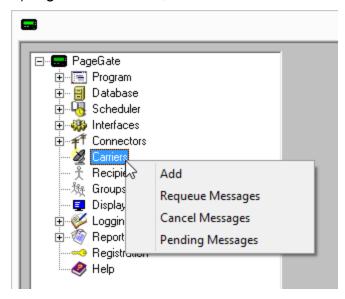
Configuring API Daze

Step 1: Configure API Daze in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



1

Carrier

Protocol

Max Chars

Host

Port

APIDaze

443

160

HTTPPOST

Apply

api4.apidaze.io/yourAPlkey/sm

3) Specify the following:

Carrier: APIDaze

Protocol: HTTPPOST

Host: api4.apidaze.io/yourAPlkey/sms/send?

api secret=yoursecretAPlcode

NOTE: Paste your API code in to the 'yoursecretAPIcode'

section

Port: 443

Max Chars: 160

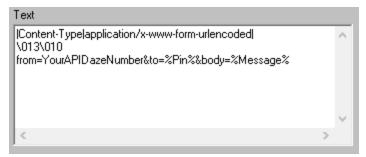
4) Click Apply to add the new delivery method.

- 5) Go to Carriers API Daze Template
- 6) Specify the following in the 'Text' section:

|Content-Type|application/x-www-form-urlencoded|

\013\010

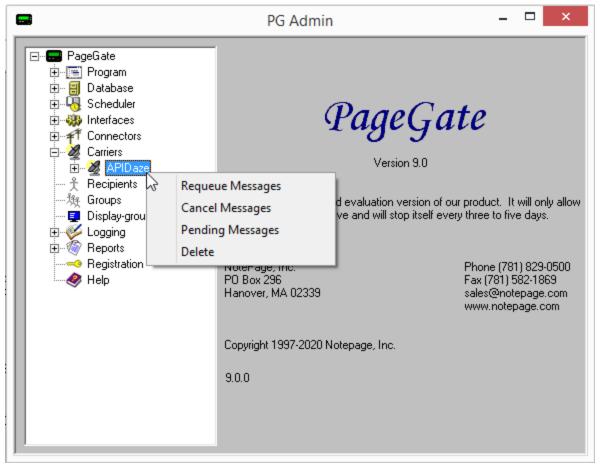
from=YourAPIDazeNumber&to=%RecipientId%&body=%Message%



7) Click Apply

Step 4: Create Recipients tied to the API Daze method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: API Daze

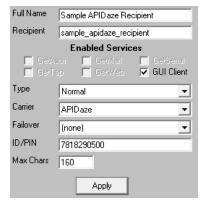
Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

 Correct
 Incorrect

 7818290500
 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

Click Apply.



1

Public Safety Delivery Services

Some SMS delivery services are designed specifically to work with public safety dispatching to provide mapping, geopositional and other key data to first responders.

To use one of these services, you'll take output from a CAD system and pass various data points like call type, address, crossroads and cross-streets to the service. When the service receives that data, they then put it through a field parser to understand what data exists in which field. As a result, these services usually require data to be passed in a consistently structured order.

Typically speaking, the delivery service will work with you to configure their parser but once the parser is configured, it's important that those field positions remain where they are.

Examples:

- Active911
- I Am Responding
- CodeMessaging
- <u>eDispatches</u>
- FireTextResponse
- Rover
- The Fire Horn
- Who's Responding

If your SMS delivery service supports multiple APIs, hosts or delivery methods, you can configure them for failover and redundancy. For more information, see the <u>Failover</u> <u>Scenarios</u> section of the documentation.

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

Configuring Active911

Active911 supports receiving messages by SNPP and SMTP. As a result, we can configure PageGate to use the better and more direct SNPP method first and fail over to SMTP if something goes wrong.

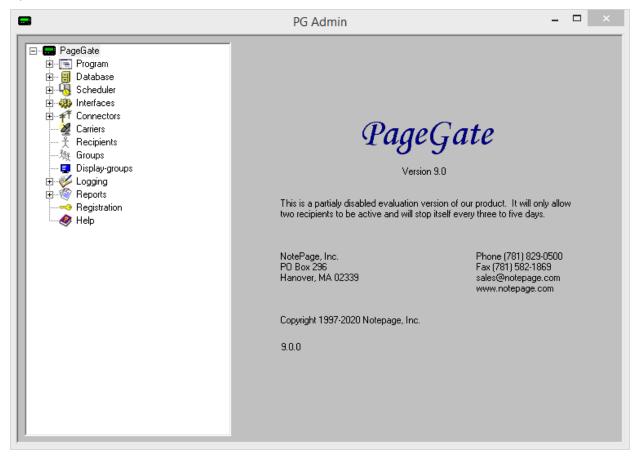
Special Notes:

• Port 444 will need to be open for SNPP traffic.

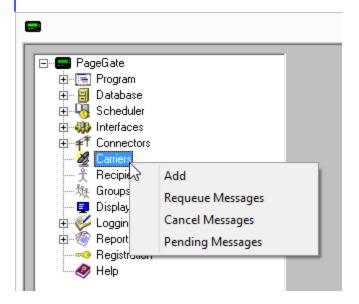
 To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure Active911-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: Active911-PRIMARY

Protocol: SNPP

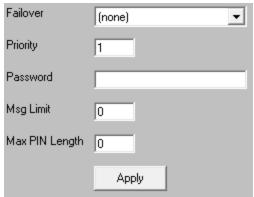
Host: snpp.active911.xcom

Port: 444

Max Chars: 6000



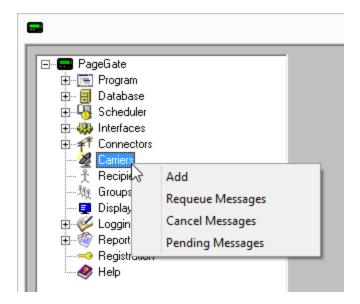
- 4) Go to Carriers Active911-PRIMARY Advanced
- 5) Set Priority to: 1



6) Click Apply

Step 2: Configure Active911-BACKUP as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: Active911-BACKUP

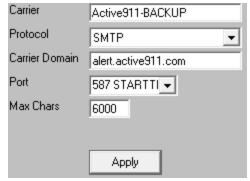
Protocol: SMTP

Host: alert.active911.com

Port: Specify the port required by your

SMTP server.

Max Chars: 6000



- 3) Go to Carriers Active 911-BACKUP Advanced
- 4) Specify the following:

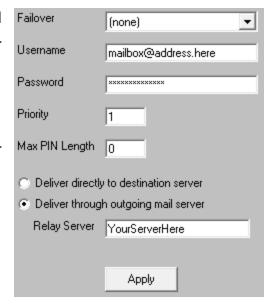
Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

5) Click Apply



1

- 6) Go to Carriers Active 911-BACKUP Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

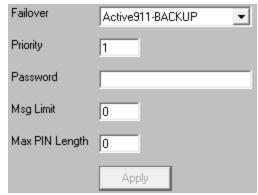
From = CAD@notepage.com



8) Click Apply.

Step 3: Configure the failover

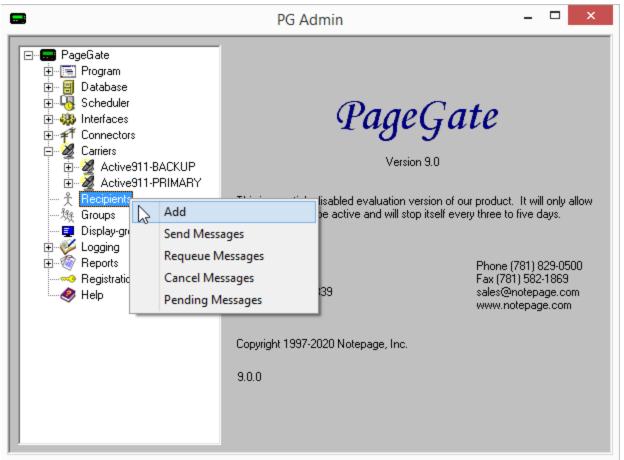
- 1) Go to Carriers Active911-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: Active911-BACKUP



3) Click Apply

Step 4: Create Recipients tied to the Active911 method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

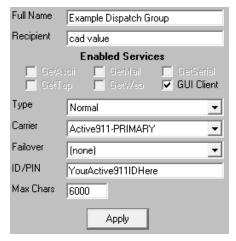
For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: Active911-PRIMARY

Failover: See Failover Scenarios

ID/PIN: The Active911 messaging ID. Typically speaking, Active911 will give you an email address per group you want to send to. The prefix of the email



address, the part before the @, is what you'll use in the ID/PIN field.

For example, if your Active911 ID is 491-x3aAkdbn@alert.active911.com, you would use 491-x3aAkdbn in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring I Am Responding

I Am Responding supports receiving messages by SMTP/Email and has been investigating the possibility of bringing SNPP services online.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

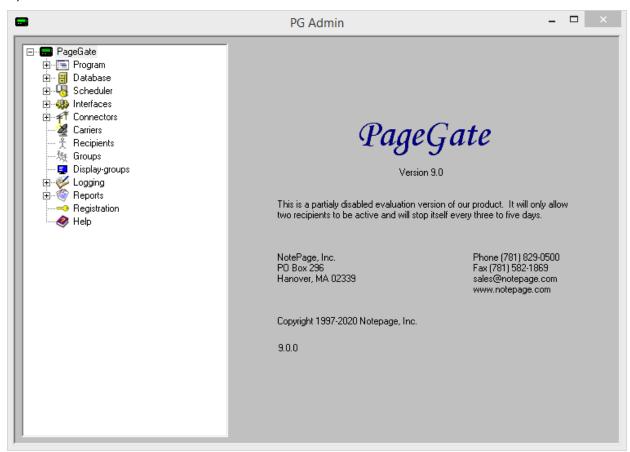
To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

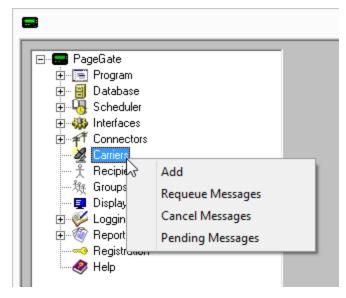
Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

Step 1: Configure IAmResponding as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: IAmResponding

Protocol: SMTP

Host: iaralerts.com

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers IAmResponding Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

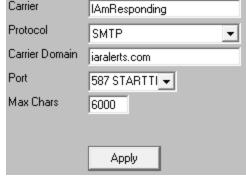
When using direct SMTP, select 'Deliver directly to destination server'.

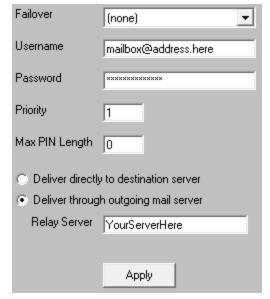
Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers IAmResponding Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com





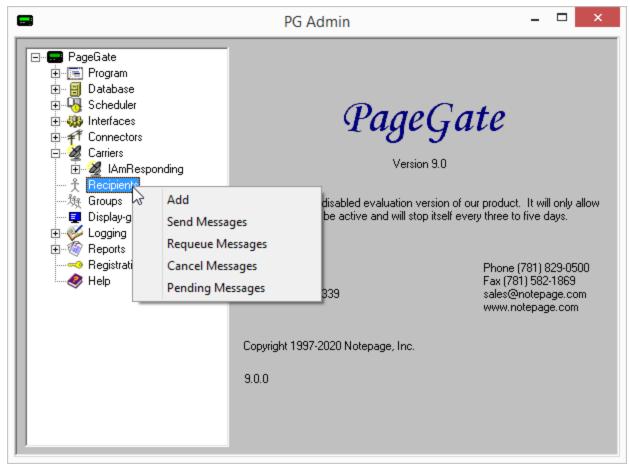


Settings

9) Click Apply.

Step 2: Create Recipients tied to the IAmResponding method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

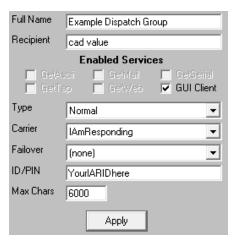
For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: IAmResponding

Failover: See Failover Scenarios

ID/PIN: The IAR messaging ID. Typically speaking, IAR will give you an email address per group you want to



send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.

For example, if your IAR ID is 4912anh@iaralerts.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring CodeMessaging

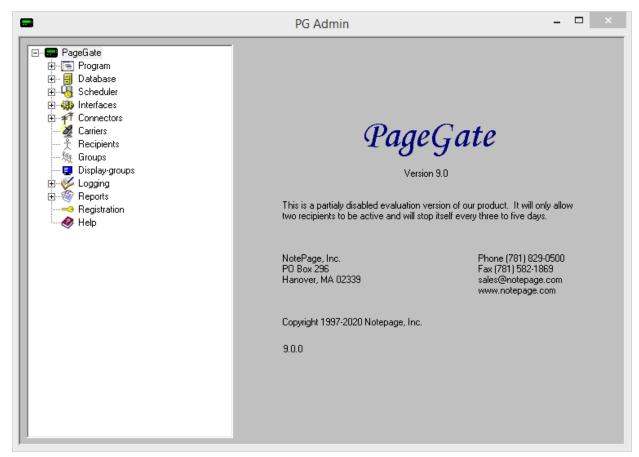
CodeMessaging supports receiving messages by WCTP, SNPP and SMTP. As a result, we can configure PageGate to use the better and more direct WCTP method first, fail over to SNPP if something goes wrong and then have a final last-ditch attempt to deliver it as SMTP/Email.

Special Notes:

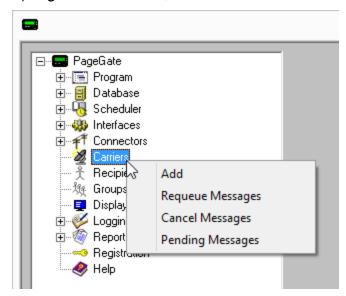
- Port 443 will need to be open for WCTP.
- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure CodeMessaging-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: CodeMessaging-PRIMARY

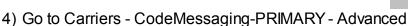
Protocol: WCTP

Host: www.codepassport.net/codepassport.asp?

wci=getWCTP

Port: 443

Max Chars: 1000



5) Specify the following:

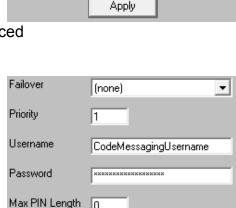
Priority: 1

Username: Contact CodeMessaging to obtain this

information.

Password: Contact CodeMessaging to obtain this

information.



Apply

CodeMessaging-PRIMARY

www.codepassport.net/codepa

WCTP

443

1000

Carrier

Protocol

Max Chars

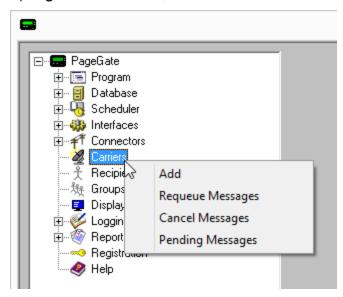
Host

Port

6) Click Apply

Step 2: Configure CodeMessaging-SECONDARY as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

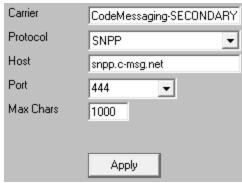
Carrier: CodeMessaging-SECONDARY

Protocol: SNPP

Host: snpp.c-msg.net

Port: 444

Max Chars: 1000



- 3) Go to Carriers CodeMessaging-SECONDARY Advanced
- 4) Specify the following:

Priority: 1

Password: Enter the CodeMessaging username and password values separated by a single space.

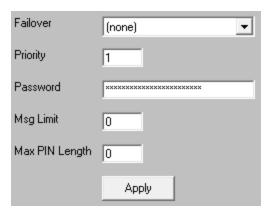
EXAMPLE:

username password

NPSupport PasswordGoesHere

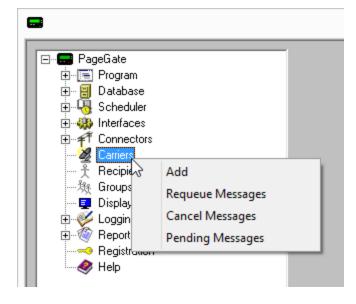
Contact CodeMessaging to obtain your authentication credentials.

5) Click Apply



Step 3: Configure CodeMessaging-FINAL as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

1

•

Carrier: CodeMessaging-FINAL

Protocol: SMTP **Host**: c-msg.net

Port: Specify the port required by your

SMTP server.

Max Chars: 1000



4) Specify the following:

Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

- 5) Click Apply
- 6) Go to Carriers CodeMessaging-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com

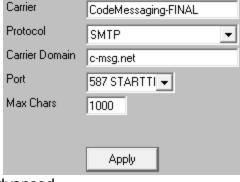


Apply

8) Click Apply.

Step 3: Configure the failover system

- 1) Go to Carriers CodeMessaging-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: CodeMessaging-BACKUP



(none)

10

Deliver directly to destination server
 Deliver through outgoing mail server
 Relay Server YourServerHere

mailbox@address.here

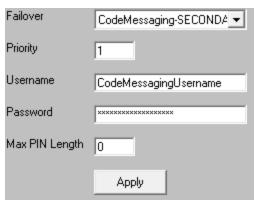
Failover

Username

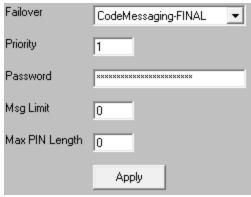
Password

Max PIN Length

Priority



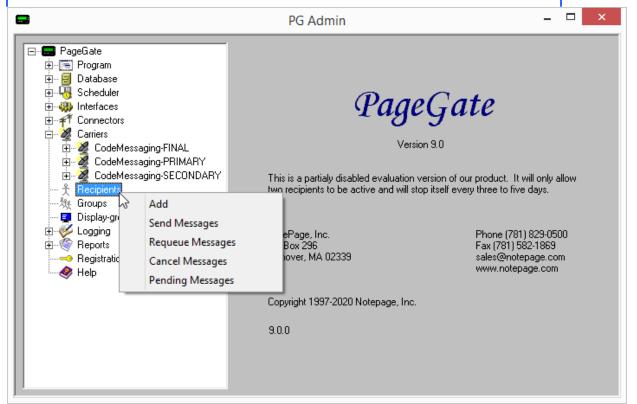
- 3) Click Apply
- 4) Go to Carriers CodeMessaging-SECONDARY Advanced



5) Click the dropdown arrow next to 'Failover' and select: CodeMessaging-FINAL

Step 4: Create Recipients tied to the CodeMessaging method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

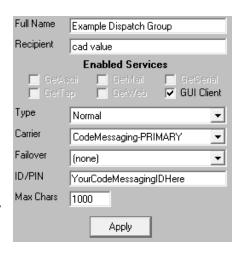
For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: CodeMessaging-PRIMARY

Failover: See Failover Scenarios

ID/PIN: The CodeMessaging messaging ID. Typically speaking, CodeMessaging will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



1

For example, if your CodeMessaging ID is x3aAkdbn@c-msg.net, you would use x3aAkdbn in the ID/PIN field.

Max Chars: 1000

3) Click Apply.

Configuring eDispatches

eDispatches supports receiving messages by SMTP/Email.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

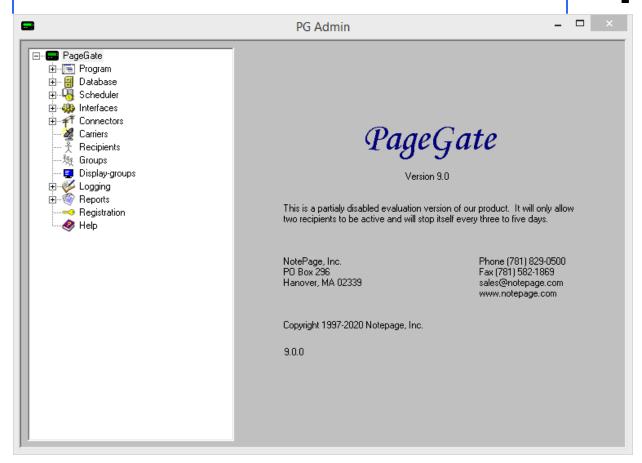
To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

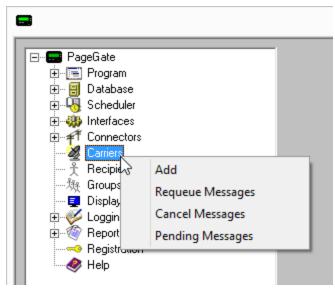
Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

Step 1: Configure eDispatches as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: eDispatches

Protocol: SMTP

Host: edispnoc.com

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers eDispatches Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

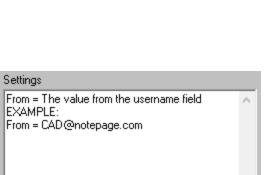
When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers eDispatches Template
- 8) Specify the following in the 'Settings' section:

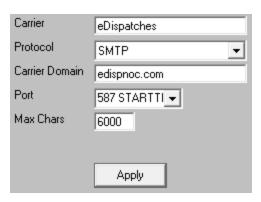
From = The value from the username field **EXAMPLE:**

From = CAD@notepage.com



Apply

Click Apply.



(none)

Deliver directly to destination server.

 Deliver through outgoing mail server Relay Server YourServerHere

mailbox@address.here

Failover

Username

Password

Max PIN Length

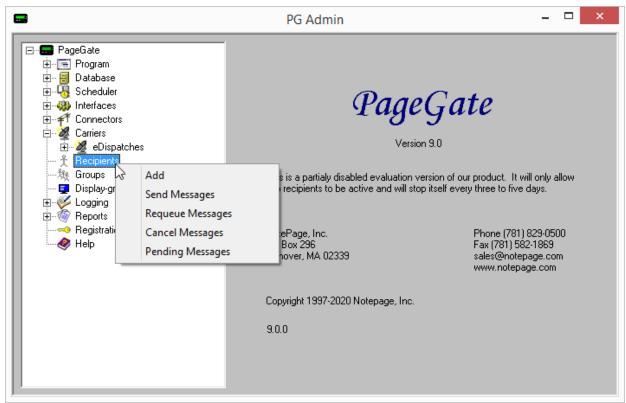
Priority.



1

Step 2: Create Recipients tied to the eDispatches method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

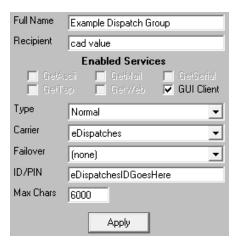
Type: Normal

Carrier: eDispatches

Failover: See Failover Scenarios

ID/PIN: The eDispatches messaging ID.

Typically speaking, eDispatches will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



1

For example, if the eDispatches email address is 4912anh@edispnoc.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring FireTextResponse

FireTextResponse supports receiving messages by SMTP/Email.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

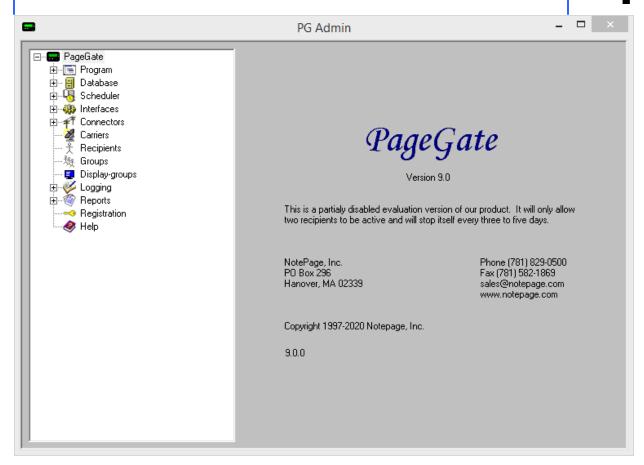
To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

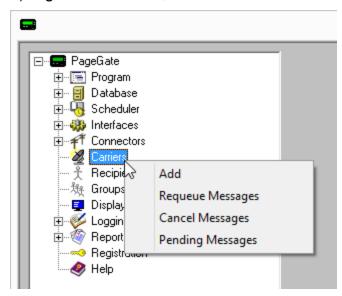
Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

Step 1: Configure FireTextResponse as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: FireTextResponse

Protocol: SMTP

Host: ftralerts.com or ftralerts.net

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers FireTextResponse Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

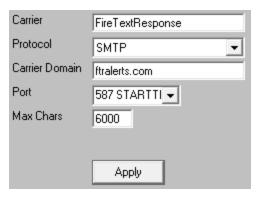
- 6) Click Apply
- 7) Go to Carriers FireTextResponse Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field **EXAMPLE:**

From = CAD@notepage.com



Click Apply.



(none)

Deliver directly to destination server.

 Deliver through outgoing mail server. Relay Server YourServerHere

mailbox@address.here

Failover

Username

Password

Max PIN Length

Priority.

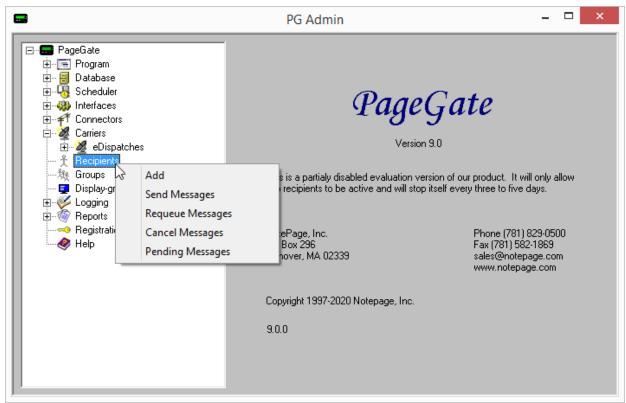


Apply

1

Step 2: Create Recipients tied to the FireTextResponse method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

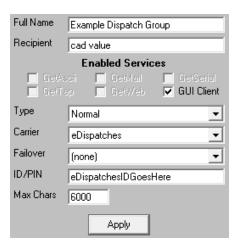
Type: Normal

Carrier: FireTextResponse

Failover: See Failover Scenarios

ID/PIN: The FireTextResponse messaging ID.

Typically speaking, FireTextResponse will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



For example, if the email address is 4912anh@ftralerts.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring Rover

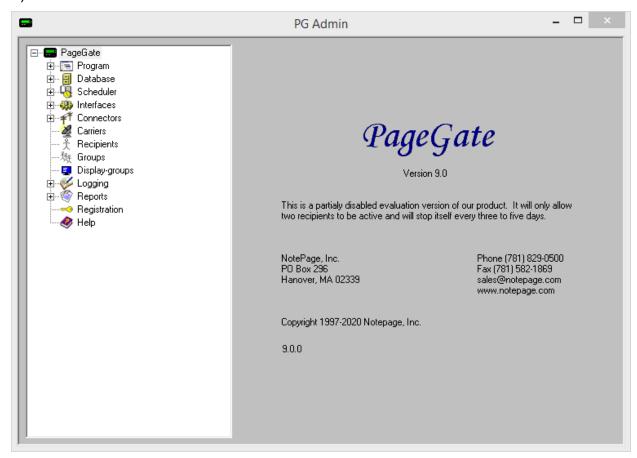
Rover supports receiving messages by WCTP.

Special Notes:

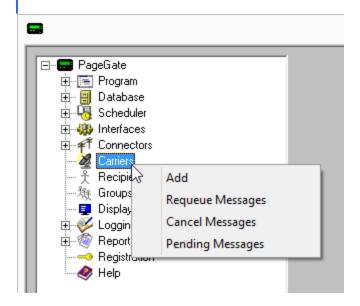
• Port 443 will need to be open for WCTP.

Step 1: Configure Rover as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: Rover

Protocol: WCTP

Host: websvc.spotteddogtech.com

Port: 443

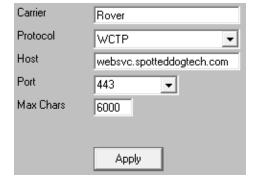
Max Chars: 6000

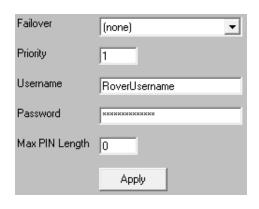
- 4) Go to Carriers Rover Advanced
- 5) Specify the following:

Priority: 1

Username: Contact Rover to obtain this information.

Password: Contact Rover to obtain this information.

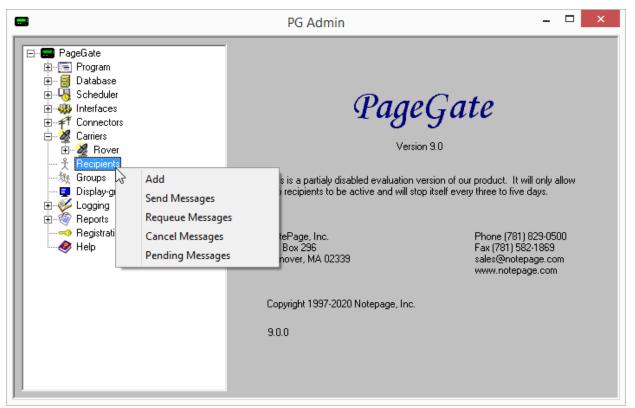




6) Click Apply

Step 2: Create Recipients tied to the Rover method of delivery

Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

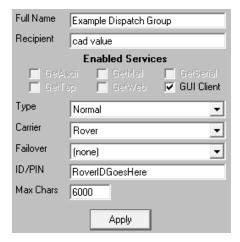
Type: Normal **Carrier**: Rover

Failover: See Failover Scenarios

ID/PIN: Enter the Rover ID

Max Chars: 6000

3) Click Apply.



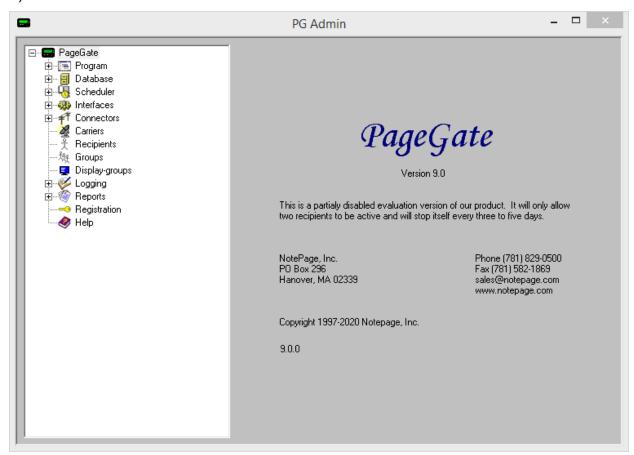
1

Configuring The Fire Horn

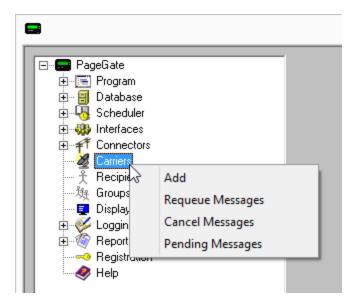
The Fire Horn provides a CGI URL for clients to submit messages to and they can use PageGate's HTTPGET protocol to do so.

Step 1: Configure FireHorn as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: Rover

Protocol: HTTPGET

Host:

thfirehorn.com/api/software_relay/text_message/YourSiteKey Here/

NOTE: You will need your Fire Horn site key as part of the host address.

Port: 443

Max Chars: 6000

4) Go to Carriers - FireHorn - Template

5) Specify the following in the 'Text' section: |message|%Message%|



6) Click Apply

Step 2: Create Recipients tied to the FireHorn method of delivery

1) Right click Recipients, select Add.

Carrier

Host

Port

Protocol

Max Chars

FireHorn

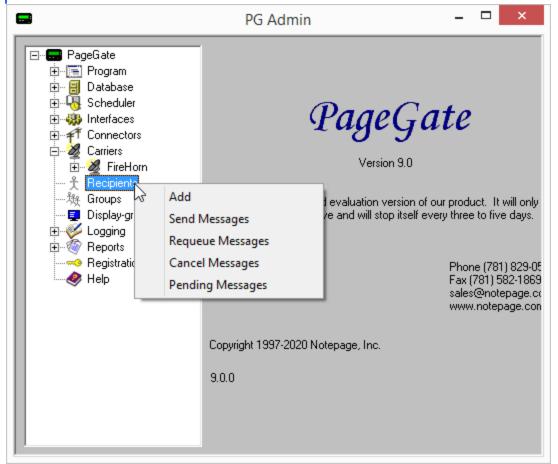
HTTPGET

6000

Apply

thfirehorn.com/api/software_re

▾



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

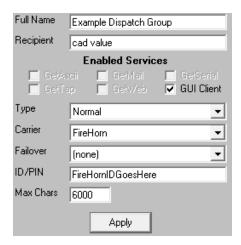
Carrier: FireHorn

Failover: See Failover Scenarios

ID/PIN: Enter the FireHorn ID

Max Chars: 6000

3) Click Apply.



1

Configuring Who's Responding

Who's Responding supports receiving messages by SMTP/Email.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

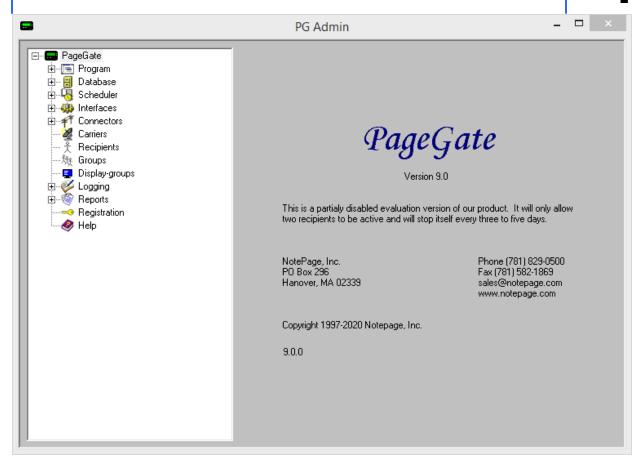
To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

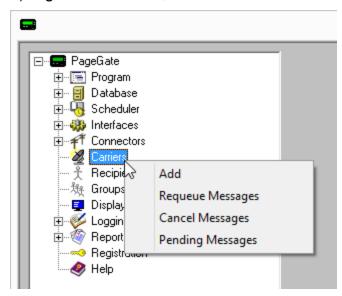
Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

Step 1: Configure WhosResponding as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: WhosResponding

Protocol: SMTP

Host: ds1.whosresponding.com

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers WhosResponding Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers WhosResponding Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field **EXAMPLE:**

From = CAD@notepage.com



Apply



(none)

Deliver directly to destination server.

 Deliver through outgoing mail server. Relay Server YourServerHere

mailbox@address.here

Failover

Username

Password

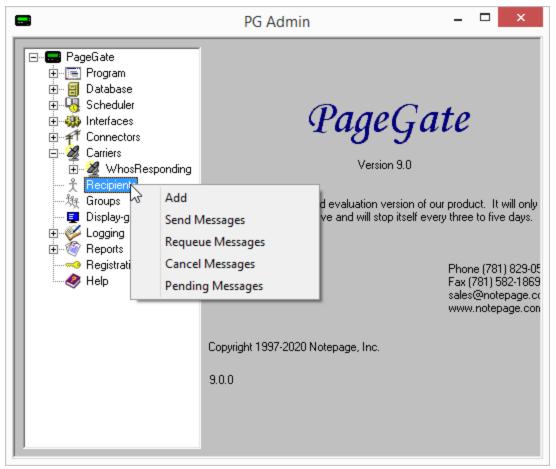
Max PIN Length

Priority.

1

Step 2: Create Recipients tied to the WhosResponding method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: WhosResponding

Failover: See Failover Scenarios

ID/PIN: The Who's Responding messaging ID.



1

Typically speaking, Who's Responding will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.

For example, if the Who's Responding email address is 4912anh@iaralerts.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Medical Industry Delivery Services

Standard SMS/text messaging is not secure, not HIPAA compliant and should never be used to transmit messages with PHI. Some SMS delivery services are designed to work with hospitals, clinics and other medical services to provide HIPAA compliant secure messaging.

In most cases, these services have two methods of operating and some even support both:

A secure server that hosts all messages

With this method, the SMS service hosts a secure messaging server that they provide you and your users access to. When you send a message, the message is created on the secure server and a notification with login link is sent to the end user's phone. The end user must then log in to the secure server to retrieve their message.

• A secure app on the end-user's device

With this method, the SMS service provides a secure messaging app that is installed on the end user's devices. When you send a message, you initiate the message through the service's secure server and they provide the message to the secure app on the device.

For more information, have a look at our article on how secure messaging works.

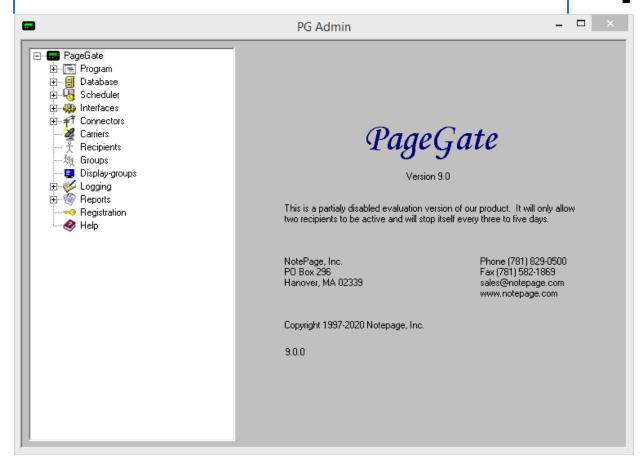
Examples: <u>TigerConnect</u>, <u>QliqSOFT</u>

Configuring TigerConnect

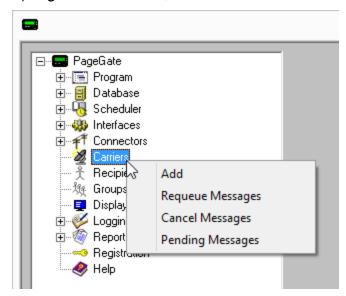
TigerConnect supports receiving messages by WCTP.

Step 1: Configure TigerConnect as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

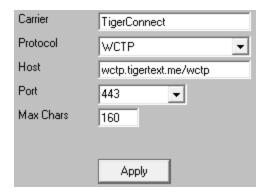
Carrier: TigerConnect

Protocol: WCTP

Host: wctp.tigertext.me/wctp

Port: 443

Max Chars: 160

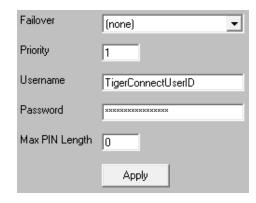


- 4) Go to Carriers TigerConnect Advanced
- 5) Specify the following:

Priority: 1

Username: Enter the TigerConnect UserID.

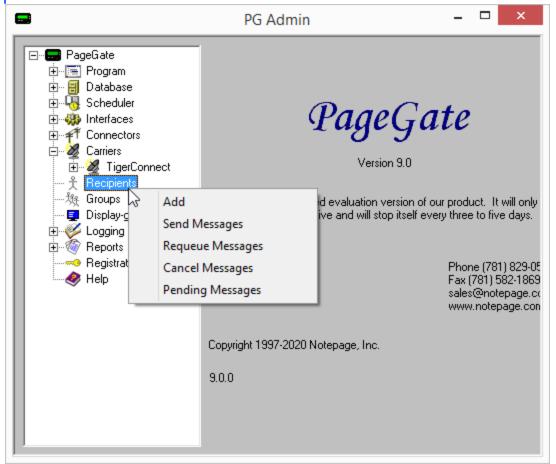
Password: Enter the TigerConnect password.



6) Click Apply

Step 2: Create Recipients tied to the TigerConnect method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: TigerConnect

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

 Correct
 Incorrect

 7818290500
 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

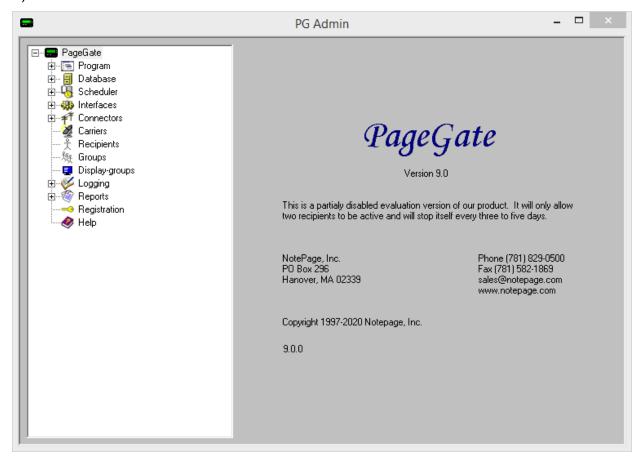


Configuring QliqSOFT

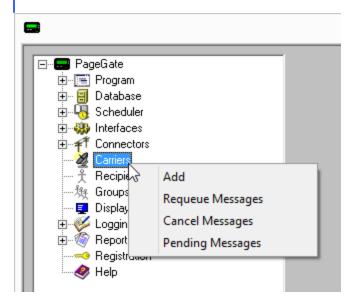
QliqSOFT supports receiving messages by POST method to their secure API.

Step 1: Configure QliqSOFT in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

Carrier: APIDaze

Protocol: HTTPPOST

Host: webprod.qliqsoft.com/secure_messages/send

Port: 443

Max Chars: 160

4) Click Apply to add the new delivery method.

- 5) Go to Carriers QliqSOFT Template
- 6) Specify the following in the 'Text' section:

|api_key|your-QliqSOFT-web-API-key| |to|%RecipientId%| |from|%Sender%| |text|%Message%|



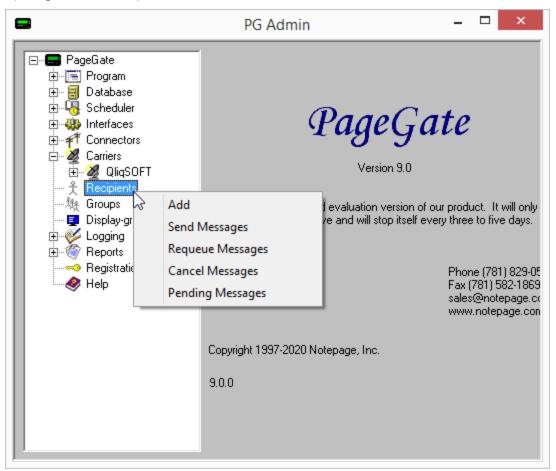


NOTE: You will need your QliqSOFT web API key. Information on how to generate that API key can be found in the QliqSOFT documentation: https://webprod.gliqsoft.com/gliqCONNECT_CloudApiGuide.pdf

7) Click Apply

Step 4: Create Recipients tied to the QliqSOFT method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

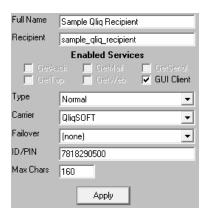
Type: Normal

Carrier: QliqSOFT

Failover: See Failover Scenarios

ID/PIN: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500



1

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Carrier Enterprise Systems

The major North American carriers each have their own respective enterprise messaging platforms and these gateways are ultimately faster and more reliable than the free, public SMTP-to-SMS system. These platforms also typically provide multiple APIs, allowing PageGate to use all of them in a failover capacity.

Access to these gateways is usually not provided free of charge and will require a contract of some variety with the carrier.

- Verizon Enterprise Messaging Access Gateway (EMAG)
- AT&T FirstNet
- Sprint Enterprise Messaging Gateway (EMG)

Configuring EMAG

To register on <u>Verizon's EMAG</u> platform, you'll need to contact your Verizon representative, who will provide an intake form.

In the registration process, you'll need to specify whether your EMAG account has the ability to send to all cell phones, also called inter-carrier operability, or <u>just</u> Verizon cell phones.

Note for Public Safety: Verizon offers free access to dispatch related public safety organizations if you ONLY message Verizon phones through EMAG. Enabling inter-carrier operability requires a paid contract.

On the intake form, you're interested in the WCTP, SNPP and SMTP APIs. With all three, we can configure a failover system where the program will use the best method of delivery (WCTP) first, then fail over to the second best (SNPP) and if that fails, it makes a last ditch attempt to send it out via email (SMTP).

For the WCTP and SNPP APIs, you'll need to provide the public IP address your PageGate server resides behind. You'll also be asked to create a username and password that are unique to each API and we'll need those credentials for PageGate's configuration.

For the SMTP API, you'll need to specify whether you have a cloud based solution, like Office 365, or a traditional SMTP server and provide your email domain and server IP information.

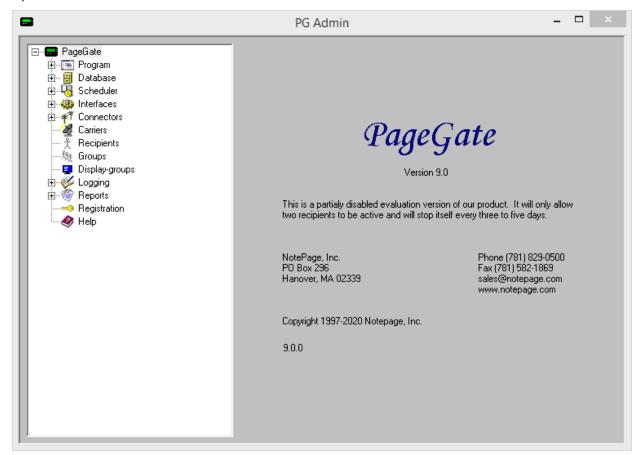
It's important to note that EMAG ties your API credentials to your public IP address. If your public IP address changes, you'll definitely want to update that with EMAG and, if possible, communicate the shift ahead of time

Special Notes:

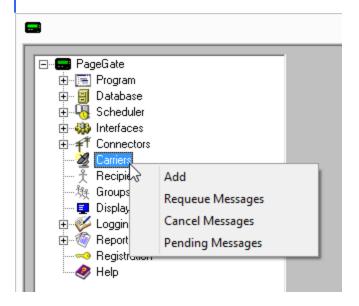
- Port 443 will need to be open for WCTP.
- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure EMAG-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

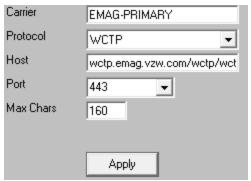
Carrier: EMAG-PRIMARY

Protocol: WCTP

Host: wctp.emag.vzw.com/wctp/wctp

Port: 443

Max Chars: 160

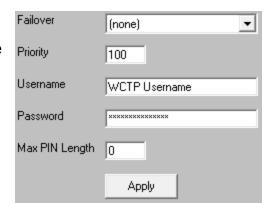


- 4) Go to Carriers EMAG-PRIMARY Advanced
- 5) Specify the following:

Priority: See <u>Prioritizing Messages</u>

Username: The EMAG WCTP API Username

Password: The EMAG WCTP API Password



- 6) Click Apply
- 7) Go to Carriers EMAG-PRIMARY Template
- 8) Specify the following in the 'Settings' section:

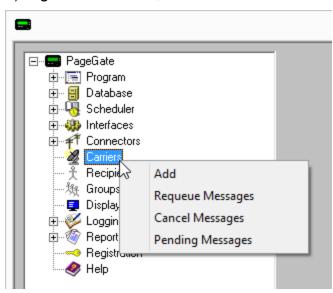
StripNonPrintable = True



9) Click Apply.

Step 2: Configure EMAG-SECONDARY as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

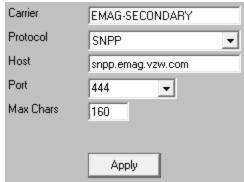
Carrier: EMAG-SECONDARY

Protocol: SNPP

Host: snpp.emag.vzw.com

Port: 444

Max Chars: 160



- 3) Go to Carriers EMAG-SECONDARY Advanced
- 4) Specify the following:

Priority: See <u>Prioritizing Messages</u>

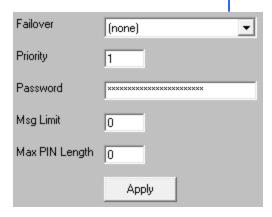
Password: Enter the EMAG SNPP username and password values separated by a single

space.

EXAMPLE:

username password

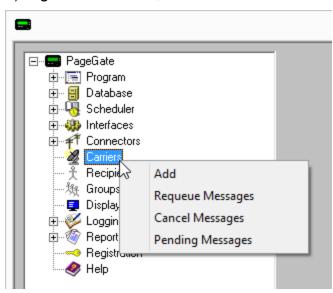
NPSupport PasswordGoesHere



5) Click Apply

Step 3: Configure EMAG-FINAL as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: EMAG-FINAL

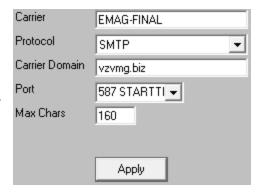
Protocol: SMTP **Host**: vzvmg.biz

Port: Specify the port required by your

SMTP server. Max Chars: 160

3) Go to Carriers - EMAG-FINAL - Advanced

4) Specify the following:



Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Priority: See Prioritizing Messages

- 5) Click Apply
- 6) Go to Carriers EMAG-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com

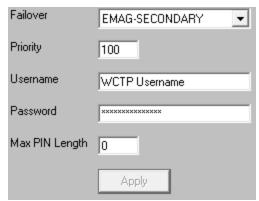




8) Click Apply.

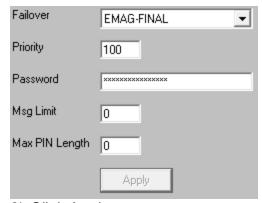
Step 4: Configure the failover system

- 1) Go to Carriers EMAG-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: EMAG-SECONDARY



3) Click Apply

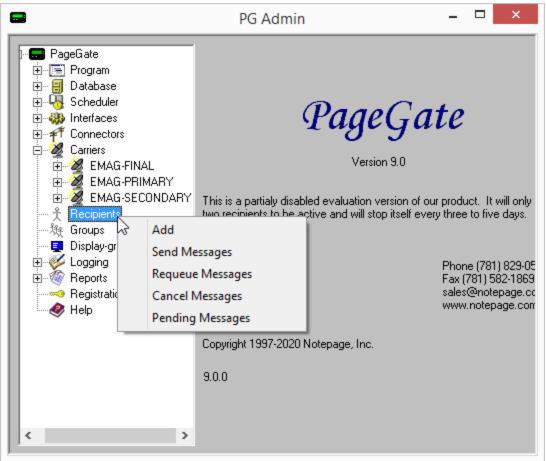
- 4) Go to Carriers EMAG-SECONDARY Advanced
- 5) Click the dropdown arrow next to 'Failover' and select: EMAG-FINAL



6) Click Apply

Step 4: Create Recipients tied to the EMAG-PRIMARY method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

1

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric

characters, underscores and dashes.

Type: Normal

Carrier: EMAG-PRIMARY

Failover: See Failover Scenarios

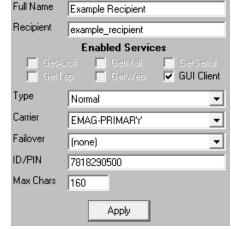
ID/PIN: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring FirstNet



To begin the process of registering on FirstNet, you'll want to contact your AT&T representative or go to https://www.firstnet.com/signup/decision

Unlike other message delivery services, FirstNet does not whitelist the sender and requires that the sender submit a list of specific numbers to message.

Put another way, gather all of the phone numbers you want to messages as you'll need to submit them to FirstNet for whitelisting. If you try to send to a number that is not whitelisted with FirstNet, their hosts will not accept the traffic.

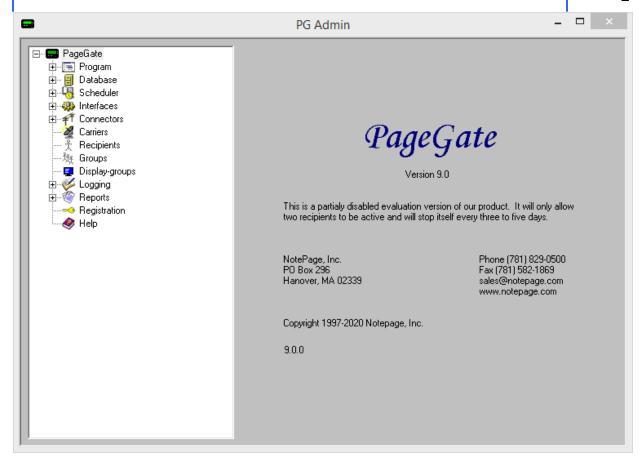
FirstNet supports receiving messages by WCTP, SNPP and SMTP. With all three, we can configure a failover system where the program will use the best method of delivery (WCTP) first, then fail over to the second best (SNPP) and if that fails, it makes a last ditch attempt to send it out via email (SMTP).

Special Notes:

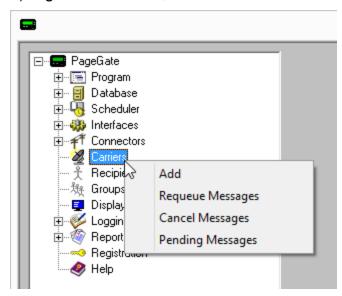
- Port 443 will need to be open for WCTP.
- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure FirstNet-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

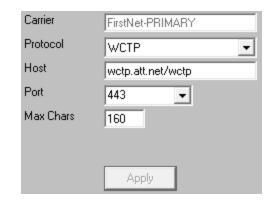
Carrier: FirstNet-PRIMARY

Protocol: WCTP

Host: wctp.att.net/wctp

Port: 443

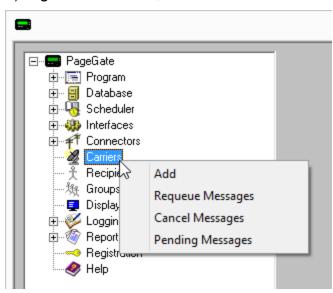
Max Chars: 160



4) Click Apply.

Step 2: Configure FirstNet-SECONDARY as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

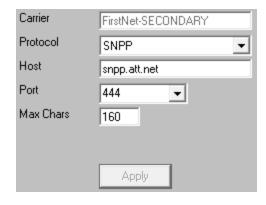
Carrier: FirstNet-SECONDARY

Protocol: SNPP

Host: snpp.att.net

Port: 444

Max Chars: 160

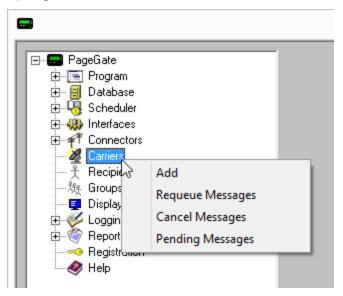


3) Click Apply

Step 3: Configure FirstNet-FINAL as a delivery method

1

1) Right click Carriers, select Add



2) Specify the following:

Carrier: EMAG-FINAL

Protocol: SMTP

Host: mms.att.net

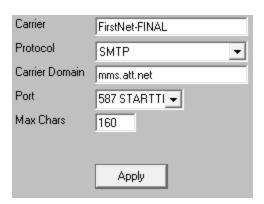
Port: Specify the port required by your

SMTP server.

Max Chars: 160

3) Go to Carriers - EMAG-FINAL - Advanced

4) Specify the following:



Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

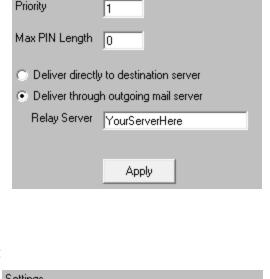
Specify the required username and password.

Priority: See Prioritizing Messages

- 5) Click Apply
- 6) Go to Carriers FirstNet-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com



(none)

mailbox@address.here

Failover

Username

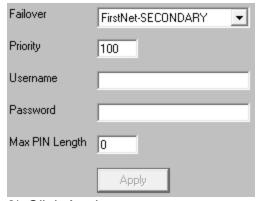
Password



8) Click Apply.

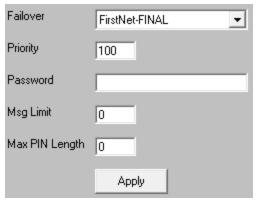
Step 4: Configure the failover system

- 1) Go to Carriers FirstNet-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: FirstNet-SECONDARY



3) Click Apply

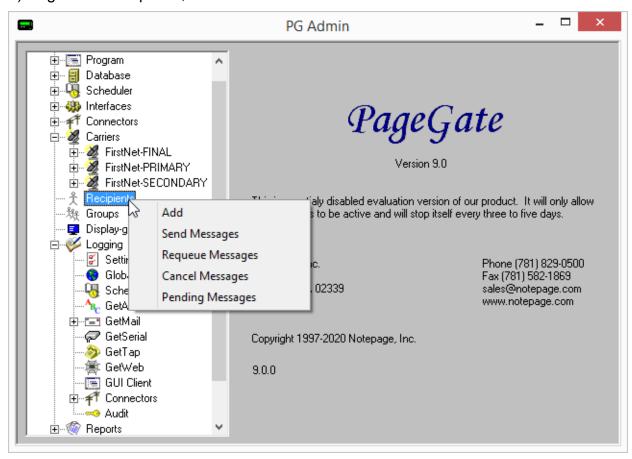
- 4) Go to Carriers FirstNet-SECONDARY Advanced
- 5) Click the dropdown arrow next to 'Failover' and select: FirstNet-FINAL



6) Click Apply

Step 4: Create Recipients tied to the FirstNet-PRIMARY method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric

characters, underscores and dashes.

Type: Normal

Carrier: FirstNet-PRIMARY

Failover: See <u>Failover Scenarios</u>

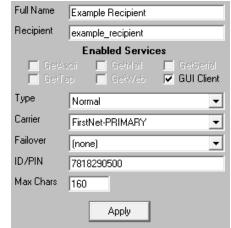
ID/PIN: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring EMG



To begin the process of registering on Sprint's EMG, you'll want to contact your Sprint representative or go to https://emg.sprint.com

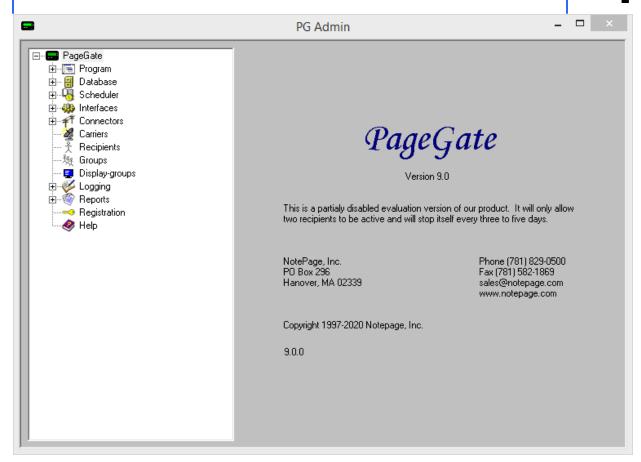
EMG supports receiving messages by SNPP and SMTP. With all both, we can configure a failover system where the program will use the best method of delivery (SNPP) first and if that fails, it makes a last ditch attempt to send it out via email (SMTP).

Special Notes:

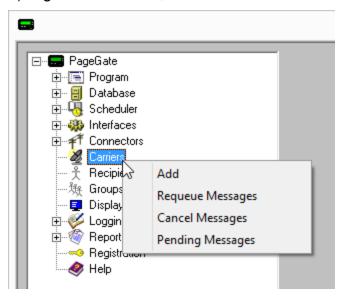
- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure Sprint-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

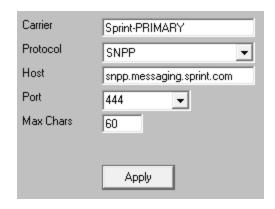
Carrier: Sprint-PRIMARY

Protocol: SNPP

Host: snpp.messaging.sprint.com

Port: 444

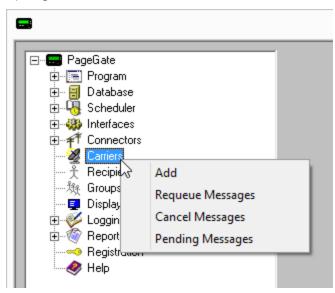
Max Chars: 160



4) Click Apply.

Step 2: Configure Sprint-FINAL as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: Sprint-FINAL

Protocol: SMTP

Host: messaging.sprintpcs.com

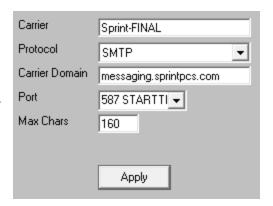
Port: Specify the port required by your

SMTP server.

Max Chars: 160

3) Go to Carriers - Sprint-FINAL - Advanced

4) Specify the following:



Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Priority: See <u>Prioritizing Messages</u>

- 5) Click Apply
- 6) Go to Carriers Sprint-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field **EXAMPLE:**

From = CAD@notepage.com

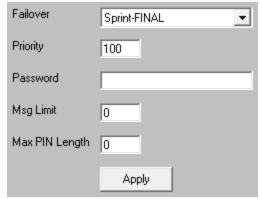




8) Click Apply.

Step 3: Configure the failover system

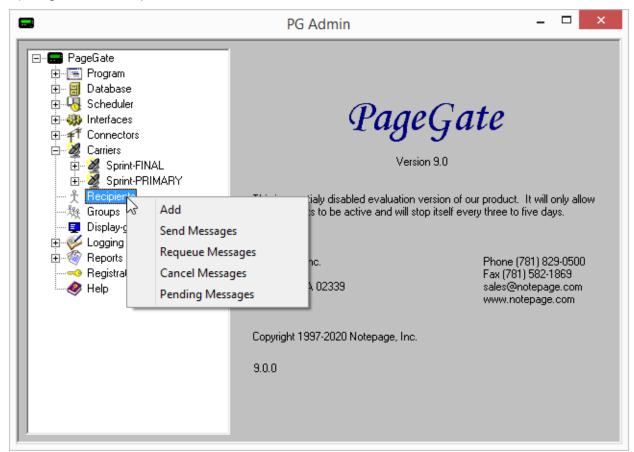
- 1) Go to Carriers Sprint-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: Sprint-FINAL



3) Click Apply

Step 4: Create Recipients tied to the Sprint-PRIMARY method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

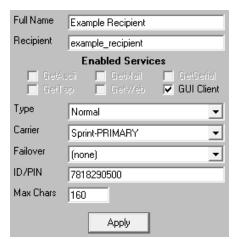
Type: Normal

Carrier: Sprint-PRIMARY

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.



1

3) Click Apply.

How to send Email

SMTP is the protocol used to send email of all varieties, including those delivered as SMS; nearly every US and Canadian carrier supports text messaging to their phones using a public access SMTP/Email gateway.

PageGate has a full mail server engine as a core part of the program and this gives you the ability to send SMTP/Email messages in one of two ways: Direct and Relayed

To explain the difference between the two, direct delivery allows PageGate to use its own mail server engine to directly negotiate with the receiving mail servers. Relayed delivery configures PageGate to pass all of its traffic through a verified SMTP server for delivery, like an email client.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you have PageGate use direct delivery for SMTP/Email, it has to abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain. This is incredibly important to note because, in an effort to combat spam, all major US and Canadian carriers pay respect to SPF records.

SPF stands for "Sender Policy Framework" and is a record of public IP addresses that are allowed to deliver email on behalf of your email domain. This record is published by whoever owns and operates the email domain. If the PageGate server's public IP address is not part of your email domain's SPF record, the major carriers will filter your messages as potential spam for failing the SPF validation check. If you continue to send traffic that fails SPF validation checks, the receiving servers will eventually blacklist your site from sending any traffic to them.

To check to see if port 25 is open, run the Port Scan in the Program - Tools section of the PageGate Admin.

To verify that your site can perform the necessary MX lookups and to discover what your SPF record is, run DNS Lookup in the Program - Tools section of the PageGate admin.

Due to some of the complications involved in configuring PageGate for direct delivery, it is usually more practical to configure PageGate to relay its SMTP/Email traffic through your company or ISP's SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

For information on how to configure a "Relayed Delivery" SMTP carrier, click here.

For information on how to configure a "Direct Delivery" SMTP carrier, click here.

How to send Pages

PageGate can be configured to deliver messages to pagers by modem, serial or internet methods of delivery. Pagers receive their service through a local paging transmitter or from carriers like USA Mobility and American Messaging and this determines what you'll need to configure in PageGate.

On-site paging transmitters, like those made by Zetron, Glenayre and Motorola, support receiving messages via modem or serial line by the TAP protocol and PageGate supports TAP delivery by either method. For more information on how to configure either a modem or serial TAP carrier, have a look at the Creating a TAP Carrier section of the documentation. PageGate

Pagers hosted through a paging company can be messaged with any protocols the carrier supports. For example, American Messaging and USA Mobility support the SNPP, WCTP, SMTP and TAP protocols. SNPP and WCTP are more efficient and reliable than SMTP and should be implemented where possible. If you're looking for a method of message delivery that isn't reliant on your internet connection, most pager companies still support dial-in TAP terminals.

PageGate also supports sending TAP by TCP/IP.

Click here for a list of known SNPP hosts.

<u>Click here</u> to access the steps to create an SNPP carrier.

Click here for a list of known WCTP hosts.

Click here to access the steps to create a WCTP carrier.

Click here for a list of known SMTP addresses.

<u>Click here</u> to access the steps to create an SMTP carrier.

Click here for a list of known TAP terminals.

Click here to access the steps to create a TAP carrier.

Miscellaneous Methods

Outside of SMS, email and paging, PageGate has the ability to communicate in other methods to a variety of sources and devices. PageGate's miscellaneous delivery methods are:

• XMPP (Extensible Messaging and Presence Protocol)

This protocol allows PageGate to communicate with an XMPP server/chat system such as Jabber. Click here to access the steps to create an XMPP carrier.

1

• HTTPGET

This protocol allows PageGate to pass an HTTP GET request to a web API. This is useful for sending messages to a variety of platforms, such as message aggregation services like The Fire Horn or carrier lookup services like Data24-7. <a href="https://doi.org/10.2016/nc.201

HTTPPOST

This protocol allows PageGate to pass an HTTP POST request to a web API. This is useful for sending messages to a variety of platforms, such as message aggregation services like <a href="https://doi.org/10.1001/jhene-10.1001/j

FAX

This protocol allows PageGate to use a faxmodem to deliver messages to destination Fax machines. Click here to access the steps to create a FAX carrier.

FAXSrv

This protocol allows PageGate to pass facsimile messages to either a local or network available Microsoft fax server. Click here to access the steps to create a FAXSrv carrier.

RawSerial

This protocol allows PageGate to deliver messages as raw data strings over a serial port. Click here to access the steps to create a RawSerial carrier.

RawTCP

This protocol allows PageGate to deliver messages by Raw TCP to a host IP. <u>Click here</u> to access the steps to create a RawTCP carrier.

File

This protocol allows PageGate to output a message as an ascii formatted file to a specified directory. This is incredibly useful when implementing the PageGate Filter Pack as it allows you to put messages through for secondary processing. This protocol also, just as an example, allows you to keep a hard record of messages that are sent from the program by keeping a copy of every message sent as a file in the specified directory.

Click here to access the steps to create a File carrier.

• <u>TONE/Touch Tone/DTMF</u> (Dual Tone Multi-Frequency)

This protocol allows PageGate to use a dial-up modem to deliver touch tones to older numeric-only pagers and similar equipment. <u>Click here</u> to access the steps to create a TONE carrier.

• <u>UCP</u> (Universal Computer Protocol)

A delivery protocol for analog modem, or direct serial communications to a wireless provider. Click here to access the steps to create a UCP carrier.

General Features

- **Multiple recipients** allows a single message to be sent to more than one recipient and/or group.
- Recipient Groups messages can be sent to predefined groups of recipients.
- **Display Groups** dispatchers using the PageGate GUI Client program can be configured to only see a subset of recipients and groups
- On-call groups a schedule can be setup for the recipients in a group, allowing PageGate to send messages to only the recipients scheduled to receive messages at that point in time.
- **Multiple delivery methods** PageGate can be connected to the internet through a modem, and a paging terminal by a direct cable connection.
- Message splitting long messages can be intelligently split into multiple smaller messages.
- **Settable character limits** the maximum number of characters to be sent in a message is settable by carrier and individual recipient
- Modular / Scalable PageGate's front-end Interfaces allows the program to be used with network computers, email, websites and 3rd party applications.
- Protocols for message delivery PageGate supports the protocols: SNPP, SMTP, WCTP, HTTPS, TAP, FAX, GSM, UCP and TONE.
- Requeue messages missed messages can be requeued for re-transmission to the wireless carrier.
- **High output** PageGate's intelligent queuing of messages and multiple Connectors allows for the delivery of a large number of messages.
- **Failover** undeliverable text messages can be automatically sent to an alternative carrier, recipient, group and connection.
- **Intelligent message queuing** messages for the same carrier are grouped together and sent during a single communication session.

Maximum Characters - set the number of characters for each recipient and carrier.
 When sending a larger amount of characters the messages will be sequentially numbered.

- Reliapage will number a message and a recipient can tell if a sequentially numbered message is missed.
- **Hold Messages** for recipients and groups to be sent at a later time.
- Reports on recipient, date/time and message can be previewed, saved and printed for all messages sent and received.
- **Logs** to help monitor the activity of all of PageGate modules and functions.
- Real-time Monitoring with the PageGate Monitor module of all PageGate's modules and functions from the paging server, or any workstation connected via TCP/IP.
 Purchasing and Pricing

For a quote, please contact NotePage Sales at 781-829-0500 or sales@notepage.com

To purchase PageGate, you have several options:

- Online (with credit cards: MasterCard, Visa, American Express and Discover) at https://www.notepage.net/purchase.htm
- Fax credit card details (i.e. number, expiration date, security code, name and billing address) and order information to NotePage, Inc. at 781-829-0419.
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 We are unfortunately unable to accept purchase orders from outside of the USA. Obtain W-9 at https://www.notepage.net/purchase-orders.htm
- Check and money order (in US Dollars, drawn from a US bank) payable to:

NotePage, Inc.

P.O. Box 296

Hanover, MA 02339

USA

 For a wire transfer or ACH payment, please contact NotePage Sales at sales@notepage.com for bank and account details

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When purchasing PageGate, please include the following order information:

- 1. PageGate Recipient License quantity.
- 2. Interface(s) & optional Additional Connectors.
- 3. Mailing address and attention to for the CD.
- 4. Contact name, email and telephone number.
- 5. Email address for Registration Key delivery.
- 6. Software registration information includes these fields:

Name/Department:

Company Name:

Address1:

Address2:

City:

State/Province:

Zip Code/Postal Code:

Country:

A PageGate electronic Registration Key will be emailed within 24 hours of ordering. A PageGate CD will be sent by regular mail.

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Upgrade

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- 2. Fax credit card details (i.e. number, expired date, security code, name and billing address) and order information to NotePage, Inc. at 781-829-0419.
- 3. Purchase order, signed and dated, on official letterhead can be faxed to NotePage, Inc. at 781-829-0419. We are unfortunately unable to accept purchase orders from outside of the USA. Obtain W-9 at https://www.notepage.net/purchase-orders.htm

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4. Check and money order (in US Dollars, drawn from a US bank) payable to: NotePage, Inc.

P.O. Box 296 Hanover, MA 02339 USA

- 5. For a wire transfer, please contact NotePage Sales at sales@notepage.com
- 6. For a NotePage Reseller in your area, please contact NotePage Sales.

<u>Please include the following upgrade information:</u>

- 1. PageGate Serial Number (PageGate Admin module under Registration).
- 2. PageGate existing version to current version and PageGate CD (optional).
- 3. PageGate Pager License: existing quantity to new quantity.
- 4. Interfaces: GUI Client, Command Line/ASCII, Web (CGI), TAP, TAP2ASCII Module, Serial, Serial2ASCII Module, SNPP Server Module, Tap IP Server Module, Touchtone Receiver Module (DTMF), PageGate Filter Pack, Android SMS Gateway App
- 5. Additional Connectors.
- 6. Contact name, email and telephone number.
- 7. Mailing address and 'attention to' for the optional PageGate CD.
- 8. Email address for Registration Key delivery.

An upgraded PageGate electronic Registration Key is emailed within 24 hours of ordering. The optional PageGate CD, if ordered, is sent by regular mail. The optional PageGate CD is only relevant when upgrading the PageGate version. Pricing

PageGate's pricing is determined by three things and the option of a service license agreement or standard support.

Recipients

Recipients can be cell phones, email addresses, web APIs, pagers, fax machines and similar. This represents the people, devices, APIs and other destinations for your messages.

Interfaces

These represent how you want PageGate to accept messages for delivery. PageGate's Interfaces are priced separately.

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Connectors

These represent the throughput of the system, the rate at which the program can deliver messages. PageGate includes 1 Connector. Additional Connectors are a separate, one-time charge.

There are no monthly or yearly fees for PageGate.

PageGate Priority Support

Priority support puts your inquiries in a priority queue for a guaranteed 2-hour response during normal business hours and also provides upgrades to PageGate free of charge for the duration of the contract.

For more information, see https://www.notepage.net/priority-support.htm

Pricing for PageGate software at https://www.notepage.net/purchase.htm

Contact Information

NotePage, Inc. PO Box 296 Hanover, MA 02339 USA

Sales: sales@notepage.net

Support: support@notepage.net
Phone Number: 781-829-0500
Fax Number: 781-829-0419
Websites: www.notepage.net

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More information at https://www.notepage.net/reseller.htm

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Evaluation Information

PageGate software defaults into a evaluation mode until purchased and registered. Enter the provided registration information in the PageGate Admin module's Registration screen.

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The evaluation version of PageGate allows for two active recipients at any given time, and the PageGate Server and PageGate will need to be restarted every 3-5 days.

If a less restrictive evaluation would be useful to fully test PageGate, please contact NotePage Sales at sales@notepage.com or by phone at 781-829-0500 x 1 to discuss the availability of a thirty-day temporary evaluation key.

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If you like PageGate and want a complete, registered version please contact: sales@notepage.com

If there are any questions, please contact sales@notepage.com
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Release Notes

Release Notes File Information:

Release Notes File for PageGate Version 9.0.0

<u>Changes since 8.4.3</u> Added PageGate TCP Server service Added PageGate UDP Server service

Added PageGAte TAP IP Server service

Added AwsSns protocol - Amazon Web Services Simple Notification Service

Added MessageLimit, SingleAckGoAhead, and NoEotOnDisconnect settings to TAP-IP-Server

Added UDP protocol option to RawTCP protocol (template setting: RawTcpProtocol = UDP)

Added log monitoring feature

Improved the way And and Or Types are used in the Filter Pack

Improved Filter Pack's debug logging capabilities

Added LocationConverter to filter pack

Updated ActiveX controls

Added ConnectionPersists option to PG TAP IP Server

Added SMTPTLSVersion template variable

Changed the way GetTAP and GetSerial reset themselves when connection to COM port is lost

Fixed problem in PG Admin POP Mail Collection screen, when using French version of Windows

Fixed problem with messages getting stuck in pending after failover and dedicated carrier Improved how delay characters are used by Connectors

Added ModemHangupCommand template variable

Added UseCarrierAuth template variable

Updated ActiveX controls

Added HttpSuccessResponse and HttpErrorResponse template variables

Added <WriteFile> and %FilterIndex% to the Filter Pack

Changes since 8.4.1

Fixed problem with GetAscii advanced polling not running InterfaceFilter script

Added SMTPQpEncode template variable

Added SMTPConnectTimeout template variable

Fixed problem with SMTP server service not reading second DNS server entries correctly

Added better keyboard navigation support to PG Admin

Added ReplyTo template variable for outgoing SMTP messages

Fixed problem in PG Admin where TAP-IP type carriers wouldn't save changes

Added new 'webdata.exe' CGI for flexible inbound API POST or GET calls

Added some minor delays to TAP IP Server to work better with slower sending systems

Changes since 8.3.1

Getmail - option to use new experimental email parser

Added SMTPForceStartTls template setting

Messages getting stuck in pending problem fixed in 8.3.1 now fixed in all protocols

Added %InputFileName% macro to filter pack

Changes since 8.3.0

Allowed 'Dialing Prefix' to be used with TCP/IP based carrier protocols

Fixed problem where failed messages (but meant to be retried) don't ever get sent

Changes since 8.2.1

Added PGService application type - only uses a single windows service

Fixed problem with the PG systray icon, not being able to start/stop PG

Updated Tap interface and TAP2ASCII, to accept long messages split across multiple packets

Added mail server auth type that doesn't advertise authentication options

Added login/password support to GSM-AT protocol

PG GUI Client - fixed problem where client wouldn't completely quit after viewing history

TAP2ASCII modules updated to support "*", "*", PG Recipient in pininfo.txt

Export PinInfo option added to PG Admin Database Export object

Added support for basic HTTP Auth in HTTPGET and HTTPPOST protocols

Fixed problem with GSM check for replies routine - wasn't using correct comm settings

Updated scheduler logic to make carrier and recipient priorities override default carrier/modem scheduling logic

Added SSH support to RawTCP protocol (using port 22)

Added SSH support to GSM-AT-IP protocol (using port 22)

Censored passwords in log files

Added SSL/TLS support for POP retrieval when using port 995

Improved mail server module's shutdown routine

Extended length of database path fields

Improvements to locking routine to avoid duplicate messages under heavy load

Improvements to Filter Pack - more %Temp% and %Group% variables, etc.

SMTP inbound - fixed problem where last CRLF was missed if split between packets

Changes since 8.2.0

DB synch import routines do a better job of recovering from network connectivity problems

Fixed interface file deletion issue

Changes since 8.1.1

Added Filter, SubjectFilter, and InterfaceFilter template settings for use with filter pack

XMPP protocol supports replies (i.e. 2-way)

XMPP protocol supports/forces SSL connection when using port 443

XMPP protocol will auto-subscribe a new user when the sender's name in a message is set to SUBSCRIBE

Minor changes to module startup timing after cleanup routine

Minor changes to GUI Client shutdown routine

Minor changes to the default global template values for new installs/upgrades

PGFilter - fixed display for value of <All> section in Debug mode

PGFilter - fixed problem where literal searches in All only searched the first line

PGFilter - \r \n and \### syntax now supported as literals in RegEx replacement text

Connector logs now include both DB Msg and Sent Msg entries

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Fixed problem with connectors where current multi-part messages wasn't being continued after hitting msg limit and reconnecting

Updated installer version

Changes since 8.1.0

PG Monitor - npp integration not showing possible recipients in list - fixed
PG Monitor - npp integration mistaking sent messages as module errors - fixed
PG Admin - sometimes has trouble creating GetAscii folder on network drives - fixed
Updated guilist.htm template to include code to check for empty fields on submit
GetWeb wasn't automatically restarting after the nightly cleanup routine - fixed
Tweaked module shutdown timing during cleanup routine to improve speed

Changes since 8.0.3

Increased the timeout for SMTP TLS connections

Modified the 'paste registration from clipboard' routine to ignore spaces before the field name colon

Made change in GetTAP and TAP2ASCII modules so multiple TAP fields can be parsed out of a single TAP block

Updated connectors to ignore unsolicited line state messages when using telnet over TCP/IP

Updated connectors so DTR is not dropped every time modem is reset for GSM-AT protocol

Connectors sending via SMTP weren't encoding "=" property in email bodies - fixed Services are now given more time to start before being asked to start again

PG GUI Client sometimes had trouble/error closing - fixed

PG GUI Client - improved reliability of message counters

PG GUI Client - recipient list filtering only worked for local recipients, when there is a local recipient list setup - fixed

Updated HTTP/SSL component to improve compatibility with https ssl certificates

Changes since 8.0.2

Changed how the Max Chars value is used in HTTPGET, HTTPPOST, RawSerial and RawTCP protocols

Updated GetTAP's routine for separating ad-hoc recipient names and recipient id's so that the pininfo file can accept

alpha values for recipient id's

Fixed problem with GUI Client preset message selection when using non-default sort order

Fixed problem where held messages were being delivered immediately

Changes since 8.0.0

Added HttpPostType template setting - default value = Form, optional value = HeadBody Fixed problem with database synchronization between PageGate servers

Fixed problem with InterMessageDelay template variable - was only activating between multi-part messages

Changes since 7.0.26

Added GSM-AT-IP protocol

Added TAP-IP protocol

Added XMPP protocol

New TAP-IP Server module (TAP over TCP/IP)

New Serial2ASCII interface modules

New SMS Gateway Android App

New PG Filter Pack

Support for Windows Server 2016

Added UseSMSM2M template setting to support alternate GSM-AT commandset

Added UseTelnet template setting for RawTCP, GSM-AT-IP protocols

In PG Admin added "Copy from" function to recipient, group and display group member screens

Added InterMessageDelay template setting

Added login support for RawTCP protocol

Added init string support to RawTCP protocol

Added Received, Content-Type and Content-Transfer-Encoding headers to outbound SMTP messages

Improved SMTP delivery logging

Improved port scan tool in PG Admin and added DNS port check

Added DNS lookup tool in PG Admin

Added UseAlternateDNS template setting for MX lookups

In PG Admin added progress indicators to import and export routines

Message limit handling added to TCP, Serial and GSMAT protocols

Expanded length of carrier username and password fields to 100 characters

Added SMTP_Timeout and POP_Timeout registry settings for mailserver inbound connections

Added ResponseRecipient template variable for use with HTTPPOST and HTTPGET protocols

When 'Forward To' is being used, messages with a blank sender now use the postmaster address

Fixed problem where RawSerial protocol was sending the message text twice

Added logging of full response to HTTPGET and HTTPPOST protocols

(sometimes isn't logged to PG Monitor and only to disk - due to length)

Added PGM_IP0 registry setting to hard-code localhost IP address for PG Monitor logging (default is 127.0.0.1)

PG can now auto-detect some GSM-AT modem commands

Reply Carrier added to Connector 2-way settings, so a Carrier's communications settings can be used

Added 'Reply Check' polling interval setting to global connectors screen Improved GSM-AT delivery performance

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Added support for Andorid NotePage SMS Gateway application

Database synchronization routine now imports/exports templates for carriers and recipients

Added ForwardThroughRecipient registry setting to modify the behavior of 'Forward To' nessages

Fixed problem with WCTP protocol where non-standard ports sometimes weren't recognized

Improved scheduling of connectors according to both carrier and recipient priority Improved log archiving routines

Changes since 7.0.25

GetMail does a better job of handling multi-line quoted-printable encoded subject headers

Connectors are a little more lenient about required carriage-returns in the TAP protocol (some Zetron terminals not providing them correctly)

Added option (registry setting) to allow GetAscii to process hidden files

Fixed logging problem in GetAscii for files that are unreadable (logged an incorrect recipient name)

Added ModemWakeupCommand template setting

GUI client was not allowing alpha characters to be used in ad-hoc recipients - fixed The SNPP Server pininfo file will now accept "*","*","<recipient>" entry Increased the ODBC timeout from 1 to 3 seconds for linked SQL tables Fixed problem with GetAscii's "changing" file type

Changes since 7.0.24

Added "ExpandTabs" template setting to convert tab characters to multiple spaces Fixed problem with connectors getting duplicate 'dialer' field error when failing over messages

Nightly routine will now skip inaccessible log files during trim routine

Changes since 7.0.23

Fixed problem sending via WCPT when host responses used single quotes around xml tag values

Change made to scheduler so error #10065 won't retry

All modules now use quoted paths internally

Fixed problem with reports in PG Admin when there was an apostrophe in the recipient name

Fixed report: sent messages - by sender - totals only

Fixed problem importing recipients using simplified text file option

Changes since 7.0.22

PG Admin GetMail Settings static DNS field always displayed system DNS values, even if static value was set and being used

Added X-Mailer header to outgoing SMTP messages

SNPP server MaxConnection setting was being ignored - fixed

The 'dialer' field was being left as null when new messages were created. New default value is 0 (zero)

Marking multiple messages as 'FAILED' by connectors was slow - fixed

Added 'Large Font' option in GUI Client

Carriers using TAP protocol now look for more strict message sequence replies when sending

Changes since 7.0.21

Added "IgnoreCD" template setting to ignore modem CD line when sending via TAP, UCP, and SERIAL protocols

Updated scheduler to give detailed info about any null values found in the database Fixed problem with GetMail using AdHoc recipients where only the PIN from the first message's subject was used

Fixed problem with FaxSvr protocol where first recipient received all messages from a group

Made some changes when writing to the messages table to solve some delays when using linked tables with MS SQL Server

Changed default template value for SMTPHelloHost to %InternetDomain%

Changes since 7.0.20

Update to GetMail to improve processing of multipart messages

GUI Client will now allow multiple copies to be run on the same computer when using serverlist feature

PG Monitor Good/Bad fields made read-only

Added capability to add pauses to RawTCP and RawSerial delivery protocols

Connectors will translate accented characters to non-accented version when StripNonPrintable is set in the template

The GetAscii module now won't truncate messages to their maximum input size (6000 chars) until after processing the lookup table

In SMTP sessions, increased wait for response after sending message body from 30 to 45 seconds

Updated TAP protocol to send EOT when carrier message limit is reached

Fixed problem with GetTap where it rarely and intermittently used an incorrect sender value

Changes since 7.0.14

Update made to GetMail module to better handle some types of base64 encoded email messages

Removed colon and tab characters from default subject delimiter list

Shortened default subject search length to 40 characters

Lengthened the recipient's ID/PIN field to 80 characters

Changes since 7.0.13

Minor speed improvement to process state checking routines Minor changes in module start/stop logging syntax SnppMessOnly setting moved from registry to template settings

Changes since 7.0.12

PG GUI Client arrow key in recipient list now moves to first recipient in the list, not first created recipient in the database

Minor update to help mail server process shut down more reliably

Updated PG Admin's Microsoft treeview control to newer version

Improved speed of loading recipients from database into PG Admin's tree at startup Minor speed improvement for the SMTP protocol (less small packets sent)

Changes since 7.0.11

GetMail was mis-handling end of line characters in messages using content type HTML and Quoted Printable encoding - fixed

Fixed problem in PG Admin where switching from one recipient advanced screen to another, and applying changes, the changes are improperly applied to the new recipient. The little used 'nopage' feature has been depreciated

Update made to PG Admin's Send Message routine to work with new versions of MS SQL and linked tables

Changes since 7.0.10

GetMail can now process subject lines that have different encoding than the message body

SMTP and WCTP delivery will use the Postmaster email address if no sender address is provided

New option to keep GetTap direct connections active indefinitely (no EOT)

Fixed problem in GetTap when incoming ad-hoc PIN is out of range, and follows a valid ad-hoc PIN message in same session

Tweaked connector priorities to encourage internet based protocol carriers to use nonserial port connectors more often

PG Admin import routines will now indicate where import errors occur in the import text files

GetMail now accounts for systems that (incorrectly) end email headers with CRLFLF instead of CRLFCRLF

The touch tone receiver module now supports modems that use single character unsolicited response codes (i.e. R for Ring)

Changes since 7.0.9

Fixed problem with routine that stripped non-printable characters (control characters) in messages

Changes since 7.0.8

Fixed problem sending WCTP messages using HTTPS

Lengthened host field for carriers

Changes since 7.0.7

Fixed problem when sending WCTP in enterprise host mode and using WCTPResponsesTo, where invalid attributes are sent

Changes since 7.0.6

Fixed problem in GetTap module causing DB errors when using ad-hoc ranges Some windows in PG Admin could get hidden behind the main window - fixed Added support to WCTP carriers to allow reply redirection (if supported by the carrier) Fixed template problem where 'From' and 'To' settings were applied after the message text was processed

Changes since 7.0.5

Fixed problem where PG Admin was getting errors on some screens if there were more than 32767 objects in its tree

Connectors using GSM modems will now send an <ESC> to cancel a message, after a message is not accepted by the modem (usually a network issue)

Connectors using GSM modems will wait for the +CDS message after sending a message, if the +CNMI command is used in the connector's init string

Added support for Data24-7 wireless carrier lookup service

Improved PGStray behavior for starting PageGate modules

Changed connectors to use the server's machine name instead of the workstation's machine name in the SMTP HELO command, by default

Changes since 7.0.4

***Important - Fix for problem where if multiple messages are being sent by the same connector, to the same carrier, all messages sent in that specific delivery session may contain the same text

Fixed problem where the 'StripNonPrintable' template setting was adding extra spaces Added AM/PM field to requeue messages form in PG Admin

Changes since 7.0.3

Fixed problem with database upgrade routine where carrier template entries were being created instead of recipient templates

Fixed problem with template settings not being processed correctly on non-english versions of Windows

Added notification list support for failover events

Changes since 7.0.2

Fixed problem with templating system where it was applying the priority of the subject and body values, in the wrong order

Changes since 7.0.1

Fixed problem in PG Admin where 'template' object was not available for recipients or carriers after the first 1000

Fixed problem in PG Admin when choosing the 'Groups' object under an ad-hoc recipient Fixed content-type: variable sent to webservers during WCTP transactions - was causing failures with some WCTP hosts

Fixed 3134 error when receiving email messages for ad-hoc email recipients

Fixed problem with templating system where it was applying the priority of the settings in the wrong order.

Changes since 7.0.0

Improved db retry routines for when database is busy

Moved support dlls back into program folder from common folder

Changes since 6.1.1

Support for non-standard characters after ID= in TAP protocol

Added 'Domain' field to carriers screen, allowing it to be set at carrier level

Fixed POP collection timeout problem while in DATA command

POP retrieval routine compensates for servers that send incorrect <CR> and <LF> singletons

Connectors and mailserver now dynamically get the DNS servers from Windows, or can be set manually

SMTP carriers can now have unique relay server settings

Added registry setting to PG Monitor to allow for custom Sender for NPP messages

Totally new message format templating system added

Accented characters changed to unaccented versions when using StripNonPrintable template option

Added FAXSrv delivery protocol - can use MS Fax service

Added logs zip function (right-click logging in PG Admin)

Added database zip function (right-click database in PG Admin)

Added priority setting to carriers (lower numbers = higher priority)

Added priority setting to recipients (lower numbers = higher priority)

The folder naming convention for the archived logs has been changed to YyyyyMmmDdd to avoid date order confusion and also help sort order

Changes since 6.0.16

Added HTTPPOST protocol

Added HTTPGET protocol

Added SSL/TLS (port 465) and STARTTLS (port 587) support to connectors for SMTP delivery

Separated username and password fields in advanced carrier settings

Added support for forced 'from' address in SMTP

Fixed problem with POP collection only happening at GetMail startup

Fixed problem where some protocols weren't failing over if COM port didn't exist Improved PG Admin port scan and modem scan routines

New and improved program installer and uninstaller
Outdated 'what's this?' help removed from forms
Added server start/stop right-click menu to PG Admin
Made sort order on guilist.htm template case insensitive
Updated rights checking on settings screen
In PG Admin, made member list screens stretch to form size
Improved support for new versions of Windows: UAC, security, virtualization, etc.

Changes since 6.0.15

Fixed a problem with automatic import/export where it could hang if the import/export file becomes unavailable

Fixed a problem where the SNPP Server module wouldn't start with some non-US locale settings

Added the ability to set a slight pause between messages (changed value from sec to ms)

Changes since 6.0.14

Added field for Fax Class in PG Admin, for fax type carriers Connectors now report fax class in logs for fax type carriers Added the ability to set a slight pause between messages

Changes since 6.0.13

Some read timeouts weren't happening in the mail server - fixed

Changes since 6.0.12

Dial-up-networking capabilities removed from mail server service

Changes since 6.0.11

Added SMTP_Force_Auth registry setting to allow authentication method to be locked, in connectors, for msg delivery

Updated MX resolver .dll to resolve timeout issues with some DNS servers

Update to handle message locking better when using linked tables to SQL server

Added small delay to RawTCP connector protocol before shutting down the connection to the host

Resolved problem where SNPP authentication was being sent with every message, instead of once per connection

Changes since 6.0.10

Fixed problem in connectors - wouldn't deliver messages when using linked tables to SQL Server

Changes since 6.0.9

Fixed another date/time format related problem when running on foreign language version of windows

1

Allowed non-printable characters (outside the 'normal' ascii range) to be included in template files

Changes since 6.0.8

Updated PG Admin to allow serial ports above 16 to be entered for GetTAP and GetSerial

Changes since 6.0.7

Fixed problem when editing recipients - sometimes wrong carrier was shown Carrier list is now alphabetized

Changed default install folder to be off root

Changes since 6.0.6

Slight delay added to modem reset routines, to help with some modems that don't respond quickly enough

Changes since 6.0.5

In SMTP messages, the SendSubject option was being ignored, and subjects were being sent no matter what - fixed

When new recipients are created for SMTP carriers, Send Subject is now checked by default

Changes since 6.0.4

Add %Carrier% variable to templates

Fix %Pin% variable in templates

Improve retrieval of multiple GSM replies

Fix problem in PGAdmin and PGSched on systems running foreign language version of Windows

Update connectors so that if one type of SMTP authentication fails, it will try other types - if available

Update mail server module to handle comments in email addresses better

Updated GetMail interface to allow SpamKeywords list to also look in the message subject

Changes since 6.0.3

Updated database date/time routines to get date and time separators from the system (instead of hard coded / and :

Changes since 6.0.2

Connectors: workaround for buggy CDMA modems that give 'infinite' response to CMGL command

Connectors: delay initial reply check for GSM modems, allowing outgoing messages to happen first

Changes since 6.0.1

Fixed problem with PGC not restoring properly from task bar Added %Message% variable support in subject templates (.stp) files Fixed error 9 in PGSTray.exe when starting services

Changes since 6.0.0

Fixed problem where Connectors could only send WCTP to ports 80 and 443 Updated comm routines for GetSerail

Fix for PGAdmin and PGStray, getting errors on system with LOTS of processes running

Changes since 5.0.9

General:

Basic 2-way support (accept replies) for cellular modems (GSMAT protocol)
Optimizations for database access, code execution, and processor utilization
Improved compatibility with newer operating systems
Many minor cosmetic and bug fixes

GUI Client

Optimized database access Improved compatibility with newer operating systems (esp Win7)

Connectors:

New optimized serial port handling routines

Support for serial ports above COM16

Improved support for USB modems

Improved support for cellular modems (GSMAT protocol)

Improved support for fax modems (FAX protocol)

New FILE protocol that allows messages to be written out to text files

Custom filter programs can post-process messages written by the File protocol

Improved message subject handling (especially SMTP protocol)

Support for subject templates

New macros supported in message templates (%OriginalRecipient%, %LastRecipient%)

CRAM-MD5 authentication support (SMTP)

Improved proxy server support (WCTP)

HTTPS support (WCTP)

GetAscii:

Larger lookup tables are now possible

Custom filter programs can be made to pre-process all incoming messages

GetMail:

Support for additional MIME types in email messages Improved message parsing

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GetSerial:

New optimized serial port handling routines Support for serial ports above COM16 Improved support for USB modems Larger lookup tables are now possible Improved logging

GetTap:

Greatly improved logging
Improved message handling and parsing
New optimized serial port handling routines
Support for serial ports above COM16
Improved support for USB modems

GetWeb:

Minor updates only

Scheduler:

Improved database efficiency

SMTP Server:

Improved compatibility with newer operating systems Improved support for running as an application Improved support for running as a system service Support for authentication for relayed messages

SNPP Server:

Improved compatibility with newer operating systems Greatly improved support for running as an application Better logging when running as an application Improved support for running as a system service

TAP2ASCII

New multiple incoming TAP servers available, for multiple modem or direct serial TAP connections

Changes since 5.0.8

Fixed problem with sending of success/failure notifications

Fixed problem when client security is not enabled, but admin security is, and using Windows credentials to try to get to client setup screen

Fixed problem where interfaces were filtering out 'group_list' groups instead of 'display_group' groups.

Increased number of recipients in envelope of incoming SMTP connections to 500

Changes since 5.0.7

Send subject option on recipients changed to ALWAYS send something for the subject (sends 'Text Message' if

a subject can't be found in the message test

Domain POP collection can now use DomainAliases too

Changed 'Show All Dialers' in PGMonitor to 'Show All Connectors'

Added AdHoc support to the GetTap interface

GetTap has been expanded to accept messages up to 2000 characters in length (was 240)

Getmail will accept the subject of a message even if the body can't be read

Changes since 5.0.6

Fixed problem where message text from incoming emails were converted to lowercase Fixed problem where incoming POP messages were sometimes marked as duplicates Fixed problem where recipients weren't recognized in some POP messages Removed control character encoding (transparent TAP) in Raw Serial protocol Fixed db error with synchronization importing recipients with web service enabled Fixed truncation problem in decoding multipart mime email messages Improved timeout detection on SMTP connections

Fixed problem where email-only type recipients were leaving .pro files in the Mailln folder Added capability for multi-line presets messages in GUI Client

Changes since 5.0.5

Fixed totals on recipient sent message report (message total for each recipient was cumulative)

Fixed syntax error in guery expression when sending via GSM

Fixed problem with domain POP collection where some headers had first character truncated

Fixed problem with local domain being case sensitive for domain pop collection

Fixed problem with too large of a timeout value for POP collection

Fixed UIDL collection problem where same message is retrieved multiple times

Changes since 5.0.4

Fixed problem with ad-hoc recipient processing introduced in v 5.0.2

Changes since 5.0.3

Fixed problem with Advanced Ascii processing when the multiple character wildcard is changed from '*' to something else

Changed logging to show ascii value of characters in '<>' instead of using a generic '^' character

Fixed hourglass behavior on import screens

Fixed auto-conversion of full recipient name to short name when the apostrophe is used Made changes to get rid of sporadic 3219 errors in GUI Client

1

Added support for displaying a list of pagegate servers in GUI Client on startup (serverlist.txt)

Fixed error 9 problem when using the brows button for selecting a new database location if current is invalid on startup

Fixed problem using failure notification lists if the failure happened connecting to the carrier

Changes since 5.0.2

Small delay added to initial 220 response of server, for some slow servers

IP address text added to log for initial SMTP connection

Improved how default values for advanced and unused settings are handled when creating and editing carriers and recipients

Fixed 'Enabled' box on Ad-Hoc Mail screen.

Fixed problem where the ad-hoc feature could be used to send a message to a id/pin that matched an existing recipient with that interface disabled

Added spam keyword detection capability to GetMail interface

Changes since 5.0.1

fixed error in PG Admin when a static recipient was set for GetAscii advanced ascii or GetSerial, and the recipient was deleted

fixed problem where an extra colon was being left in SMTP messages if the "don't send from" option is used

lengthened password fields in database (means a database version update too)

Changes since 5.0.0

Fixed error message that was displayed after database rebuild in PG Admin Changed behavior of dropped connections in pgmailserver

Reworked email filtering in pgmailserver and pggmail

Changes (since 4.0)

General

Microsoft Vista Support

Greatly enhanced security options, including 'managers' allowed only to maintain their own group of recipients

Database synchronization between PG servers (master/slave configuration)

Improved logging (additional logging detail levels and log search function)

Audit logging/tracking

Message Archiving with 'Archive Manager' version of PG Admin for archiving old messages and accessing them

Improved reporting (including speed improvements in some reports)

(support for linked tables to MS SQL Server - not sure we should advertise this yet) PG Server

SNPP server add-on (for incoming messages)

Touch tone receiver add-on (for incoming messages)

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Fax delivery capability

Raw Serial and Raw TCP delivery protocols

HTTPS support for WCTP delivery

Message templates, which allow customized formatting of message text

Pin length can be automatically limited by carrier (important for carriers who use different length pin numbers for different protocols)

Failure/Success notifications can be sent to groups of email recipients

User's PG login name, Windows login name, and machine name tracked for each message

PG Client

Pre-programmable buttons can also be programmed to automatically select recipients and groups

When recipients are selected, a list of predefined messages can be displayed for selection (preset prompting)

Clients can be locked into only seeing a predefined set of recipients and groups (display groups)

Message length in message entry box can be limited

A failure warning can be set to popup on failed messages, even if the PG Client is minimized

Send confirmation option added

Can now requeue messages from the history screen

New hot-keys added

New improved security options (individual logins for a users & use of Windows login credentials)

Can view all groups a recipient belongs to

Macro variables to allow a recipient's carrier, pin, and manager on its info screen Reporting improvements

PG Monitor

Can be integrated with a stand-alone copy of NotePager Pro to send wireless alerts of the PageGate Server's health

Decreased network overhead

Changes (since 3.7)

SNPP protocol supported

UCP protocol supported

WCTP protocol supported

GSM modems and phones supported

Serial (RS232) monitoring interface added

TAP incoming interface added

Failover recipients supported (if messages fail to one recipient they can be sent to another)

Failover for carriers supported

Improved reporting in PG Admin

Added reporting to PG Client

GetMail interface can now filter incoming email messages

GetAscii can now monitor for changes in files

GetAscii can parse info out of data files

Messages can be held for recipients until a time of day

Extra comment fields added to each recipient and group

PG GUI Client can filter recipient list according to comment fields

Hot-Key shortcuts added to PG Client

2 more levels of passwords added to PG Admin

GUI Client now supports 100 preset messages

GUI Client can now display the members of a group (shift-click on the group's name in the recipient lists)

GUI Client can now be minimized to the regular Windows taskbar

GUI Client in the history log can be copied and modified or resent

PG Monitor updated

The number of messages delivered in a single connection can be limited

Dialers can be set to deliver internet based messages only (set modem port to 0)

A new web template has been added that has the same look as the GUI Client

Some minor cosmetic updates

Changes: (since 3.6)

Problem with GetWeb saying that messages are rejected even though they aren't, fixed

Problem with Group-List web pages not being updated correctly fixed

Problem with Group List report fixed

Group-List webpages now shows groups with a {G} prefix

GUI Client window is now sizeable

GUI Client now tracks messages sent to groups by individual message

GUI Client's programmable button labels are now able to be changed

Dialers can now auto-detect most modem init strings

Changes: (since 3.5)

Group report added

Archive log option added

Group and Ad-Hoc label location now settable in GUI Client

Problem with GetAscii sending duplicate messages fixed

Problem with PG Admin allowing duplicate recipients fixed

Changes: (since 3.5 beta sp3)

Problem when printing history file from GUI client fixed

Option added to not send 'from' field as part of the message text

Fixed problem in scheduler when messages are sent to an empty group

More options made available for ad-hoc recipients

Changes: (since 3.5 beta sp2)

PGAdmin

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Preliminary help file documentation completed Tone wait string not displaying correctly - resolved Duplicate mailbox names are no longer allowed New report added for messages sent by recipient

PGDial1

Error encountered after sending message - resolved

PGSched

Problem sending to groups fixed

GUI Client

Name changed to 'PageGate GUI Client' System tray icon behavior improved

Changes: (since 3.5 beta sp1)

Temporary evaluation keys no longer expire prematurely

Context sensitive help has been added. Full help file still does not include documentation for new email service.

Changes: (since 3.5 beta)

PG Admin

The service pack version (SP) is now displayed on the top right corner of PG Admin when showing version info.

The formatting of the 'Pending Msg' button on the pending messages screen has been fixed.

On the 'Dial Up Networking Settings' screen, the 'Enabled' checkbox was not staying checked: fixed.

Dialer1/GetMail

Coordinated dialing between dial-up networking and message delivery now works correctly.

New log entries for dial-up networking progress added.

Scheduler

Trims new dial-up networking logs as part of nightly cleanup routine.

Problem with scheduling future/repeating messages (error message) resolved.

NotePager Net Client

The main screen stayed disabled after exiting the options screen with the 'X': fixed.

GUI Interface

The status of the interface was not being reported correctly to PG Monitor.

Changes: (since version 3.16)

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PageGate now has all email function built-in (MDaemon is no longer used/required) In this beta release, the help documentation has not been changed to reflect this change See the following documentation for features, capabilities, and setup of the new email server

Changes: (since version 3.15)

New setup program - smaller and faster

Problem with NotePager Net not updating status logs fixed Problem with too many users accessing database error fixed Promptless setup options for administrators (see pgreadme.txt)

Changes: (since version 3.14)

A memory leak was fixed in pagegate.exe when running on Windows9x

Changes: (since version 3.13)

This version uses the newly released MS Jet Database engine v4.0 sp4

Problem with on-call groups fixed

NotePager Net's 'Use these setting for all local users' setting works

Improved automatic database rebuild routines

Message count report format improved

Problem with PG Monitor becoming permanently minimized fixed

Problem in schedule when using multiple dialers fixed

Changes: (since version 3.12)

Problem fixed where NotePager Net sometimes did not retain the prog buttons

Problem fixed where full name group list web pages didn't update correctly

Problem fixed causing NotePager Net to give an error on the initial run

Changes: (since version 3.11)

New Feature in NotePager Net GUI Client: The administrator can now disable various capabilities of NotePager Net to simplify the interface (i.e. Spell Check, Pre-Programmed messages, etc.)

Problem fixed in GetMail causing collection loop

Problem fixed in Scheduler in repeating messages

Changes: (since version 3.10)

Problem fixed where the cleanup routine was dropping leading zeros in the registration key information

Problem fixed where only the first 5 recipients were shown in NotePager Net's local recipient list screen

Memory leak in PageGate.exe fixed

Problem fixed not allowing administrators to add new recipients

Problem fixed where modem in use error was not displayed correctly

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Changes: (since version 3.07)

General

PageGate is now fully Windows 2000 compatible

PageGate's database has been upgraded to be compatible MS Access 2000

NotePager Net (GUI) client:

local recipient lists can be stored in a shared folder

on a workstation, program settings can be saved for all users or just a single user smaller fonts can be used in the recipient pick lists

Email

messages sent as an attachment inside another mail message are accepted Web

full names can be shown on group-list web pages

Changes: (since version 3.06)

New version of the jet database engine used (v4.0) to resolve intermittent database corruption problems

Changes: (since version 3.05)

Added new options when canceling messages from PG Admin Readme and Release notes files can be viewed prior to install Cosmetic fixes to PG Admin, PG Monitor and installation programs Added to troubleshooting and faq sections of the help file Minor bug fixes

PageGate is designed to be a highly modular application that can send messages to cell phones, pagers, email addresses or any combination of the three. This design also allows PageGate's modules to be run across multiple computers and platforms. The following installation information covers installation of PageGate on a single computer.

When you run PageGate's installation file, you'll be prompted to perform one of four installations:



The Install PageGate Server option should only be run on the system that will be hosting the database and functioning as the PageGate server. If you want to grant a workstation access to the PageGate Admin, you should use the "Install Additional PG Admin" option.

The PageGate Server installation will install the following components:

PageGate Server

This is the control module for PageGate. It is constantly running in the background whenever the PageGate application is running. It monitors, starts, and stops the other PageGate modules.

PageGate Scheduler

This module processes all messages sent by PageGate. It manages scheduled and repeating messages, in addition to scheduling the delivery of each message by a Connector.

• PageGate Connectors

The Connectors are responsible for the actual delivery of the messages.

PageGate Interfaces

These modules (GetAscii, GetMail, GetWeb, GetTAP, GetSerial and GUI) accept messages from various sources, into the PageGate application.

• PageGate Add-ons

Additional server processes than can be run to accept messages into the PageGate Server: SNPP Server Add-on, Touch-Tone Receiver Add-on (require the GetAscii interface for operation)

The PageGate GUI Client installation will install the following components:

PageGate Client

A Windows based program installed on workstations on the same network as the PageGate server. This program provides a graphical user interface to send and schedule messages.

The Additional PG Admin installation will install the following components:

• PageGate Admin

The administration program is used to setup, control, and maintain the PageGate application.

The Additional PG Monitor installation will install the following components:

PageGate Monitor

The monitoring application allows for real-time monitoring of the PageGate application from the local machine, or from any other workstation that is connected to the PageGate server via TCP/IP.

PageGate Server

The PageGate Server is the main processing portion of PageGate. All messages, modules, and interfaces are contained within and run by the PageGate Server. This installation should only be performed on the system intended to host the PageGate Server and its data.

Minimum system requirements:

Operating System: Windows XP, Vista, Windows 7, Windows 8, Windows 10, Server

2003, Server 2008, Server 2012, Server 2016, Server 2019.

Processor: 1.0 Ghz Processor or better.

Memory: 1GB RAM

Storage: 100 MB of free disk space (for application and database)

Communications: PageGate supports internet, hardware and TCP based communications. Please review the How PageGate Sends Messages section of the documentation to understand what is required to deliver your traffic.

Please reference the <u>Windows 7, 8, 10, Server 2008, Server 2012, Server 2016 and Server 2019</u> portion of the manual to install on those operating systems.

Windows 10, Server 2008, Server 2012, Server 2016 and Server 2019 Instructions
There are three ways to install the PageGate Server:

- Downloaded installation file
- Promptless Automatic installation
- Installation by CD-Rom
- Upgrading to version 9 from a previous version

Installation by Download

- 1) Open a web browser.
- 2) Go to our website: https://www.notepage.net
- 3) In the center of the page, click on the Download button under the PageGate section.
- 4) When prompted, you want to save the file.
- 5) Save the pasetup.exe file somewhere easy to reference, like the Desktop.
- 6) After the file has been downloaded, right click on it and select "Run As Administrator".
- 7) When prompted, select the Install PageGate Server option.
- 8) Click Next.
- 9) Select whether or not you want to view the ReadMe File and/or Release Notes, then click on Next.
- 10) Please read the End User License Agreement (EULA), then select "I accept the agreement" and click on Next.
- 11) In the next step, you will be prompted for the PageGate Server installation directory. By default, the installation directory is C:\Program Files(x86)\NotePage\PageGate\
 The installation directory can be changed to any local path. Click Next to proceed.

12) In the next step, changes to the program group PageGate will appear under in the start menu can be made. Click Next to proceed.

- 13) Select whether you want to create a Desktop Icon for PageGate and click on Next.
- 14) Click Install to begin installing the PageGate Server.
- 15) Click Finish to finalize the installation.

Be sure to make a copy of the installation file and store it somewhere safe. You will need it again if you ever need to reinstall PageGate, or want to install the Additional PageGate Administrator, Additional PageGate Monitor, or GUI Client on a workstation.

Promptless Automatic Installation

Any part of PageGate can be installed unattended. This helps network administrators to automate the program's installation.

- 1) Start the PageGate setup program as usual (see above).
- 2) When the list of installation options screen is shown, exit the installation.
- 3) Browse in to the c:\Users\<your_user>\AppData\Local\Temp\ directory.
- 4) Copy the 'PGSetup' folder to another location.
- 5) Use the following command line syntax to run a promptless install.

PageGate Server Installation File: pgssetup.exe

Command line options:

/silent	Installs without prompts. Does display progress screens, will prompt for reboot if necessary.
/verysilent	Installs without prompts, display screens and will reboot without prompting, if necessary.
/norestart	This flag prevents the installation from rebooting, even if necessary.
/dir ="x:\dirname"	This flag overrides the default installation directory.
/group="folder name"	This flag overrides the default Windows Start Menu group name.
/noicons	This flag will prevent the installation from creating the desktop icons for the program.

The <path> option should be replace with the path to where you copied the 'PGSetup' folder in step #2 above.

Here is an example of a promptless install of the PageGate server if the PGSetup folder was copied to C:\

C:\PGSetup\pgssetup.exe /silent /dir="c:\PageGate"

That command line would install the PageGate server to c:\PageGate\ without prompting for information, would display the progress screens and would prompt to reboot the system if necessary.

Optional Registry Settings

Note: Folders that are set must be created and given sufficient rights before the program is run.

Location: HKEY LOCAL MACHINE\SOFTWARE\Wow6432Node\NotePage\PageGate\

Name	Typ e	Description
Prog_Di	Strin	This value specifies the directory in which the program was resides. The
r	g	path specified in this field must end in a backslash, \.
DB_Dir	Strin	This value specifies the directory in which the database resides. The path
	g	specified in this field must end in a backslash, \.
Log Dir	Strin	This value specifies the directory in which the logs reside. The path
Log_Dir	g	specified in this field must end in a backslash, \.
Archive	Strin	This value specifies the directory in which archived information should
_Dir	g	reside. The path specified in this field must end in a backslash, \.
		If a database password has been set on the PageGate database, the
DB_Pa	Strin	password for the database can be specified here. Due to the nature of the
ssword	g	security involved, the value is encrypted, so it must be copied from a system with the password already set.

Installation by CD-Rom

- 1) Insert the PageGate CD-Rom into your computer.
- 2) PageGate's setup routine will (on most computers) automatically start. Cancel the autorun.
- 3) In Windows, browse to your CD Drive.
- 4) Right click on the pgsetup.exe file, left click on "Run As Administrator".
- 5) In the next portion of the setup, you will be given the option to view the Readme and Release Notes files. If you choose to display either file, they will be shown when you hit 'Next'.

6) The following screen will display PageGate's End User License Agreement. Please read it carefully and proceed with the installation of PageGate only if you agree with all the terms of this agreement.

- 7) On the next screen you can specify a location where you want PageGate installed. The default install location is C:\PageGate\ You can change the installation path by hitting the 'Browse' button. To accept the install location, hit 'OK'.
- 8) You will now be prompted for the name of the group that the PageGate icons should be added to in the Windows Start Menu. The default group is 'PageGate'.
- 9) The setup program is now ready to install PageGate. Click the 'Install' button to start the installation process.
- 10) The setup program will now copy the PageGate program and support files to your computer. If you encounter any problems during this part of the installation, please refer to the 'Installation Troubleshooting' section of the manual.
- 11) The next screen will tell you that PageGate has been successfully installed. Hit the 'Finish' button to exit PageGate's setup program.
- 12) In some cases, your computer will ask to be restarted after the installation of PageGate. If you are prompted to do so, you must restart your computer before running PageGate
- 13) Remove the CD and keep it in a safe place. You will need it again if you ever need to reinstall PageGate, or want to install the Additional PageGate Administrator, Additional PageGate Monitor, or GUI Client on a workstation.

Upgrading to version 9

Make sure you have a PGv9 registration key. Previous version registration keys will not work with version 9.

- 1) Make a backup of the PageGate database (pagegate.mdb). By default, this file is located in the c:\PageGateData\Database\ directory.
- 2) If you're using PageGate's GetMail Module, please backup the PageGate Mailboxes sub-directory of the PageGate Program directory.
- 3) If you're using PageGate's GetWeb interface, please backup the web templates/webpages.
 - a) On the computer running the PageGate Server, open the PageGate Admin.
 - b) Go to the Interfaces GetWeb Settings section.
 - c) Make a note of the Web Pages Directory.
 - d) Browse to the directory indicated in step c.

- e) In this directory, there will be a sub-directory called Templates.
- f) To backup your webpage templates, you could copy the Templates folder to a CD, make a copy on a network location, make a copy in a different folder on the current system, the methods of backing up can vary widely.
- 4) Shut down every part of PageGate. Make sure that none of the PageGate processes or applications, even the PageGate Client on the workstations, are running.
- 5) To verify that everything has been shut down, run the Task Manager in Windows by pressing Ctrl+Alt+Del on your keyboard or by right clicking on the task bar and selecting "Task Manager".
- 6) Once the task manager comes up, browse through the Applications or Processes tab. There should be nothing the begins with PG in either list. If you see something that begins with PG that's still in the list, please highlight it and click on End Task.
- 7) Download the latest PageGate installation file from our website (https://www.notepage.net Click the download button under the PageGate section and save the pgsetup.exe file to your desktop).
- 8) Right click on the pgsetup.exe, left click on "Run As Administrator".
- 9) When it asks which installation you wish to run, the only option you want to select is Install PageGate Server.
- 10) Unless you need to change the installation directory, you can really just click next through the entire routine until it finishes.
- 11) Now that we have version 9 installed, right click the shortcut for 'PageGate Admin' and select "Run As Administrator".
- 12) The Admin will prompt you for the version 9 Registration Key. Please enter it, then click Apply.
- 13) Go to the Program Settings section.
- 14) Once in the Settings, you should see a section that says "Run PageGate As". If you are using Windows Server 2016 or 2019, select 'PG Service'. For other operating systems, select 'Windows Service'.
- 15) Click Apply.
 - When you click on Apply, you will be prompted for a username and password. In most cases, you can leave both values blank and click 'Apply' again.
 - To explain, if the default System Account in Windows is enabled, you can leave the credentials blank. If the default system account is disabled, you will need to provide an

account name and password that has the "Log on as Service" security policy. Click here for more information.

- 16) Open the Services list in Windows. You can do this by either going in to the Services section of the Administrative Tools in the Control Panel or by running services.msc in the Run command.
- 17) Browse to the PageGate Service.
- 18) Right click on the PageGate service, tell it to start.

To upgrade the PageGate Client to v9, please refer to this portion of the manual.

To upgrade the Additional PageGate Admin to v9, please refer to this portion of the manual.

To upgrade the Additional PageGate Monitor to v9, please refer to this portion of the manual.

Windows Server 2016 and 2019 Core

These are the steps to install the PageGate Server in Windows Server 2016 and 2019 Core (no GUI).

- 1) Configure networking: sconfig (this is optional)
- 2) Run powershell: powershell
- Download PageGate setup program: invoke-webrequest https://www.notepage.net/download/pgsetup.exe -outfile pgsetup.exe
- 4) Return to command prompt: exit
- 5) Run PageGate setup: pgsetup
- 6) select the Install PageGate Server option.
- 7) Click Next.
- 8) Select whether or not you want to view the ReadMe File and/or Release Notes, then click on Next.
- 9) Please read the End User License Agreement (EULA), then select "I accept the agreement" and click on Next.
- 10) In the next step, you will be prompted for the PageGate Server installation directory. By default, the installation directory is C:\Program Files(x86)\NotePage\PageGate\

 The installation directory can be changed to any local path. Click Next to proceed.

11) In the next step, changes to the program group PageGate will appear under in the start menu can be made. Click Next to proceed.

- 12) Click Next.
- 13) Click Install to begin installing the PageGate Server.
- 14) Click Finish to finalize the installation.

PageGate GUI Client

The PageGate GUI Client is a Windows based program that can be installed on workstations on the same network as the PageGate server. This program provides a graphical user interface that shows a list of recipients available to message and grants the ability to immediately send or schedule messages.

The PageGate Client can be installed on the server but is intended to be run from workstation computers.

Note: If you have the GUI Client installed on the PageGate server, do not have the workstations reference the PageGate Server's GUI Client program folder. Each workstation requires its own installation of the GUI Client.

Minimum system requirements to run the PageGate GUI Client:

Operating System: Windows XP, Vista, Windows 7, Windows 8, Windows

10, Server 2003, Server 2008, Server 2012, Server 2016, Server 2019

Processor: 1.0 Ghz Processor or better.

Memory: 1GB RAM

Storage: 100 MB of free disk space (for application and database)

Please reference the <u>Windows 7, 8, 10, Server 2008, Server 2012, Server 2016 and Server 2019</u> section of the manual to install on those operating systems.

Pre-installation

There are a few things you should verify before installing the PageGate GUI Client:

 The PageGate Server must be installed and operational before the PageGate GUI Client is installed.

2) The PageGate Server's database directory must be shared on the network and the workstation must have sufficient network permissions to the database (pagegate.mdb). The workstation must have read, write, and change permissions to this file.

- 3) If you plan to use the spell-checking feature, Microsoft Office 2000 or newer must be installed on the workstation.
- 4) If application or database passwords have been defined in the PG Admin program, they will be needed to access the application and the PageGate database.

Windows 10, Server 2008, Server 2012, Server 2016 and Server 2019 Instructions
There are three ways to install the PageGate GUI Client:

- Downloaded installation file
- Promptless Automatic installation
- Installation by CD-Rom

Steps to upgrade from a previous version:

Upgrading from Versions 4, 5, 6 or 7

Installation by Download

- 1) Open a web browser.
- 2) Go to our website: https://www.notepage.net
- 3) In the center of the page, click on the Download button under the PageGate section.
- 4) When prompted, save the file somewhere convenient to reference, like the Desktop.
- 5) After the file has been downloaded, right click on it and select "Run As Administrator"
- 6) If prompted by the User Accounts Control, allows the installation to proceed.
- 7) When prompted, select Install PageGate GUI Client.
- 8) Click Next.

9) Select whether or not you want to view the ReadMe File and/or Release Notes, then click on Next.

- 10) Please read the End User License Agreement (EULA), then select "I accept the agreement" and click on Next.
- 11) In the next step, you will be prompted for the PageGate Client installation directory. By default, the installation directory is C:\Program Files (x86)\NotePage\PageGate Client. Once you've specified the installation path, click on Next to proceed.
- 12) In the next step, changes to the program group in the Start Menu the PageGate Client will appear under can be made. Click Next to proceed.
- 13) Select whether you want to create a Desktop Icon for the PageGate Client and click on Next.
- 14) Click Install to begin installing the PageGate Client.
- 15) Click Finish to finalize the installation.

Be sure to make a copy of the installation file and store it somewhere safe. You will need it again if you ever need to reinstall PageGate, or want to install the Additional PageGate Administrator, Additional PageGate Monitor, or GUI Client on a workstation.

Promptless Automatic Installation

Any part of PageGate can be installed unattended. This helps network administrators to automate the program's installation.

- 1) Start the PageGate setup program as usual (see above).
- 2) When the list of installation options screen is shown, exit the installation.
- 3) Browse in to the c:\Users\<your_user>\AppData\Local\Temp\ directory.
- 4) Copy the 'PGSetup' folder to another location.
- 5) Use the following command line syntax to run a promptless install.

Installation executable for the GUI Client: pgcsetup.exe

Command line options:

/silent	Installs without prompts. Does display progress screens, will prompt for	
	reboot if necessary.	

/verysilent	Installs without prompts, display screens and will reboot without prompting, if necessary.
/norestart	This flag prevents the installation from rebooting, even if necessary.
/dir ="x:\dirname"	This flag overrides the default installation directory.
/group="folder name"	This flag overrides the default Windows Start Menu group name.
/noicons	This flag will prevent the installation from creating the desktop icons for the program.

Here is an example of a promptless install of the PageGate server if the PGSetup folder was copied to C:\

C:\PGSetup\pgcsetup.exe /silent /dir="c:\PageGate Client\"

That command line would install the PageGate server to c:\PageGate Client\ without prompting for information, would display the progress screens and would prompt to reboot the system if necessary.

Optional Registry Settings

Client Registry Settings

Note: Folders that are set must be created and given sufficient rights before the program is run.

 $Location: HKEY_CURRENT_USER \\ \label{location: hkey_current} Location: HKEY_CURRENT_USER \\ \label{location: hkey_current} SOFTWARE \\ \label{location: hkey_current} Note Page \\ \label{location: hk$

Name	Туре	Description
LockSettin gs	Dword	By default settings in the Current User portion of the registry are used. If every user on the workstation should use the standardized, rather than logon specific, settings, then the Local Machine portion of the registry can be forced to be used instead by setting LockSettings to 1, which is a 'true' value.
DB_Dir	String	This value specifies the directory in which the database resides. The path specified in this field must end in a backslash, \.
DB_Passw ord	String	If a database password has been set on the PageGate database, the password for the database can be specified here. Due to the nature of the security involved, the value is encrypted, so it must be copied from a system with the password already set.
Sender	String	This value specifies a static sender's name that this copy of the Client will use when sending messages.

Station	String	Note: Values lower than 10 are system reserved and should never be
		used.
		used. Clients with the same Station value will be able to reference each others' message histories and be able to run reports on the same.
		others' message histories and be able to run reports on the same.

CD-Rom Installation

- 1) Insert the PageGate CD-Rom into your computer.
- 2) PageGate's setup routine will (on most computers) automatically start. Cancel the autorun.
- 3) In Windows, browse to your CD Drive.
- 4) Right click pgcsetup.exe, left click "Run as Administrator".
- 5) In the next portion of the setup, you will be given the option to view the Readme and Release Notes files. If you choose to display either file, they will be shown when you hit 'Next'.
- 6) The following screen will display PageGate's End User License Agreement. Please read it carefully and proceed with the installation of PageGate only if you agree with all the terms of this agreement.
- 7) On the next screen you can specify a location where you want the GUI Client installed. The default install location is C:\Program Files (x86)\NotePage\PageGate Client\You can change the installation path by hitting the 'Browse' button. To accept the install location, hit 'OK'.
- 8) You will now be prompted for the name of the group that the GUI Client icons should be added to in the Windows Start Menu. The default group is 'PageGate Client'.
- 9) The setup program is now ready to install the GUI Client. Click the 'Install' button to start the installation process.
- 10) The next screen will tell you that the GUI Client has been successfully installed. Hit the 'Finish' button to exit PageGate's setup program.
- 11) Remove the CD and keep it in a safe place. You will need it again if you ever need to reinstall the GUI Client, or want to install the Additional PageGate Administrator, Additional PageGate Monitor, or GUI Client on a workstation.

Upgrading from a previous version

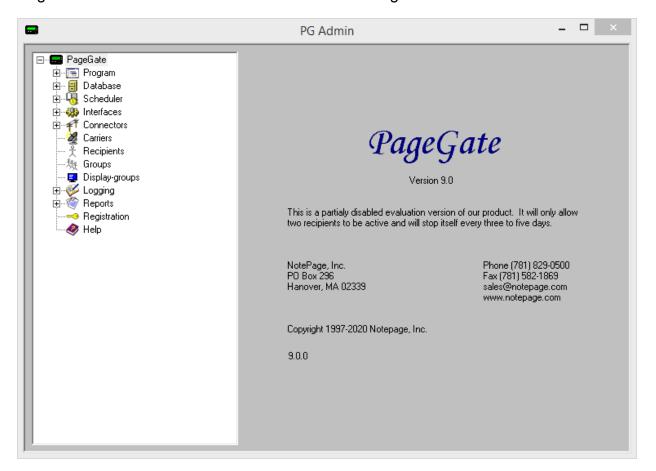
Make sure you **DO NOT** have the PageGate Client running. The update cannot be applied if the PG Client is running.

To upgrade the PageGate Client from a previous version to version 9, go through the steps enumerated in the <u>Installation by Download</u> section but during the installation, make sure to specify the old version's program directory.

Additional PG Admin

Do not install this on the PageGate Server. The Additional PageGate Admin is only intended for workstations.

The Additional PageGate Admin is a program that allows a workstation the capability to modify PageGate's settings, such as the ability to add, modify, or remove recipients and carriers. The workstation intended to run the Additional PageGate Admin must have network access to the PageGate Server's database.



Minimum system requirements to run the PageGate Admin

Operating System: Windows XP, Vista, Windows 7, Windows 8, Windows

10, Server 2003, Server 2008, Server 2012, Server 2016, Server 2019

Processor: 1.0 Ghz Processor or better.

Memory: 1GB RAM

Storage: 100 MB of free disk space (for application and database)

Please reference the <u>Windows 7, 8, 10, Server 2008, Server 2012, Server 2016 and Server 2019</u> portion of the manual to install on those operating systems.

Pre-installation

There are a few things that should be verified and setup before the installation of PG Admin:

- 1) <u>Do not install this on the PageGate Server</u>. The Additional PageGate Admin program is intended only for workstations.
- 2) Be sure your hardware meets the minimum specs for PageGate Admin.
- 3) Be sure the computer is configured for your network. The PageGate Admin must access the PageGate database through your LAN (Local Area Network).
- 4) Be sure that you have sufficient permissions (if applicable) to install new programs on the chosen computer.
- 5) In some cases, you will be asked to restart your computer after the installation of the PageGate Admin. If so, this must be done before the PageGate Admin is run. Be sure that you install the PageGate Admin at a time when this can be done.
- 6) Always be sure to have a complete backup of your system before installing any new software! The installation of the PageGate Admin is not and exception to this rule.

Windows 10, Server 2008, Server 2012, Server 2016 and Server 2019 Instructions
There are three ways to install the PageGate Admin:

- Downloaded installation file
- Installation by CD-Rom
- Promptless Automatic installation
- Upgrading to version 9 from a previous version

Installation by Download

- 1) Open a web browser.
- 2) Go to our website: https://www.notepage.net

3) In the center of the page, click on the Download button under the PageGate section.

- 4) When prompted, you want to save the file.
- 5) Save the pgsetup.exe file somewhere easy to reference, like the Desktop.
- 6) After the file has been downloaded, right click on it and select "Run As Administrator".
- 7) When prompted, select: Install Additional PG Admin
- 8) Click Next.
- 9) Select whether or not you want to view the ReadMe File and/or Release Notes, then click on Next.
- 10) Please read the End User License Agreement (EULA), then select "I accept the agreement" and click on Next.
- 11) In the next step, you will be prompted for the PageGate Admin installation directory. By default, the installation directory is C:\Program Files(x86)\NotePage\PageGate Admin\
 The installation directory can be changed to any local path. Click Next to proceed.
- 12) In the next step, changes to the program group for the PageGate Admin will appear under in the start menu can be made. Click Next to proceed.
- 13) Select whether you want to create a Desktop Icon for the PageGate Admin and click on Next.
- 14) Click Install to begin installing the PageGate Admin.
- 15) Click Finish to finalize the installation.

Promptless Automatic Installation

Any part of PageGate can be installed unattended. This helps network administrators to automate the program's installation.

- 1) Start the PageGate setup program as usual (see above).
- 2) When the list of installation options screen is shown, exit the installation.
- 3) Browse in to the c:\Users\<your_user>\AppData\Local\Temp\ directory.
- 4) Copy the 'PGSetup' folder to another location.
- 5) Use the following command line syntax to run a promptless install.

PageGate Server Installation File: pgasetup.exe

Command line options:

Installs without prompts. Does display progress screens, will prompt for reboot if necessary.
Installs without prompts, display screens and will reboot without prompting, if necessary.
This flag prevents the installation from rebooting, even if necessary.
This flag overrides the default installation directory.
This flag overrides the default Windows Start Menu group name.
This flag will prevent the installation from creating the desktop icons for the program.

The <path> option should be the 'PGSetup' folder in step #4 above.

Here is an example of a promptless install of the PageGate Admin if the PGSetup folder was copied to C:\

C:\PGSetup\pgasetup.exe /silent /dir="c:\PageGate Admin\"

That command line would install the PageGate server to c:\PageGate Admin\ without prompting for information, would display the progress screens and would prompt to reboot the system if necessary.

Optional Registry Settings

Note: Folders that are set must be created and given sufficient rights before the program is run.

Location: HKEY_LOCAL_MACHINE\SOFTWARE\Wow6432Node\NotePage\PageGate\

Nam e	Туре	Description
Prog_ Dir	String	This value specifies the directory in which the program was resides. The path specified in this field must end in a backslash, \.
DB_ Dir	String	This value specifies the directory in which the database resides. The path specified in this field must end in a backslash, \.
Log_ Dir	String	This value specifies the directory in which the logs reside. The path specified in this field must end in a backslash, \.
Archiv e_Dir	String	This value specifies the directory in which archived information should reside. The path specified in this field must end in a backslash, \.
DB_P assw	String	If a database password has been set on the PageGate database, the password for the database can be specified here. Due to the nature of the

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ord	security involved, the value is encrypted, so it must be copied from a system
	with the password already set.

CD-Rom Installation

- 1) Insert the PageGate CD-Rom into your computer.
- 2) PageGate's setup routine will (on most computers) automatically start. Cancel the autorun.
- 3) In Windows, browse to your CD Drive.
- 4) Right click on the pgasetup.exe file, left click on "Run As Administrator".
- 5) In the next portion of the setup, you will be given the option to view the Readme and Release Notes files. If you choose to display either file, they will be shown when you hit 'Next'.
- 6) The following screen will display PageGate's End User License Agreement. Please read it carefully and proceed with the installation of PageGate only if you agree with all the terms of this agreement.
- 7) On the next screen you can specify a location where you want the PageGate Admin installed. The default install location is C:\Program Files (x86)\NotePage\PageGate Admin\
 - You can change the installation path by hitting the 'Browse' button. To accept the install location, hit 'OK'.
- 8) You will now be prompted for the name of the group that the PageGate Admin icons should be added to in the Windows Start Menu. The default group is 'PageGate Admin'.
- 9) The setup program is now ready to install the PageGate Admin. Click the 'Install' button to start the installation process.
- 10) The next screen will tell you that the PageGate Admin has been successfully installed. Hit the 'Finish' button to exit PageGate's setup program.

Upgrading from a previous version

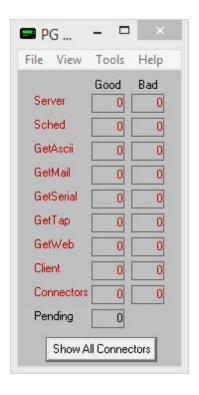
Make sure you DO NOT have the PageGate Admin running. The update cannot be applied of the PG Admin is running.

To upgrade the PageGate Admin from a previous version to version 9, go through the steps enumerated in the <u>Installation by Single Executable</u> section but during the installation, make sure to specify the previous version's program directory.

Additional PG Monitor

Do not install this on the PageGate Server. The Additional PageGate Monitor program is only intended for workstations.

The Additional PageGate Monitor is a program that allows a workstation to view what's happening in PageGate as it happens. It shows which modules are running, how many messages have been processed, how many of the processed messages are good, how many of the processed messages are bad, and also gives the detailed log of the precise transactions between PageGate, its modules and the messaging hosts PageGate contacts.



Minimum requirements to run the PageGate Monitor

Operating System: Windows XP, Vista, Windows 7, Windows 8, Server

2003, Server 2008 32-bit and 64-bit, Server 2012, Server 2016, Server 2019

Processor: 1.0 Ghz Processor or better.

Memory: 1GB RAM

Storage: 100 MB of free disk space (for application and database)

Please reference the <u>Windows 8, 10, Server 2008, Server 2012, Server 2016 and Server 2019</u> portion of the manual to install on those operating systems.

Windows 8, 10, Server 2008, Server 2012, Server 2016 and Server 2019 Instructions

There are three ways to install the Additional PG Monitor:

- Installation by download
- Promptless Automatic installation
- Installation by CD-Rom
- <u>Upgrading to version 9 from a previous version</u>

Installation by Download

- 1) Open a web browser.
- 2) Go to our website: https://www.notepage.net
- 3) In the center of the page, click on the Download button under the PageGate section.
- 4) When prompted, you want to save the file.
- 5) Save the pgsetup.exe file somewhere easy to reference, like the Desktop.
- 6) After the file has been downloaded, right click on it and select "Run As Administrator".
- 7) When prompted, select: Install Additional PG Monitor
- 8) Click Next.
- 9) Select whether or not you want to view the ReadMe File and/or Release Notes, then click on Next.
- 10) Please read the End User License Agreement (EULA), then select "I accept the agreement" and click on Next.
- 11) In the next step, you will be prompted for the installation directory. By default, the installation directory is C:\Program Files(x86)\NotePage\PageGate Monitor\
 The installation directory can be changed to any local path. Click Next to proceed.
- 12) In the next step, changes to the program group PageGate will appear under in the start menu can be made. Click Next to proceed.

13) Select whether you want to create a Desktop Icon for the PageGate Monitor and click on Next.

- 14) Click Install to begin installing the PageGate Monitor.
- 15) Click Finish to finalize the installation.

Promptless Automatic Installation

Any part of PageGate can be installed unattended. This helps network administrators to automate the program's installation.

- 1) Start the PageGate setup program as usual (see above).
- 2) When the list of installation options screen is shown, exit the installation.
- 3) Browse in to the c:\Users\<your_user>\AppData\Local\Temp\ directory.
- 4) Copy the 'PGSetup' folder to another location.
- 5) Use the following command line syntax to run a promptless install.

PageGate Server Installation File: pgmsetup.exe

Command line options:

/silent	Installs without prompts. Does display progress screens, will prompt for reboot if necessary.	
/verysilent	Installs without prompts, display screens and will reboot without prompting, if necessary.	
/norestart	This flag prevents the installation from rebooting, even if necessary.	
/dir ="x:\dirname"	This flag overrides the default installation directory.	
/group="folder name"	This flag overrides the default Windows Start Menu group name.	
/noicons	This flag will prevent the installation from creating the desktop icons for the program.	

The <path> option should be the 'PGSetup' folder in step #4 above.

Here is an example of a promptless install of the PageGate Monitor if the PGSetup folder was copied to C:\

C:\PGSetup\pgmsetup.exe /silent /dir="c:\PageGate Monitor\"

That command line would install the PageGate server to c:\PageGate Monitor\ without prompting for information, would display the progress screens and would prompt to reboot the system if necessary.

Optional Registry Settings

Location: HKEY_LOCAL_MACHINE\SOFTWARE\NotePage\PageGate\

Name	Typ e	Description
PGM		This key specifies the port number that PageGate uses to send updates via UDP. This setting MUST match the setting used by the PageGate Server,
Port	Deci	referenced in the <u>Logging</u> section of the documentation. Use a value of 10101 decimal, unless the server value has been changed.
NPP_ Sende r	Strin g	If the PageGate Monitor's NotePager Pro Alerts have been enabled, this key specifies the Sender information for these alerts.

CD-Rom Installation

- 1) Insert the PageGate CD-Rom into your computer.
- 2) PageGate's setup routine will (on most computers) automatically start. Cancel the autorun.
- 3) In Windows, browse to your CD Drive.
- 4) Right click on the pgmsetup.exe file, left click on "Run As Administrator".
- 5) In the next portion of the setup, you will be given the option to view the Readme and Release Notes files. If you choose to display either file, they will be shown when you hit 'Next'.
- 6) The following screen will display PageGate's End User License Agreement. Please read it carefully and proceed with the installation of PageGate only if you agree with all the terms of this agreement.
- 7) On the next screen you can specify a location where you want the PageGate Monitor installed. The default install location is C:\Program Files (x86)\NotePage\PageGate Monitor\
 - You can change the installation path by hitting the 'Browse' button. To accept the install location, hit 'OK'.
- 8) You will now be prompted for the name of the group that the PageGate Monitor icons should be added to in the Windows Start Menu. The default group is 'PageGate Monitor'.

9) The setup program is now ready to install the PageGate Monitor. Click the 'Install' button to start the installation process.

10) The next screen will tell you that the PageGate Monitor has been successfully installed. Hit the 'Finish' button to exit PageGate's setup program.

Upgrading from a previous version

Make sure you do not have the PageGate Monitor running. The update cannot be applied of the PG Monitor is running.

- 1) Open a web browser.
- 2) Go to our website: https://www.notepage.net
- 3) In the center of the page, click on the Download button under the PageGate section.
- 4) When prompted, you want to save the file.
- 5) Save the pgsetup.exe file somewhere easy to reference, like the Desktop.
- 6) After the file has been downloaded, right click on it and select "Run As Administrator".
- 7) When prompted, select: Install Additional PG Monitor
- 8) Click Next.
- 9) Select whether or not you want to view the ReadMe File and/or Release Notes, then click Next.
- 10) Please read the End User License Agreement (EULA), then select "I accept the agreement" and click Next.
- 11) In the next step, you will be prompted for the installation directory. Specify the existing PageGate Monitor program directory, then click Next to proceed.
- 12) In the next step, changes to the program group PageGate will appear under in the start menu can be made. Click Next to proceed.
- 13) Select whether you want to create a Desktop Icon for the PageGate Monitor and click Next.
- 14) Click Install to begin installing the PageGate Monitor.
- 15) Click Finish to finalize the installation.

Be sure to make a copy of the installation file and store it somewhere safe. You will need it again if you ever need to reinstall PageGate, or want to install the Additional PageGate Administrator, Additional PageGate Monitor, or GUI Client on a workstation.

PageGate is designed to easily integrate with other applications by providing a range of front-end APIs. Once integrated, your application(s) will be able to send messages to the recipients and groups that have been configured in the software, and even send messages through PageGate for recipients that aren't configured in the program's database with PageGate's Ad-Hoc Messaging feature.

PageGate supports the following integration methods:

• GUI Client

The PageGate GUI Client is a Windows based program that can be installed both on the PageGate server and on workstations that have network access to the PageGate server's database. Recipients and groups configured in the PageGate Admin display in the recipient list, which allows a user to select them to send a message immediately or schedule a message to go out at a later time.

Accepting HTTP Requests

PageGate has an HTTP data receiver (webdata.exe) that can receive input from nearly any API or protocol that offers an HTTP return like HTTP GET, HTTP POST and WCTP, which allows you to receive JSON, XML, HTML, WCTP and similar data submissions via HTTP/S request.

API Polling

This method allows PageGate to request information from an API using a webform, HTTP GET or HTTP POST method. The information collected from the APIs is then fed through the GetASCII interface and filter scripts for parsing and, as a result, require the GetASCII interface and, optionally, filter pack.

• TCP Server Module

This module allows PageGate to run a TCP server/listener, enabling it to accept TCP packets from any source.

• UDP Server Module

This module allows PageGate to run a UDP server/listener, enabling it to accept UDP packets from any source.

• GetASCII - Command Line/ASCII Interface

This interface is capable of monitoring a directory or series of directories on the local hard drive or across the network for ascii file output and also provides a command line interface for other applications to use. This module allows many 'off the shelf and custom applications, such as SolarWinds' Network Performance Monitor, SolarWinds' Orion,

Paessler's PRTG and several CAD programs, among many others, to tell PageGate when a message needs to be sent.

Filter Pack

This is a companion module for GetASCII and allows PageGate to conditionally modify nearly anything about any part of any message, whether they're received by one of the interfaces or being sent by one of the connectors.

• GetMail - Email Interface (Includes SMTP server)

This API unlocks the ability to receive email in to PageGate by enabling the receiving functions of PageGate's mail server engine. This API provides the ability to host your own messaging domain or sub-domain as well as unlocking an email forwarding feature associated with your recipients and groups. This API also allows PageGate to function as an SMTP/Email receiver for any installation of NotePager Pro, allowing satellite offices to submit messages for processing with a centralized, master server.

GetWeb - Webserver and CGI Interface

Also known as the GetWeb Interface, this API allows PageGate to integrate with a web server to provide a website messaging interface. This allows you to host messaging websites on your local intranet or, if GetWeb is interfaced with an outward facing web server, on the internet. Web Developers can also use this web server interface to send GET/POST requests to notify PageGate when a message needs to be sent, who the message should go to, who sent the message and what the message should say. This interface can also be used to enable PageGate to receive notifications from applications running on different platforms (Unix, Mac, etc.).

• GetSerial - Serial Port (physical or virtual) Interface

Also known as the GetSerial Interface, this API allows PageGate to monitor a serial/RS232 port (physical or virtual) for raw data ASCII strings to be parsed in to outbound messages. When a data string is sent to a monitored serial port, GetSerial pattern matches sections of the data string to parse information for messaging.

Serial to ASCII Module

This is a companion module for GetSerial and unlocks the ability to monitor additional serial/RS232 ports (physical or virtual), up to 16. This module requires the GetAscii API to function.

GetTAP - TAP Interface

Also known as the GetTAP Interface, this API allows PageGate to monitor a serial port or answer a modem call to receive TAP transmitted pages. This allows PageGate to function as a TAP receiver or a TAP terminal for any devices and systems that can transmit that protocol, such as a Zetron or Motorola paging terminal as well as a few CAD systems. This also allows PageGate to function as a TAP receiver for any installation of NotePage

<u>Pro</u>, allowing satellite offices to submit messages for processing with a centralized, master server.

TAP to ASCII Module

This is a companion module for GetTAP and unlocks the ability to monitor additional serial/RS232 ports or modems, up to 16. This module requires the GetAscii API to function.

• TAP over TCP/IP Server Module

This API allows you to receive the TAP protocol by TCP/IP instead of by serial or modem line. This module requires the GetAscii API to function.

• SNPP Server Module

This API allows PageGate to function as an SNPP server to receive this protocol from any source that can send it. Messages received by this API are output to a directory as a text file that is then read in with the GetAscii API. This also allows PageGate to function as an SNPP receiver for any installation of NotePager Pro, allowing satellite offices to submit messages for processing with a centralized, master server. This module requires the GetAscii API to function.

• TouchTone Server Module (DTMF)

This API provides the ability to monitor a voice modem to answer calls and receive DTMF signals and output them as text to a file for the GetAscii API to process. This module requires the GetAscii API to function.

Registry Polling

The GetAscii API can accept messages that are passed to it via the Windows registry.

Windows Messages

This option enables other software to send new messages to the <u>GetAscii</u> interface by sending it a 'Windows Message'. Windows Messages can be sent by using the SendMessage() Windows API call.

Direct Database Access

PageGate uses an MSJet database that can be linked to other databases by ODBC expression.

Accepting HTTP Requests: Webdata API

PageGate has an HTTP data receiver (webdata.exe) that can receive input from nearly any API or protocol that offers an HTTP/S request like HTTP GET, HTTP POST and WCTP.

This allows you to receive JSON, XML, HTML, WCTP and similar data submissions via HTTP/S request. Received data doesn't need to conform to a single standard as it is fully

processed with the <u>GetASCII</u> interface and, optionally depending on what you want to do with the received data, Filter Pack.

If you want to receive multiple data formats, the <u>Filter Pack</u> isn't optional and you will need to implement a filtering system to tell PageGate what to do with each format received.

The API itself is a CGI executable named 'webdata.exe' that must be hosted on a web server your sending systems can access.

In some cases, this lets you run IIS on the PageGate server for an intranet accessible API.

If you have something that can submit webforms or post information via HTTP/S, like ticket tracking, records management, monitoring or other types of systems, this provides a way for them to trigger messages in PageGate.

In other cases, you'll need to host the API's executable on your outward facing web server to provide an internet accessible URL, then provide a UNC share path to the directory on the web server where webdata.exe is hosted for PageGate to access.

If you're dealing with an internet or cloud based system, this provides a way for that system to provide information to your PageGate server.

In more practical terms, the file webdata.exe is located in the PageGate program directory and MUST be copied to the webserver hosting the API.

If PageGate is not running on the web server hosting webdata.exe, you'll also need to share the directory where webdata.exe is hosted on the web server and provide the UNC filepath to PageGate's GetASCII interface.

The Webdata API is only a receiver. All data received is ultimately processed by <u>GetAscii</u> and potentially with assistance from the <u>filter pack</u>.

PageGate's <u>Filter Pack</u> opens up quite a few possibilities by allowing you to receive multiple data types from a single or multiple sources but it also allows you to create conditional logic for message processing.

As an example, you could configure a filter that changes who should receive an alert or message based on keywords or keyphrases in the received data. For instance, you could scan for the word lunch in the body of the message and direct it to the cafeteria group instead of a general distribution group.

As another example, it is possible receive the WCTP protocol with this API and you could configure a filter that directs all replies from specific senders to a specified destination, like an email distribution list, an SMS to administrators or any number of things.

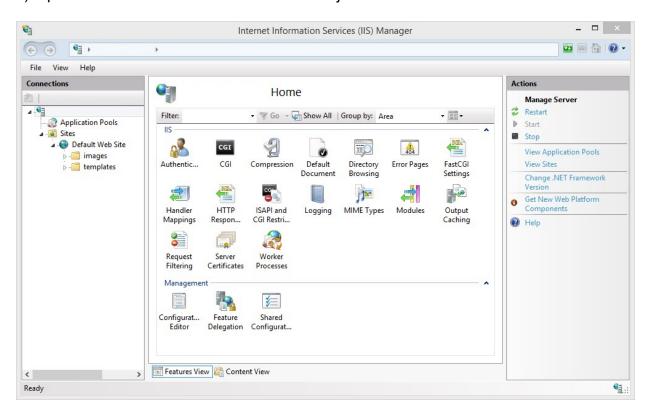
You could configure a system where messages from a certain phone number or sender ID will always be copied to certain recipients or groups.

One of the other benefits of the filter is that it can do everything described at the same time. You aren't limited in the type, style or number of filters you can apply to your server.

Step 1: Host webdata.exe on your web server

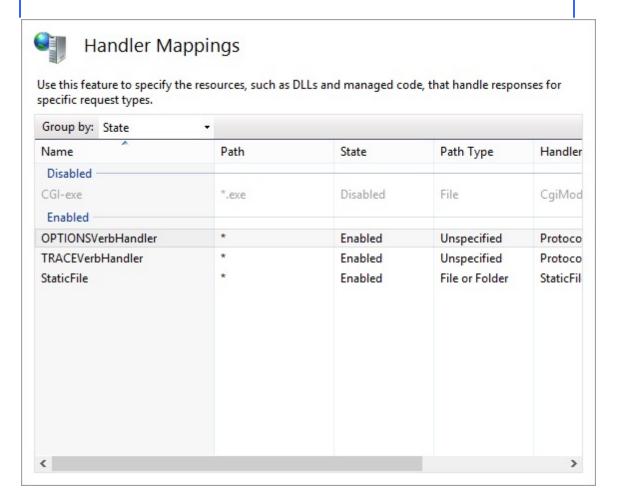
The first thing you'll need to do is host webdata.exe on your web server to provide the return URL for your API or WCTP host. The following steps are for IIS but this can be done with any web server suite.

- Copy webdata.exe from the PageGate program directory to your server's scripting directory.
- 2) Open the IIS Admin and select the server object.

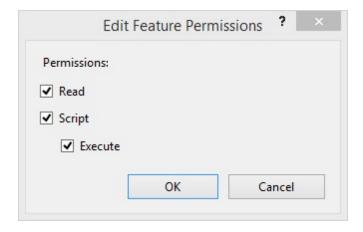


3) Open Handler Mappings.

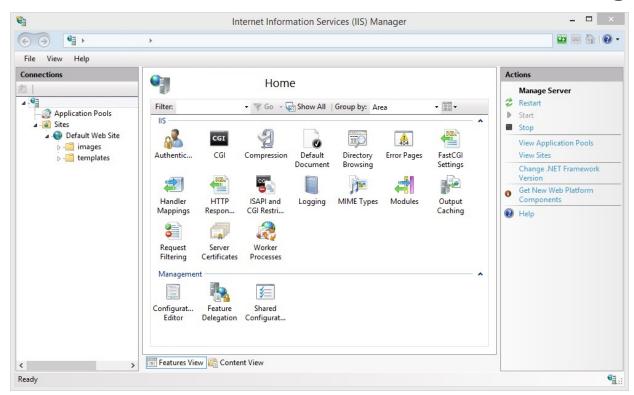
How PageGate Accepts Messages



- 4) Right click CGI-exe, left click Edit Feature Permissions
- 5) Check Execute.

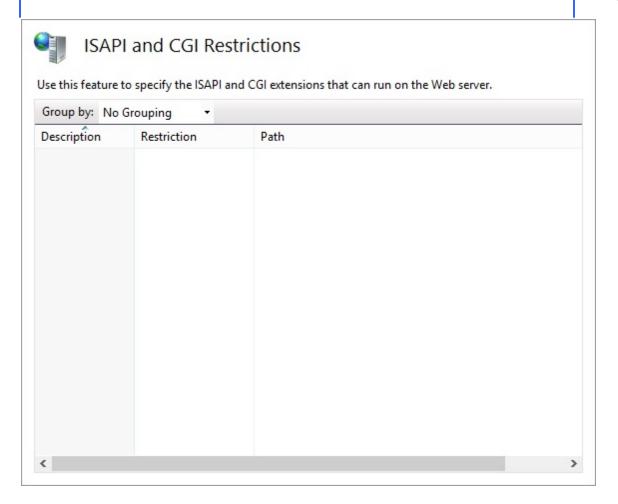


- 6) Click OK.
- 7) Select the Server object again.



8) Open ISAPI and CGI Restrictions.

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- 9) Right click in the box and select Add.
- 10) Specify the following and click OK:

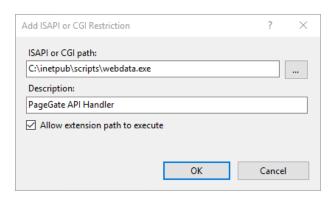
ISAPI or CGI path: Specify the location of

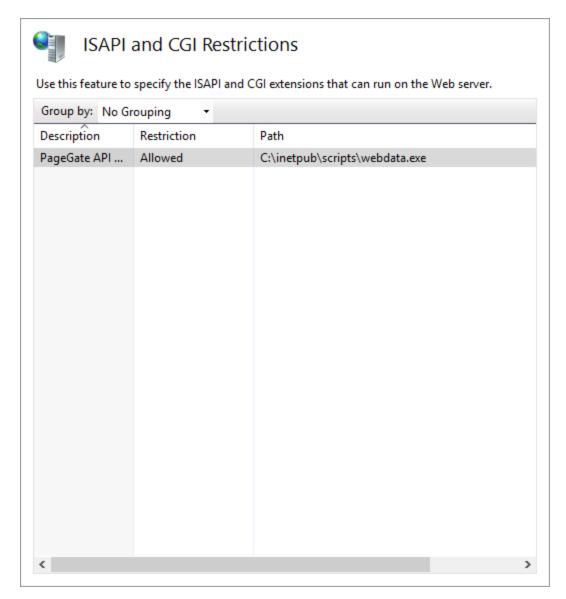
webdata.exe

Description: PageGate API Handler

Check 'Allow extension path to execute'

Example:





Step 1a: Share the folder webdata.exe is hosted in

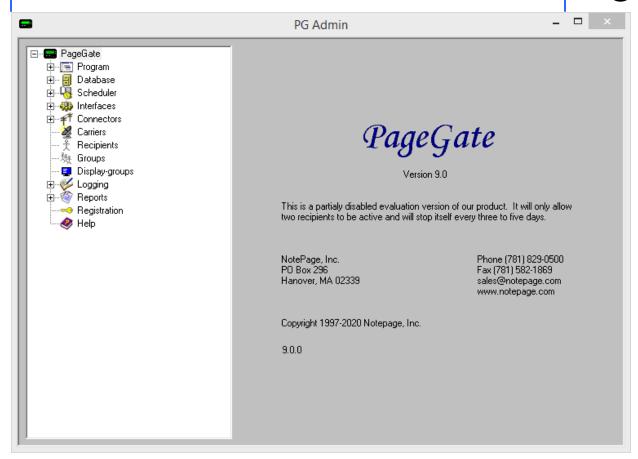
If PageGate is not running on the server hosting webdata.exe, you will need to share the directory where webdata.exe is hosted to allow the GetASCII interface to parse data sent to the receiver.

Step 2: Configure GetASCII to process the received data

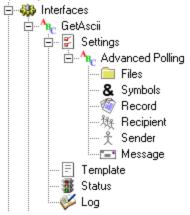
Each API and protocol will have a unique structure to the data returned to your server and you'll need to tell PageGate how to interpret the data and what to do with it in general.

To do that, you'll want to configure an 'Advanced Polling' rule:

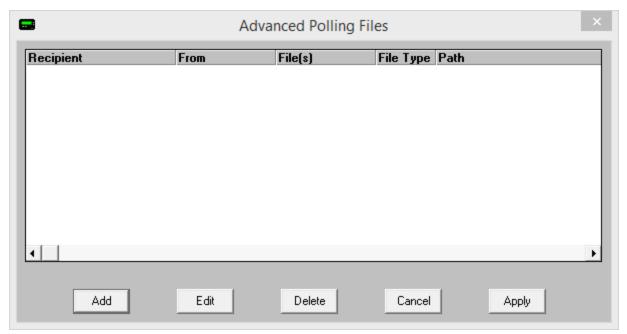
1) Open PG Admin.



2) Expand Interfaces - GetAscii - Settings - Advanced Polling



3) Click Files.



- 4) Click Add.
- 5) Specify the following and click Apply: **Recipient**: *

From: Leave Blank

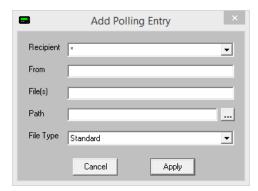
File(s): *.asc

Path: The path to the folder webdata.exe is stored in

on the web server.

Example: \\WebServer01\pgscripts\

File Type: Custom



NOTE: If you will be implementing a <u>filtering system</u>, you will do so at this point. For more information, please see <u>PageGate's Filter Script documentation</u>.

- 6) Go to Interfaces GetAscii Settings Advanced Polling Record
- 7) Specify the following and click Apply:

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Start Pattern: *
Start Offset 0

End Pattern: ~

End Offset: 0

End Offset 0

Apply

- 8) Go to Interfaces GetAscii Settings Advanced Polling Recipient. This section tells PageGate where in the data to look for the recipient or group this reply should go to.
- 9) Select 'Dynamic Recipient' and configure the parameters.

For example, let's say you're working with the WCTP protocol and want to auto-respond to the person who sent the message. In WCTP, you can key off of senderID="Value". As another example, let's say you're receiving an XML form and one of the tags will determine who needs to receive the reply. You would key off of <XML Tag>Value</XML Tag>.

Start Pattern: This value determines the first character in the recipient block.

For example, if you're working with WCTP and want to key off of senderID="Value". You would use senderID=" as the Start Pattern.

As another example, if you're working with XML and want to key off of

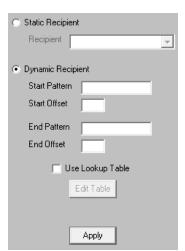
<XML Tag>Value</XML Tag>. You would use <XML Tag> as the Start Pattern.

Start Offset: The number of characters in the start pattern.

End Pattern: This value determines the last character in the recipient block.

For example, if you're working with WCTP and are using senderID=" as the Start Pattern, you would use " as the End Pattern.

As another example, if you're working with XML are using <XML Tag> as the Start Pattern, you would use </XML Tag> as the End Pattern.



End Offset: The negative value of the number of characters in

the End Pattern. Examples: -1, -10, etc

10) Go to Interfaces - GetAscii - Settings - Advanced Polling - Sender. This section tells PageGate where in the data to look for the sender value.

11) For most implementations, you can select 'Static Sender' and specify a sender value. However, if the sender's name will be contained in the data read, you can select 'Dynamic Sender' and parameters are configured similarly to the recipient section.

Start Pattern: This value determines the first character in the sender block.

For example, if you're working with WCTP and want to use the value in senderID="Value". You would use senderID=" as the Start Pattern.

As another example, if you're working with XML and want to key off of

<XML Tag>Value</XML Tag>. You would use <XML Tag> as the Start Pattern.

Start Offset: The number of characters in the start pattern.

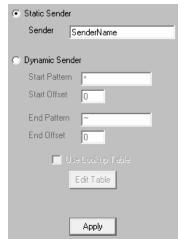
End Pattern: This value determines the last character in the sender block.

For example, if you're working with WCTP and are using senderID=" as the Start Pattern, you would use " as the End Pattern.

As another example, if you're working with XML are using <XML Tag> as the Start Pattern, you would use </XML Tag> as the End Pattern.

End Offset: The negative value of the number of characters in the End Pattern.

Examples: -1, -10, etc



- 12) Go to Interfaces GetAscii Settings Advanced Polling Message. This section tells PageGate what in the data should be considered the message and also allows for basic reformatting of messages.
- 13) Select 'Dynamic Message' and configure the parameters. If you want everything in the received data to be considered the message, you would use a Start Pattern of * and an End Pattern of ~.

Start Pattern: This value determines the first character in the message block.

For example, if you're working with WCTP and want to use the value in the

<wctp-Alphanumeric> tag, you would use <wctp-Alphanumeric>
as the Start Pattern.

As another example, if you're working with XML and want to key off of

<XML Tag>Value</XML Tag>. You would use <XML Tag> as the Start Pattern.

Start Offset: The number of characters in the start pattern.

End Pattern: This value determines the last character in the sender block.

For example, if you're working with WCTP and are using <wctp-Alphanumeric> as the Start Pattern, you would use </wctp-Alphanumeric> as the End Pattern.

As another example, if you're working with XML are using <XML Tag> as the Start Pattern, you would use </XML Tag> as the End Pattern.

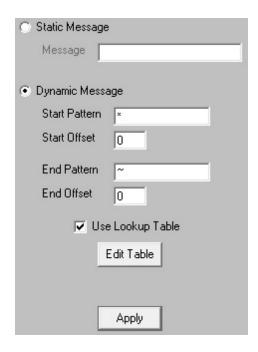
End Offset: The negative value of the number of characters in the End Pattern.

Examples: -1, -10, etc

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed.

To enable this feature, check Use Lookup Table and click Edit Table.





For more information, please see the <u>lookup table</u> section of the documentation. Controlling Webdata's HTTP Responses

The HTTP response provided by the Webdata API can be controlled and customized by creating a file named 'response.txt' in the same directory on the web server where 'webdata.exe' resides.

```
If 'response.txt' does not exist, Webdata will provide a default response of: content-type: text/html status: 200 
<a href="https://does.not.exist.com/responses/"></a> <a href="https://does.not.exist.com/responses/"><a href="https://does.not.exist.com/responses/">https://does.not.exist.com/responses/<a href="https://does.not.exist.com/responses/">https://does.not.exist.com/resp
```

However, if your sending system requires a specific response or additional information, you can provide its template in the 'response.txt' file.

For example, you can use the Webdata API to host a very basic WCTP receiver by using this as the response template:

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Message accepted for processing </wctp-ClientSuccess> </wctp-SubmitClientResponse> </wctp-Operation>

There are two variables that can be used in the Webdata API's response template.

Value	Function
%Filename%	Outputs the name of the file created by submitting data to webdata.exe
	Outputs the number of the relative-index kept by Webdata.
%FileIndex%	This number resets as data is processed and provides a somewhat unique value for responses.

Example: Receiving Replies via EMAG WCTP

PageGate can be easily integrated with <u>Verizon's Enterprise Messaging platform</u> (<u>EMAG</u>), which supports an enterprise WCTP gateway that supports one-way and two-way messaging.

With one-way implementations, PageGate delivers SMS through the <u>Verizon EMAG</u> WCTP gateway but no reply is expected and none is monitored for.

With two-way implementations, PageGate delivers SMS through the same gateway but replies are expected. In order to provide those replies to you, the EMAG WCTP API requires a reply address; somewhere to route the replies. PageGate's Webdata API provides the ability to receive those replies and this API must be hosted on an outward facing web server as the reply URL provided to the EMAG WCTP API must be internet accessible.

You can then configure reply processing in a few ways:

Static Recipient or Group

This is the most basic form of reply processing. All replies will be delivered to the specified recipient or group.

Reply processing with GetASCII API Advanced Polling rules

If you own the GetASCII API, you can feed the reply information through that system for advanced processing. This allows you to modify message content and who the replies should go to but does not allow for conditional modification or conditional sending. For example, you couldn't have the program scan the body of the message for a keyphrase, then completely change who the message is intended to go to based on it. That would require the PageGate Filter Pack.

• Reply processing with the GetASCII API and the PageGate Filter Pack

Reply messages can be fed through PageGate's <u>Filter Pack</u> to allow for conditional sending. For instance, with the PageGate's filter pack, you can tell PageGate to conditionally change who receives the message based on what the text in the reply is. As an example, you could configure a filter system so that any time the word lunch shows up in a reply message, that reply is sent to the cafeteria group instead of the general replies group.

You could configure a system where replies from a certain phone number will always be copied to certain recipients or groups.

You could configure a system where certain keywords or phrases are replaced with other keywords or phrases. For example, you could translate a code like PD4N in to 4th Precinct.

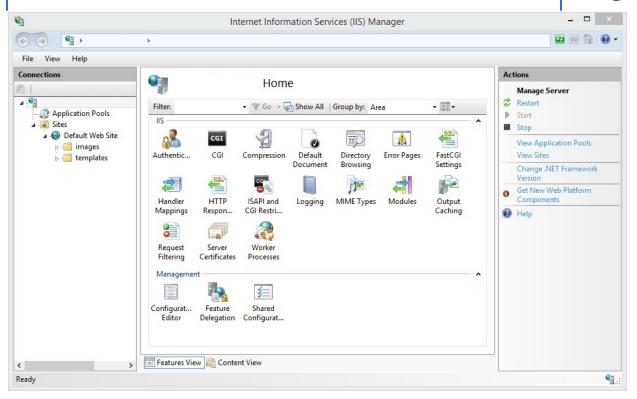
You could configure a system to describe every element I've just described all at once.

However, you must own and implement the <u>Filter Pack</u> to have the functionality necessary to do conditional sending as described.

Step 1: Host webdata.exe on your web server

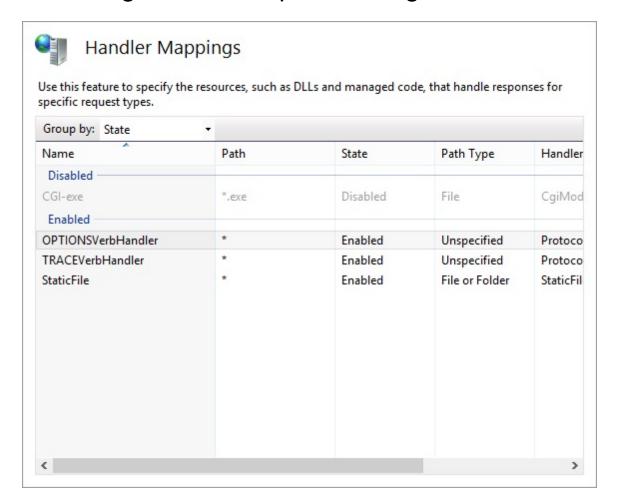
The first thing you'll need to do is host webdata.exe on your web server so you can provide the return URL to the EMAG WCTP API. The following steps are for IIS but this can be done with any web server suite.

- Copy webdata.exe from the PageGate program directory to your server's scripting directory.
- 2) Open the IIS Admin and select the server object.

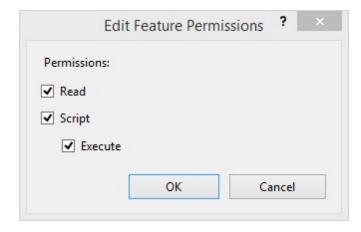


3) Open Handler Mappings.

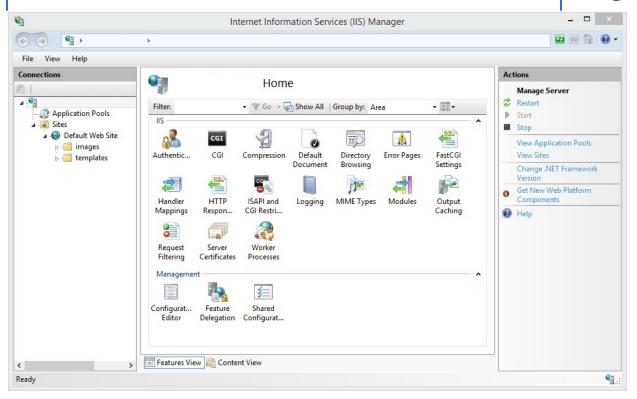
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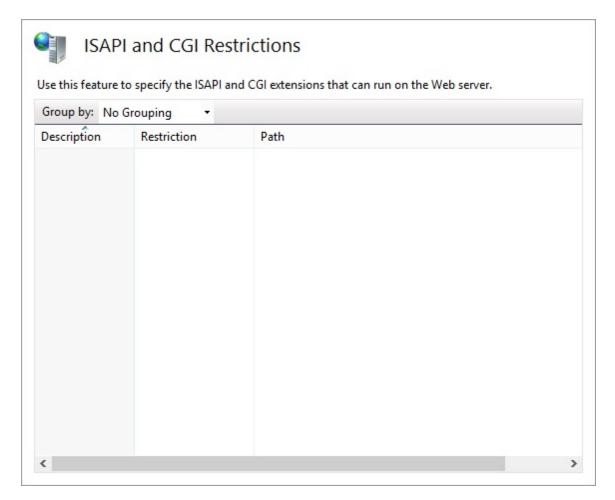
- 4) Right click CGI-exe, left click Edit Feature Permissions
- 5) Check Execute.



- 6) Click OK.
- 7) Select the Server object again.



8) Open ISAPI and CGI Restrictions.



- 9) Right click in the box and select Add.
- 10) Specify the following and click OK:

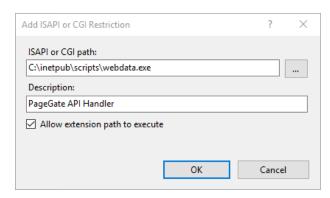
ISAPI or CGI path: Specify the location of

webdata.exe

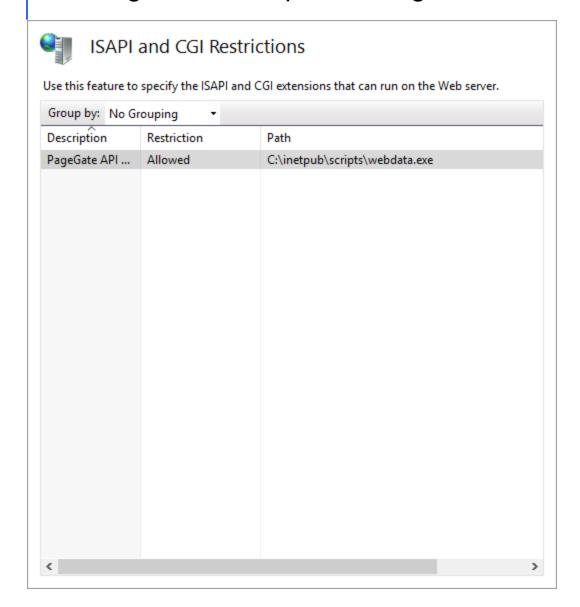
Description: PageGate API Handler

Check 'Allow extension path to execute'

Example:



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Step 1a: Share the folder webdata.exe is hosted in

If PageGate is not running on the server hosting webdata.exe, you will need to share the directory where webdata.exe is hosted to allow the GetASCII interface to parse data sent to the receiver.

Step 2: Configure the EMAG WCTP API to send replies to Webdata

- 1) Log in to the **EMAG** web portal
- 2) Go to Connections APIs
- 3) Edit your existing WCTP API connection.
- 4) Provide the URL to webdata.exe in the Return URL field.

Example: https://yourlPhere/pgscripts/webdata.exe

5) Apply the changes.

Static Recipient or Group

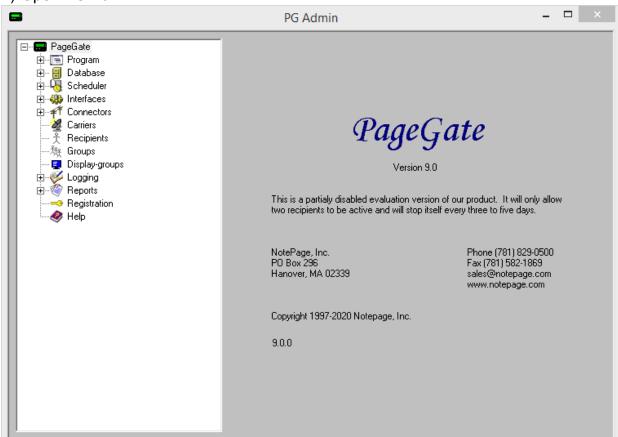
These are the steps on how to configure PageGate to deliver EMAG WCTP replies to a static recipient or group.

Step 1: Configure GetASCII to process the received data

WCTP has a unique structure to the data returned to your server and you'll need to tell PageGate how to interpret the data and what to do with it in general.

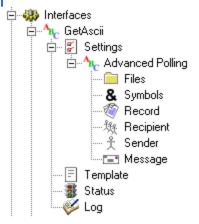
To do that, you'll want to configure an 'Advanced Polling' rule for PageGate's GetASCII interface:

1) Open PG Admin.

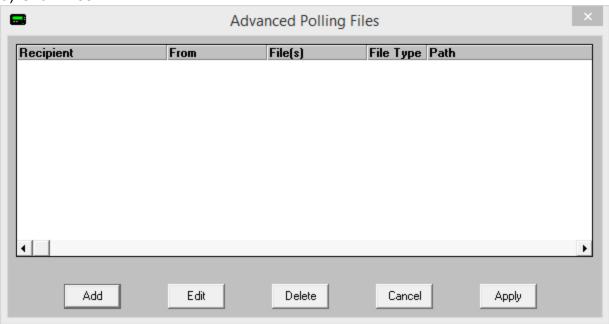


2) Expand Interfaces - GetAscii - Settings - Advanced Polling

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3) Click Files.



- 4) Click Add.
- 5) Specify the following and click Apply:

Recipient: *

From: Leave Blank

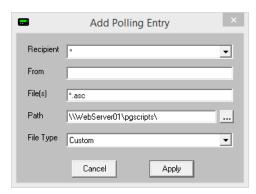
File(s): *.asc

Path: The path to the folder webdata.exe is stored in

on the web server.

Example: \\WebServer01\pgscripts\ or c:

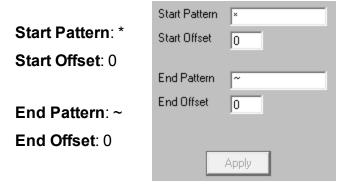
\inetpub\pgscripts\



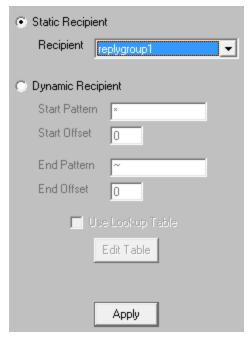
File Type: Custom

NOTE: If you will be implementing a <u>filtering system</u>, you will do so at this point. For more information, please see <u>PageGate's Filter Script documentation</u>.

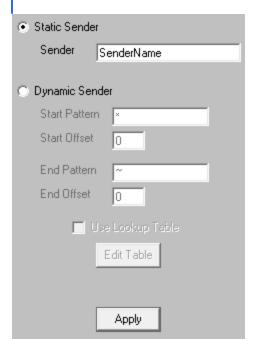
- 6) Click Apply, then Apply again.
- 7) Go to Interfaces GetAscii Settings Advanced Polling Record
- 8) Specify the following and click Apply:



- 9) Go to Interfaces GetAscii Settings Advanced Polling Recipient.
- 10) Select 'Static Recipient and specify the recipient or group the replies should go to.



- 11) Go to Interfaces GetAscii Settings Advanced Polling Sender. This section tells PageGate where in the data to look for the sender value.
- 12) Select 'Static Sender' and specify a sender value.



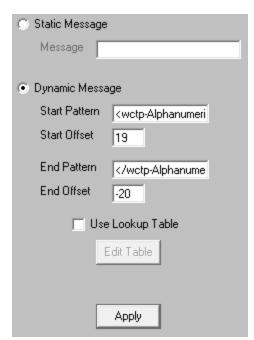
- 13) Go to Interfaces GetAscii Settings Advanced Polling Message. This section tells PageGate what in the data should be considered the message and also allows for basic reformatting of messages.
- 14) Select 'Dynamic Message' and configure the parameters. If you want everything in the received data to be considered the message, you would use a Start Pattern of * and an End Pattern of ~.

Start Pattern: <wctp-Alphanumeric>

Start Offset: 19

End Pattern: </wctp-Alphanumeric>

End Offset: -20



The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed.

To enable this feature, check Use Lookup Table and click Edit Table.

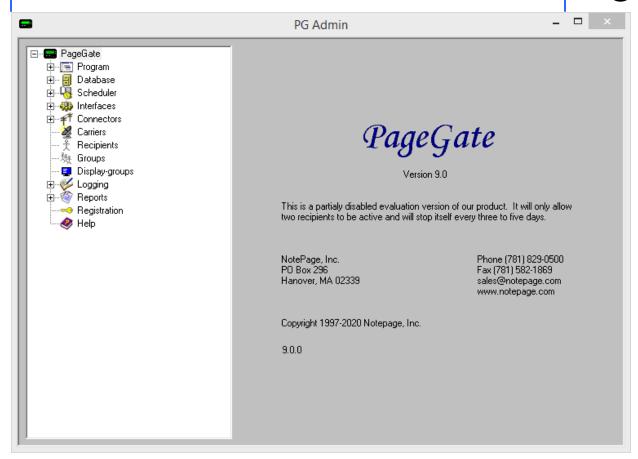


For more information, please see the <u>lookup table</u> section of the documentation. **Processing replies with GetAscii Advanced Polling**

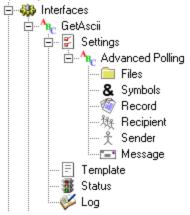
This is an example of how EMAG WCTP reply messages can be processed with the GetASCII API.

Step 1: Configure GetASCII to process the received data

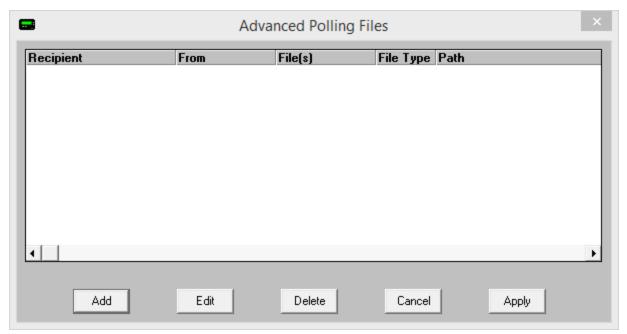
1) Open PG Admin.



2) Expand Interfaces - GetAscii - Settings - Advanced Polling



3) Click Files.



- 4) Click Add.
- 5) Specify the following and click Apply: **Recipient**: *

From: Leave Blank

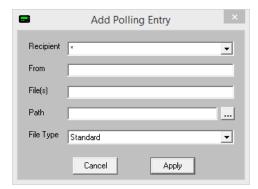
File(s): *.asc

Path: The path to the folder webdata.exe is stored in

on the web server.

Example: \\WebServer01\pgscripts\

File Type: Custom



NOTE: If you will be implementing a <u>filtering system</u>, you will do so at this point. For more information, please see <u>PageGate's Filter Script documentation</u>.

- 6) Go to Interfaces GetAscii Settings Advanced Polling Record
- 7) Specify the following and click Apply:

Start Pattern: *
Start Offset

Start Offset

Start Offset

End Pattern

End Offset

End Offset

Apply

- 8) Go to Interfaces GetAscii Settings Advanced Polling Recipient. This section tells PageGate where in the data to look for the recipient or group this reply should go to.
- 9) Select 'Dynamic Recipient' and configure the parameters.

Start Pattern: This value determines the first character in the recipient block.

Since we're working with WCTP, you could key off of senderID="Value" to auto-respond to the person that sent the message.

You would use senderID=" as the Start Pattern.

Start Offset: The number of characters in the start pattern: 10

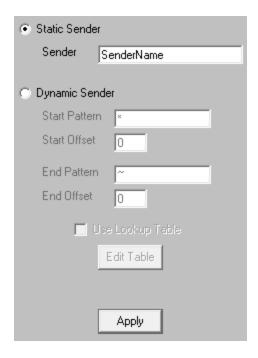
End Pattern: This value determines the last character in the recipient block.

Since we're working with WCTP and are using senderID=" as the Start Pattern, you would use " as the End Pattern.

End Offset: The negative value of the number of characters in the End Pattern: -1

- 10) Go to Interfaces GetAscii Settings Advanced Polling Sender. This section tells PageGate where in the data to look for the sender value.
- 11) Select 'Static Sender' and specify a sender value.





- 12) Go to Interfaces GetAscii Settings Advanced Polling Message. This section tells PageGate what in the data should be considered the message and also allows for basic reformatting of messages.
- 13) Select 'Dynamic Message' and configure the parameters. If you want everything in the received data to be considered the message, you would use a Start Pattern of * and an End Pattern of ~ with both Offsets set to 0.

Start Pattern: <wctp-Alphanumeric>

Start Offset: 19

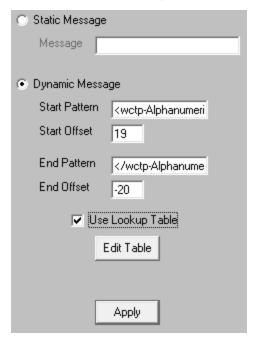
End Pattern: </wctp-Alphanumeric>

End Offset: -20



The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed.

To enable this feature, check Use Lookup Table and click Edit Table.



For more information, please see the <u>lookup table</u> section of the documentation. **Processing replies with a Filter Pack**

Note: PageGate's <u>filter pack</u> supports <u>RegEx expressions</u>, which can allow you to implement an incredibly intricate system.

To say that there are many things you can do with a properly coded <u>filter pack</u> would be an understatement. The <u>Filter Pack</u> allows you to modify and conditionally modify any part of what it interacts with. It can reassign who a message is delivered to based on words or phrases in a reply, it can modify the body of the message, it can modify the subject line, it can insert pre-determined text and many other things.

For instance, with the filter pack, you can tell PageGate to conditionally change who receives the message based on what the text in the reply is. As an example, you could configure a filter system so that any time the word lunch shows up in a reply message, that reply is sent to the cafeteria group instead of the general replies group.

You could configure a system where replies from a certain phone number will always be copied to certain recipients or groups.

You could configure a system where certain keywords or phrases are replaced with other keywords or phrases. For example, you could translate a code like PD4N in to 4th Precinct.

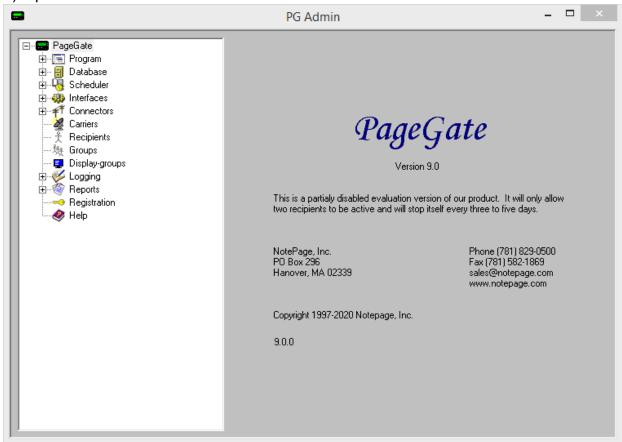
You could configure a system to describe every element I've just described all at once, it's just a matter of coding your <u>filter pack</u> to perform the actions you want.

Step 1: Configure GetASCII to process the received data

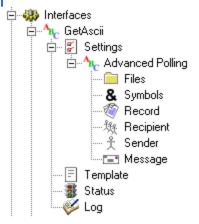
WCTP has a unique structure to the data returned to your server and you'll need to tell PageGate how to interpret the data and what to do with it in general.

To do that, you'll want to configure an 'Advanced Polling' rule for PageGate's GetASCII interface:

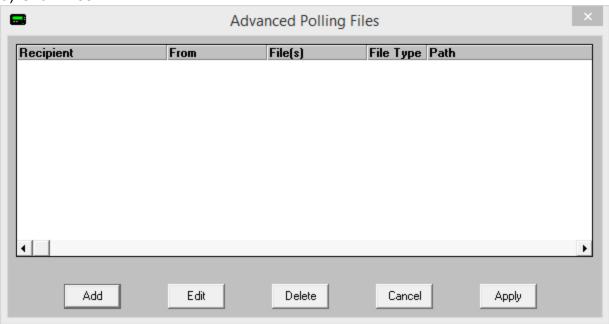
1) Open PG Admin.



2) Expand Interfaces - GetAscii - Settings - Advanced Polling



3) Click Files.



- 4) Click Add.
- 5) Specify the following and click Apply:

Recipient: *

From: Leave Blank

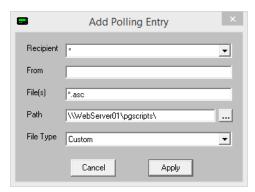
File(s): *.asc

Path: The path to the folder webdata.exe is stored in

on the web server.

Example: \\WebServer01\pgscripts\ or c:

\inetpub\pgscripts\



File Type: Custom

6) Click Apply, then Apply again.

NOTE: Since you will be implementing a <u>filtering system</u>, you will do so at this point. For more information, please see <u>PageGate's Filter Script documentation</u>.

API Polling

With the <u>HTTPGET</u> and <u>HTTPPOST</u> protocols, you can poll information from any Web or REST API that supports the GET or POST methods. That information can then be fed through a <u>filter pack</u> to turn it in to a message to your recipients and groups.

For instance, if you have a web resource that provides XML content, you can configure PageGate to poll for that XML content, then feed it through a filter pack to turn it in to a readable text message.

As an example, you can poll the <u>Spillman CAD XML API</u> for information to dispatch for first responders.

As another example, you can <u>poll the National Weather Service</u> for information on the weather in your local area, then send that weather information out as an SMS to your recipients and groups.

Example: Spillman XML API

Note: This requires the GetASCII API and the Filter Pack.

In this example, we're using a Powershell script to automatically poll the Spillman XML API for information in real time, then parsing the collected data with PageGate's GetAscii interface and a filtering system.

One key component of this implementation is understanding what you want done with the data you get from CAD. Do you want every notification or call type to go to every district? Should only certain agency codes receive messages? Understanding the answers to questions like these is key to knowing whether you need to implement a <u>filtering system</u>.

Step 1: Create the script to poll the Spillman XML API

1) In Windows, create a new directory for the script to reside in. Example: C:\PageGateData\sp-pg-ps\

- 2) Open your preferred text editor (Notepad, Wordpad, EditPad, NotePad++, etc)
- 3) Copy and paste the <u>Spillman XML API Powershell Script</u> in to your new, blank document.

- 4) Modify \$WorkingDir to reflect the path you created in step 1. <u>Example</u>: \$WorkingDir = "C:\PageGateData\sp-pg-ps\"
- 5) Modify \$RequestUri to reflect the IP address and port of your Spillman XML API host. <u>Example</u>: \$RequestUri = "127.0.0.1:4081/DataExchange/REST"
- 6) Modify \$APIRequest to reflect the information you want from Spillman. This API Request will directly determine what information is requested from CAD.

The default request information from the CAD Active Call table and asks for Law, Fire and EMS call types but NOT Miscellaneous call types.

Default Request:

```
<?xml version="1.0" encoding="UTF-8"?>
<PublicSafetyEnvelope version="1.0">
<From/>
<To/>
<To/>
<Creation/>
<PublicSafety id="">
<Query>
<CADActiveCallTable>
<CallTypeLawFireEMS search_type="not_equal_to">m</CallTypeLawFireEMS>
<CADMasterCallCommentsTable childField="LongTermCallID"
parentField="LongTermCallID" />
</CADActiveCallTable>
</Query>
</PublicSafety>
</PublicSafetyEnvelope>
```

- 7) Modify \$LogFile to reflect the path you created in step 1. Example: \$LogFile = "c:\PageGateData\sp-pg-ps\log.txt"
- 8) Save the file as pollspillman.ps1 in the directory you created in step 1. Example: c:\PageGateData\sp-pg-ps\pollspillman.ps1

Step 2: Create an Eveng Log source for the script

- 1) Run Powershell as administrator.
- 2) Type the following and hit enter:

New-EventLog -LogName Application -Source "SpillmanXmlApiRequester"

3) Close Powershell.

Step 3: Create a Windows Service for the script

 There are a few service manager utilities you could use but we recommend using <u>NSSM</u> (<u>https://nssm.cc/download</u>). Unzip the nssm-verzion.zip file in to your script's directory.

Example: c:\PageGateData\sp-pg-ps\nssm-2.24\

- 2) Open your preferred text editor (Notepad, Wordpad, EditPad, NotePad++, etc)
- 3) Copy and paste the <u>Spillman to PageGate Service Installation Script</u> in to your new, blank document.
- 4) Modify \$NssmPath to reflect the directory you unzipped NSSM to. Example: \$NssmPath = "c:\PageGateData\sp-pg-ps\nssm-2.24\win64\"
- 5) Modify \$PsPath to point to the pollspillman.ps1 script you created above. Example: \$PsPath = "c:\PageGateData\sp-pg-ps\pollspillman.ps1"
- 6) Save the file as install.ps1 in the directory the script resides in. Example: c:\PageGateData\sp-pg-ps\
- 7) Run Powershell as administrator.
- 8) Change directory in to the folder the script resides in. Example: c:\PageGateData\sp-pg-ps\
- 9) Type the following and hit enter: .\install.ps1
- 10) Close Powershell.
- 11) Open the Services list in Windows.
- 12) Go in to the properties of the Spillman-PageGate-PowerScript service.
- 13) Select the 'Log On' tab
- 14) Specify a service account with permission to run powershell scripts. A normal user account is usually sufficient but this user must have logged in to Windows and run Microsoft Edge or the Internet Explorer at least once.
- 15) Start the Spillman-PageGate-PowerScript service.

NOTE: To remove the script, use the Spillman to PageGate service removal script.

Step 4: Configure GetAscii

This part of the configuration will be determined by what you want to do with the data retrieved from Spillman's API.

Basic Implementation

In the most basic configuration, PageGate will match the value in <AgencyCode> to its recipients and groups list, allowing any call to that agency to go through regardless of incident type or nature code used.

• Implementation with filtering

With PageGate's filter pack, you have the ability to determine what dispatches should trigger outbound messages by keying off of any data returned by the API.

Examples of what you can do with filtering:

- Specify which notification types an agency should receive
- Determine whether additional assets should be messaged based on address and notification type
- Restrict certain notification types to only go to specific agencies or assets

Spillman XML API Powershell Script

- # If powershell scripts aren't yet allowed to run on this computer then
- # run powershell as administrator and issue the following command:
- # set-executionpolicy remotesigned
- # Need to create event logging source before first run, in powershell, as administrator # New-EventLog -LogName Application -Source "SpillmanXmlApiRequester"
- # To run this script as a service see install-service.ps1 script

User Settable Values

- # Folder that the script runs out of \$WorkingDir = "THE PATH TO YOUR SCRIPT'S FOLDER"
- # Delay between requests (seconds) \$RequestDelay = 3
- # PageGate Recipient \$PGRecipient = "fromcad"
- # PageGate Sender \$PGSender = "CAD"

```
# Request URI
$RequestUri = "THE IP OF YOUR SPILLMAN SERVER:4081/DataExchange/REST"
# API Username
$APIUsername = "xmluser"
# API Password
$APIPassword = "xmluser"
# Write debug info to console
$Debug = $True
# Write debug info to a file
# *** should not be left set on a production system
    because file will grow indefinitely
$LogToFile = $True
# Path to log file
$LogFile = "THE PATH TO YOUR SCRIPT'S FOLDER\log.txt"
# API XML request
$APIRequest = '<?xml version="1.0" encoding="UTF-8"?>
<PublicSafetyEnvelope version="1.0">
<From/>
<To/>
<Creation/>
<PublicSafety id="">
<Query>
<CADActiveCallTable>
<CADMasterCallCommentsTable childField="LongTermCallID"</p>
parentField="LongTermCallID" />
<RadioLogUnitStatusTable childField="LongTermCallID"</p>
parentField="LongTermCallID" />
</CADActiveCallTable>
</Query>
</PublicSafety>
</PublicSafetyEnvelope>'
# End Of Line value - used in Build-Message-Text
Set-Variable -Name Eol -Scope Global -Value "`r`n"
# This function is used to build the contents of the text message
# use $CallXml.<XML-tag-name> to insert the contents of an XML tag in the call
function Build-Message-Text($CallXml)
```

```
# This will return the call's full XML response as the message text
  #Return $PGRecipient + $EoI +
  #$PGSender + $EoI +
  #$CallXml.OuterXML
  # This will return select XML fields as the message text
  Return $PGRecipient + $Eol +
  $PGSender + $EoI +
  '<LongTermCallID>' + $CallXml.LongTermCallID + '</LongTermCallID>' + $Eol +
  '<IncidentNature>' + $CallXml.IncidentNature + '</IncidentNature>' + $EoI +
  '<RespondToAddress>' + $CallXml.RespondToAddress + '</RespondToAddress>' +
$Eol+
  '<CityCode>' + $CallXml.CityCode + '</CityCode>' + $Eol +
  '<AgencyCode>' + $CallXml.AgencyCode + '</AgencyCode>' + $Eol +
  '<WhenCallWasOpened>' + $CallXml.WhenCallWasOpened +
'</WhenCallWasOpened>' + $EoI +
  '<YCoordinateGeobase>' + $CallXml.YCoordinateGeobase +
'</YCoordinateGeobase>' + $Eol +
  '<XCoordinateGeobase>' + $CallXml.XCoordinateGeobase +
'</XCoordinateGeobase>' + $Eol +
  '<CallTakerComments>' +
$CallXml.CADMasterCallCommentsTable.CallTakerComments +
'</CallTakerComments>' + $Eol
##### End User Settable Values
# write startup notice to event log
Write-EventLog -LogName "Application" -Source "SpillmanXmlApiRequester" -EntryType
Information - EventId 1 - Message "Started"
if ($Debug)
{
  Write-Host ("Started")
  if ($LogToFile)
    Add-Content $LogFile -value "Started"
}
try
  while ($True)
  {
```

```
if ($Debug)
    {
       Write-Host
       Write-Host ("Start message check")
       if ($LogToFile)
       {
         Add-Content $LogFile -value ""
         Add-Content $LogFile -value "Start message check"
      }
    }
    # variable that stores call ids read from API request XML
    $Xmllds = New-Object System.Collections.Generic.List[string]
    # get stored ids from disk
    try
    {
      # clear stored ids
       $StoredIds = $null
      # read ids file
       [System.Collections.Generic.List[String]]$StoredIds = get-content ($WorkingDir +
"ids.txt") -ErrorAction Stop
    }
    catch
      # can't access file
       Write-EventLog -LogName "Application" -Source "SpillmanXmlApiRequester" -
EntryType Error -EventId 1 -Message "Unable to read stored Ids file"
       if ($Debug)
       {
         Write-Host ("Unable to read stored lds file")
         if ($LogToFile)
           Add-Content $LogFile -value "Unable to read stored lds file"
      }
  # check if null
  if (!$StoredIds)
    # null, so create empty object
    $StoredIds = New-Object System.Collections.Generic.List[string]
  }
```

```
if ($Debug)
    Write-Host ("Stored Ids:")
    $StoredIds
    if ($LogToFile)
      Add-Content $LogFile -value "Stored lds:"
      Add-Content $LogFile -value $StoredIds
  }
  # generate credentials used to access API
  $TextCredentials = $APIUsername + ":" + $APIPassword
  $ByteCredentials = [System.Text.Encoding]::ASCII.GetBytes($TextCredentials)
  $Base64Credentials = [Convert]::ToBase64String($ByteCredentials)
  $Headers = @{ Authorization = "Basic " + $Base64Credentials }
  # API request in XML form
  $Body = $APIRequest
  # make the actual request
  $Response = Invoke-WebRequest -URI $RequestUri -Method "Post" -Headers
$Headers -Body $Body -UseBasicParsing
  if ($Debug)
    Write-Host ("HTTP response:")
    $Response
    if ($LogToFile)
      Add-Content $LogFile -value "HTTP response:"
      Add-Content $LogFile -value $Response
    }
  }
  # convert the received body text to an XML object (easier to work with)
  $ResponseXml = New-Object XML
  $ResponseXml.PreserveWhitespace = $True
  $ResponseXml.LoadXml($Response.Content)
  # check if null
  if (!$ResponseXml)
  {
```

```
# null, so create empty object
    $ResponseXml = New-Object XML
 #if ($Debug)
 #{
 # Write-Host ("Response XML:")
 # $ResponseXml.OuterXml
 # if ($LogToFile)
 # {
 #
       Add-Content $LogFile -value "Response XML:"
       Add-Content $LogFile -value $ResponseXml.OuterXml
 # }
 #}
 # loop through the CADActiveCallTable blocks
 foreach ($Call in $ResponseXml.SelectNodes("//CADActiveCallTable"))
    # only process Dispatched (DISP) or Onsite (ONS) calls
    if (($Call.StatusCodeOfCall -eq 'DISP') -or ($Call.StatusCodeOfCall -eq 'ONS'))
     $CallId = $Call.LongTermCallID + "-" + $Call.CallTypeLawFireEMS + "-" +
$Call.AgencyCode + "-" + $Call.IncidentNature
     $CallId = $CallId -replace " ", "-"
     $Xmllds.Add($Callld)
     $Match = $False
    # look for a match in the stored ids
    foreach ($StoredId in $StoredIds)
      if ($CallId -eq $StoredId)
        # match found
        $Match = $True
        break
      }
    if ($Match)
      # existing id
      if ($Debug)
        Write-Host ("Call Id already exists: " + $CallId)
        if ($LogToFile)
```

```
Add-Content $LogFile -value ("Call Id already exists: " + $CallId)
      }
    }
    else
      # new id found
      $StoredIds.Add($CallId)
      # write message file
      $MessageText = Build-Message-Text($Call)
      if ($Debug)
      {
        Write-Host ("Call ld is new: " + $CallId)
        Write-Host ("New message created:")
        $MessageText
        if ($LogToFile)
           Add-Content $LogFile -value ("Call ld is new: " + $Callld)
           Add-Content $LogFile -value "New message created:"
           Add-Content $LogFile -value $MessageText
        }
      }
      $MessageFile = $WorkingDir + $CallId + ".asc"
      try
      {
        Set-Content -Path $MessageFile -Value $MessageText
      }
      catch
        # unable to write message file
        Write-EventLog -LogName "Application" -Source "SpillmanXmlApiRequester" -
EntryType Error -EventId 3 -Message "Unable to write message file"
        if ($Debug)
        {
           Write-Host ("Unable to write message file")
           if ($LogToFile)
             Add-Content $LogFile -value "Unable to write message file"
    }
```

```
# do it all again for each <RadioLogUnitStatusTable> entry
    foreach ($AddCall in $Call.RadioLogUnitStatusTable)
      # only process Dispatched (DISP) or Onsite (ONS) calls
      if (($AddCall.StatusDisplayCode -eq 'DISP') -or ($Call.StatusDisplayCode -eq
'ONS'))
         # only process ones with AgencyCode set
         if ($AddCall.AgencyCode)
           # replace the master call's AgencyCode with this one
           $Call.AgencyCode = $AddCall.AgencyCode
           $CallId = $Call.LongTermCallID + "-" + $Call.CallTypeLawFireEMS + "-" +
$Call.AgencyCode + "-" + $Call.IncidentNature
           $CallId = $CallId -replace " ", "-"
           $Xmllds.Add($Callld)
           $Match = $False
         # look for a match in the stored ids
         foreach ($StoredId in $StoredIds)
         {
           if ($CallId -eq $StoredId)
             # match found
             $Match = $True
             break
           }
         if ($Match)
           # existing id
           if ($Debug)
             Write-Host ("Call Id already exists: " + $CallId)
             if ($LogToFile)
               Add-Content $LogFile -value ("Call Id already exists: " + $CallId)
             }
           }
         else
```

```
# new id found
           $StoredIds.Add($CallId)
           # write message file
           $MessageText = Build-Message-Text($Call)
           if ($Debug)
           {
             Write-Host ("Call ld is new: " + $Callld)
             Write-Host ("New message created:")
             $MessageText
             if ($LogToFile)
               Add-Content $LogFile -value ("Call ld is new: " + $Callld)
               Add-Content $LogFile -value "New message created:"
               Add-Content $LogFile -value $MessageText
             }
           }
           $MessageFile = $WorkingDir + $CallId + ".asc"
           try
           {
             Set-Content -Path $MessageFile -Value $MessageText
           }
           catch
             # unable to write message file
             Write-EventLog -LogName "Application" -Source
"SpillmanXmlApiRequester" -EntryType Error -EventId 3 -Message "Unable to write
message file"
             if ($Debug)
               Write-Host ("Unable to write message file")
               if ($LogToFile)
                  Add-Content $LogFile -value "Unable to write message file"
              }
         }
  }
```

```
# write stored ids to disk
  try
  {
    Set-Content -Path ($WorkingDir + "ids.txt") -Value $Xmllds
  catch
    # unable to write stored ids
    Write-EventLog -LogName "Application" -Source "SpillmanXmlApiRequester" -
EntryType Error -EventId 4 -Message "Unable to write stored Ids file"
    if ($Debug)
    {
       Write-Host ("Unable to write stored lds file")
       if ($LogToFile)
      {
         Add-Content $LogFile -value "Unable to write stored lds file"
    }
  }
  if ($Debug)
    Write-Host ("Pausing for " + $RequestDelay + " seconds")
    if ($LogToFile)
    {
      Add-Content $LogFile -value ("Pausing for " + $RequestDelay + " seconds")
    }
  }
  Start-Sleep -Seconds $RequestDelay
 }
}
finally
  # write shutdown notice to event log
  Write-EventLog -LogName "Application" -Source "SpillmanXmlApiRequester" -
EntryType Information -EventId 2 -Message "Stopped"
  if ($Debug)
    Write-Host ("Stopped")
    if ($LogToFile)
    {
       Add-Content $LogFile -value "Stopped"
```

```
}
Spillman to PageGate Service Installation Script
# This script will install the sp-pg.ps1 script as a windows service
# It must be run with administrator rights
# Steps
# 1. Download the NSSM tool from https://nssm.cc
# 2. Update $NssmPath variable value below to point to the nssm executable folder
# 3. Update $PsPath variable value below
#4. Run this script
# 5. In the Windows Services App, update the logon credentials for this service to
# use a regular user account, instead of the system account
# path to nssm.exe
$NssmPath = "THE PATH TO YOUR SCRIPT'S FOLDER\nssm-2.24\win64\"
# path to sp-pg.ps1
$PsPath = "THE PATH TO YOUR SCRIPT'S FOLDER\sp-pg-ps\sp-pg.ps1"
# name of service
$ServiceName = "Spillman-PageGate-PowerScript"
$NssmCommand = (Get-Command ($NssmPath + "nssm.exe")).Source
$PoShCommand = (Get-Command powershell).Source
#alternate for specific path
#$PoShCommand = "C:\windows\system32\WindowsPowerShell\v1.0\powershell.exe"
$args = '-ExecutionPolicy Bypass -NoProfile -File "{0}" -f $PsPath
$args
& $NssmCommand install $ServiceName $PoShCommand $args
```

Spillman to PageGate Service Removal Script

This script will remove the Spillman-PageGate-PowerScript windows service # It must be run with administrator rights

path to nssm.exe

\$NssmPath = "THE PATH TO YOUR SCRIPT'S FOLDER\sp-pg-ps\nssm-2.24\win64\"

name of service

\$ServiceName = "Spillman-PageGate-PowerScript"

\$NssmCommand = (Get-Command (\$NssmPath + "nssm.exe")).Source

\$PoShCommand = (Get-Command powershell).Source

& \$NssmCommand remove \$ServiceName confirm

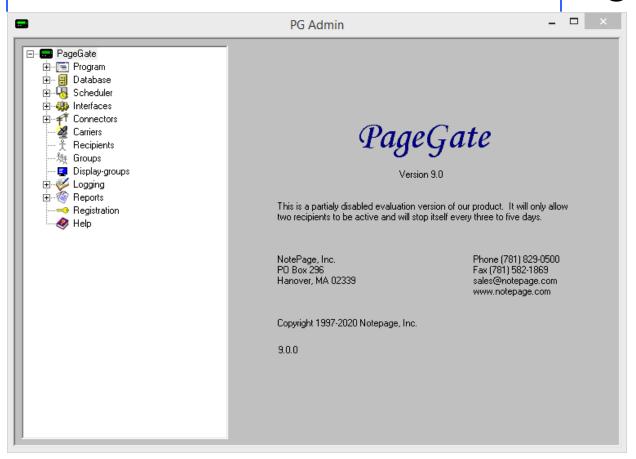
Implementing GetAscii for Spillman

Without filtering, PageGate will monitor all received information from the API and dispatch any message addressed to an agency code that exists as a recipient or group in PageGate.

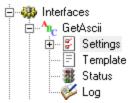
1) In Windows, create a directory for GetAscii to reference.

Example: c:\PageGateData\ASCII\

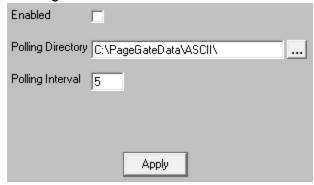
2) Run PG Admin.



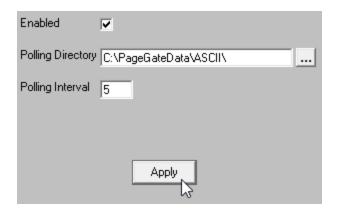
3) Go to Interfaces - GetAscii - Settings



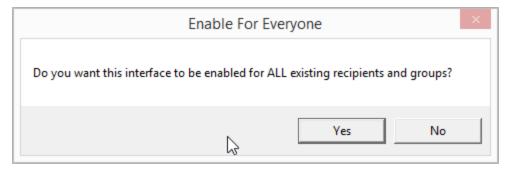
4) Set 'Polling Directory' to the directory the script resides within. Example: c: \PageGatedata\ASCII\



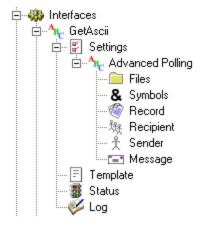
5) Check 'Enabled' and click Apply.

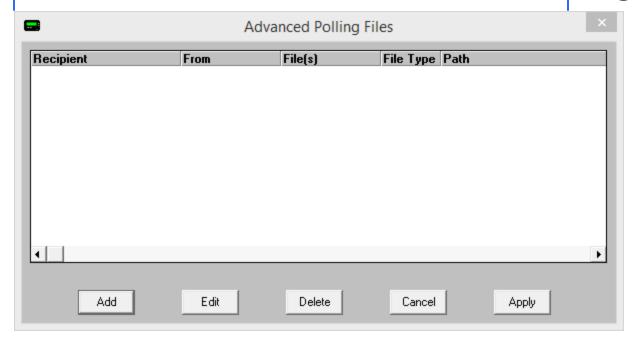


6) Select 'Yes'



7) Go to Interfaces - GetAscii - Settings - Advanced Polling - Files





- 8) Click Add
- 9) Specify the following and click Apply, then click Apply again.

Recipient: *

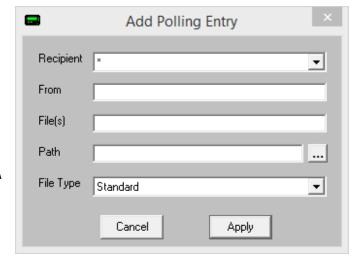
From: CAD

File(s): *.asc

Path: The path to your script.

Example: C:\PageGateData\sp-pg-ps\

File Type: Custom

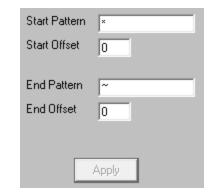


- 10) Go to Interfaces GetAscii Settings Advanced Polling Record
- 11) Specify the following and click Apply

Start Pattern: *
Start Offset: 0

End Pattern: ~

End Offset: 0



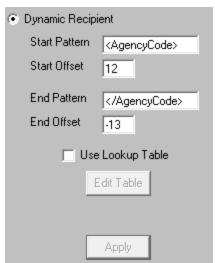
- 12) Go to Interfaces GetAscii Settings Advanced Polling Recipient
- 13) Select 'Dynamic Recipient', specify the following and click Apply

Start Pattern: <AgencyCode>

Start Offset: 12

End Pattern: </AgencyCode>

End Offset: -13



- 14) Go to Interfaces GetAscii Settings Advanced Polling Sender
- 15) Select 'Static Sender', enter the name 'CAD' and click Apply



- 16) Go to Interfaces GetAscii Settings Advanced Polling Message
- 17) Specify the following and click Apply

Dynamic Message

	Start Pattern ×
Start Pattern: * Start Offset: 0	Start Offset 0
	End Offset 0
End Pattern: ~	Use Lookup Table
End Offset: 0	Edit Table
	Apply

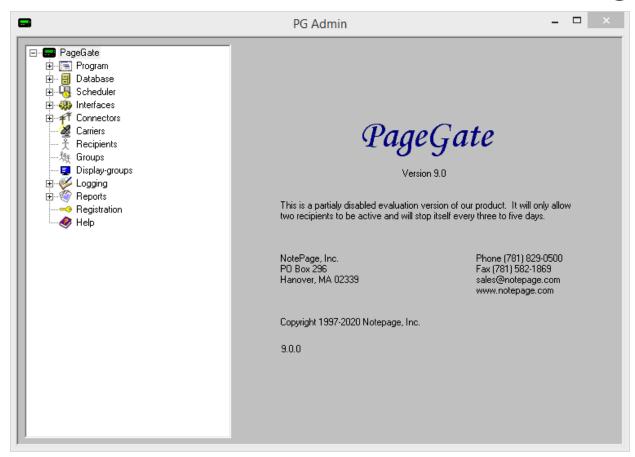
Implementing GetAscii and Filtering with Spillman

PageGate's <u>filtering system</u> allows you to do nearly anything you want with processed traffic. In our <u>example filter pack for Spillman</u>, we provide examples for how to:

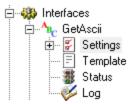
- Only allow an agency to be messaged for specific nature codes.
- Allow an agency to receive all nature codes.
- Determine whether additional assets should be messaged based on address and notification type
- Restrict certain notification types to only go to specific agencies or assets

Step 1: Configure GetAscii

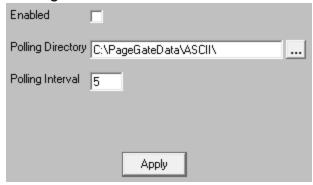
- 1) In Windows, create a directory for GetAscii to reference. Example: c:\PageGateData\ASCII\
- 2) Run PG Admin.



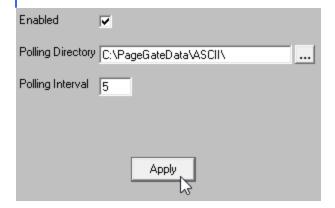
3) Go to Interfaces - GetAscii - Settings



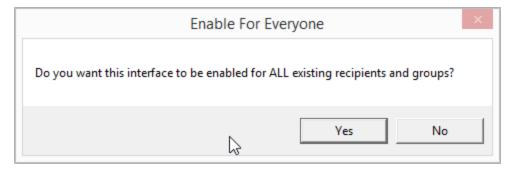
4) Set 'Polling Directory' to the directory the script resides within. Example: c: \PageGatedata\ASCII\



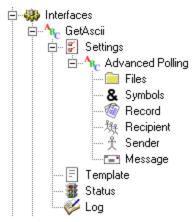
5) Check 'Enabled' and click Apply.

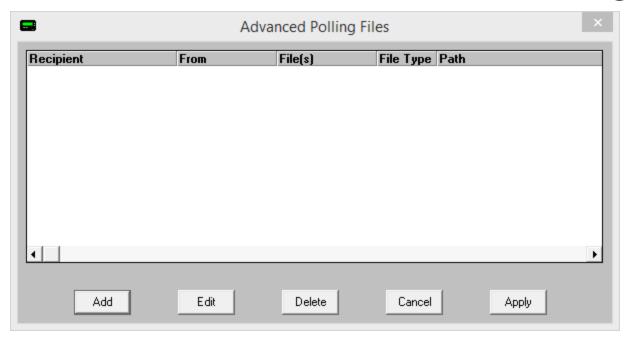


6) Select 'Yes'



7) Go to Interfaces - GetAscii - Settings - Advanced Polling - Files





- 8) Click Add
- 9) Specify the following and click Apply, then click Apply again.

Recipient: *

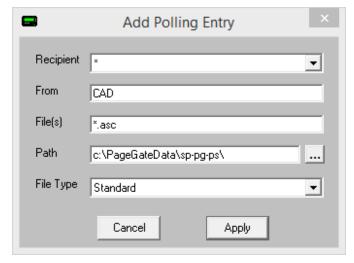
From: CAD

File(s): *.asc

Path: The path to your script.

Example: C:\PageGateData\sp-pg-ps\

File Type: Standard



Step 2: Configure your filter(s)

PageGate's filtering system allows you to do nearly anything you want with processed traffic. In our <u>example filter pack for Spillman</u>, we provide examples for how to:

- Only allow an agency to be messaged for specific nature codes.
- Allow an agency to receive all nature codes.
- Determine whether additional assets should be messaged based on address and notification type

• Restrict certain notification types to only go to specific agencies or assets

Step 3: Implement your filter

1) In PG Admin, go to Interfaces - GetAscii - Template

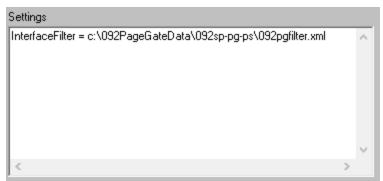


2) Specify the following in the 'Settings' section:

InterfaceFilter = The path to and file name of your script.

Note: \ is a system reserved character and the \ in file paths must be represented as \092 Example:

InterfaceFilter = c:\092PageGateData\092sp-pg-ps\092pgfilter.xml



```
3) Click Apply.
Example Filter Pack for Spillman
<DebugFile>
      <Active>
             True
       </Active>
      <Name>
             debug.txt
      </Name>
</DebugFile>
<Filter>
      <Comment>
             Check to see if processed data is original CAD output
      </Comment>
 <Search>
 <Section>
      Recipient
 </Section>
 <Type>
      Literal
 </Type>
 <Text>
      fromcad
 </Text>
 </Search>
      <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    True
             </Text>
      </Replace>
</Filter>
<Filter>
      <Comment>
             abort if not original CAD output
      </Comment>
```

```
<Search>
 <Section>
      Flag
 </Section>
 <Type>
      Literal
 </Type>
 <Text>
      False
 </Text>
 </Search>
      <Replace>
             <Section>
                   Flag
             </Section>
             <Scope>
                   Section
             </Scope>
             <Text>
                   True
             </Text>
      </Replace>
<Abort>True</Abort>
</Filter>
<Filter>
      <Comment>
             set recipient to an invalid name so if there aren't any matches, the file won't
be
             accepted by PageGate
      </Comment>
  <Search>
    <Section>
      Message
    </Section>
    <Type>
      RegEx
    </Type>
    <Text>
                   (?s).*
    </Text>
  </Search>
      <Replace>
             <Section>
```

```
Recipient

</Section>

<Scope>

Section

</Scope>

<Text>

nobody

</Text>

</Replace>

</Filter>

<Comment>
```

In this example, we want to restrict what notification types will trigger a message to an agency. In this example, if the incident nature is AIRCRAFT EMERGE or AIRCRAFT HIJACK or ARSON or BOMB THREAT or DROWNING or ESCAPE PRISONER or EXPLOSION or FIRE CHEM SPILL or FIRE FUEL SPILL or FIRE WILDLAND or FIRE STRUCTURE or GAS LEAK INSIDE or GAS LEAK OUTSID or GUNSHOT WOUND or MUTUAL AID OUT or PURSUIT or RAILROAD INCIDE or RESCUE or SCHOOL LOCKDOWN or SEARCH or SMOKE INVESTIGA or UNATTENDED DEAT or WEATHER INCIDEN, the filter will dispatch the message to the recipient or group referenced in the 'Text' section in the <Replace> statement.

```
</ri>
<Search>
<Section>
Message
</Section>
<Type>
RegEx
</Type>
<Text>
```

(?s).*<IncidentNature>(AIRCRAFT EMERGE|AIRCRAFT HJACK|ARSON|BOMB THREAT|DROWNING|ESCAPE PRISONER|EXPLOSION|FIRE CHEM SPILL|FIRE FUEL SPILL|FIRE WILDLAND|FIRE STRUCTURE|GAS LEAK INSIDE|GAS LEAK OUTSID| GUNSHOT WOUND|MUTUAL AID OUT|PURSUIT|RAILROAD INCIDE|RESCUE| SCHOOL LOCKDOWN|SEARCH|SMOKE INVESTIGA|UNATTENDED DEAT| WEATHER INCIDEN)

```
</Text>
</Search>
</Replace>
<Section>
Recipient
```

```
</Section>
            <Scope>
                   Section
            </Scope>
            <Text>
                   ExampleRecipientOrGroup
            </Text>
      </Replace>
<WriteFile>
            THE PATH TO YOUR SCRIPT'S FOLDER\%InputFileNameBase%-%
FilterIndex%%InputFileNameExtension%
      </WriteFile>
</Filter>
<Filter>
      <Comment>
            In this example, we want to make sure the "Search and Rescue" team is
ALWAYS messaged in addition to the original agency dispatched any time the call type is
'SEARCH' is used.
      </Comment>
  <Search>
    <Section>
      Message
    </Section>
    <Type>
      RegEx
    </Type>
    <Text>
(?s).*<IncidentNature>SEARCH<VIncidentNature>
    </Text>
  </Search>
      <Replace>
            <Section>
                  Recipient
            </Section>
            <Scope>
                   Section
            </Scope>
            <Text>
                   YourSearchAndRescueRecipientOrGroup
            </Text>
      </Replace>
```

```
<WriteFile>
            THE PATH TO YOUR SCRIPT'S FOLDER\%InputFileNameBase%-%
FilterIndex%%InputFileNameExtension%
      </WriteFile>
</Filter>
<Filter>
      <Comment>
            In this example, we want to make sure the "Search and Rescue" team is
ALWAYS messaged in addition to the original agency dispatched any time the call type is
'RESCUE' is used.
      </Comment>
  <Search>
    <Section>
      Message
    </Section>
    <Type>
      RegEx
    </Type>
    <Text>
(?s).*<IncidentNature>RESCUE<VIncidentNature>
    </Text>
  </Search>
      <Replace>
            <Section>
                  Recipient
            </Section>
            <Scope>
                  Section
            </Scope>
            <Text>
                  YourSearchAndRescueRecipientOrGroup
            </Text>
      </Replace>
      <WriteFile>
            THE PATH TO YOUR SCRIPT'S FOLDER\%InputFileNameBase%-%
FilterIndex%%InputFileNameExtension%
      </WriteFile>
</Filter>
<Filter>
      <Comment>
```

In this example, we're scanning the address for a specific value. If it finds that value, the agency referenced should be messaged in addition to the original agency dispatched. This can be used to dispatch additional resources when an event takes place at a school, hospital or other specifically addressed location.

```
</Comment>
  <Search>
    <Section>
      Message
    </Section>
    <Type>
      RegEx
    </Type>
    <Text>
(?s).*<RespondToAddress>An Example Address<\/RespondToAddress>
    </Text>
  </Search>
      <Replace>
            <Section>
                  Recipient
            </Section>
            <Scope>
                  Section
            </Scope>
            <Text>
                  ExampleRecipientOrGroup
            </Text>
      </Replace>
      <WriteFile>
            THE PATH TO YOUR SCRIPT'S FOLDER\%InputFileNameBase%-%
FilterIndex%%InputFileNameExtension%
      </WriteFile>
</Filter>
<Filter>
      <Comment>
            set recipient back to an invalid name in case the above filter changed it
      </Comment>
  <Search>
    <Section>
      Message
    </Section>
    <Type>
```

```
RegEx
    </Type>
    <Text>
                  (?s).*
    </Text>
  </Search>
      <Replace>
            <Section>
                  Recipient
            </Section>
            <Scope>
                  Section
            </Scope>
            <Text>
                   nobody
            </Text>
      </Replace>
</Filter>
<Filter>
      <Comment>
            In this example, the specified agency should receive all call types.
      </Comment>
        <Search>
          <Section>
            Message
          </Section>
          <Type>
            RegEx
          </Type>
          <Text>
      <AgencyCode>ExampleAgencyCode</AgencyCode>
          </Text>
        </Search>
      <Replace>
            <Section>
                  Recipient
            </Section>
            <Scope>
                   Section
            </Scope>
            <Text>
```

```
ExampleAgencyCode

</Text>

</Replace>

<Continue>

False

</Continue>

</Filter>
```

Example: National Weather Service

Note: This requires the GetASCII API and the Filter Pack.

With the <a href="https://example.com/https://

In this example, we're configuring PageGate to automatically poll the National Weather service for information on the weather in your local area, then send that weather information out as an SMS to your recipients and groups.

Step 1: Configure PageGate to send SMS

Step 2: Create the carrier to poll the information from the web API

1) Right click Carriers, left click Add.



2) Name the carrier: noaa-weather

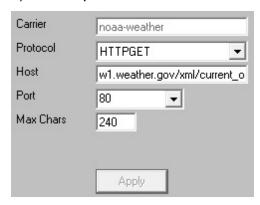
3) Set the protocol to: HTTPGET

4) Set the Host to the National Weather Service's web API: w1.weather.gov/xml/<your region>

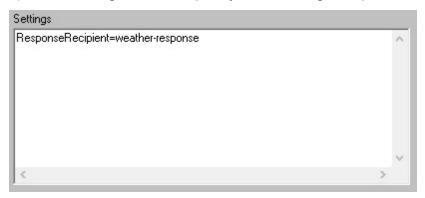
For example, you would use this for the weather at Boston Logan International Airport: w1.weather.gov/xml/current obs/KBOS.xml

For more information on the National Weather Service's web API/XML feeds, have a look at their website: http://w1.weather.gov/xml/current obs/

5) Set the port to: 80



- 6) Click Apply to add the noaa-weather carrier.
- 7) Go to Carriers noaa-weather Template.
- 8) In the Settings section, specify the following: ResponseRecipient=weather-response



9) Click Apply.

Step 3: Create a File carrier to pass the web API information to PageGate's GetASCII

API and Filter Pack for processing

- 1) In Windows, create a new directory for PageGate's message processing to reference. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called response as a sub-directory of PageGate's database directory (By default, c:\PageGateData\response\).
- Right click Carriers, left click Add.
- 3) Specify the following:

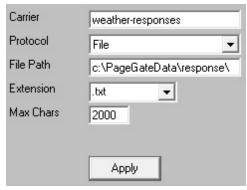
Carrier: weather-responses

Protocol: File

File Path: Specify the directory you created in step 10. By default, c

\PageGateData\response\

Extension: .txt Max Chars: 2000



4) Click Apply.

Step 4: Create a recipient tied to the File carrier

1) Right click Recipients, left click Add.



2) Specify the following:

Full Name: weather-response Recipient: weather-response

Type: Normal

Carrier: weather-responses

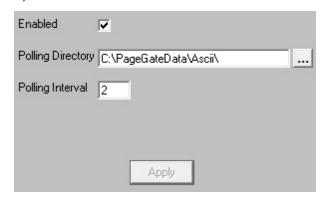
Failover: (none)
ID/PIN: Leave blank
Max Chars: 2000



3) Click Apply

Step 5: Configure and enable the GetASCII API

- In Windows, create a new directory for the GetASCII API's basic processing. We recommend creating a directory called ASCII as a sub-directory of <u>PageGate's</u> <u>database directory</u> (By default, c:\PageGateData\ASCII\).
- 2) In the PageGate Admin, go to Interfaces GetASCII Settings.
- 3) Set the 'Polling Directory' to the directory you created in step 1. By default, c: \PageGateData\ASCIN
- 4) Check Enabled.



- 5) Click Apply.
- 6) Say yes, you do want this to be enabled for everyone.
- 7) Go to Interfaces GetASCII Settings Advanced Polling Files.
- 8) Click Add and specify the following:

Recipient: *

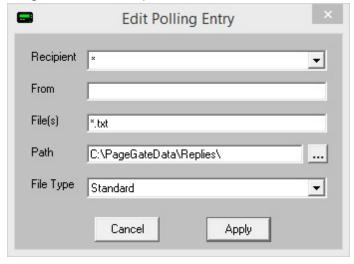
From:

File(s): *.txt

File Type: Standard

Path: Specify the folder the reply messages will be written to. By default, C:

\PageGateData\response\



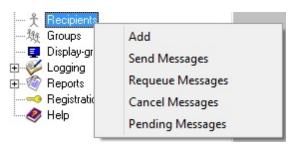
- 9) Click Apply.
- 10) Click Apply again.
- 11) Go to Program Settings.
- 12) In the 'Run on this server' section, check GetASCII.
- 13)Click Apply.
- 14) If prompted for credentials, leave them blank and click Apply again.

Step 6: Configure the Filter Pack to process the web API data

- 1) Copy pgfilter.exe, pgfilter.xml and preproc.bat in to the directory you created for the weather-responses File carrier. By default, c:\PageGateData\response\
- 2) Click here for the necessary pgfilter.xml script configuration.

Step 7: Create a recipient to initiate the weather check with the National Weather Service

1) Right click Recipients, left click Add.



2) Specify the following:

Full Name: check-weather Recipient: check-weather

Type: Normal

Carrier: noaa-weather

Failover: (none) ID/PIN: 123 Max Chars: 2000



3) Click Apply.

Once you finish this configuration, any time a any message is created for the check-weather recipient, the program will perform the necessary request to poll the current weather data from the National Weather service, then send that information as a text message to the recipients and groups specified in the <u>filter pack's</u> configuration.

As an added bonus, if you have the <u>PageGate Client</u>, you can configure a scheduled message to go to the weather-check recipient every day at a specified interval. So, you could configure the program to check and broadcast the weather every hour, day, week, month or at any other timescale you prefer.

It's also important to note that you can configure as many HTTPGET carriers to check as many National Weather service regions and have all output fed through the same <u>filter</u> pack.

TCP Server Module

This interface allows PageGate to function as a TCP server to receive TCP packets from a variety of sources. Messages received by this API are output to a directory as a text file that is then read in by the GetASCII API.

Step 1: Create a directory for the TCP Server

- 1) In Windows, create a new directory for the TCP Server. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called TCP as a sub-directory of PageGate's database directory (By default, c: \PageGateData\TCP\).
- 2) In Windows, browse in to the PageGate program directory.
- 3) Move the pgtcpserver.exe and pgtcp.ini files to the folder you created in step 1.

Step 2: Configure the TCP Server's settings

1) The first thing we'll need to do is modify the pgtcp.ini file. Open the file in notepad.

To give you a little more information, this INI file controls the behavior of the TCP Server. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 2) Configure the port the TCP server should listen to. By default, the port is set to 5002.
- 3) Change the OutputFolder= value to the directory you created in step 1. By default, C: \PageGateData\TCP\
- 4) Change the LogFolder= value to your <u>logging directory</u>. If you are unsure of what this folder is, open the PageGate Admin and go to the <u>Program Settings</u> section. By default, C:\PageGateData\Logs\
- 5) Next, we'll need to set the end of record delimiter but let's go in to what that means first. When the TCP Server is receiving information, it doesn't really know what in the data is important; it's just receiving TCP packets of data. The end of record delimiter tells the TCP server that the expressed series of characters denotes a break in the data stream.

For example, the TCP server could receive a series of 5 packets:

- a) This is
- b) a
- c) test message #
- d) This is a new
- e) message

If you set EndOfRecordDelimiter = #, that tells the TCP server that everything before every # received is a data block to be parsed.

Put another way, the end of record delimiter tells the TCP server how to break down the information it's receiving in to processable chunks.

It's the "over" of a CB radio conversation.

5) Below that, there are RequiredText and RequiredTextOperator values that can be set.

RequiredText specifies text that must appear for a data block to be processed and you may specify multiple values by separating each with a | (pipe).

The RequiredTextOperator specifies whether you're using OR or AND logic.

For example, let's say you specify the following: RequiredText=alarm|notification RequiredTextOperator=AND

That tells the TCP server that both the words alarm AND notification need to appear in a received data block for that data block to be treated as a message to send.

As another example: RequiredText=alarm|alert RequiredTextOperator=OR

That tells the TCP server that either the words alarm or alert need to appear in a received data block for that data block to be treated as a message to send.

6) Next we have EndOfRecordTimeout, whose value is expressed in milliseconds.

If data is received by the TCP server, but the EndOfRecordDelimiter isn't received within the time specified, the data will be accepted for processing anyway.

By default, this is set to 3000 milliseconds or 3 seconds.

7) RejectOnTimeout determines whether timeouts should post a rejection notice or not. By default, this is set to true.

- 8) AcceptResponse determines what the TCP server will echo to the sending system upon acceptance of a data block.
- 9) RejectResponse determines what the TCP server will echo to the sending system upon rejection of a data block.
- 10) Last, we have two optional settings: StaticRecipient and StaticSender

StaticRecipient allows you to specify the name of a specific recipient or group in PageGate that ALL traffic from the TCP server should be passed through.

StaticSender allows you to hard code a sender's name that should be associated with ALL traffic from the TCP server.

11) Save the .ini file and close notepad.

Step 3: Run the TCP Server

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the TCP Server's program directory. By default, c: \PageGateData\TCP\
- 3) Type the following and hit enter: pgtcpserver /install
- 4) Exit the command prompt.
- 5) Open the Services list in Windows.
- 6) Go in to the Properties of the PageGate TCP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Step 4: Configure the GetASCII API to process the TCP Server's messages

- 1) Go to Interfaces GetASCII Settings.
- 2) Set the 'Polling Directory' to the output folder. By default, C:\PageGateData\TCP\
- 3) Check Enabled.
- 4) Click Apply.

- 5) Go to Program Settings.
- 6) In the 'Run on this server' section, check GetASCII
- 7) Click Apply.
- 8) If prompted for credentials, leave them blank and click Apply again.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling Files</u> section to specify the TCP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc and it is a Standard file type.

UDP Server Module

This interface allows PageGate to function as a UDP server to receive UDP packets from a variety of sources. Messages received by this API are output to a directory as a text file that is then read in by the <u>GetASCII API</u>.

Step 1: Create a directory for the UDP Server

- 1) In Windows, create a new directory for the UDP Server. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called UDP as a sub-directory of PageGate's database directory (By default, c: \PageGateData\UDP\).
- 2) In Windows, browse in to the PageGate program directory.
- 3) Move the pgudpserver.exe and pgudp.ini files to the folder you created in step 1.

Step 2: Configure the UDP Server's settings

1) The first thing we'll need to do is modify the pgudp.ini file. Open the file in notepad.

To give you a little more information, this INI file controls the behavior of the UDP Server. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 2) Configure the port the UDP server should listen to. By default, the port is set to 5002.
- 3) Change the OutputFolder= value to the directory you created in step 1. By default, C: \PageGateData\UDP\

- 4) Change the LogFolder= value to your <u>logging directory</u>. If you are unsure of what this folder is, open the PageGate Admin and go to the <u>Program Settings</u> section. By default, C:\PageGateData\Logs\
- 5) Next, we'll need to set the end of record delimiter but let's go in to what that means first. When the UDP Server is receiving information, it doesn't really know what in the data is important; it's just receiving UDP packets of data. The end of record delimiter tells the UDP server that the expressed series of characters denotes a break in the data stream.

For example, the UDP server could receive a series of 5 packets:

- a) This is
- b) a
- c) test message #
- d) This is a new
- e) message

If you set EndOfRecordDelimiter = #, that tells the UDP server that everything before every # received is a data block to be parsed.

Put another way, the end of record delimiter tells the UDP server how to break down the information it's receiving in to processable chunks.

It's the "over" of a CB radio conversation.

5) Below that, there are RequiredText and RequiredTextOperator values that can be set.

RequiredText specifies text that must appear for a data block to be processed and you may specify multiple values by separating each with a | (pipe).

The RequiredTextOperator specifies whether you're using OR or AND logic.

For example, let's say you specify the following: RequiredText=alarm|notification RequiredTextOperator=AND

That tells the UDP server that both the words alarm AND notification need to appear in a received data block for that data block to be treated as a message to send.

As another example:
RequiredText=alarm|alert
RequiredTextOperator=OR

That tells the UDP server that either the words alarm or alert need to appear in a received data block for that data block to be treated as a message to send.

6) Next we have EndOfRecordTimeout, whose value is expressed in milliseconds. This value tells the UDP server how long to wait before timeout after receiving data, to accept a data record.

By default, this is set to 3000 milliseconds or 3 seconds.

- 7) RejectOnTimeout determines whether timeouts should post a rejection notice or not. By default, this is set to true.
- 8) AcceptResponse determines what the UDP server will echo to the sending system upon acceptance of a data block.
- 9) RejectResponse determines what the UDP server will echo to the sending system upon rejection of a data block.
- 10) Last, we have two optional settins: StaticRecipient and StaticSender

StaticRecipient allows you to specify the name of a specific recipient or group in PageGate that ALL traffic from the UDP server should be passed through.

StaticSender allows you to hard code a sender's name that should be associated with ALL traffic from the UDP server.

11) Save the .ini file and close notepad.

Step 3: Run the UDP Server

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the UDP Server's program directory. By default, c: \PageGateData\UDP\
- 3) Type the following and hit enter: pgudpserver /install
- 4) Exit the command prompt.
- 5) Open the Services list in Windows.
- 6) Go in to the Properties of the PageGate UDP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Step 4: Configure the GetASCII API to process the UDP Server's messages

- 1) Go to Interfaces GetASCII Settings.
- 2) Set the 'Polling Directory' to the output folder. By default, C:\PageGateData\UDP\
- 3) Check Enabled.
- 4) Click Apply.
- 5) Go to Program Settings.
- 6) In the 'Run on this server' section, check GetASCII
- 7) Click Apply.
- 8) If prompted for credentials, leave them blank and click Apply again.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling Files</u> section to specify the UDP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc and it is a Standard file type.

GetAscii Integration

The GetAscii API, also known as the Command Line/ASCII interface, is capable of monitoring a directory or series of directories on the local hard drive or across the network for ascii file output and also provides a command line interface for other applications to use. This module allows many 'off the shelf' and custom applications, such as SolarWinds' Network Performance Monitor, SolarWinds' Orion, Paessler's PRTG and several CAD programs, among many others, to tell PageGate when a message needs to be sent.

GetAscii can accept messages from other applications in the following ways:

- Command Line
- ASCII Text/XML/HTML/JSON File
- Registry Polling
- Windows Messages

Click here for more information at the GetAscii section of the documentation.

You may also want to review the sections on:

- How to see if the GetAscii module is running
- How to get a list of current PageGate Recipients and Groups

Command Line Integration

PageGate includes two executable files that can be run to pass messages into its message queue: sendpage.exe and sendpage32.exe.

Sendpage.exe is a 16-bit program, and sendpage32 is a 32-bit program. Depending on how the programs are to be called, you may need to use one or the other.

To use the executables, run them and provide the recipient, sender, and message information as parameters on the command line.

Example:

sendpage32 Joe Brian Testing 123

That example would send a message to Joe from Brian with the message Testing 123.

These executables can be hosted in any directory, whether it is local to the PageGate Server or a network directory. If you need to call the command line executables from another location, please reference that path before the file name. For example, you would use this as an example command to a network instance of the command line executable:

\\servername\directory\sendpage32.exe Joe Brian Testing 123

or you would use this command to a local instance of the command line executable:

c:\PageGateData\ASCIl\sendpage32.exe Joe Brian Testing 123

Any time a command is issued to a command line executable, the CLE outputs a file in the same directory that the GetAscii module will read in for data parsing.

Detailed information about the use of the sendpage programs can be found in the GetAscii section (under Interfaces) of the documentation.

Text File Integration

<u>GetAscii</u> can extract message information from plaintext formatted ascii files, whether the content in the file is HTML, XML, JSON or other form of plaintext.

<u>GetAscii's</u> basic polling module looks for text files with a predefined file format in a single location. <u>GetAscii</u> also supports an <u>advanced polling module</u>, which enable <u>GetAscii</u> to read files from multiple folders and from files that aren't in a standard format. <u>GetAscii</u> can even 'watch' files for additions or changes, then extract message data from them.

Detailed information about the use of the <u>GetAscii</u> text file interface can be found in the <u>GetAscii</u> section (under <u>Interfaces</u>) of the documentation.

Registry Polling Integration

The GetAscii interface can accept messages that are passed to it via the Windows registry. Messages written to a predefined location in the registry will be picked up by the GetAscii interface. The application to be integrated with PageGate MUST be running on the same computer as the GetAscii module to use this integration method.

To integrate using this method:

1) Open the Windows Registry Editor.

2) Browse to

HKEY_LOCAL_MACHINE\Software\Wow6432Node\NotePage\Transfer\Messages\
Note: In versions of Windows prior to Windows Vista and Windows Server 2008, the path is HKEY_LOCAL_MACHINE\Software\NotePage\Transfer\Messages\

- 3) Create a new Key.
- 4) The name of the new key should be unique so it doesn't get overwritten by the next message.

Under the new key, the following values should be created:

Name	Туре	Value	Description
Ready	Dword	0	Specifies whether this message is ready to be read in.
То	String	Custom	This entry specifies the Recipient or Group within PageGate who should receive this message.
From	String	Custom	This entry specifies the Sender value for this message.
Message	String	Custom	This entry specifies the text of the message to be sent.

After all the values are written, set the 'Ready' value to one (1). This signals PageGate that the entry is complete and can be read in. These new entries are automatically removed by the <u>GetAscii</u> interface after they are read in.

Windows Messaging Integration

This option enables other software to send new messages to the <u>GetAscii</u> interface by sending it a 'Windows Message'. Windows Messages can be sent by using the SendMessage() Windows API call. The application to be integrated with PageGate must be running on the same computer as the <u>GetAscii</u> module to use this integration method. This method may require a little more programming experience that the previous methods,

but it is more efficient than the previous methods and is fairly easy to implement. Here is the syntax of the API call:

SendMessage(PGHandle, WM_COPYDATA, MyHandle, CopyDataStructure)
Please refer to a Windows API reference for syntax and usage information

The current PageGate handle (PGHandle) can be read from the registry at: HKEY_LOCAL_MACHINE\Software\NotePage\Transfer\Handle

The CopyDataStructure should contain a string value with the following format: sendpage32 recipient sender message

The 'sendpage' text must be a the beginning of the string.

The 'recipient' label should be replaced with the name of an existing PageGate recipient or group.

The 'Sender' label should be replaced with the sender's name.

The 'message' label should be replaced with the actual text of the message to be sent.

For example:

sendpage32 Bob John This is a test

That would send a message to Bob from John that said "This is a test".

How to see if GetAscii is active

Read the PageGate database file (pagegate.mdb)

The current location of the PageGate database can be read from the registry: HKEY LOCAL MACHINE\Software\NotePage\Transfer\DBDir

It is in a format compatible with MS Access 2000. In the 'Control' table, the 'getascii_state' field will be True if the GetAscii module is running.

Read the registry

The registry value HKEY_LOCAL_MACHINE\Software\NotePage\Transfer\Running will have a value of 1 when GetAscii is running

Use the OpenEvent API call

When GetAscii starts, it creates a Windows event named 'NotePagelsRunning'. This event is destroyed when GetAscii stops. The API call OpenEvent(0,0,"NotePagelsRunning") will return a non-zero result if the GetAscii interface is running.

How to get a list of Recipients and Groups

Read the PageGate database file (pagegate.mdb)

The current location of the PageGate database can be read from the registry: HKEY_LOCAL_MACHINE\Software\NotePage\Transfer\DBDir

It is in a format compatible with MS Access 2000. The 'Users' table has an entry for each valid PageGate recipient and group.

Read the registry

The GetAscii interface keeps an up-to-date list of all the PageGate recipients and groups in the Windows registry:

HKEY_LOCAL_MACHINE\Software\NotePage\Transfer\Recipients HKEY_LOCAL_MACHINE\Software\NotePage\Transfer\Groups Filter Pack

The filter pack is a scripting system that allows you to modify any input in to or output from any of PageGate's interfaces based on nearly any criteria of your choosing.

Things you can do with the filtering system:

- Conditionally modify who a message is intended to go to based on key words or key phrases.
 - All fire, rescue and accident calls should be dispatched but non-emergency calls should not be.
 - Only alarms with "CRITICAL" in them should be delivered.

Exam ples:

- Messages with the keyphrase "HAZARD" should go to a high priority group instead of the normal distribution list.
- Replies with the word 'subscribe' should perform one action but replies with the word 'unsubscribe' should perform another.
- Modify the contents or structure of data to turn it in to something more user-friendly and readable.
 - Pull content from an API (like the National Weather Service, a Ticket Tracking system like Jira or ServiceNow, etc)

ples: • Parse XML, HTML, JSON or any other form of delimited text in to readable message content

- Trigger a Powershell or other script.
- This allows you to have PageGate trigger other applications or processes by tying them to a conditional filter in PageGate. Powershell is incredibly powerful

and with the right script, you could have PageGate execute functions that would modify another application's database, perform network or domain lookup functions or anything else made available by Powershell.

This is certainly not a comprehensive list of things you could do and, effectively, this filter allows you to modify any input fed in to or output delivered from PageGate based on nearly any selection criteria of your choosing.

Over the course of this documentation, we'll be going over how to configure, code and implement PageGate's filtering system.

First, the filter scripts require the file 'pgfilter.exe' to reside in the PageGate program directory and will need to reference an XML file containing the script, which can reside in any directory the PageGate server has access to (whether that's on the local hard drive or on a network share via UNC path). You should receive all necessary files for the filtering system upon purchase but if you do not have them, please contact our sales and registration department at 781-829-0500 x 1 or by email at sales@notepage.com.

Second, it's important to understand the chain of events that triggers the script to run.

For more detailed information, please see: How to Implement the Script

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	
٧	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
	<u>IMPORTANT</u>
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output.
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character \sim in its function, if you want to use the \sim character in your text, you'll need to represent it with its ASCII value. The ASCII value of \sim is: \126

Note: PageGate's <u>filter script</u> supports <u>RegEx expressions</u>, which can allow you to implement an incredibly intricate system.

How to Implement the Script

Step 1: Copy the filter's executable in to the PageGate program directory

The file 'pgfilter.exe' must reside in the PageGate program folder. If you do not have a copy of this file, please contact our sales and registration department at sales@notepage.com or by phone at 781-829-0500.

Step 2: Determine what you want filtered

Filter scripts are called through PageGate's template system and can be broken down in to two categories: Inbound and Outbound

Inbound filters can trigger on and modify content passed to the program. These filters are applied to the program's input interfaces and on a global level to effect all input interfaces.

Outbound filters can trigger on and modify messages delivered by the program. These filters can be applied to a recipient, carrier, connector and on a global level.

You can have a system reference multiple filters for different purposes at the same time.

For example, you could configure an inbound filter to strip XML and JSON formatting from received data as well as a global outbound filter that inserted a custom header before every message. You could then make exceptions to that global rule by configuring unique filters for a carrier, recipient or connector.

You could also configure an SMS reply processing system that filtered reply messages containing certain keywords to specific recipients and groups while also implementing an outbound filter to customize the contents or formatting of messages delivered to them.

You could do everything described all at once. It really is just a matter of determining what you want to do, then implementing an appropriate solution.

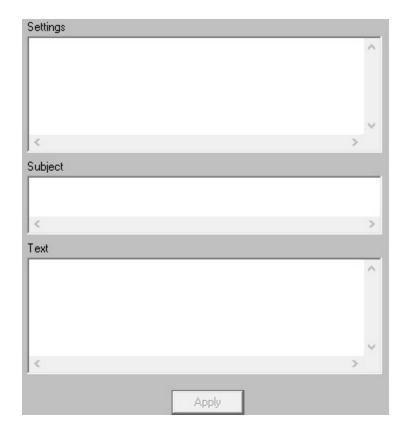
Step 3: Write the filter

Each filter exists as an XML file in a directory of your choosing; this directory just needs to be accessible to the PageGate server, whether that's on the local hard drive or via UNC to a network path. The XML file containing your filter may also be called anything you like, you can give the file any name as long as its extension is .xml

Steps for writing filters can be found here.

Step 4: Reference the filter

After writing a filter, you'll need to add reference it in the 'Settings' section of a template in PG Admin.



IMPORTANT

Due to the way PageGate is programmed, the character '\' is system reserved. When referencing file paths in the template, you will need to use the ASCII value for a backslash. \ must be followed by the three digit ASCII code 092.

For example, c:\092PageGateData\092

Inbound Filters

Value	Description	Example	
InterfaceFil ter	This applies a filter to processed data. This allows the interfaces to apply the initial layer of data sorting and collection and then applies the filter to the result. GetAscii	InterfaceFilter = c: \092PageGateData\092Filters\ 092yourfilter.xml	
	temp file with recipient, sender and message, and after lookup substitution GetMail		

Filter is applied against temp file with recipient, sender and message, after they have been extracted from the email, and decoding has taken place

GetSerial

Filter is applied against temp file with recipient, sender and message, and after lookup substitution

GetTap

Filter is applied against each message that is received. The file processed by PGFilter will have ld as first line, second line blank, and message on remaining lines.

GetWeb

Filter is applied against temp file with recipient, sender and message

This can be used on an interface or global level. If used in an interface, it applies the filter to that interface. If used on a global level, it applies the filter to all input from all interfaces.

This applies a filter to raw, unprocessed data. This applies the filter before the interface has a chance to read the data. The specific behavior varies depending on the interface in question.

<u>GetAscii</u>

Standard polling: Filter is applied against the

RawInterfa ceFilter

Advanced polling: Filter is applied against each record that is found, before it is processed any further (record pattern matching done first)

GetMail

Filter is applied against the raw file received from the PageGate mail server process. All headers are intact and no decoding has taken place yet. Envelope values for recipient

raw text file before GetAscii tries to process it RawInterfaceFilter = c:

Advanced polling: Filter is applied against

and record that is found, before it is

092yourfilter.xml

235

and sender are not available for modification in the raw mail file (because they are read from the envelope).	
GetSerial Filter is applied against each record found before it is processed any further (record pattern matching is done first)	
GetTap Filter is applied against each message that is received.	
GetWeb Filter is applied against raw text file created by webgate.exe CGI program	
This can be used on an interface or global level. If used in an interface, it applies the filter to that interface. If used on a global level, it applies the filter to all input from all interfaces.	

Outbound Filters

Value	Description	Example
	This applies a filter to outbound messages.	
	This can be applied on a recipient, carrier,	
	connector or global level.	
	If used in a recipient template, all messages	ConnectorFilter = c:
	delivered to that recipient will be processed	
Filter	through the filter.	\092PageGateData\092Filters\
	If used in a carrier template, all messages	092yourfilter.xml
	delivered through that carrier will be	
	processed through the filter.	
	If used in the program template, it applies to	
	all output from the program.	

Connector Filter	This applies a filter to the messages delivered by a connector. This filter can only modify the contents of a message and cannot modify the recipient or sender information. This can be applied on a connector or global level. If used in the program template, it applies to all connectors in the program.	Filter = c: \092PageGateData\092Filters\ 092yourfilter.xml	
SubjectFilt er	This applies a filter to the subject line of any outbound email. This value is only referenced by the SMTP protocol and is not referenced by other protocols. This can be applied on a recipient, carrier, connector or global level. If used in a recipient template, all SMTP/email messages delivered to that recipient will have their subject lines processed through the filter. If used in a recipient template, all SMTP/email messages delivered to through that SMTP/email carrier will have their subject lines processed through the filter. If used in the program template, all SMTP/email traffic sent from the system will have its subject line processed through the filter.	SubjectFilter = c: \092PageGateData\092Filters\ 092yourfilter.xml	

<u>Hierarchy</u>

An Interface (and Global) template can have both a RawInterfaceFilter and an InterfaceFilter. Both filters will run in that order if they are both set.

Connectors will run any outbound filter according to which template has the highest priority. In order, they are:

- 1) Recipient
- 2) Carrier
- 3) Connector
- 4) Global

After implementing a filter script, it is highly recommend that you go through a <u>debugging</u> <u>process</u> to verify what you've configured. See <u>Debugging the Script</u> for more information. Debugging the Script

To debug the filter script, you'll first need to set the <u>Debug tag</u> to true.

By setting Debug to True, that puts the script in to debugging mode. When in debugging mode, the script will display a window that shows the result of every component of your filter. It will display whether the filter performed its functions successfully or if there was an error and, if there was an error, what the error was related to. For example, "Match not found" in the event that your search criteria couldn't be found.

This makes tracking down errors in the script much easier than it otherwise would be.

If you're using preproc.bat, rename it to preprocv.bat

If you're using pstproc.bat, rename it to pstprocv.bat

The v in the file name stands for Verbose, so you're effectively putting the script in to a mode that will display far more information on the screen.

The Filter Script

Filters can be simple or complex depending on what you want to do. The most basic filters are search and replace functions, where you remove specific patterns like XML tags from text or replace short-codes with more verbose information. The more advanced filters can conditionally modify who receives a message, what the message says and execute functions via batch file or Powershell script, among other things.

The filters themselves are written in XML and, to start, you may want to look at the complete filter script template. That will give you a general overview of each section and all of the possible values you could use in them.

To break things down, there is one major section, Filter, that determines what each section of the script will do. Additionally, there are two conditional sections, InputFile and OutputFile, plus an optional debugging mode:

Filter

The Filter section determines what you want to do with the data read as input. A single filter script may reference multiple individual <Filter> sections to perform multiple tasks within the same data set. It's also important to note that the filter system supports the use of Regex, allowing for a high level of customization and control.

InputFile

Most scripts will not need this parameter. When using the filter system in conjunction with the GetAscii interface or a FILE protocol carrier, the InputFile section determines which file(s) you want the filter to scan.

OutputFile

Most scripts will not need this parameter. When using the filter system in conjunction with the GetAscii interface or a FILE protocol carrier, the OutputFile section determines what you want to name the files output by the filter's modifications.

Debug

The Debug section determines whether you want a debug level review of the filter to appear before the filter completes its actions. This is incredibly useful when first configuring a script and we recommend that this flag be enabled until the filter is ready to put in to production.

For most scripts, you'll want to start with the <u>Filter</u> section.

The Complete Filter Script Template

Note: The InputFile and OutputFile sections are not required for most scripts. For more information, please see The Filter Script.

```
<InputFile>
      <Name>
             (Parameter), static input filename
      </Name>
      <Delete>
             True, (False)
      </Delete>
<OutputFile>
      <Name>
             (InputFile), static output filename
      </Name>
</OutputFile>
<Debug>
      True, (False)
</Debug>
<Filter>*
      <Search>*
             <Type>
                   (Literal), RegEx
             </Type>
             <Section>
                   (All), Recipient, Sender, Message, Temp, Flag
             </Section>
```

```
<Text>*
                    search text, True, False
                    must be quoted to retain beginning and/or ending whitespace
       </Search>
       <Replace>*
              <Type>
                    (Literal), RegEx, And, Or
              </Type>
              <Section>
                    (All), Recipient, Sender, Message, Temp, Flag
              </Section>
              <Scope>
                    (Match), Section
              </Scope>
              <All>
                    True, (False)
              </All>
              <Text>*
                    replacement text, True, False
                    must be quoted to retain beginning and/or ending whitespace
              </Text>
       </Replace>
      <Continue>
             (True), False
      </Continue>
      <Abort>
              True, (False)
      </Abort>
</Filter>
<Filter>...
Notes:
      Sections with * are required
      Remove all *'s from a live filter.
      Values in () are default values if section is not present
```

The first Command Line parameter is the name of the InputFile to be processed If an <InputFile><Name> section is used, its value overrides the Command Line parameter value

The default settings file name is pgfilter.xml

The settings file name can be set by using settingsfile= as the first parameter on the Command Line. The input file name would then be the second parameter

OutputFile Name supports variables:

%InputFilePathAndName%

%InputFilePath%

%InputFileName%

%InputFileNameBase%

%InputFileNameExtension%

Section values for Recipient, Sender, Message, and All really just mean:

Recipient: first line of text, Sender: second line of text.

Message: third and remaining lines of text

All: the entire contents of the file

Literal search text special characters:

~ as first character means start of section/file

~ as last character means end of section/file

? matches a single character

* matches anything (including nothing)

\ following 3 digits are a decimal character value

the ~, ?, *, and \ characters must use \ with decimal equivalent to be used

literally

RegEx replacement:

Backreferences are allowed in replacement text

If the replacement scope is not 'match' or the replacement section is not the

same

as the search section, then only the literal replacement type can be used, because RegEx can only make replacements in the original searched text

(the

%Match% and %Group% macros can still be used in the literal replacement

text)

Literal search text variables

%Recipient% - the current value for Recipient

%Sender% - the current value for Sender

%Message% - the current value for Message

%All% - the current value for All of the text

%Temp% - the current value for the Temp variable

\ following 3 digits are a decimal character value

Literal replacement text variables:

%Match% - the actual text that matched the search text (Literal or RegEx match types)

%Group1%, %Group2%, %Group3% - RegEx group backreferences obtained from a RegEx search

%Recipient% - the current value for Recipient %Sender% - the current value for Sender %Message% - the current value for Message %All% - the current value for All of the text %Temp% - the current value for the Temp variable \following 3 digits are a decimal character value

The default value of the Temp variable is an empty string The default value of the Flag variable is false

RegEx uses a Pearl compatible implementation syntax good reference: http://www.regular-expressions.info/tutorialcnt.html

Filter

The Filter section determines what you want to do with the data read as input. A single filter script may reference multiple individual <Filter> sections to perform multiple tasks within the same data set. You can also find <u>filter statement examples here</u> and <u>complete</u> script examples here.

Flag	Values and Description		
Search	Please review the Search section for a detailed explanation of this tag and		
	its components.		

Replace	Please review the Replace section for a detailed explanation of this tag and its components.		
	This tag determines whether or not you want the script to continue to the next action if it finds a match. This tag can be set to a value of True or False.		
Continue	For example, let's say we're <u>searching</u> for the text 345 within the <u>input file</u> 's data. Let's also say that no match for 345 can be found in the input data. If Continue is set to True, the filter will move to the next specified <filter> section. If Continue is set to False, the script will immediately terminate upon not finding a match.</filter>		
Abort	If the search section finds a match and Abort has a value of True, the script is aborted. Basically, the input data is left unchanged and no more filter blocks are processed. It just abruptly ends the filter processing and quits out without saving anything.		

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	
٧	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
	<u>IMPORTANT</u>
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must
	be followed by a three digit code to indicate the character to be output.
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.

Search

The Search section determines what you want the filter to look for.

```
See Values and Description
</Type>
<Text>
See Values and Description
</Text>
</Search>
```

Flag	Values and Description		
		g determines where the filter should look for the data specified in the g (see below).	
	Value s	Explanation	
	All	All tells the filter to search the entire data set read from the input file.	
	Recipi ent	Recipient tells the filter to search only in the first line of the file.	
	Sende r	Sender tells the filter to search only in the second line of the file.	
Section	Messa ge	Message tells the filter to search only in the third and following lines of the file.	
	Тетр	Temp is a string variable that can be passed strings of characters to hold, then use its value to search on later. Temp does not support boolean operators. For example, you can have certain information stored in the Temp value, then both search on and output that Temp value in successive Filter tags. See Example 1 and Example 3 .	
	Flag	Flag is a boolean value that can only hold a true or false statement. However, you can run "And" or "Or" statements against it for advanced logic chains. See Example 3 .	
	Values: Literal or RegEx		
Туре	This tag determines whether you want to use literal text or a RegEx statement in the Text tag.		
Text	to the T	rpe tag is set to Literal, this tells the filter to search on the text entered in Text tag. For example, you could enter the literal text Fire Department if Inted the filter to key off of the literal text "Fire Department" (without the	
(Literal)	* - Multi	g supports the following boolean parameters: ple Character Wildcard imple, fire* would find fire, firewood, fireplace, fireman and similar.	

	? - Single Character Wildcard		
	For example, fire? would fine fires, fired but would not find fire.		
	~ as first character means start of section/file		
	~ as last character means end of section/file		
	For example, ~12345~ would only read 12345. Without the ~ before and after		
	the string, the filter would recognize 12345 in 0123456.		
	This tag also supports the following variables:		
	%Recipient% - the current value for Recipient		
	%Sender% - the current value for Sender		
	%Message% - the current value for Message		
	%All% - the current value for All of the text		
	%Temp% - the current value for the Temp variable		
	\-following 3 digits are a decimal character value. See Below.		
	The PageGate Filter script supports RegEx expressions. RegEx uses a Pearl		
Text	compatible implementation syntax and a good reference guide for the		
(Regex)	language can be found here:		
- /	http://www.regular-expressions.info/tutorialcnt.html		

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	
~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
	<u>IMPORTANT</u>
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output.
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.

Replace

The Replace section determines what you want to do with the data found in the <u>Search</u> section.

```
<Replace>
      <Section>
             See Values and Description
      </Section>
      <Type>
             See Values and Description
      </Type>
      <Scope>
             See Values and Description
      </Scope>
      <All>
            See Values and Description
      </All>
      <Text>
             replacement text goes here
             must be quoted to retain beginning and/or ending whitespace
             See Values and Description
      </Text>
</Replace>
```

Flag		Values and Description
	Values:	All, Recipient, Sender, Message, Temp, Flag
	This tag	determines which section the filter perform the replacement within.
	Value	Explanation
	All	All tells the filter to replace any instance of the searched text within the entire data set read from the input file.
	Recipi ent	Recipient tells the filter to replace values only in the first line of the file.
Secti	Sende r	Sender tells the filter to replace values only in the second line of the file.
on	Mess age	Message tells the filter to replace values only in the third and following lines of the file.
	Temp	Temp is a string variable that can be passed strings of characters to hold, then use its value to search on later. Temp does not support boolean operators. For example, you can have certain information stored in the Temp value, then both search on and output that Temp value in successive Filter tags.
	Flag	Flag is a boolean value that can only hold a true or false statement. However, you can run "And" or "Or" statements against it for advanced logic chains.

	Values: Literal, RegEx, And, Or
Туре	This tag determines whether you want to use literal text or a RegEx statement in the Text tag. This tag can also be used as a situational boolean operator to determine how to proceed.
	The boolean values (Or & And) modify the Flag value. So, for example, you could have the filter search for a value and set it as the Flag, then have the replace filter use "Or" to indicate that the Flag value may be more than one thing. You could also use the And operator to tell the filter that the Flag value must contain multiple variables to be matched. See Example 3 .
Scop e	Values: Match or Section
All	Values: True or False
Text (Liter al)	If the Type tag is set to Literal, this tells the filter to search on the text entered in to the Text tag. For example, you could enter the literal text Fire Department if you wanted the filter to key off of the literal text "Fire Department" (without the quotes). This tag supports the following boolean parameters: * - Multiple Character Wildcard For example, fire* would find fire, firewood, fireplace, fireman and similar. ? - Single Character Wildcard For example, fire? would fine fires, fired but would not find fire. ~ as first character means start of section/file ~ as last character means end of section/file For example, ~12345~ would only read 12345. Without the ~ before and after the string, the filter would recognize 12345 in 0123456.
Text (Reg	The PageGate Filter script supports RegEx expressions. RegEx uses a Pearl compatible implementation syntax and a good reference guide for the language
ex)	can be found here: http://www.regular-expressions.info/tutorialcnt.html

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara cter	Function
~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.

?	Single character wildcard.	
*	Multiple character wildcard.	
	<u>IMPORTANT</u>	
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must	
	be followed by a three digit code to indicate the character to be output.	
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.	

Filter Statement Examples

To better demonstrate how some of the flags function, here are a few examples of complete filter statements and an explanation of what they do.

Here is an example of a Literal Text Replacement Command.

Here is an example of an Abort Command.

Abort Command

This Filter statement tells the script to terminate if the <u>Flag</u> variable is set to False:

```
<Filter>
      <Search>
            <Section>
                   Flag
            </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   False
            </Text>
      </Search>
      <Replace>
            <Section>
                   Flag
            </Section>
            <Scope>
                   Section
            </Scope>
            <Type>
                   And
```

```
</Type>
</Text>
False
</Text>
<All>
False
</All>
</Replace>
</Continue>
False
</Continue>
```

Literal Text Replacement Command

This Filter statement tells the script to replace one piece of literal text with another. More specifically, this statement tells the script to search for the literal text Boiler Room and replace it with boiler tech group.

```
<Filter>
      <Search>
             <Section>
                   Αll
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   Boiler Room
             </Text>
      </Search>
      <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                    boiler_tech_group
             </Text>
             < | | A||>
```

```
False
</All>
</Replace>
</Filter>
InputFile

The InputFile section determines which file(s) you want the filter to scan.

<InputFile>
<Name>
See Values and Description
</Name>
<Delete>
See Values and Description
</Delete>
</InputFile>
```

Flag	Values and Description
Name	Values: Parameter or Static Input File Name This tag determines the name(s) of the file(s) that you want the filter to modify. Just to note, the value Parameter is literal and not figurative. To use this value, you'll want to use the text Parameter, including the capital P. When the filter is engaged by the pstproc.bat file, it is fed the file name being used by the filter. The Parameter value tells the filter that it should simply accept the file name as it was passed by the batch file. Alternatively, you can specify a static file for input. For example, c: \PageGateData\Filter\winsck9000.log would tell the filter to only read from a specific file named winsck9000.log. As another example, you could specify c: \PageGateData\Filter*.log and that would tell the filter to read all log files placed in the directory.
Delete	Values: True or False This tag determines whether you want the filter to delete the input file when it has finished processing it. If you do, set this tag to True. If you do not, set this tag to False.

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	
~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output.
\	This character is used when you want to represent a character as represented by its $\frac{ASCIIDecimal}{Decimal}$ value. For example, since the filter directly references the character \sim in its function, if you want to use the \sim character in your text, you'll need to represent it with its ascii value. The ascii value of \sim is \126.

OutputFile

The OutputFile section determines what you want to name the files output by the filter's modifications. This section is defined as follows:

Flag	Values and Description
Name	Values: InputFile or Static Input File Name
	This tag determines the names of the files that you want the filter to output after it has modified the data read from the input file.
	The value InputFile (this is case sensitive) tells the filter that the file output should mirror the original input file's name. So, for example, if the file read was named example.txt, then the file output would also be called example.txt
	Alternatively, you can specify a static naming convention for the output files. This value also supports the following variables: %InputFileName% %InputFileNameBase% %InputFileNameExtension% %InputFilePathAndName%

%InputFilePath%

So, for example, you could specify this as the value: c:\PageGateData\ASCIN% InputFileNameBase%.asc

That would tell the filter that it should use the original name of the file read but the output file should have the extension .asc instead of the extension on the original file.

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	
٧	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
	<u>IMPORTANT</u>
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output.
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character \sim in its function, if you want to use the \sim character in your text, you'll need to represent it with its ascii value. The ascii value of \sim is \126.

Debug

The Debug section determines whether you want a debug level review of the filter to appear before the filter completes its actions. This is incredibly useful when first configuring a script and we recommend that this flag be enabled until the filter is ready to put in to production. This section is defined as follows:

<Debug>
 See Values and Description
</Debug>

Flag	Values and Description
	Values: True or False
Debug	

This tag determines whether you want to review the debug level information for the filter before it completes its actions. Set this flag to True to review the debugging information, set this flag to False if you do not.

Please see <u>Debugging the Script</u> for more information.

Complete Script Examples

Due to the complex nature of the Filter script, we've created a few examples of how scripts can be implemented. This is by no means a complete list of everything that the script can do and is intended to be a set of examples to guide you through the possibilities the script offers.

Example 1

In this example, we've configured the filter script to search the message read from the input file for the text BIOHAZARD and replace it with bio_hazard. We're then inserting the static text WARNING! EXTREME HAZARD DETECTED: before the matched search string.

Example 2

In this example, we've configured the filter to scan through XML tags for the text Technical or Network in the <AlertType> tag, then pull in information from the <Incident> and <Description> tags. This collated data is then being passed to a statically named group in PageGate: techsupervisors.

Example 3

In this example, we've configured the filter to scan for certain keywords and key phrases. If it finds them, messages containing that text should not be allowed to go through and should instead be filtered.

Example 4

In this example, we've configured the filter script for a dispatching agency that needs all fire, rescue and accident calls dispatched but does not want non-emergency calls dispatched. To do this, the script reads in the entire input file and looks for certain flags like FIRE, DISPATCHED or RESCUE, DISPATCHED or ACCID, DISPATCHED.

If it finds any of those three strings, the script then begins massaging and reformatting the data to remove unwanted information and to determine who the message should go to and what the message should say.

In this particular example, all fire and rescue calls need to be delineated from each other so that the fire calls go to the fire department and the rescue calls go to the rescue department but all accident calls should go to both fire and rescue departments.

Example 5

In this example, we're using an <u>HTTPGET</u> carrier to poll data from the National Weather service to have it delivered as an SMS.

Example 6

This example is designed to work with an <u>SMS Replies</u> system and is configured to look for the words 'subscribe' and 'unsubscribe' in the body of reply messages. If it finds 'subscribe', it reconfigures the message to go to the recipient or group in PageGate named 'subscribe'. If it finds 'unsubscribe', it reconfigures the message to go to the recipient or group named 'unsubscribe'.

Example 7

This example is designed to work with an <u>SMS Replies</u> system and is configured so that any time someone replies to a message with 'unsubscribe' or 'subscribe', those replies execute a batch file or script contained within a batch file. This can be especially useful if you're using an SQL environment and have PageGate's database linked to it with ODBC expressions. In theory, you could code a script to be executed that would automatically remove an entry from the users table of the database any time the 'unsubscribe' script was executed.

Example 8

This example is designed to work with an <u>SMS Replies</u> system. This script is configured with a list of 'allowed' phone numbers and is also configured to scan the sender value of all replies. If the sender's phone number isn't in the 'allowed' list, the message is filtered as spam.

Example 1

Example 1

In this example, we've configured the filter script to search the message read from the input file for the text 'BIOHAZARD'. If it is found then the script will replace the current Recipient with 'bio_hazard' to indicate that all messages containing the word BIOHAZARD should go to the bio_hazard group. We're then inserting the static text 'WARNING! EXTREME HAZARD DETECTED:' before the matched search string.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

This section of the filter configures the script to look for a static file named Example.txt in the same directory as the script and, when the script completes, it will not delete the original file and will output to a static file named Output.txt to the directory in which the script resides.

```
</Name>
      <Delete>
             False
      </Delete>
<OutputFile>
      <Name>
             Output.txt
      </Name>
</OutputFile>
<Debug>
      False
</Debug>
# This section of the filter configures the script to search
# for BIOHAZARD and if found, replaces the Recipient
# with bio_hazard.
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   BIOHAZARD
             </Text>
      </Search>
      <Replace>
             <Section>
                   Recipient
             </Section>
             <Type>
                   Literal
             </Type>
             <Scope>
                   Section
             </Scope>
             <Text>
                   bio hazard
             </Text>
```

```
</Replace>
      <Continue>
             True
      </Continue>
</Filter>
# This section of the filter configures the script to insert
# WARNING! EXTREME HAZARD DETECTED: before the BIOHAZARD text
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   BIOHAZARD
             </Text>
      </Search>
      <Replace>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Scope>
                   Match
             </Scope>
             <Text>
                   WARNING! EXTREME HAZARD DETECTED: %Match%
             </Text>
      </Replace>
</Filter>
Original Content
This is an example of the input file for filter example 1. This is what it looks like before the
filter engages.
supervisors
AlarmMonitor
BIOHAZARD ROOM 354
```

Another example:

```
it_alerts
AlarmMonitor
BIOHAZARD RULES IN EFFECT FOR WING 2
Filtered Content
```

When the data from example 1 is put through the example 1 filter, this is the output:

```
bio_hazard
AlarmMonitor
WARNING! EXTREME HAZARD DETECTED: BIOHAZARD ROOM 354
```

or like this:

```
bio_hazard
AlarmMonitor
WARNING! EXTREME HAZARD DETECTED: BIOHAZARD RULES IN EFFECT FOR WING 2
Example 2
Example 2
```

In this example, we've configured the filter to scan through an XML file for the text 'Technical' or 'Network' in the <AlertType> tag. It will then temporarily store the information from the <Incident> and <Description> tags in the Temp variable. This collected data is then being passed to a statically named group in PageGate: techsupervisors.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

```
# This section of the Filters tells the script to look for
# any lines that have<AlertType>Technical</AlertType> and
# set the Flag variable to True if it is found
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
              <Text>
                     <AlertType>Technical</AlertType>
              </Text>
       </Search>
       <Replace>
              <Section>
                    Flag
              </Section>
              <Scope>
                    Section
              </Scope>
              <Type>
                    Or
              </Type>
              <Text>
                     True
              </Text>
       </Replace>
</Filter>
# This section of the Filters tells the script to look for any
# lines that have the<AlertType>Network</AlertType> and
# set the Flag variable to True if it is found
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
              <Text>
                     <AlertType>Network</AlertType>
```

```
</Text>
      </Search>
      <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Or
             </Type>
             <Text>
                    True
             </Text>
      </Replace>
</Filter>
# This Filter section tells the script to abort if no instances of
# the two search strings can be found:
<Filter>
      <Search>
             <Section>
                    Flag
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    False
             </Text>
      </Search>
      <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    And
             </Type>
             <Text>
                    False
```

```
</Text>
       </Replace>
       <Continue>
              False
       </Continue>
</Filter>
# This section of the filter tells the script to grab data
# contained in the < Incident > tag.
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
              <Text>
                     <Incident>*</Incident>
              </Text>
       </Search>
       <Replace>
              <Section>
                    Temp
              </Section>
              <Scope>
                    Section
              </Scope>
              <Type>
                    Literal
              </Type>
              <Text>
                     %Match%
              </Text>
       </Replace>
</Filter>
# This section of the filter tells the script to grab data from
# the <Description> tag
<Filter>
       <Search>
              <Section>
```

```
</Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    <Description>*</Description>
             </Text>
      </Search>
       <Replace>
             <Section>
                   Temp
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                    %Temp% %Match%
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# < Incident > from the message.
<Filter>
      <Search>
             <Section>
                    Temp
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    <Incident>
             </Text>
      </Search>
      <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
```

```
Match
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# </lncident> from the message.
<Filter>
      <Search>
             <Section>
                    Temp
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    </lncident>
             </Text>
      </Search>
      <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Match
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
```

< Description > from the message.

```
<Filter>
      <Search>
             <Section>
                    Temp
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    <Description>
             </Text>
      </Search>
      <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Match
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# </Description> from the message.
<Filter>
      <Search>
             <Section>
                    Temp
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    <Incident>
             </Text>
      </Search>
```

```
<Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This Filter tells the script to output the file in the standard
# PageGate GetASCII file format for direct processing:
<Filter>
      <Search>
             <Section>
                   Flag
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   True
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   TechSupervisors\013\010CAD\013\010%Temp%
             </Text>
```

</Replace>

</Filter>

Original Content

This is example XML content to be processed by filter example 2. This is what it looks like before the filter engages.

- <XML>
- <AlertType>Technical</AlertType>
- <Requester>Station 3</Requester>
- <Assets>PC01, PC02</Assets>
- <Category>Desktop Support</Category>
- <Incident>Replace Computers</incident>
- <Description>Workstations 01 and 02 should be replaced on Thursday</Description>
 </XML>

Another example:

- <XML>
- <AlertType>Network</AlertType>
- <Requester>Admin Group</Requester>
- <Assets>Router</Assets>
- <Category>Network Support</Category>
- <Incident>DNS Failure/Incident>
- <Description>DNS failures detected in node 2
- </XML>

Filtered Content

When the data from filter example 2 is processed by filter example 2, this is the output content:

techsupervisors

CAD

Replace Computers, Workstations 01 and 02 should be replaced on Thursday

Another example:

techsupervisors

CAD

DNS Failure, DNS failures detected in node 2

Example 3

In this example, we're scanning for keywords and keyphrases that indicate a message shouldn't be sent. If the filter finds any of the keywords or keyphrases, it will filter those messages from going through. For this example, we've configured the filter to look for the key phrases "Return from Alarm" and "Alarm Acknowledged" as well as potential partial matches.

```
<InputFile>
<Name>
    Parameter
</Name>
<Delete>
    True
</Delete>
<Debug>
True
</Debug>
<OutputFile>
<Name>
    c:\PageGateData\output\%InputFileNameBase%.asc
</OutputFile>
<Filter>
<Comment>look for Return From Alarm/Comment>
<Search>
    <Section>
        Αll
    </Section>
    <Type>
        Literal
    </Type>
    <Text>
        Return From Alarm
    </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
<Filter>
```

```
<Comment>look for Partial Phrases of Return From Alarm
<Search>
    <Section>
        ΑII
    </Section>
    <Type>
        Literal
    </Type>
    <Text>
        Retu*
    </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
<Filter>
<Comment>look for Alarm Block Acknowledged</Comment>
<Search>
    <Section>
        Αll
    </Section>
    <Type>
         Literal
    </Type>
    <Text>
        Alarm Block Acknowledged
    </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
<Filter>
```

```
<Comment>look for Partial "Alarm Block Acknowledged" phrases</Comment>
<Search>
     <Section>
         ΑII
     </Section>
     <Type>
         Literal
     </Type>
    <Text>
         Block
     </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
Example 4
Example 3
```

In this example, we've configured the filter script for a dispatching agency that needs all fire, rescue and accident calls dispatched but does not want non-emergency calls dispatched. To do this, the script reads in the entire input file and looks for certain keywords like FIRE, DISPATCHED or RESCUE, DISPATCHED or ACCID, DISPATCHED.

If it finds any of those three strings, the script then reformats the data, removes unwanted information, and determines who the message should be sent to.

In this particular example, all fire and rescue calls need to be separated from each other so that the fire calls go to the fire department and the rescue calls go to the rescue department, but all accident calls should go to both fire and rescue departments.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

This section of the filter configures the script to accept whatever file name is passed by the preproc.bat file, to delete the input file when it's finished and to output the reformatted data to the c:\PageGateData\ASCI\ folder with a file name mirroring the original file but with a .asc extension instead of the original file's extension.

```
<InputFile>
      <Name>
             Parameter
      </Name>
      <Delete>
             True
      </Delete>
<Debug>
      False
</Debug>
<OutputFile>
      <Name>
             c:\PageGateData\ASCII\%InputFileNameBase%.asc
      </Name>
</OutputFile>
# The next three sections of the Filters tells the script to look for any lines that have
# the text ,FIRE,DISPATCHED| or ,RESCUE,DISPATCHED| or ACCID,DISPATCHED| in
the input file
# and sets the temporary Flag variable to True if any are found
# look for lines with station FIRE, DISPATCHED identifier
<Filter>
      <Search>
             <Section>
                   Αll
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,FIRE,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                   Flag
             </Section>
             <Scope>
                   Section
             </Scope>
```

```
<Type>
                   Or
             </Type>
             <Text>
                   True
             </Text>
      </Replace>
</Filter>
# look for lines with station RESCUE, DISPATCHED identifier
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    ,RESCUE,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                   Flag
             </Section>
             <Scope>
                   Section
             </Scope>
             <Type>
                   Or
             </Type>
             <Text>
                   True
             </Text>
      </Replace>
</Filter>
# look for lines with station ACCID, DISPATCHED identifier
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
```

```
<Type>
                    Literal
             </Type>
             <Text>
                    ,ACCID,DISPATCHED|
             </Text>
       </Search>
       <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Or
             </Type>
             <Text>
                    True
             </Text>
      </Replace>
</Filter>
# This section test the value of the Flag variable
# and aborts out of the script if it is not set to True
# Note that the values in the <Replace> section really
# don't matter because the script is aborting
# abort if FIRE/RESCUE/ACCID DISPATCHED not found
<Filter>
       <Search>
             <Section>
                    Flag
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    False
             </Text>
       </Search>
       <Replace>
             <Section>
                    Flag
```

```
</Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    And
             </Type>
             <Text>
                    False
             </Text>
       </Replace>
       <Continue>
             False
      </Continue>
</Filter>
# Now that the filter has determined that there is relevant data
# in the message file, these filter statements will search for
# department names and store what is found in the Temp variable
# look for lines with station F-BAY identifier
<Filter>
      <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    /F-BAY
             </Text>
       </Search>
       <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
```

```
F-BAY
             </Text>
       </Replace>
</Filter>
# look for lines with station F-STU identifier
<Filter>
       <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    /F-STU
              </Text>
       </Search>
       <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
                    F-STU
             </Text>
       </Replace>
</Filter>
# This Filter section tells the script to abort if no
# acceptable station is found within the data
# (the Temp variable is still blank)
<Filter>
       <Search>
             <Section>
                    Temp
             </Section>
             <Type>
                    Literal
```

```
</Type>
             <Text>
             </Text>
       </Search>
       <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    And
             </Type>
             <Text>
                    False
             </Text>
       </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# This Filter section tells the script to grab a portion of the data read for modification:
# It grabs everything between the first character of the line and ,DISPATCHED| keyword
# and removes everything else
<Filter>
      <Search>
             <Section>
                    Αll
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    *,DISPATCHED|
             </Text>
       </Search>
      <Replace>
             <Section>
                    ΑII
             </Section>
```

<Scope>

```
Section
              </Scope>
              <Type>
                    Literal
              </Type>
              <Text>
                    %Match%
              </Text>
       </Replace>
</Filter>
# This Filter flag takes the data read by the previous statement and modifies it:
# It gets rid of extra stuff between date/time and address and replaces it with
# a carriage return and line feed
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
             <Text>
                    (Eastern Daylight Time)*/%Temp%,F,
              </Text>
       </Search>
       <Replace>
             <Section>
                    ΑII
              </Section>
              <Scope>
                    Match
              </Scope>
              <Type>
                    Literal
              </Type>
             <Text>
                    \013\010
              </Text>
       </Replace>
</Filter>
```

The next two filter sections separate the rescue calls from the fire calls # so that they go to two different agencies/organizations/units.

```
<Filter>
      <Search>
            <Section>
                   ΑII
            </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   FIRE
            </Text>
      </Search>
      <Replace>
            <Section>
                   Temp
            </Section>
            <Scope>
                   Section
            </Scope>
            <Type>
                   Literal
            </Type>
            <Text>
                   %Temp%-FIRE
            </Text>
      </Replace>
</Filter>
<Filter>
      <Search>
            <Section>
                   ΑII
            </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   RESCUE
            </Text>
      </Search>
      <Replace>
            <Section>
                   Temp
            </Section>
```

```
<Scope>
                   Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   %Temp%-RESCUE
             </Text>
      </Replace>
</Filter>
# The next three Filter sections remove the text ,DISPATCHEDI from the message
# and replaces it with more readable text
# get rid of DISPATCHED on RESCUE
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,RESCUE,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   \013\010RESCUE
             </Text>
      </Replace>
</Filter>
```

```
# get rid of DISPATCHED on FIRE
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,FIRE,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   \013\010FIRE
             </Text>
      </Replace>
</Filter>
# get rid of DISPATCHED on ACCID
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,ACCID,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
```

```
</Section>
             <Scope>
                    Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   \013\010ACCID
             </Text>
      </Replace>
</Filter>
# This Filter section tells the script to output the file in the standard
# PageGate GetASCII file format for direct processing:
# convert to standard .asc format
<Filter>
      <Search>
             <Section>
                   Flag
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    True
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                    %Temp%\013\010CAD\013\010Dispatch %Temp%\013\010%All%
             </Text>
      </Replace>
```

```
</Filter>
Original Content
```

This is example content to be processed by filter example 3. This is what it looks like before the filter engages.

2018-08-23 14:07:30.307 (Eastern Daylight Time) CISCOUNITSTAT||T=1| V=6233M070737305319||T=4|V=02||T=0|V=U,00/F-BAY,P,PRIMARY STREET/CROSS STREET,INJ ACCID,DISPATCHED|| Filtered Content

When the data from filter example 4 is processed by filter example 4, this is the output

content:

```
F-BAY
DISPATCH
P,PRIMARY STREET/CROSS STREET,INJ ACCID
Example 5
Example 4
```

This filter script is designed to work with the National Weather service's XML content, which is generated by polling their web API.

Note: The <InputFile> and <OutputFile> sections are not icluded, so the script will use the filename passed in by PageGate, and write the script's results back to the same filename when done.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

This section of the filter grabs the data from the <weather> XML tag.

```
</Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    Weather: %Match%
             </Text>
      </Replace>
</Filter>
# This section of the filter grabs the data from the <temp f> XML tag.
<Filter>
<Search>
     <Section>
         ΑII
     </Section>
     <Type>
         Literal
     </Type>
     <Text>
         <temp_f>*</temp_f>
     </Text>
</Search>
<Replace>
     <Section>
         Temp
     </Section>
     <Scope>
         Section
     </Scope>
     <Type>
         Literal
     </Type>
     <Text>
         %Temp% \013\010Temperature: %Match%
     </Text>
</Replace>
</Filter>
# This section of the filter grabs the data from the <windchill f> XML tag.
<Filter>
<Search>
     <Section>
         ΑII
```

```
</Section>
     <Type>
         Literal
     </Type>
     <Text>
         <windchill f>*</windchill f>
     </Text>
</Search>
<Replace>
     <Section>
         Temp
     </Section>
     <Scope>
         Section
     </Scope>
     <Type>
         Literal
     </Type>
     <Text>
         %Temp% \013\010Windchill: %Match%
     </Text>
</Replace>
</Filter>
# This section removes the literal text <weather> from the text to be processed.
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   <weather>
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Match
             </Scope>
```

```
<Text>
             </Text>
      </Replace>
</Filter>
# This section removes the literal text </weather> from the text to be processed.
<Filter>
      <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    </weather>
             </Text>
       </Search>
       <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section removes the literal text <temp f> from the text to be processed.
<Filter>
      <Search>
             <Section>
                    Αll
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    <temp_f>
             </Text>
```

```
</Search>
       <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
             </Text>
       </Replace>
</Filter>
# This section removes the literal text </temp_f> from the text to be processed.
<Filter>
       <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    </temp_f>
             </Text>
       </Search>
       <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
             </Text>
       </Replace>
</Filter>
# This section removes the literal text <windchill_f> from the text to be processed.
<Filter>
       <Search>
             <Section>
```

```
</Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    <windchill_f>
             </Text>
      </Search>
      <Replace>
             <Section>
                    Αll
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section removes the literal text </windchill_f> from the text to be processed.
<Filter>
      <Search>
             <Section>
                    Αll
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    </windchill_f>
             </Text>
      </Search>
      <Replace>
             <Section>
                    Αll
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
```

```
</Text>
       </Replace>
</Filter>
# This section provides the recipient and sender information necessary
# to process this data in to an SMS. Effectively, what you're doing is
# telling the program who this weather data should go to by outputting
# information in the GetASCII API's basic format. The \013\010
# statements represent a carriage return followed by a line feed and are
# required. With the example provided below, this will process all
# traffic to a single recipient or group named customer-phone.
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
              <Text>
              </Text>
       </Search>
       <Replace>
              <Section>
                    ΑII
              </Section>
              <Scope>
                    Section
              </Scope>
              <Text>
                     customer-phone\013\010Weather\013\010%Match%
              </Text>
       </Replace>
</Filter>
Original Content
```

This is an example of the raw XML content pulled from the National Weather Service for the Boston-Lo

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<?xml-stylesheet href="latest_ob.xsl" type="text/xsl"?>
<current observation version="1.0"</pre>
       xmlns:xsd="http://www.w3.org/2001/XMLSchema"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
```

```
xsi:noNamespaceSchemaLocation="http://www.weather.gov/view/current_observation.xsd">
      <credit>NOAA's National Weather Service</credit>
      <credit URL>http://weather.gov/</credit URL>
      <image>
            <url>http://weather.gov/images/xml logo.gif</url>
            <title>NOAA's National Weather Service</title>
            <link>http://weather.gov</link>
      </image>
      <suggested_pickup>15 minutes after the hour</suggested_pickup>
      <suggested pickup period>60</suggested pickup period>
      <location>Boston, Logan International Airport, MA</location>
      <station id>KBOS</station id>
      <latitude>42.36056</latitude>
      <longitude>-71.01056</longitude>
      <observation time>Last Updated on Nov 27 2017, 10:54 am EST</observation time>
    <observation time rfc822>Mon, 27 Nov 2017 10:54:00 -0500
      <weather>Mostly Cloudy</weather>
      <temperature string>45.0 F (7.2 C)</temperature string>
      <temp_f>45.0</temp_f>
      <temp c>7.2</temp c>
      <relative humidity>48</relative humidity>
      <wind string>from the West at 16.1 gusting to 25.3 MPH (14 gusting to 22 KT)
      <wind dir>West</wind dir>
      <wind degrees>280</wind degrees>
      <wind mph>16.1</wind mph>
      <wind gust mph>25.3</wind gust mph>
      <wind kt>14</wind kt>
      <wind gust kt>22</wind gust kt>
      string>1012.4 mb</pressure string>
      oressure mb>1012.4</pressure mb>
      oressure in>29.90
      <dewpoint string>26.1 F (-3.3 C)</dewpoint string>
      <dewpoint f>26.1</dewpoint f>
      <dewpoint c>-3.3</dewpoint c>
      <windchill string>38 F (3 C)</windchill string>
      <windchill f>38</windchill f>
      <windchill c>3</windchill c>
      <visibility mi>10.00</visibility mi>
      <icon url base>http://forecast.weather.gov/images/wtf/small/</icon url base>
      <two day history url>http://www.weather.gov/data/obhistory/KBOS.html</two day history url>
      <icon url name>bkn.png</icon url name>
      <ob url>http://www.weather.gov/data/METAR/KBOS.1.txt</ob url>
      <disclaimer url>http://weather.gov/disclaimer.html</disclaimer url>
      <copyright url>http://weather.gov/disclaimer.html</copyright url>
      <privacy policy url>http://weather.gov/notice.html</privacy_policy_url>
</current observation>
```

Filtered Content

When the data from the National Weather Service is processed by filter example 5, this is

the output content:

customer-phone Weather Weather: Mostly Cloudy Temperature: 45.0 Windchill: 38

Example 6

Example 5

This filter script is designed to work with an <u>SMS Replies</u> system and is configured to look for the words 'subscribe' and 'unsubscribe' in the body of reply messages. If it finds 'subscribe', it reconfigures the message to go to the recipient or group in PageGate named 'subscribe'. If it finds 'unsubscribe', it reconfigures the message to go to the recipient or group named 'unsubscribe'.

Note: The <InputFile> and <OutputFile> sections are not icluded, so the script will use the filename passed in by PageGate, and write the script's results back to the same filename when done.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

```
# look for 'unsubscribe' in message text (all lower case)
# if found, route the message to 'unsubscribe' recipient
<Filter>
       <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    unsubscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
```

```
<Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient-or-group-here
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'Unsubscribe' in message text (begins with capital)
# if found, route the message to 'unsubscribe' recipient
<Filter>
       <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    Unsubscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient-or-group-here
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'subscribe' in message text (all lower case)
# if found, route the message to 'subscribe' recipient
```

```
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   subscribe
             </Text>
      </Search>
      <Replace>
             <Section>
                   Recipient
             </Section>
             <Scope>
                   Section
             </Scope>
             <Text>
                   subscribe-recipient-or-group-here
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'Subscribe' in message text (begins with capital)
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                    Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    Subscribe
             </Text>
      </Search>
      <Replace>
             <Section>
```

```
Recipient

</Section>

<Scope>

Section

</Scope>

<Text>

subscribe-recipient-or-group-here

</Text>

</Replace>

<Continue>

False

</Continue>

</Filter>
```

Example 7

This filter script is designed to work with an <u>SMS Replies</u> system and is configured so that any time someone replies to a message with 'unsubscribe' or 'subscribe', those replies will be sent to an 'unsubscribe' or 'subscribe' recipient in PageGate that will execute a batch file or script contained within a batch file.

To do so, there's a bit of preparation you'll need to do to tell PageGate what script to run. It's also important to note that this batch file can be used to execute powershell commands.

Step 1: Create a directory for your batch file

 Create a directory for the batch file(s) to reside in. This will also be the output folder for the carrier we'll create in Step 2. For example, c:\PageGateData\unsubscribe\

Step 2: Create a FILE Carrier

- 1) Open PG Admin.
- 2) Right click Carriers, select Add.
- 3) Give the carrier a name, something straightforward like BATCH.
- 4) Set Protocol to: FILE
- 5) Set File Path to the directory you created in Step 1 above. By default, c: \PageGateData\unsubscribe\

Step 3: Create a recipient named 'unsubscribe' and tie it to the FILE carrier

- 1) Right click Recipients, select Add.
- 2) Name the recipient: unsubscribe
- 3) Set Carrier to the FILE carrier you created in step 2. By default, BATCH.

4) Click Apply.

Step 4: Place and edit the appropriate script files

- 1) Open the directory you created in step 1 above. By default, c: \PageGateData\unsubscribe\
- 2) Copy pstproc.bat from the PageGate program directory in to that folder.
- 3) Edit pstproc.bat to execute the desired effect.

Step 5: Configure the SMS Replies Filter System

```
# look for 'unsubscribe' in message text
# if found, route the message to 'unsubscribe' recipient
<Filter>
      <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    unsubscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'Unsubscribe' in message text
# if found, route the message to 'unsubscribe' recipient
<Filter>
```

```
<Search>
             <Section>
                    Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   Unsubscribe
             </Text>
      </Search>
      <Replace>
             <Section>
                   Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'subscribe' in message text
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   subscribe
             </Text>
      </Search>
      <Replace>
             <Section>
                   Recipient
```

```
</Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                   subscribe-recipient
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'Subscribe' in message text
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   Subscribe
             </Text>
      </Search>
      <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                   subscribe-recipient
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
```

Example 8

This example is designed to work with an <u>SMS Replies</u> system. This script is configured with a list of 'allowed' phone numbers and is also configured to scan the sender value of all replies. If the sender's phone number isn't in the 'allowed' list, the message is filtered as spam.

```
<Filter>
<Comment>
This filter is scanning the sender value for a series of phone numbers. In this example,
we're using a simple Regex string to create an 'or' statement. So, we're scanning for the
first number or the second number or the third number and so on.
</Comment>
<Search>
     <Section>
         Sender
     </Section>
     <Type>
         Regex
     </Type>
     <Text>
         (phonenumber1|phonenumber2|phonenumber3|phonenumber4|etc)
     </Text>
</Search>
<Replace>
<Comment>
If the filter finds any of the specified phone numbers, it assigns the intended delivery group
or recipient.
</Comment>
     <Section>
         Recipient
     </Section>
     <Scope>
         Section
     </Scope>
     <Text>
         name of messaging group or recipient
     </Text>
</Replace>
<Continue>
     False
</Continue>
</Filter>
```

GetMail Integration

The GetMail API allows you to receive SMTP/Email traffic and translate it into outbound messages in a different format. For example, you could email a message to PageGate to deliver as a message to cell phones, other email addresses, pagers, web APIs, etc.

Enabling GetMail allows you to have all traffic to a recipient or group forwarded to the specified email address as well as allowing PageGate to host a POP accessible mailbox on the PageGate server for that recipient or group.

PageGate has a fully functional mail server engine as a core part of the program but without the GetMail module, you only ever access the outbound functions of this mail server. The GetMail module unlocks the receiving portion of our mail server engine.

GetMail can receive email/SMTP messages in one of two ways:

- Sub-domain hosting
- POP Mailbox

The best method of email integration is to have PageGate host a sub-domain off of your existing domain. To do this, you'll want to talk to your mail server administrator and ask them to create this sub-domain for you, then redirect the MX record for that sub-domain to the internal IP address of the PageGate server. For example, let's say that you have an email domain of whatever.com (and that your email addresses something@whatever.com). You could have messaging.whatever.com created and redirected to PageGate's IP. As soon as you do, every recipient and group in the program becomes a valid email address.

So, let's say that we have a recipient called sales and we have GetMail configured to use messaging.whatever.com. You could send an email to sales@messaging.whatever.com and that email would come in to PageGate, then get processed as an outbound message for the recipient named sales.

POP is a relatively antiquated method of receiving email, many modern mail servers don't support it. However, if your mail server does still support POP mailboxes, you can configure GetMail to periodically check those email addresses, then read in any email waiting in the mailbox and deliver that traffic to a recipient or group of your specification.

With the ubiquity of email, more and more modern applications are integrating the ability to send email. If your application has the ability to send email, it can easily be integrated with PageGate by using PageGate's email interface. It is worth noting that this interface can be used to integrate applications running on different platforms (Unix, Mac, etc.). For more information, please refer to the GetMail section of this manual for more details.

GetWeb Integration

The GetWeb API provides a CGI executable that can be hosted on a web server and a series of pre-formatted templates to publish a messaging website or series of messaging websites. Web Developers can use this web server interface to send messages to PageGate from their webpages (HTML, ASP, JavaScript, etc.). This means that you can host messaging websites on your local intranet or, if GetWeb is interfaced with an outward facing web server, on the internet.

GetWeb's CGI executable can be used with either a POST or GET method.

The POST method can be used by creating a form on your webpage and pointing to the webgate.exe program in the FORM ACTION statement.

The GET method is more popular with scripting languages such as JavaScript and Java. It allows the GetWeb CGI to be called with a command similar to one that could be entered into a browser's URL field.

The GetWeb interface can be used to enable PageGate to be integrated with applications running on different platforms (Unix, Mac, etc.). Please refer to the <u>GetWeb</u> section of this manual for more details.

You can also find examples of Linux and Powershell scripts that can be used with GetWeb in our documentation here.

GetSerial Integration

<u>The GetSerial API</u> allows PageGate to monitor a serial/RS232 port, virtual or physical, for raw data text strings to be parsed in to outbound messages.

When a data string is sent to monitored a serial port, GetSerial pattern matches sections of the data string to parse information for messaging. For more information, please see the <u>GetSerial</u> portion of the documentation.

GetTAP Integration

The GetTAP API allows PageGate to monitor a serial port or answer a modem call to receive TAP transmitted pages.

This allows PageGate to function as a TAP receiver or a TAP terminal for any devices and systems that can transmit that protocol, such as a Zetron terminal. For more information, please see the GetTAP portion of the documentation.

If you need to monitor more than just one serial port or phone line for incoming TAP messages, you can do so with PageGate's TAP2Ascii module. For more information, please contact our Sales Department at 781-829-0500 xt1 or at sales@notepage.com

SNPP Server Integration

The SNPP API allows PageGate to function as an SNPP server to receive this protocol from a variety of sources. Messages received by this API are output to a directory as a text file that is then read in with the GetASCII API. As a result, this API requires the GetASCII API to function.

To configure the PageGate SNPP server:

1) Create a directory where the SNPP Server and its files will reside. We recommend creating the following directory: C:\PageGateData\SNPP\

- 2) In Windows, browse in to the PageGate installation directory.
- 3) Move the snppserver.exe, pininfo.txt and snpp.ini files to the folder you created in step 1.
- 4) The first thing we'll need to do is modify the snpp.ini file. Open the file in notepad.

To give you a little more information, this .ini file controls the behavior of the PageGate SNPP Server. If you are running the evaluation version of the PageGate SNPP Server, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 3) Change the OutputFolder= value to the directory you created in step 1.
- 4) Change the LogFolder= value to your PageGate Logging directory. If you are unsure of what this folder is, open the PageGate Admin and go to the Program Settings section.
- 5) Save the snpp.ini file and close notepad.

- 1) Open pininfo.txt in notepad.
- 2) This file tells the SNPP server what range of numbers can be passed to the server. The format of the entries defined in this text file are:

"Starting PIN", "Ending PIN", "recipient type"

If you would like ID numbers in a range to be recognized as the recipient's name (not using ad-hoc, but using numeric recipient names in PageGate), use the text "PG_Recipient" as shown below:

"0001","9999", "PG_Recipient"

If you would like ID numbers in a range to be passed through PageGate as intact ID's to another source in an ad-hoc range, use the name of a Recipient in PageGate whose type is Ad-Hoc.

"0000001","4999999","adhoc1"

To set the SNPP Server to run as a Windows Service, do the following:

- 1) Open a command prompt.
- 2) Change directory to the SNPP Server's program directory.
- 3) Type the following and hit enter: snppserver /install
- 4) Exit the command prompt.

- 5) Open the Services list in Windows.
- 6) Go in to the Properties of the PageGate SNPP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Once this has been done, the final step is to configure the GetASCII module to read the data from the SNPP server. To do so:

- 1) Open the PageGate Admin.
- 2) Go to Interfaces GetASCII Settings.
- 3) In the Polling Directory, specify the PageGate SNPP Server's output folder.
- 4) Put a check in Enabled.
- 5) Click Apply.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling</u> <u>Files</u> section to specify the SNPP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc

TouchTone Receiver Integration

This module provides the ability to monitor a voice modem to answer calls and receive DTMF signals and output them as text to a file.

To configure the PageGate Touch Tone Receiver:

- 1) Create a directory where the SNPP Server and its files will reside. For example, the directory:
- C:\TouchTone\
- 2) In Windows, browse in to the PageGate installation directory.
- 3) Move the pggttone.ini and pgttreceiver.exe files to the folder you created in step 1.
- 4) The first thing we'll need to do is modify the pggttone.ini file. Open the file in notepad.

To give you a little more information, this .ini file controls the behavior of the PageGate Touch Tone Receiver. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 3) Change RunStyle=Application to RunStyle=Service
- 4) Change SwitchStyle=False to SwitchStyle=True

5) Set the DataFolder= value to your GetASCII polling directory. If you do not have GetASCII enabled, please see the GetASCII section of the documentation.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling Files</u> section to specify the SNPP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc

- 6) Set the ComPort= value to match the COM port of your modem.

 Note: Only modems that have the 'voice' capability can receive DTMF signals. Modems that do not have that ability cannot interpret them and cannot be used for this purpose.
- 7) For the Initialization and Connection strings, please use the settings relevant to your modem as detailed in the file.
- 8) Save the file and close notepad.
- 9) Open a command prompt.
- 10) Change directory to the directory you created in step 1.
- 11) Type the following and hit enter: pgttreceiver /install
- 12) Exit the command prompt.
- 13) Open the Services list in Windows.
- 14) Go in to the Properties of the PageGate TouchTone service.
- 15) Change the Startup Type to Automatic and Start the Service.

Direct Database Access

Developers that are familiar with database access can directly integrate with PageGate's database.

Note: Please consider other integration methods first. Writing improperly formatted lines to the database will interfere with PageGate's stability. Empty fields MUST be expressed as blank string values and CANNOT be left null. Each field value must exactly match the expected format.

This is probably the most efficient way to add messages to the message queue, but may not be an option in all programming environments. Another downside to this method is

that it may be version specific (if the database structure changes in a future version of PageGate, the integration may stop working).

PageGate uses a Jet 4.0 database as it's back end. This is a MS Access 2000 compatible database. If you have the ability to write to MS Access 2000 databases, then you can write to the PageGate's database directly. New messages can be added to the PageGate's message queue by adding a new record to the 'messages' table in the 'pagegate.mdb' database.

<u>Click here for field descriptions and values in the Messages table</u>

<u>Click here for field descriptions and values in the Users and Groups table</u>
The Messages Table

The field definitions, descriptions and values for the 'Messages' table.

Warning: Empty fields should be represented as blank string values. NULL values will not be properly be parsed.

Label	Field	Value
	Type	
user	Text	This field must match the name of a Recipient or Group within the PageGate Admin.
pin	Text	Must be set to a zero length string (""). This field value CANNOT be left Null.
message	Memo	This field is the text of the message to be sent
carrier	Text	Must be set to a zero length string (""). This field value CANNOT be left Null.
date_time _requeste d	Date	This field specifies the date and time to send this message. By default, set the current date and time.
date_time _sent	Date	Leave unset
frm	Text	This field specifies the name of the Sender of the message.
sent	Boolea n	Set to False
error	Boolea n	Set to False
ascii_file	Text	Must be set to a zero length string (""). This field value CANNOT be left Null.
mail_file	Text	Must be set to a zero length string (""). This field value CANNOT be left Null.
lock	Boolea n	Set to False

scheduled	Boolea n	Set to False
reliapage _index	Numeri c	Set to 0
repeat_int erval	Numeri c	Set to 0
repeat_st op	Date	This value should be set to the same value as the date_time_requested field.
station	Numeri c	This field provides a unique identifier that can be referenced when performing reports to identify the source of the message. Values 0 through 9 are system reserved and cannot be used. Set this field value to 10 ≥
message_ id	Auto Number	Leave unset
retries	Numeri c	Set to 0
lasty_try	Date	This value should be set to the 30 seconds before the date_time_requested field.
transactio n	Numeri c	REQUIRED VALUE This field must be a unique number (long integer). The best way to handle this is to edit the control database record, read the current value of the 'unique' field, increment it, and then write this value back to the control table. The transaction number can be reused after approximately 1 hour.
dialer	Numeri c	Set to 0
creator_n ame	Text	If security is enabled within PageGate, this is the name of the user who created the message. Otherwise, set the field value to a zero length string (""). This field value CANNOT be left Null.
creator_m achine	Text	This is the machine name of the computer that created the message. This field value CANNOT be left Null.
original_re cipient	Text	Set this field value to the same value as the <u>user</u> field.
last_recipi ent	Text	Set this field value to the same value as the <u>user</u> field.
server	Text	This field is not used but must be set to a zero length string (""). This field value CANNOT be left Null.
archived	Boolea n	Set to False.
priority	Numeri c	Set this field value to 0.

The Users and Groups Table

Field definitions, descriptions and values for the 'Users' table in the database.

Warning: Empty fields should be represented as blank string values. NULL values will not be properly be parsed.

be properly be parsed.		
Label	Field Type	Description and Potential Values
user	Text	The internal database name of a recipient or group and is the value referenced by the GetASCII, GetWeb, GetTAP and GetSerial interfaces. For instance, this field name is the value referenced by network monitoring utilities, CAD dispatching, ticket tracking systems and similar.
full_name	Text	The recipient or group's display name in the <u>PageGate GUI Client</u> and in <u>any messaging websites</u> this recipient or group appears on.
id	Text	The ID to message. This will vary widely based on what type of messages this recipient will receive. It could be a 10 or 11 digit ID for SMS, it could be an email address, it could be a custom ID string or it could be something else entirely.
EmailTo	Text	When this recipient is messaged through SMTP based carriers, this is the email address that will be messaged. This field overrides what may be in the ID field but only for delivery via the SMTP protocol, otherwise the ID field is respected. It is possible to tie a recipient to a non-SMTP method of delivery, like cellular hardware or an SMS delivery service (AWSSNS, Twilio, etc), then configure a failover scenario where that non-SMTP method of
		delivery fails over to SMTP. When that happens, this field's delivery value will be used instead of the id value.
carrier	Text	This value must exactly match the name of a carrier as it exists in the 'carrier' field of the Carriers table in the database; which is also the name displayed in the 'Carriers' section of PG Admin.
maxchars	Numeri c	The maximum number of characters this recipient should have the ability to receive. This value may be higher than the carrier's 'Max Chars' value. If the recipient value is higher than the carrier value, PageGate will break up long messages in to multiple data blocks based on the carrier value.
on_call	Boolea n	0 for False1 for True. This field should be set to False for recipients. If a group should have an on-call schedule, set this field to True.

		Schedules are configured in PG Admin or by modifying values in the table 'oncalltable' of the database.
reliapage _index	Numeri c	Set this field to 0.
forward	Text	If you own the GetMail interface and would like a copy of all messages sent to this recipient or group forwarded to an email address, specify that email address in this field.
		If you do not own the GetMail interface, leave this field as a blank string value.
ascii serv	Boolea	0 for False1 for True.
ice	n	If GetAscii is part if your license, set to True. Otherwise, set to False.
	D .	0 for False1 for True.
gui_servic e	Boolea	If the PageGate GUI Client is part if your license, set to True.
		Otherwise, set to False.
mail_servi		0 for False1 for True.
ce	n	If GetMail is part if your license, set to True. Otherwise, set to False.
serial_ser	Boolea n	0 for False1 for True.
VICC		If GetSerial is part if your license, set to True. Otherwise, set to False.
tap_servic e	Boolea n	0 for False1 for True.
		If GetTAP is part if your license, set to True. Otherwise, set to False. 0 for False1 for True.
web_servi ce	Boolea n	
		If GetWeb is part if your license, set to True. Otherwise, set to False. 0 for False1 for True.
ad_hoc	Boolea n	
		If this <u>recipient</u> is an ad-hoc recipient, set to True. Otherwise, set to False.
multi_pag e	Boolea n	0 for False1 for True.
		This field should be set to False for recipients.
	<u> </u>	I.

	I	
		If this group is tied to the multi-page <u>GetWeb</u> template, set this to True. Otherwise, set to False.
		0 for False1 for True.
email_only	Boolea	This field should be set to False for groups.
		If this recipient should only exist as a mailbox for use with <u>GetMail</u> , set to True. Otherwise, set to False.
		0 for False1 for True.
group	Boolea n	This field should be set to False for recipients.
		If this entry should be a group, set to True. Otherwise, set to False.
		0 for False1 for True.
display_gr oup	Boolea n	This field should be set to False for recipients and groups.
		If this entry should be a <u>display group</u> , set to True. Otherwise, set to False.
template	Text	Set to a blank string value.
text1 - text 10	Text	Text fields that are referenced by GetWeb's basic templates and values that may be called on by PageGate's template system. In most cases, leave these as blank string values.
image1 - image5	Text	Text fields that are referenced by GetWeb's basic templates and values that may be called on by PageGate's template system. In most cases, leave these as blank string values.
		0 for False1 for True.
custom	Boolea	This field should be set to False for recipients.
		If this group is tied to a custom web template, set to True. Otherwise, set to False.
	Boolea n	0 for False1 for True.
group_list		This field should be set to False for recipients.
		If this group is tied to a web template and the members of this group should display on the website it generates, set to True. Otherwise, set to False.

		0 for False1 for True.
		This field should be set to False for recipients.
GLFullNa me	Boolea n	If this group_list is true, setting this field to True will configure the website to reference the value in the full_name field instead of the recipient field.
		In all other cases, set to False.
		This field may only be set for recipients and has no effect on groups.
Failover	Text	The value of this field must exactly match the name of a recipient or group as it appears in the user field.
		If messages to this recipient fail, they will be redirected to the specified value.
		Otherwise, leave this field as a blank string value.
extra1 -	Text	Text fields that are referenced by the PageGate GUI Client and values that may be called on by PageGate's template system.
CAUGT		In most cases, leave these as blank string values.
		0 for False1 for True.
	Boolea n	This field should be set to False for groups.
hold		If this recipient should have a hold placed on their messages during specified dates and times, set to True and configure the values in hold_start and hold_stop.
		In all other cases, set to False.
hold_start	Date/Ti me	If hold is set to True, enter the current date and what time the message hold should begin. If hold is set to False, enter the current date and time. The field value won't be referenced if hold is False but this field can't be left blank.
		Date values should be expressed as m/dd/yyyy and Time values should be expressed as HH:MM:SS AM/PM.
		Example: 7/16/2020 8:35:00 PM
		The only part of the field that will remain relevant is the time value specified. PageGate will automatically update the date value to the current date if hold is True.

hold_stop	Date/Ti me	If hold is set to True, enter the current date and what time the message hold should end. If hold is set to False, enter the current date and time. The field value won't be referenced if hold is False but this field can't be left blank. Date values should be expressed as m/dd/yyyy and Time values should be expressed as HH:MM:SS AM/PM. Example: 7/16/2020 7:35:00 AM The only part of the field that will remain relevant is the time value specified. PageGate will automatically update the date value to the
creator	Text	current date if hold is True. This field specifies the name of an administrator or administrative group that should have creator/control rights to this recipient or group. If you aren't using the security system, leave this field as a blank string value. Otherwise, match this value to the name of an administrator or administrative group in your PageGate security list.
priority	Numeri c	Set to 100 for groups. Can be set to 1 - 32000 for recipients and reflects that recipient's priority in messaging. Recipients with values closer to 1 are sorted higher in the delivery order while recipients with values closer to 32000 are sorted lower. For more information, see Prioritizing Messages .

PageGate has the ability to send messages in a variety of formats to a variety of sources. Among other methods, you can:

- Send SMS/text messages to phones
- Send pages to pagers
- Send Email
- Make API calls to Web API, REST API, or web form
- Use XMPP chat clients
- Send faxes
- Send RAW data via TCP or Serial
- Trigger scripts, including Powershell

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Since reliability is incredibly important, PageGate has a <u>failover</u> system that allows you to automatically fail over from one method of communication to another in the event of failure.

For more information on how to configure a fail over, have a look at the <u>Failover Scenarios</u> section of the documentation.

SMS (text message) Delivery Methods

Sending SMS is relatively easy and it can be done in a few ways, some of which are hardware based and some of which are internet based.

Typically speaking, hardware methods of SMS delivery tend to be more reliable as they do not rely on an internet connection but SMS delivery services and carrier enterprise systems can be incredibly reliable methods of delivery.

• Carrier Public Gateways

Most carriers support an email-to-SMS system as a free, public service and PageGate supports the ability to send SMTP/Email messages. We try to keep an up to date listing of known carrier domains on our support site.

However, due to the nature of email delivery, this method can be somewhat unreliable and delayed. While this is a viable method of SMS delivery, we don't recommend using it as the primary method.

For more information, see the <u>Carrier Public Gateways</u> section of the documentation.

Cellular Hardware

On the hardware side of things, there are cellular modems and gateways. These devices have an interface PageGate can use to send and receive SMS just like a cell phone does.

Cellular modems are easier to use with physical systems as they connect by USB and/or RS-232.

Cellular gateways are easier to use in virtual environments as they can be reached via TCP by Telnet or SSH.

For more information, including make and model recommendations, have a look at the <u>Using Cellular Hardware</u> section of the documentation.

• General SMS delivery services

SMS delivery services are companies that provide a messaging API for you to deliver traffic through and you typically license your SMS services through them, though not every SMS delivery service is intended for use in every environment.

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For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

General messaging services are designed to be accessible to anyone and are incredibly easy to register and configure for the end user, though they are typically intended for lower volume environments. These services include Amazon Web Services SNS, Twilio, MessageBird and similar.

Some companies provide SMS services as an integrated part of a telephony or VOIP solution and PageGate can easily trigger messages through their API. These services include API Daze, Teli and similar.

High volume messaging services are designed for implementations that will need to send 100,000+ messages per month. Contracts are negotiated with the high volume service and PageGate uses their API to trigger messages. These services include Bandwidth, Teli, Infobip and similar.

For more information, have a look at the <u>General SMS Delivery Services</u> section of the documentation.

Public Safety delivery services

Some SMS delivery services are designed to work with public safety dispatching to provide mapping, geopositional and other key data to first responders. These services include Active911, I Am Responding, CodeMessaging and similar.

For more information, have a look at the <u>Public Safety Delivery Services</u> section of the documentation.

• Medical Industry delivery services

Some SMS delivery services are designed to work with hospitals, clinics and other medical services to provide HIPAA compliant secure messaging. These services include TigerConnect, QliqSOFT, Voalte and similar.

For more information, have a look at the <u>Medical Industry Delivery Services</u> section of the documentation.

Carrier Enterprise Systems

The major North American carriers each have their own respective enterprise messaging platforms. Verizon has EMAG (Enterprise Messaging Access Gateway), AT&T has FirstNet, Sprint has EMG (Enterprise Messaging Gateway), and so on.

Note for Public Safety: Verizon offers free access to dispatch related public safety organizations if you ONLY message Verizon phones through EMAG. Enabling inter-carrier operability requires a paid contract.

PageGate supports the protocols necessary to use these platforms to send your SMS.

For more information, see the <u>Carrier Enterprise Systems</u> section of the documentation. Carrier Public Gateways

Most carriers support an email-to-SMS system as a free, public service and PageGate supports the ability to send SMTP/Email messages. We try to keep an up to date listing of known carrier domains on our support site.

However, due to the nature of email delivery, this method can be somewhat unreliable and delayed. While this is a viable method of SMS delivery, we don't recommend using it as the primary method due to the potential delays and missed messages inherent to it.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

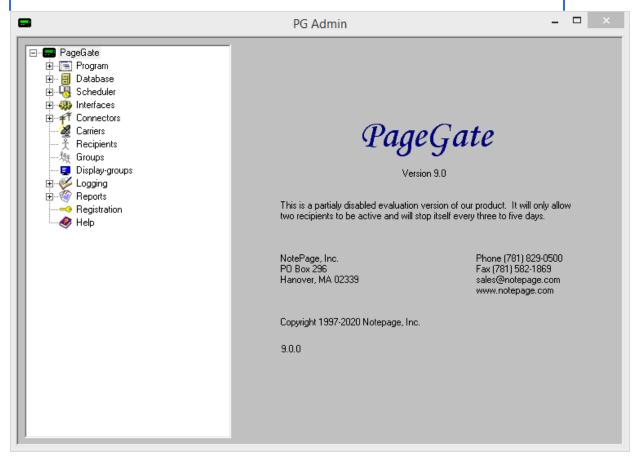
Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

Step 1: Configure the Carrier as a delivery method

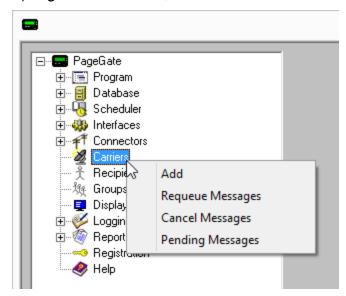
1) Run PG Admin.

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2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: The name of the carrier.

Protocol: SMTP

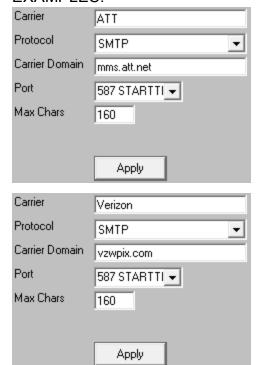
Host: The domain (part after the @) of the carrier host. For a list of known hosts, please see the SMTP Delivery section of our site.

Port: When relaying SMTP, specify the port required by your SMTP server.

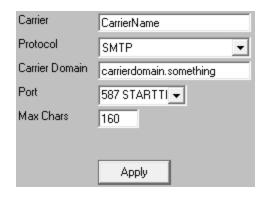
When using direct SMTP, set the port to 25.

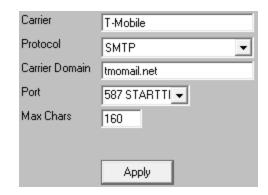
Max Chars: 160

EXAMPLES:



- 4) Go to Carriers YourNewCarrier Advanced
- 5) Specify the following:





When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers YourNewCarrier Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com



Apply

9) Click Apply.

Step 2: Create Recipients tied to the Carrier

Failover

Username

Password

Max PIN Length

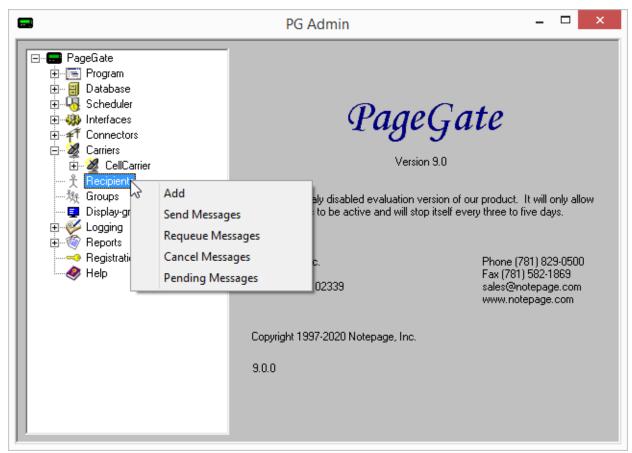
Priority

(none)

Deliver directly to destination server.

mailbox@address.here

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: The recipient's cell phone carrier

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.



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Cellular Hardware

Cellular hardware is the most reliable and efficient method of delivering SMS. By using cellular hardware, you're removing PageGate's reliance on your internet connection to deliver your messages which means that your internet connection could go down and your messages would still be delivered. It's also incredibly important to note that allowing PageGate to interact with cellular hardware is the only method of configuring a two-way-messaging-system with SMS.

SMS capable cellular hardware comes in two varieties: cellular gateway/router and cellular modem.

Cellular Gateways/Routers

Cellular routers and gateways can be accessed via TCP by Telnet or SSH. You don't have to connect these devices to a PC, they just need to be connected to your network and configured appropriately to receive messaging commands.

Good examples of cellular routers/gateways are:

- Multitech's MTR-LNA7, MTR-LVW2 and MTR-LAT1
- Airlink's GX450, RV50, RV55 and LX40
- Microhard IP4nGii
- Cisco Series 800, 900

For clientele in the UK and EU regions

- ConiuGo GmbH 700600150S
- ConiuGo GmbH 700600160S
- ConiuGo GmbH 700600170S

For information on how to configure TCP accessible cellular hardware, have a look at the <u>Creating a GSM-AT-IP Carrier</u> steps.

Cellular Modems

A cellular modem connects to a PC by USB or RS232 and provides a COM port in the operating system.

If PageGate is running in a virtual environment, you can also connect a cellular modem to a COM port virtualizer that provides the COM port to the virtual machine. This grants PageGate access to the cellular modem, which allows it to send and receive text messages just like a cell phone does.

Good examples of cellular modem are:

- Multitech's MTC-H5 and MTC-LNA4
- US Robotics' USR3500
- Microhard's IP4NG
- AirPrime 73xx and 75xx
- Skyus-DS
- BlueOcean GSM and GPRS series
- Duxbury 120 and 180
- Siemens MTC45MC, MTC45TC, TC35, TC65
- Wavecom Fastrack GSM Modems

For information on how to configure RS232 or USB connected cellular hardware, have a look at the <u>Creating a GSM-AT Carrier</u> steps.

General SMS Delivery Services

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

SMS delivery services are companies that provide a messaging API for you to deliver traffic through and you typically license your SMS services through them, though not every SMS delivery service is intended for use in every environment.

Most SMS delivery services offer at least one API that PageGate can use to send messages and some services offer multiple methods that can be used for failover and redundancy. PageGate supports the following delivery methods for internet or local network SMS delivery services:

HTTP POST and HTTP GET

These methods are used to interact with Web and REST APIs, whether those are internet or local network based. Any SMS service or application that can accept a web form, POST or GET methods can be used for messaging with this protocol.

Typically speaking, there will be a few variables needed to set things up; things like account number, API key and authentication credentials

Examples:

- AWS SNS
- Twilio
- MessageBird
- API Daze

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Telnyx

SMTP

Some delivery services offer the ability to email messages in to their platform can can be used for messaging with this protocol.

Services that support this delivery method will have an email domain you'll deliver your traffic through. For configuration steps, please see the <u>Creating a Relayed SMTP Carrier</u> section.

If your SMS delivery service supports multiple API hosts or delivery methods, you can configure them for failover and redundancy. For more information, see the <u>Failover</u> Scenarios section of the documentation.

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

Configuring AWS SNS

Step 1: Create an Amazon Web Services Account

- 1) Go to https://aws.amazon.com/
- 2) Click an AWS Create Account
- 3) Enter the email address and password.
- 4) Enter payment information (required by Amazon)
- 5) Choose your support plan.

Step 2: Create an Access Key for PageGate to use

Creating an access key can be done by providing PageGate access to the root account and password or you can tie the AWS SNS permissions to a specific user account..

If you want PageGate to use the root account, you would do the following:

- 1) Log in to your AWS account.
- 2) In the upper right hand corner, click on your account's name and select 'My Security Credentials'
- 3) Click 'Create new Access Key'
- 4) Copy the 'Access Key ID' and 'Secret Access Key' values as we'll need both in PageGate.

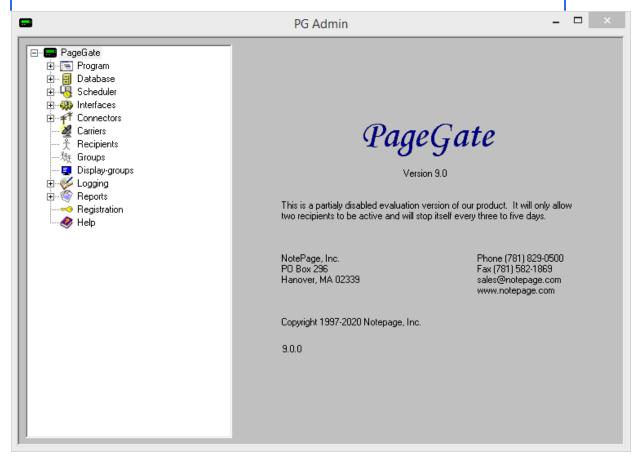
If you want to grant the ability to use AWS SNS to an existing account, you would do the following:

- 1) Log in to your AWS account.
- 2) In the upper right hand corner, click on your account's name and select 'My Security Credentials'
- 3) On the left hand side, click 'Users'
- 4) Select the user in question.
- 5) Click 'Add Permissions'
- 6) Select 'Attach existing policies directly'
- 7) In the 'Filter policies' field, enter: SNS
- 8) Check 'AmazonSNSFullAccess'
- 9) Click Next.
- 10) Click 'Add Permissions'
- 11) Select the 'Security Credentials' tab for that user.
- 12) Click 'Create Access Key'
- 13) Copy the 'Access Key ID' and 'Secret Access Key' values as we'll need both in PageGate.

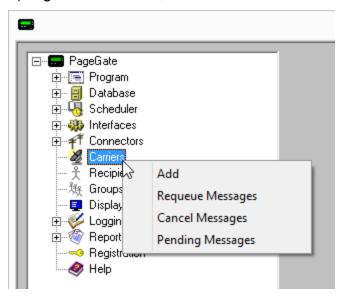
Step 3: Configure AWS SNS in PageGate

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following:

4

Carrier

Protocol

Host

Port

Max Chars

AWSSNS

AwsSns

443

160

Apply

sns.SNSHost.amazonaws.com

Carrier: AWSSNS Protocol: AwsSns

Host: Please see Amazon's SNS documentation

https://docs.aws.amazon.com/sns/latest/dg/sns-supported-

regions-countries.html

The 'Endpoint' value is what you will use in the this field.

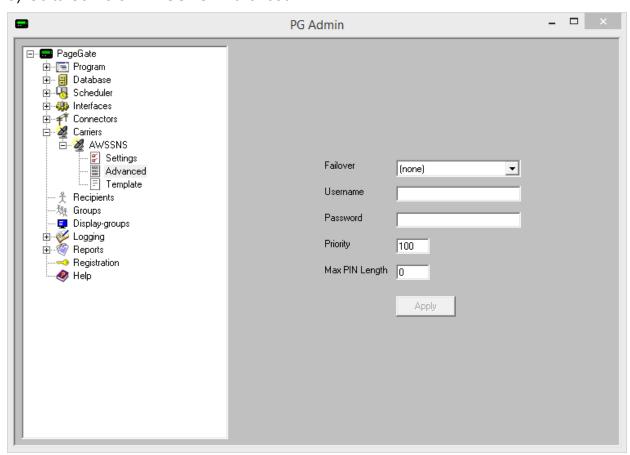
Examples:

sns.us-east-1.amazonaws.com

sns.us-west-2.amazonaws.com

Max Chars: 160

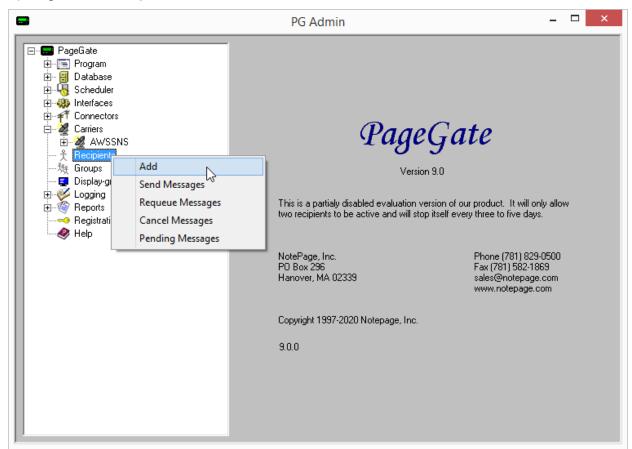
- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers AWSSNS Advanced



- 6) Enter the Access Key ID value in the Username field.
- 7) Enter the Secret Access Key value in the Password field.
- 8) Click Apply.

Step 4: Create Recipients tied to the AWSSNS method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

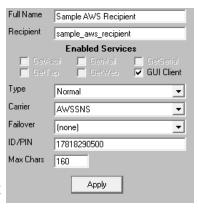
Type: Normal

Carrier: AWSSNS

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

NOTE: For messaging in North America, it is imperative that you provide the 1 in front of the phone number. AWS SNS treats the first character of the phone number as the country



code and you can unintentionally send international SMS if you do not provide the 1.

<u>Correct</u> 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring Twilio

Step 1: Create a Twilio Account

- 1) Go to https://www.twilio.com/
- 2) Click Sign Up
- 3) Create your Twilio Account

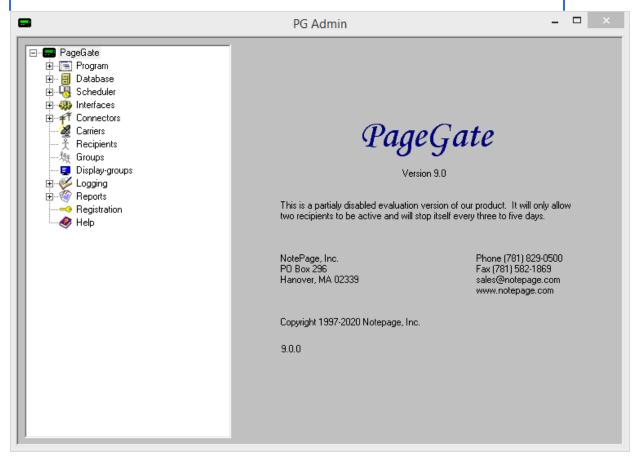
Step 2: Create an Access Key for PageGate to use

- 1) Log in to your Twilio account.
- 2) On the left hand side, click Settings, then API Keys.
- 3) Click 'Create new API Key'
- 4) In 'Friendly Name', enter: PageGate
- 5) Leave 'Key Type' set to: Standard
- 6) Click 'Create API Key'
- 7) Copy the SID and SECRET values as we'll need both for PageGate.

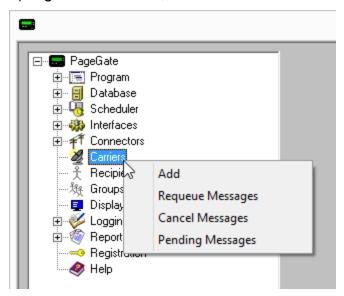
Step 3: Configure Twilio in PageGate

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following:

Carrier: Twilio

Protocol: HTTPPOST

Host: api.twilio.com/2010-04-

01/Accounts/YourAccountSID/Messages

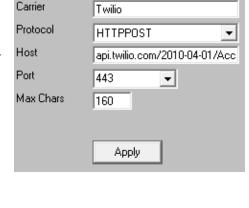
NOTE: Your account SID is part of the host address.

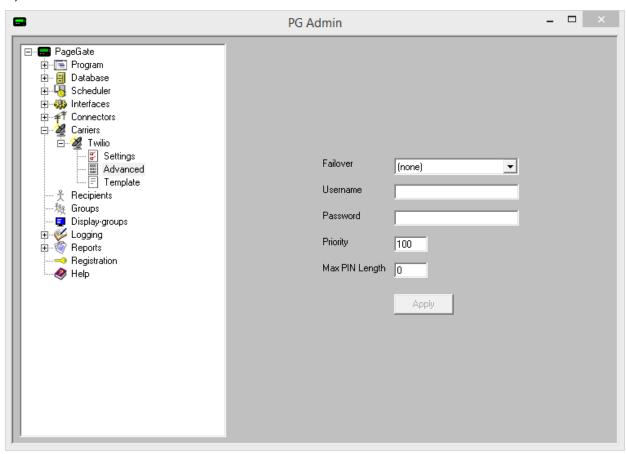
Port: 443

Max Chars: 160

4) Click Apply to add the new delivery method.

5) Go to Carriers - Twilio - Advanced





- 6) Enter the SID in 'Username'.
- 7) Enter the SECRET value in 'Password'.
- 8) Click Apply.
- 9) Go to Carriers Twilio Template
- 10) Specify the following in the 'Text' section and click Apply:

|To|%RecipientId%|

4

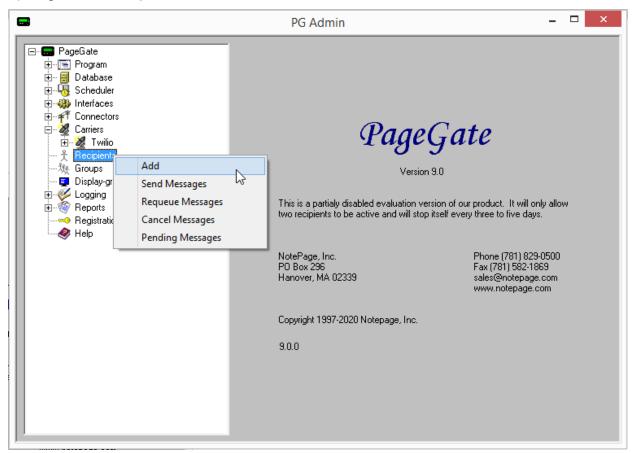
|From|The Phone Number of your Twilio Account in international format. Example: +17818290500|

|Body|%Message%|



Step 4: Create Recipients tied to the Twilio method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters,

underscores and dashes.

Type: Normal Carrier: Twilio

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

Correct Incorrect 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

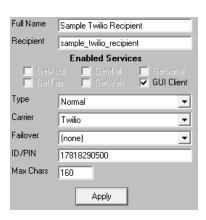
Configuring MessageBird

Step 1: Create a MessageBird Account

- 1) Go to https://messagebird.com/en/
- 2) Click Sign Up
- 3) Create your MessageBird Account
- 4) In 'Select an interface' section, select REST APIs
- 5) In 'Select a product to try first' section, select SMS API
- 6) In 'Select a use case', select Send SMS
- 7) In 'Get your free test credits', enter your cell phone number for confirmation.
- 8) Enter your verification code.
- 9) Click 'Skip'

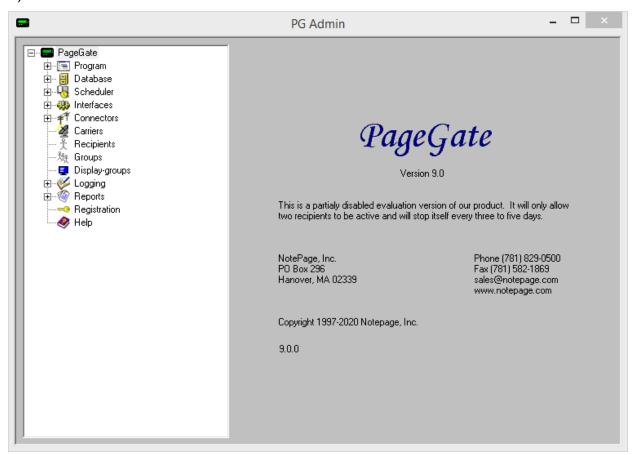
Step 2: Create an Access Key for PageGate to use

- 1) Log in to your MessageBird account.
- 2) On the right side, under Your API Keys, click Manage API Keys.
- 3) On the left side, click API access
- 4) Click 'Show Key' next to the account you want PageGate to use.
- 5) Copy the Key.

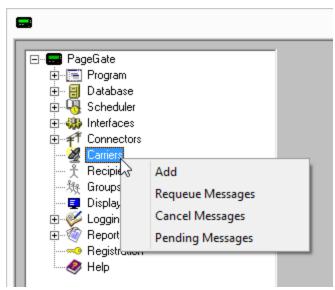


Step 3: Configure MessageBird in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

Carrier: MessageBird

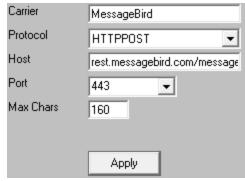
Protocol: HTTPPOST

Host:

rest.messagebird.com/messages

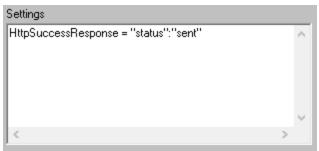
Port: 443

Max Chars: 160



- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers MessageBird Template
- 6) Specify the following in the 'Settings' section:

HttpSuccessResponse = "status": "sent"



7) Specify the following in the 'Text' section:

|Authorization|AccessKeyPasteYourAccessKeyHere|

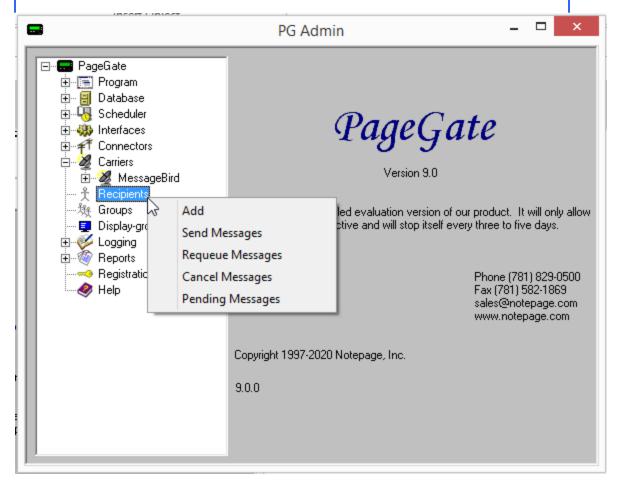
|recipients|%RecipientId%| |originator|%Sender%| |body|%Message%|



8) Click Apply

Step 4: Create Recipients tied to the MessageBird method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: MessageBird

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

Correct Incorrect 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

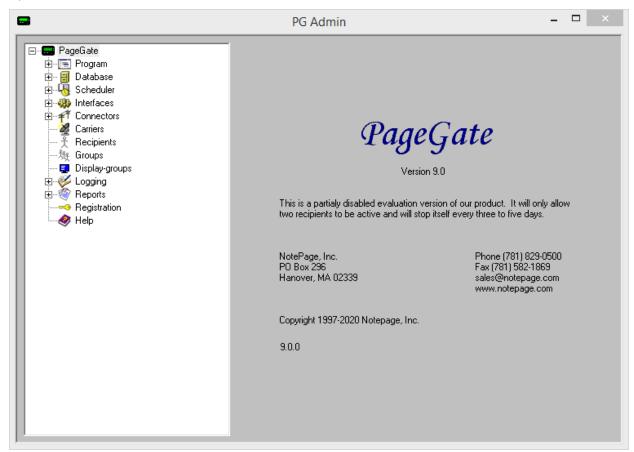
3) Click Apply.



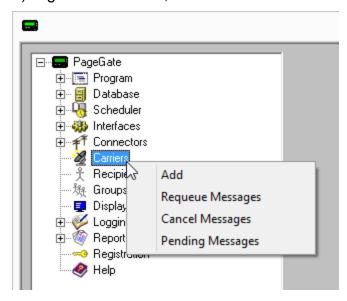
Configuring API Daze

Step 1: Configure API Daze in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



4

Carrier

Protocol

Max Chars

Host

Port

APIDaze

443

160

HTTPPOST

Apply

api4.apidaze.io/yourAPlkey/sm

3) Specify the following:

Carrier: APIDaze

Protocol: HTTPPOST

Host: api4.apidaze.io/yourAPlkey/sms/send?

api_secret=yoursecretAPlcode

NOTE: Paste your API code in to the 'yoursecretAPIcode'

section

Port: 443

Max Chars: 160

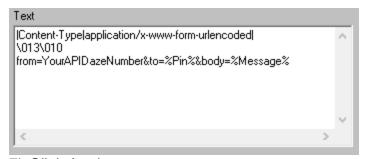
4) Click Apply to add the new delivery method.

- 5) Go to Carriers API Daze Template
- 6) Specify the following in the 'Text' section:

|Content-Type|application/x-www-form-urlencoded|

\013\010

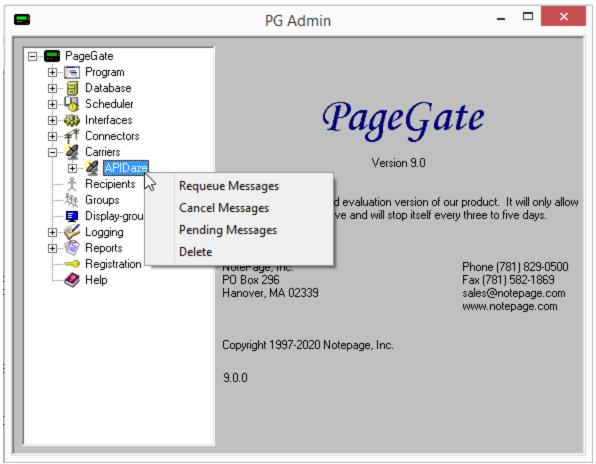
from=YourAPIDazeNumber&to=%RecipientId%&body=%Message%



7) Click Apply

Step 4: Create Recipients tied to the API Daze method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: API Daze

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.



Configuring Telnyx

Step 1: Create a Telnyx Account

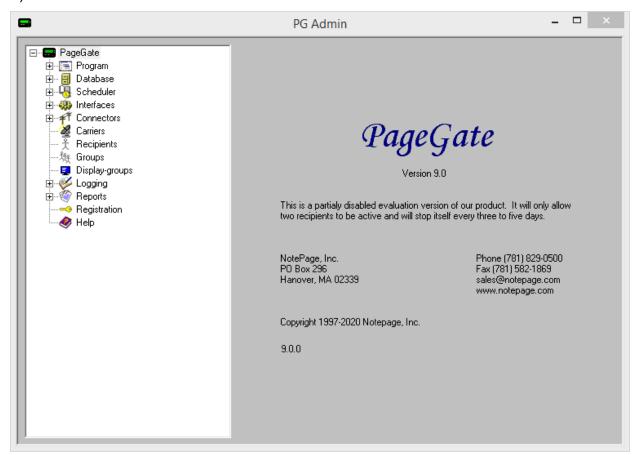
- 1) Go to https://www.telnyx.com/
- 2) Click Sign Up
- 3) Create your Telnyx Account

Step 2: Create an Access Key for PageGate to use

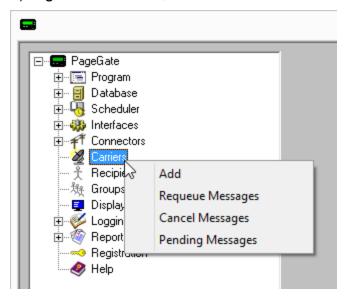
- 1) Follow the Telnyx portal setup guide: https://developers.telnyx.com/docs/v2/messaging/guickstarts/portal-setup
- 2) Follow the Telnyx development environment setup guide to generate your API key: https://developers.telnyx.com/docs/v2/messaging/quickstarts/dev-env-setup

Step 3: Configure Telnyx in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

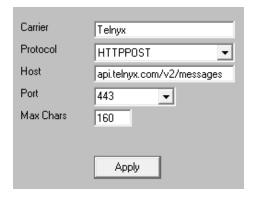
Carrier: Telnyx

Protocol: HTTPPOST

Host: api.telnyx.com/v2/messages

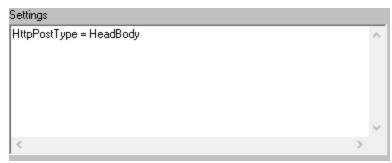
Port: 443

Max Chars: 160



- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers Telnyx Template
- 6) Specify the following in the 'Settings' section:

HttpPostType = HeadBody

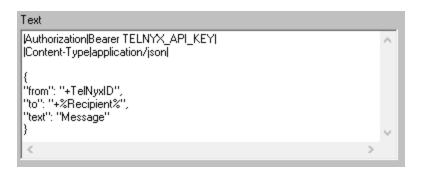


7) Specify the following in the 'Text' section and click Apply: |To|%RecipientId%|

4

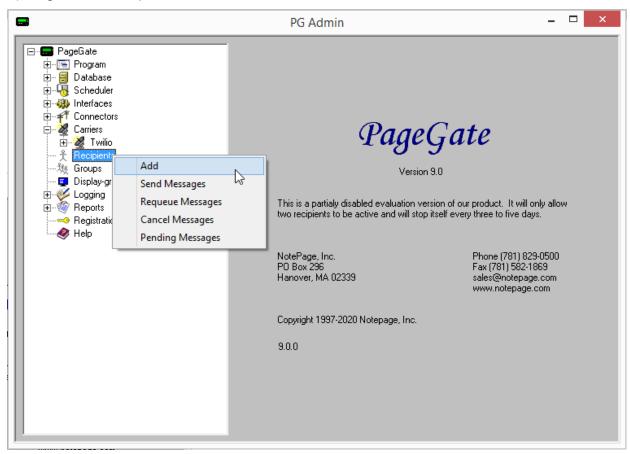
|From|A TN authorized to send SMS in your Telnyx Account in international format. Example: +17818290500| |Body|%Message%|

Note: Information on the 'From' parameter can be found in Telnyx's documentation: https://developers.telnyx.com/docs/v2/messaging/features/traffic-type



Step 4: Create Recipients tied to the Telnyx method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters,

underscores and dashes.

Type: Normal Carrier: Twilio

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

<u>Correct</u> <u>Incorrect</u> +17818290500 781829500, 17818290500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring Mobile-Text-Alerts

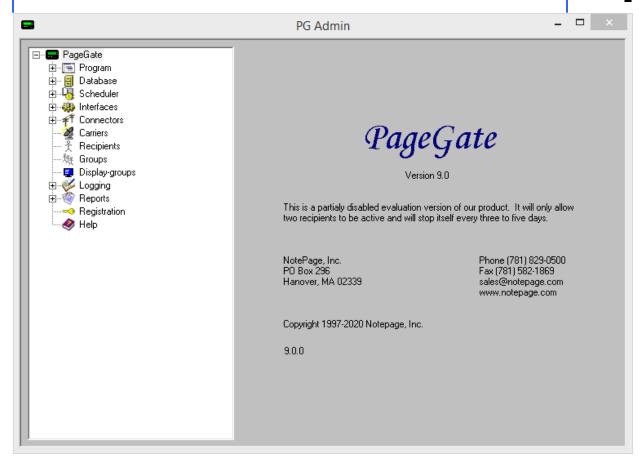
Step 1: Create a Mobile-Text-Alerts Account

- 1) Go to https://mobile-text-alerts.com/sms/api
- 2) Go through the account creation and registration process to receive your API key.

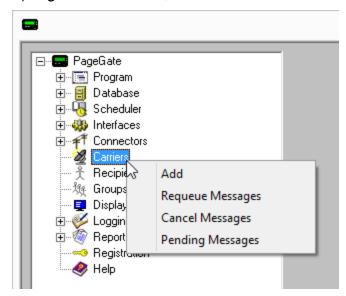
Step 2: Configure Mobile-Text-Alerts in PageGate

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following:

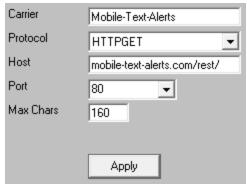
Carrier: Mobile-Text-Alerts

Protocol: HTTPGET

Host: mobile-text-alerts.com/rest/

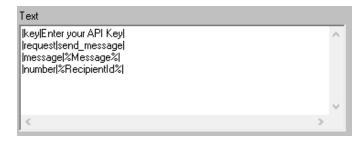
Port: 80

Max Chars: 160



- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers Mobile-Text-Alerts Template
- 6) Specify the following in the 'Text' section:

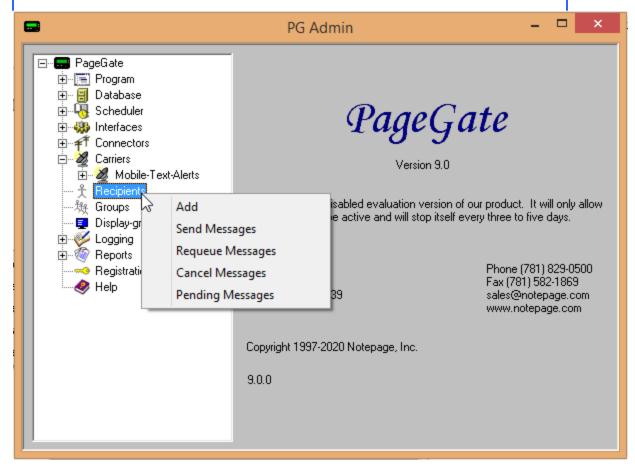
|key|Enter your API Key| |request|send_message| |message|%Message%| |number|%RecipientId%|



7) Click Apply

Step 3: Create Recipients tied to the Mobile-Text-Alerts method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

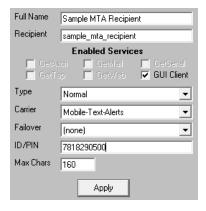
Carrier: Mobile-Text-Alerts

Failover: See Failover Scenarios

ID/PIN: Cell phone number with no spaces or dashes

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.



4

Public Safety Delivery Services

Some SMS delivery services are designed specifically to work with public safety dispatching to provide mapping, geopositional and other key data to first responders.

To use one of these services, you'll take output from a CAD system and pass various data points like call type, address, crossroads and cross-streets to the service. When the service receives that data, they then put it through a field parser to understand what data exists in which field. As a result, these services usually require data to be passed in a consistently structured order.

Typically speaking, the delivery service will work with you to configure their parser but once the parser is configured, it's important that those field positions remain where they are.

Examples:

- Active911
- IAm Responding
- Chief Messaging
- CodeMessaging
- eDispatches
- <u>FireTextResponse</u>
- Rover
- The Fire Horn
- Who's Responding

If your SMS delivery service supports multiple APIs, hosts or delivery methods, you can configure them for failover and redundancy. For more information, see the <u>Failover</u> <u>Scenarios</u> section of the documentation.

For a list of known SMS delivery services, have a look at the <u>Message Aggregators</u> section of our integration page.

Configuring Active 911

Active 911 supports receiving messages by SNPP and SMTP. As a result, we can configure Page Gate to use the better and more direct SNPP method first and fail over to SMTP if something goes wrong.

Special Notes:

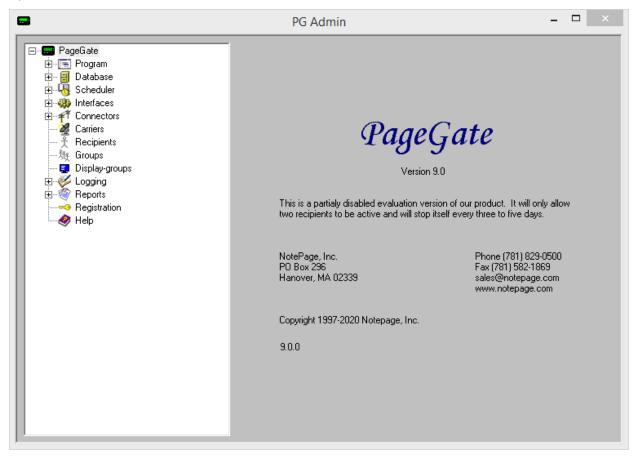
• Port 444 will need to be open for SNPP traffic.

4

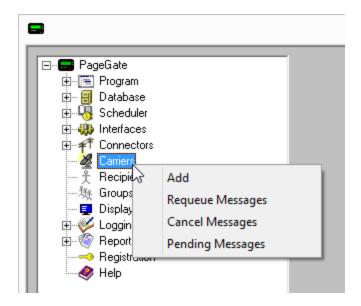
• To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure Active911-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

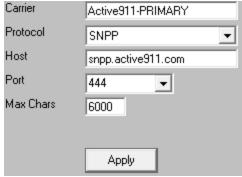
Carrier: Active911-PRIMARY

Protocol: SNPP

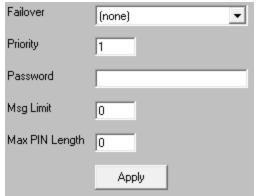
Host: snpp.active911.xcom

Port: 444

Max Chars: 6000



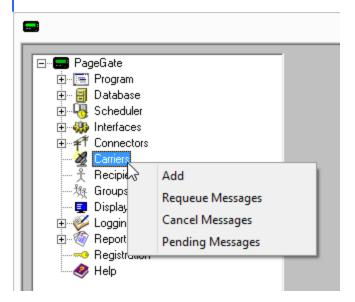
- 4) Go to Carriers Active911-PRIMARY Advanced
- 5) Set Priority to: 1



6) Click Apply

Step 2: Configure Active911-BACKUP as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: Active911-BACKUP

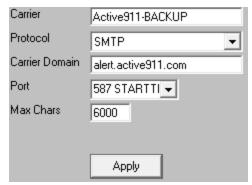
Protocol: SMTP

Host: alert.active911.com

Port: Specify the port required by your

SMTP server.

Max Chars: 6000



- 3) Go to Carriers Active 911-BACKUP Advanced
- 4) Specify the following:

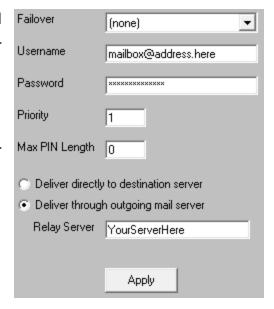
Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

5) Click Apply



- 6) Go to Carriers Active 911-BACKUP Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

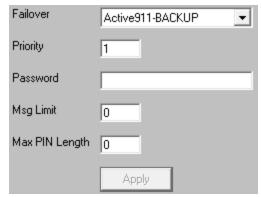
From = CAD@notepage.com



8) Click Apply.

Step 3: Configure the failover

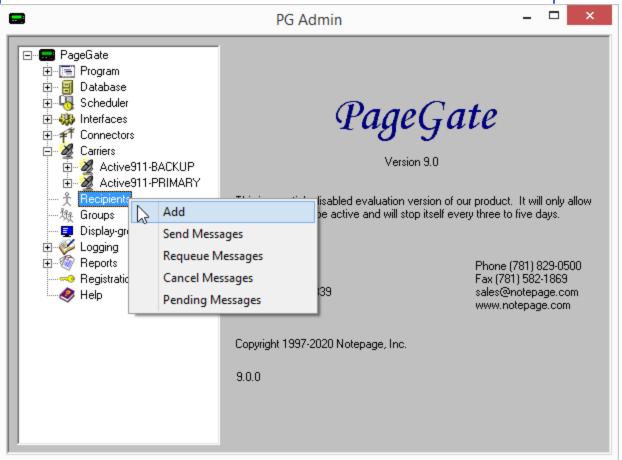
- 1) Go to Carriers Active911-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: Active911-BACKUP



3) Click Apply

Step 4: Create Recipients tied to the Active911 method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

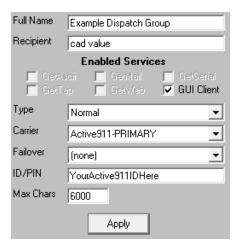
For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: Active911-PRIMARY

Failover: See Failover Scenarios

ID/PIN: The Active911 messaging ID. Typically speaking, Active911 will give you an email address per group you want to send to. The prefix of the email



4

address, the part before the @, is what you'll use in the ID/PIN field.

For example, if your Active911 ID is 491-x3aAkdbn@alert.active911.com, you would use 491-x3aAkdbn in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring I Am Responding

I Am Responding supports receiving messages by SMTP/Email and has been investigating the possibility of bringing SNPP services online.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

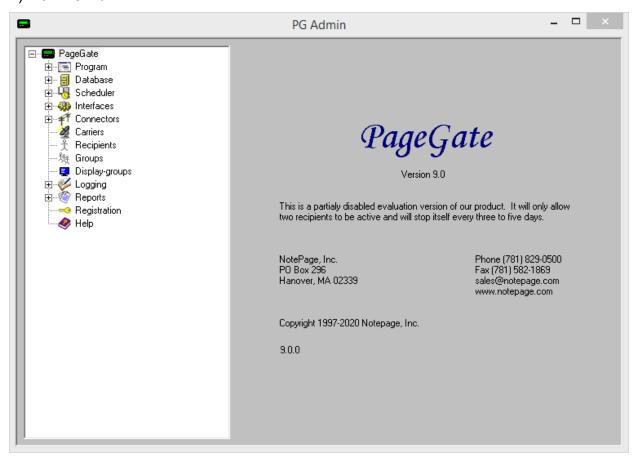
Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

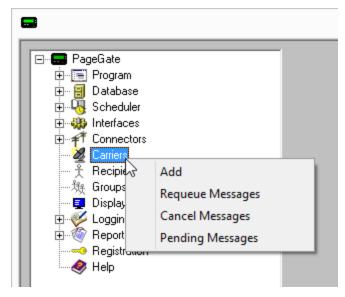
4

Step 1: Configure IAmResponding as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: IAmResponding

Protocol: SMTP

Host: iaralerts.com

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers IAmResponding Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

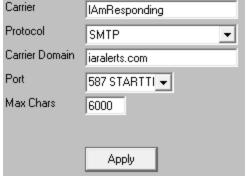
When using direct SMTP, select 'Deliver directly to destination server'.

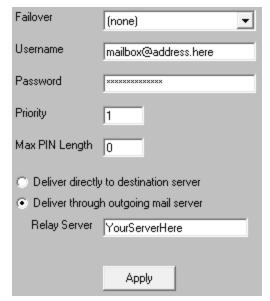
Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers IAmResponding Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com



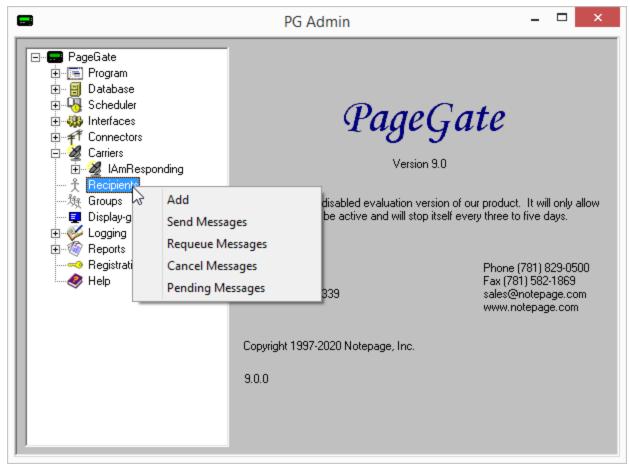




Click Apply.

Step 2: Create Recipients tied to the IAmResponding method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

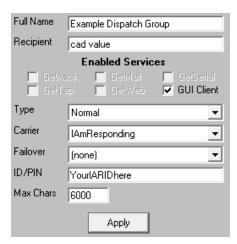
For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: IAmResponding

Failover: See Failover Scenarios

ID/PIN: The IAR messaging ID. Typically speaking, IAR will give you an email address per group you want to



4

send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.

For example, if your IAR ID is 4912anh@iaralerts.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring Chief Messaging

Chief Messaging supports receiving messages by SNPP and SMTP. As a result, we can configure PageGate to use the better and more direct SNPP method first and fail over to SMTP if something goes wrong.

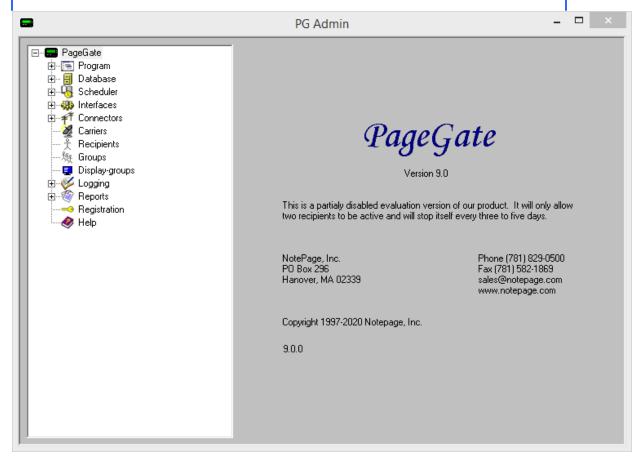
Special Notes:

- Port 444 will need to be open for SNPP traffic.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

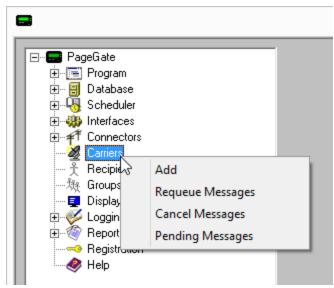
Step 1: Configure ChiefMessaging-PRIMARY as a delivery method

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following and click Apply:

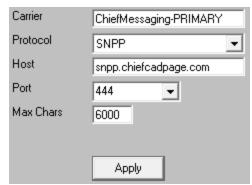
Carrier: ChiefMessaging-PRIMARY

Protocol: SNPP

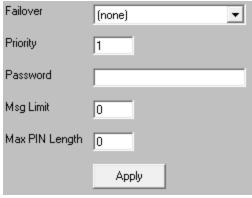
Host: snpp.chiefcadpage.com

Port: 444

Max Chars: 6000



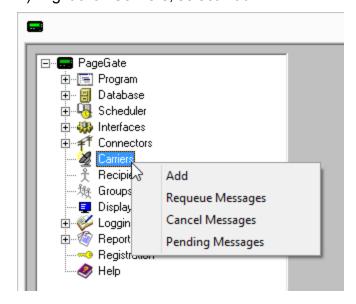
- 4) Go to Carriers ChiefMessaging-PRIMARY Advanced
- 5) Set Priority to: 1



6) Click Apply

Step 2: Configure ChiefMessaging-BACKUP as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

•

Carrier: ChiefMessaging-BACKUP

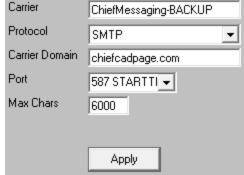
Protocol: SMTP

Host: alert.active911.com

Port: Specify the port required by your

SMTP server.

Max Chars: 6000



- Go to Carriers ChiefMessaging-BACKUP Advanced
- 4) Specify the following:

Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

- 5) Click Apply
- 6) Go to Carriers ChiefMessaging-BACKUP Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field **EXAMPLE**:

From = CAD@notepage.com

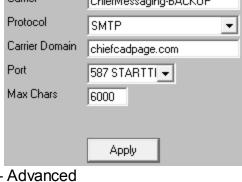


Apply

8) Click Apply.

Step 3: Configure the failover

- 1) Go to Carriers ChiefMessaging-PRIMARY Advanced
- Click the dropdown arrow next to 'Failover' and select: ChiefMessaging-BACKUP



(none)

llo.

 Deliver directly to destination server Deliver through outgoing mail server Relay Server YourServerHere

mailbox@address.here

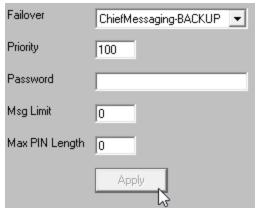
Failover

Username

Password

Max PIN Length

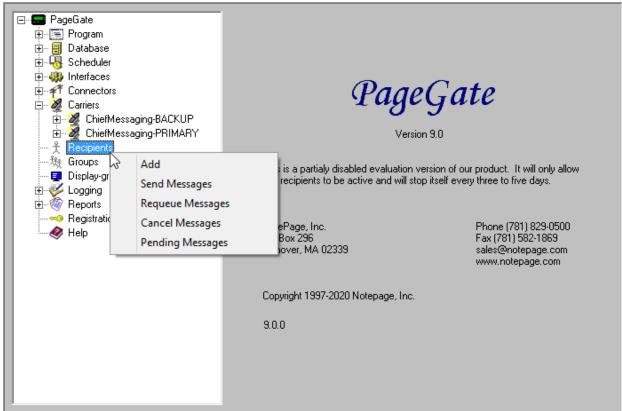
Priority



3) Click Apply

Step 4: Create Recipients tied to the Chief Messaging method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

4

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system,

this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: ChiefMessaging-PRIMARY

Failover: See Failover Scenarios

ID/PIN: The Chief Messaging messaging ID.

Typically speaking, Chief Messaging will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.

As an example, if your Chief Messaging address is uxW900@chiefcadpage.com, you would use uxW900 in the ID/PIN field.

Max Chars: 6000

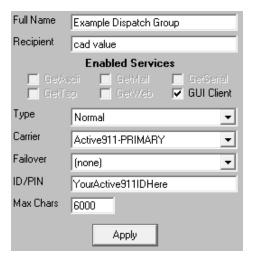
3) Click Apply.

Configuring CodeMessaging

CodeMessaging supports receiving messages by WCTP, SNPP and SMTP. As a result, we can configure PageGate to use the better and more direct WCTP method first, fail over to SNPP if something goes wrong and then have a final last-ditch attempt to deliver it as SMTP/Email.

Special Notes:

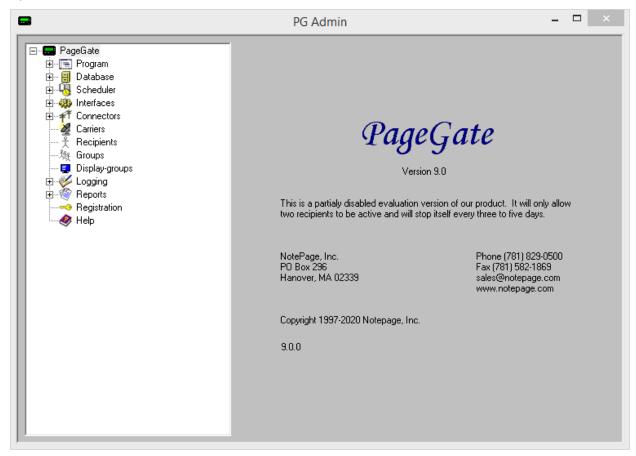
- Port 443 will need to be open for WCTP.
- Port 444 will need to be open for SNPP.

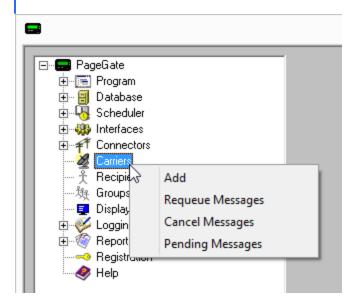


• To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure CodeMessaging-PRIMARY as a delivery method

1) Run PG Admin.





3) Specify the following and click Apply:

Carrier: CodeMessaging-PRIMARY

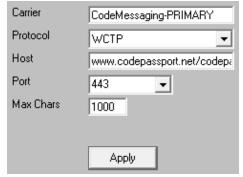
Protocol: WCTP

Host: www.codepassport.net/codepassport.asp?

wci=getWCTP

Port: 443

Max Chars: 1000



- 4) Go to Carriers CodeMessaging-PRIMARY Advanced
- 5) Specify the following:

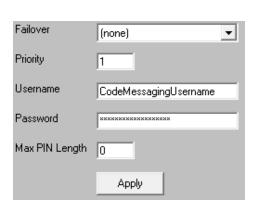
Priority: 1

Username: Contact CodeMessaging to obtain this

information.

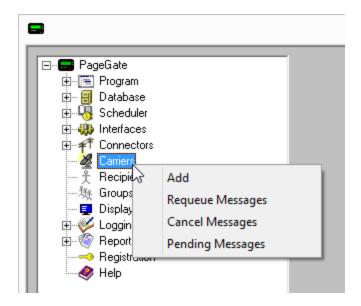
Password: Contact CodeMessaging to obtain this

information.



6) Click Apply

Step 2: Configure CodeMessaging-SECONDARY as a delivery method



2) Specify the following:

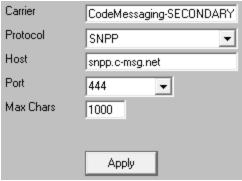
Carrier: CodeMessaging-SECONDARY

Protocol: SNPP

Host: snpp.c-msg.net

Port: 444

Max Chars: 1000



- 3) Go to Carriers CodeMessaging-SECONDARY Advanced
- 4) Specify the following:

Priority: 1

Password: Enter the CodeMessaging username and password values separated by a single space.

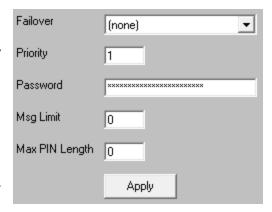
EXAMPLE:

username password

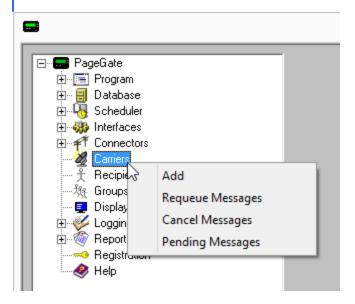
NPSupport PasswordGoesHere

Contact CodeMessaging to obtain your authentication credentials.

5) Click Apply



Step 3: Configure CodeMessaging-FINAL as a delivery method



2) Specify the following:

Carrier: CodeMessaging-FINAL

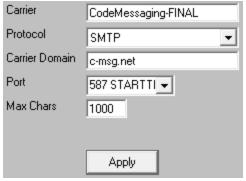
Protocol: SMTP

Host: c-msg.net

Port: Specify the port required by your

SMTP server.

Max Chars: 1000



- 3) Go to Carriers CodeMessaging-FINAL Advanced
- 4) Specify the following:

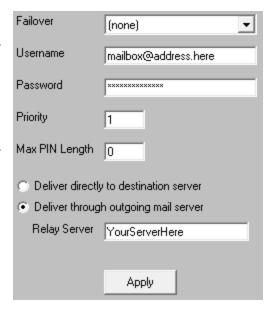
Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

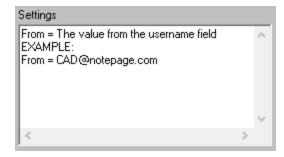
5) Click Apply



- 6) Go to Carriers CodeMessaging-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

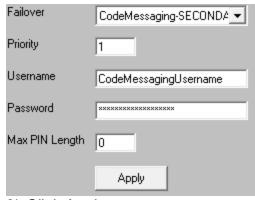
From = CAD@notepage.com



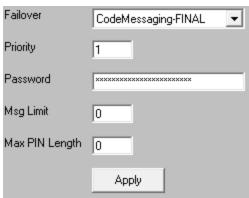
8) Click Apply.

Step 3: Configure the failover system

- 1) Go to Carriers CodeMessaging-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: CodeMessaging-BACKUP



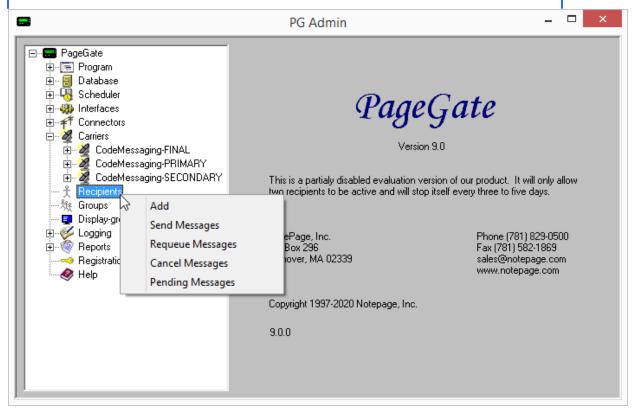
- 3) Click Apply
- 4) Go to Carriers CodeMessaging-SECONDARY Advanced



5) Click the dropdown arrow next to 'Failover' and select: CodeMessaging-FINAL

Step 4: Create Recipients tied to the CodeMessaging method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

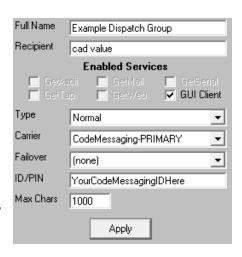
For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

Carrier: CodeMessaging-PRIMARY

Failover: See Failover Scenarios

ID/PIN: The CodeMessaging messaging ID. Typically speaking, CodeMessaging will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



4

For example, if your CodeMessaging ID is x3aAkdbn@c-msg.net, you would use x3aAkdbn in the ID/PIN field.

Max Chars: 1000

3) Click Apply.

Configuring eDispatches

eDispatches supports receiving messages by SMTP/Email.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

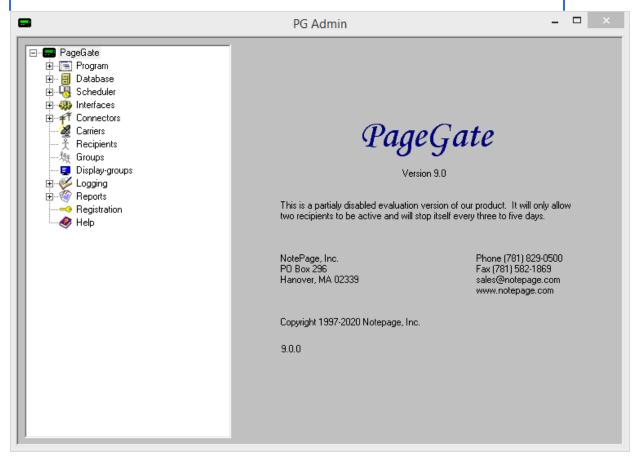
Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

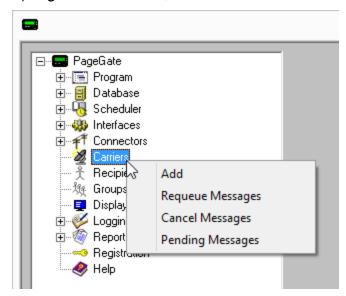
Step 1: Configure eDispatches as a delivery method

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following and click Apply:

4

Carrier: eDispatches

Protocol: SMTP

Host: edispnoc.com

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers eDispatches Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

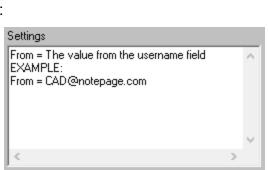
When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers eDispatches Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com



Apply

Carrier eDispatches

Protocol SMTP ▼

Carrier Domain edispnoc.com

Port 587 STARTTI▼

Max Chars 6000

(none)

Deliver directly to destination server.

mailbox@address.here

Failover

Username

Password

Max PIN Length

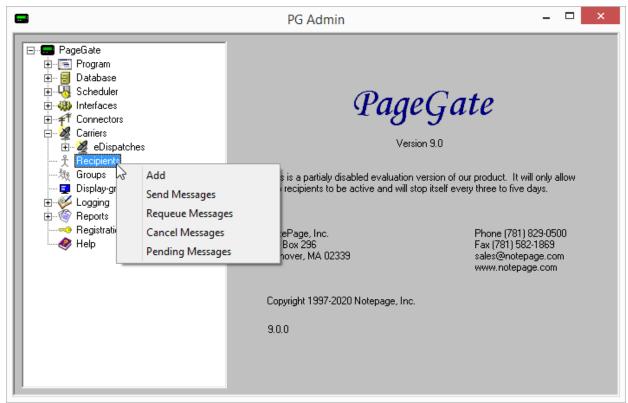
Priority.

Click Apply.

4

Step 2: Create Recipients tied to the eDispatches method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

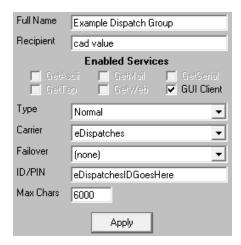
Type: Normal

Carrier: eDispatches

Failover: See Failover Scenarios

ID/PIN: The eDispatches messaging ID.

Typically speaking, eDispatches will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



4

For example, if the eDispatches email address is 4912anh@edispnoc.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring FireTextResponse

FireTextResponse supports receiving messages by SMTP/Email.

PageGate has the ability to send SMTP/Email messages in one of two ways:

Direct

Direct delivery configures PageGate to use its own mail server engine to directly negotiate with the outside world.

To configure this method of delivery, you will need to open port 25 and add the public IP address of your PageGate server to the SPF record for your email domain.

Relayed

Relayed delivery configures PageGate to pass all of its traffic through an SMTP server.

To configure this method of delivery, you will need to knowyour SMTP server address, port to connect on and required authentication credentials.

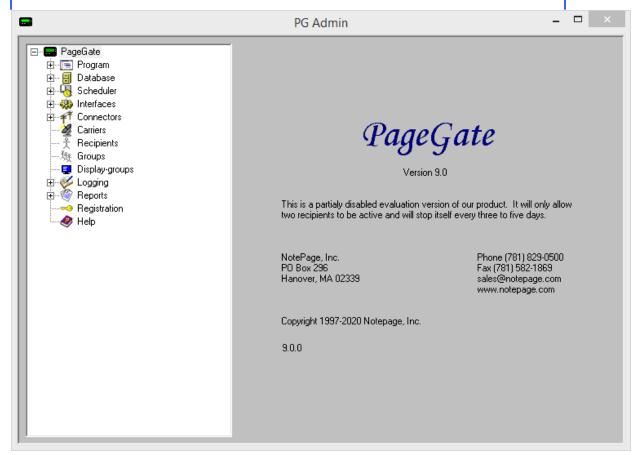
Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you use direct delivery for SMTP/Email, you'll need abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain.

Due to some of the complications involved in configuring PageGate for direct delivery, it may be more practical to configure PageGate to relay its SMTP/Email traffic through your SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

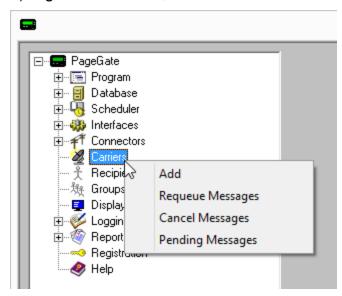
Step 1: Configure FireTextResponse as a delivery method

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following and click Apply:

Carrier: FireTextResponse

Protocol: SMTP

Host: ftralerts.com or ftralerts.net

Port: When relaying SMTP, specify the port

required by your SMTP server.

When using direct SMTP, set the port to 25.

Max Chars: 6000

- 4) Go to Carriers FireTextResponse Advanced
- 5) Specify the following:

When relaying SMTP, select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

When using direct SMTP, select 'Deliver directly to destination server'.

Set 'Priority' to: 1

- 6) Click Apply
- 7) Go to Carriers FireTextResponse Template
- 8) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com

Protocol SMTP

Carrier Domain ftralerts.com

Port 587 STARTTI

Max Chars 6000

Apply

(none)

Deliver directly to destination server.

Apply

mailbox@address.here

FireTextResponse

Carrier

Failover

Username

Password

Max PIN Length

Priority.

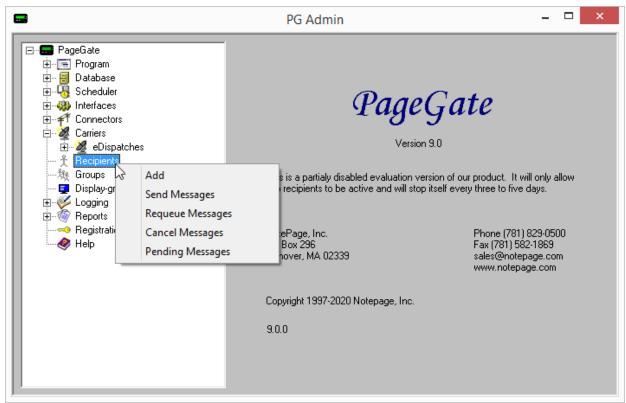


Click Apply.



Step 2: Create Recipients tied to the FireTextResponse method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

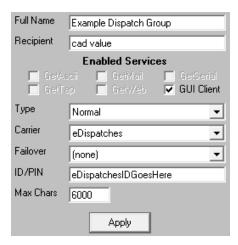
Type: Normal

Carrier: FireTextResponse

Failover: See Failover Scenarios

ID/PIN: The FireTextResponse messaging ID.

Typically speaking, FireTextResponse will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



4

For example, if the email address is 4912anh@ftralerts.com, you would use 4912anh in the ID/PIN field.

Max Chars: 6000

3) Click Apply.

Configuring Rover

Rover supports receiving messages by WCTP and SMTP. This allows you to configure WCTP as a primary method of delivery with a failover method of SMTP/email.

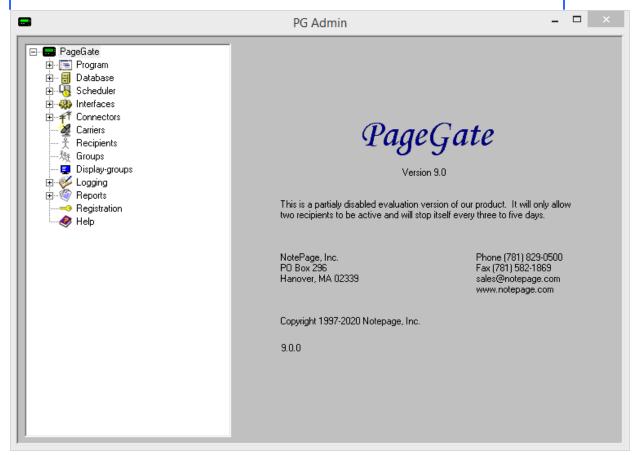
Special Notes:

- Port 443 will need to be open for WCTP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

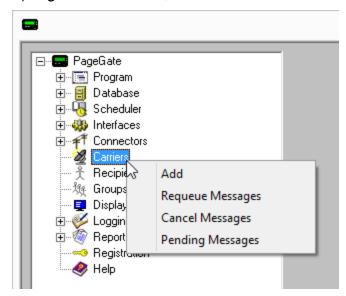
Step 1: Configure Rover-PRIMARY as a delivery method

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following and click Apply:

4

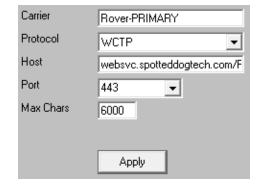
Carrier: Rover

Protocol: WCTP

Host: websvc.spotteddogtech.com/Rover.WCTP

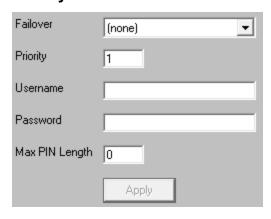
Port: 443

Max Chars: 6000



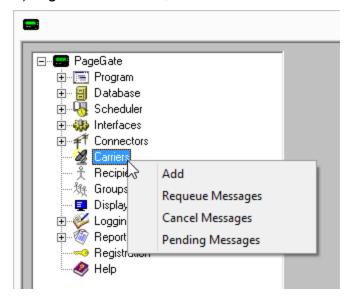
- 4) Go to Carriers Rover Advanced
- 5) Specify the following:

Priority: 1



6) Click Apply

Step 2: Configure Rover-SECONDARY as a delivery method



2) Specify the following:

Carrier: Rover-SECONDARY

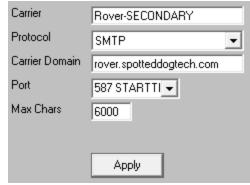
Protocol: SMTP

Host: rover.spotteddogtech.com

Port: Specify the port required by your

SMTP server.

Max Chars: 6000



(none)

llo.

Deliver directly to destination server
 Deliver through outgoing mail server
 Relay Server YourServerHere

mailbox@address.here

Failover

Username

Password

Max PIN Length

Priority.

- 3) Go to Carriers Rover-SECONDARY Advanced
- 4) Specify the following:

Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

- 5) Click Apply
- 6) Go to Carriers Rover-SECONDARY Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com

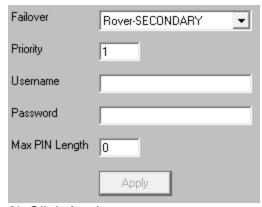
8) Click Apply.



Apply

Step 3: Configure the failover

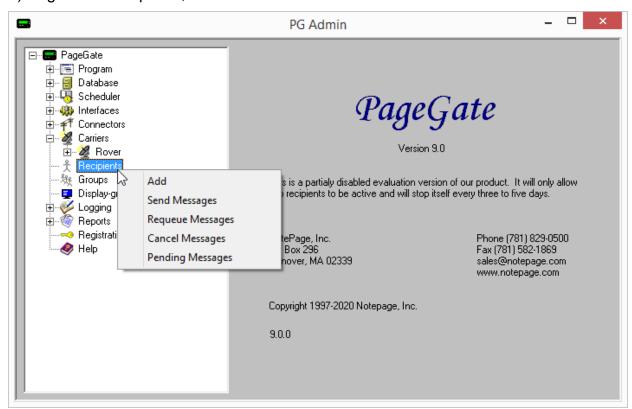
- 1) Go to Carriers Rover-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: Rover-SECONDARY



Click Apply

Step 4: Create Recipients tied to the Rover method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

4

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal **Carrier**: Rover

Failover: See Failover Scenarios

ID/PIN: Enter the Rover ID. Example:

Value@rover.spotteddogtech.com

Max Chars: 6000

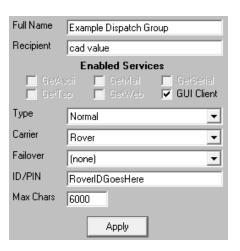
3) Click Apply.

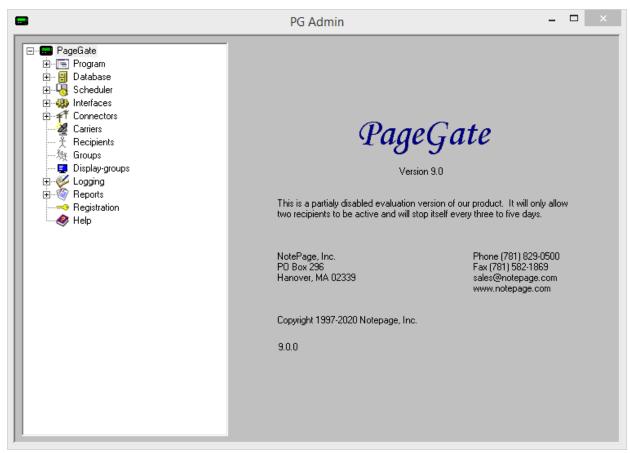
Configuring The Fire Horn

The Fire Horn provides a CGI URL for clients to submit messages to and they can use PageGate's HTTPGET protocol to do so.

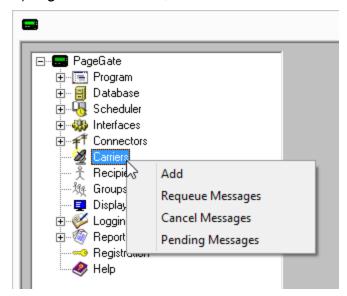
Step 1: Configure FireHorn as a delivery method

1) Run PG Admin.





2) Right click Carriers, select Add



3) Specify the following and click Apply:

4

Carrier

Protocol

Max Chars

FireHorn

443

6000

Apply

HTTPGET

thfirehorn.com/api/software_re

Carrier: Rover

Protocol: HTTPGET

Host:

thfirehorn.com/api/software_relay/text_message/YourSiteKey

Here/

NOTE: You will need your Fire Horn site key as part of the host

address.

Port: 443

Max Chars: 6000

4) Go to Carriers - FireHorn - Template

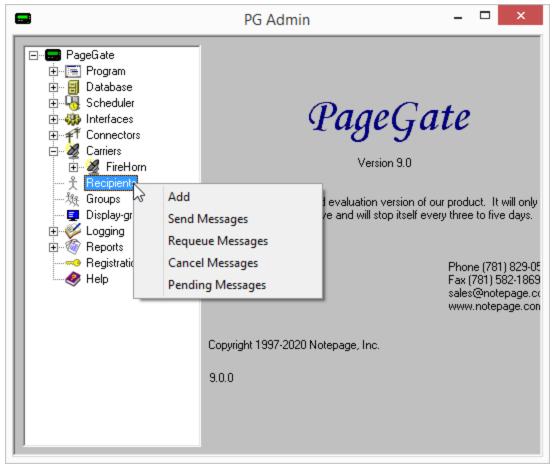
5) Specify the following in the 'Text' section: |message|%Message%|



6) Click Apply

Step 2: Create Recipients tied to the FireHorn method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

Type: Normal

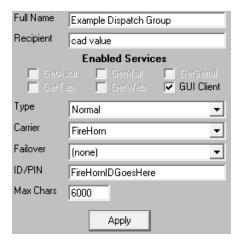
Carrier: FireHorn

Failover: See Failover Scenarios

ID/PIN: Enter the FireHorn ID

Max Chars: 6000

3) Click Apply.



4

Configuring Who's Responding

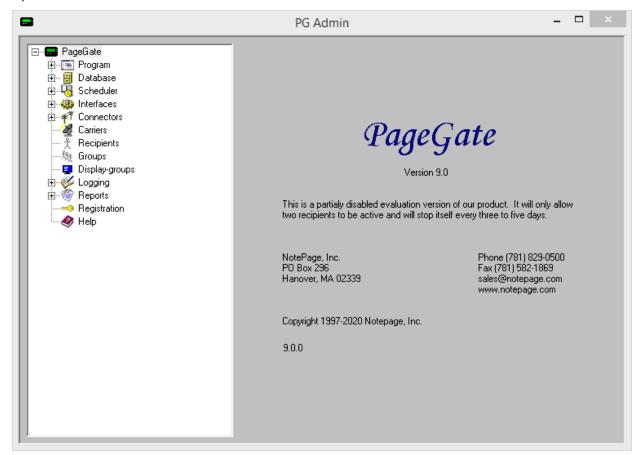
Who's Responding supports receiving messages by SNPP and SMTP. As a result, we can configure PageGate to use the better and more direct SNPP method first and fail over to SMTP if something goes wrong.

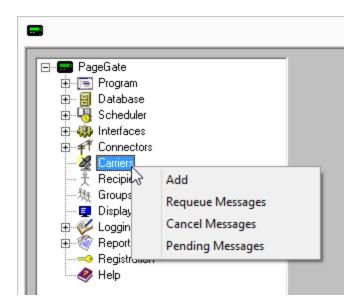
Special Notes:

- Port 444 will need to be open for SNPP traffic.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure WhosResponding-PRIMARY as a delivery method

1) Run PG Admin.





3) Specify the following and click Apply:

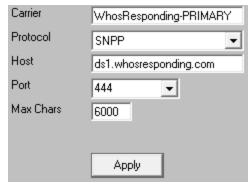
Carrier: WhosResponding-PRIMARY

Protocol: SNPP

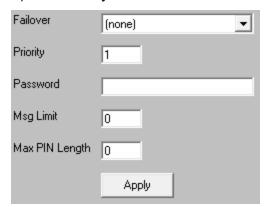
Host: ds1.whosresponding.com

Port: 444

Max Chars: 6000

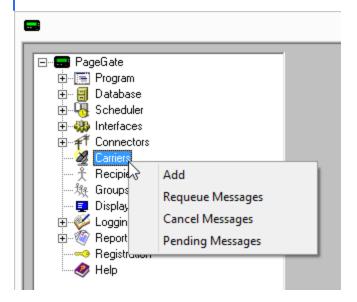


- 4) Go to Carriers WhosResponding-PRIMARY Advanced
- 5) Set Priority to: 1



6) Click Apply

Step 2: Configure WhosResponding-BACKUP as a delivery method



2) Specify the following:

Carrier: WhosResponding-BACKUP

Protocol: SMTP

Host: ds1.whosresponding.com

Port: Specify the port required by your

SMTP server.

Max Chars: 6000



- 3) Go to Carriers WhosResponding-BACKUP Advanced
- 4) Specify the following:

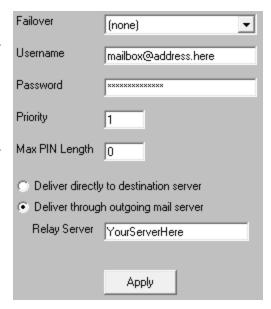
Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Set 'Priority' to: 1

5) Click Apply



- 6) Go to Carriers WhosResponding-BACKUP Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

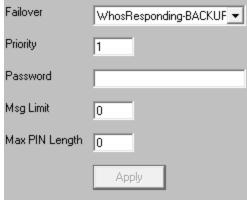
From = CAD@notepage.com



8) Click Apply.

Step 3: Configure the failover

- 1) Go to Carriers WhosResponding-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: WhosResponding-BACKUP



3) Click Apply

Step 4: Create Recipients tied to the WhosResponding method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: Describe the agency being messaged

Recipient: This field is auto-populated and may need to be edited. When integrating with a CAD system, this field will need to reflect CAD's name.

For example, if CAD is going to dispatch 'Palentine Fire District 2' by calling on the name pfd2, that is the value you would use in this field.

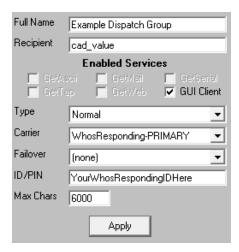
Type: Normal

Carrier: WhosResponding-PRIMARY

Failover: See Failover Scenarios

ID/PIN: The Who's Responding messaging ID.

Typically speaking, Who's Responding will give you an email address per group you want to send to. The prefix of the email address, the part before the @, is what you'll use in the ID/PIN field.



Max Chars: 6000

Click Apply.

Medical Industry Delivery Services

Standard SMS/text messaging is not secure, not HIPAA compliant and should never be used to transmit messages with PHI. Some SMS delivery services are designed to work with hospitals, clinics and other medical services to provide HIPAA compliant secure messaging.

In most cases, these services have two methods of operating and some even support both:

• A secure server that hosts all messages

With this method, the SMS service hosts a secure messaging server that they provide you and your users access to. When you send a message, the message is created on the secure server and a notification with login link is sent to the end user's phone. The end user must then log in to the secure server to retrieve their message.

• A secure app on the end-user's device

With this method, the SMS service provides a secure messaging app that is installed on the end user's devices. When you send a message, you initiate the message through the service's secure server and they provide the message to the secure app on the device.

For more information, have a look at our article on how secure messaging works.

Examples: <u>TigerConnect</u>, <u>QliqSOFT</u>, DocHalo

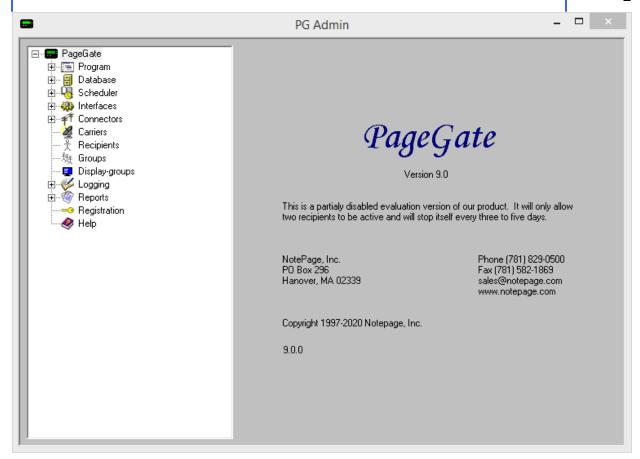
Configuring TigerConnect

TigerConnect supports receiving messages by WCTP, an HTTPS method of delivery...

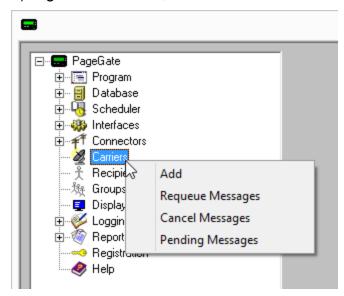
Step 1: Configure TigerConnect as a delivery method

1) Run PG Admin.

4



2) Right click Carriers, select Add



3) Specify the following and click Apply:

4

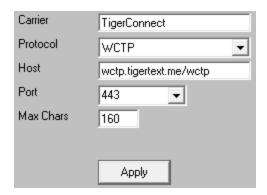
Carrier: TigerConnect

Protocol: WCTP

Host: wctp.tigertext.me/wctp

Port: 443

Max Chars: 160

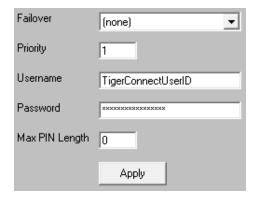


- 4) Go to Carriers TigerConnect Advanced
- 5) Specify the following:

Priority: 1

Username: Enter the TigerConnect UserID.

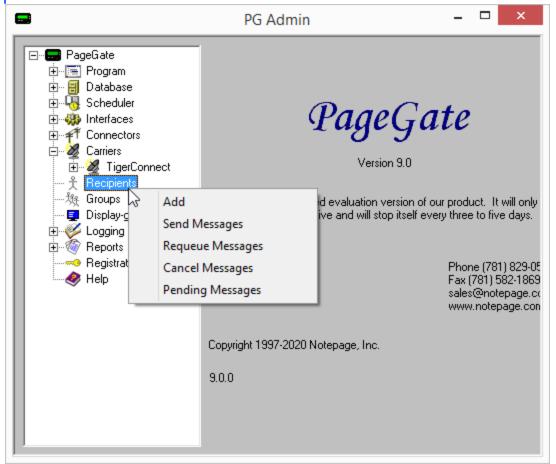
Password: Enter the TigerConnect password.



6) Click Apply

Step 2: Create Recipients tied to the TigerConnect method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: TigerConnect

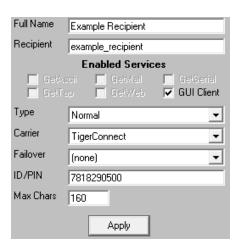
Failover: See Failover Scenarios

ID/PIN: 10 digit cell phone or pager number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

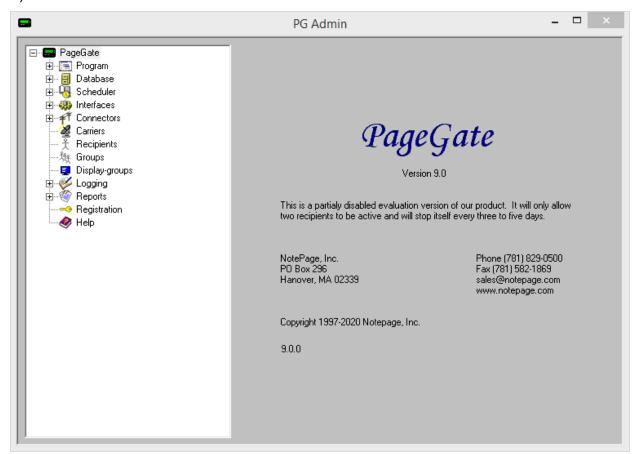


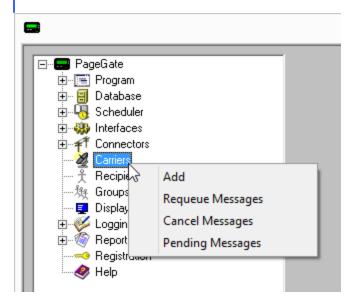
Configuring QliqSOFT

QliqSOFT supports receiving messages by POST method to their secure API.

Step 1: Configure QliqSOFT in PageGate

1) Run PG Admin.





3) Specify the following:

Carrier: QliqSOFT

Protocol: HTTPPOST

Host: webprod.qliqsoft.com/secure_messages/send

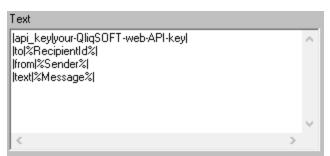
Port: 443

Max Chars: 160

4) Click Apply to add the new delivery method.

- 5) Go to Carriers QliqSOFT Template
- 6) Specify the following in the 'Text' section:

|api_key|your-QliqSOFT-web-API-key| |to|%RecipientId%| |from|%Sender%| |text|%Message%|



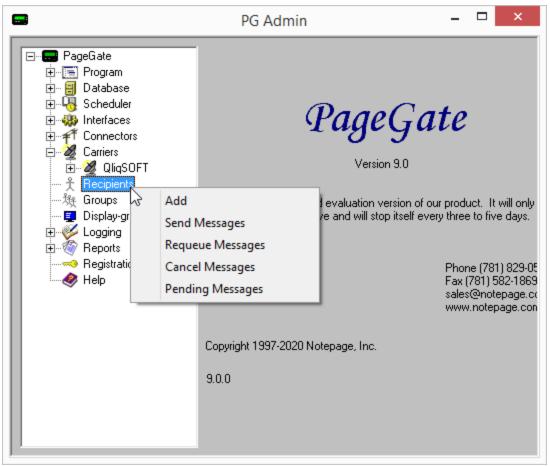


NOTE: You will need your QliqSOFT web API key. Information on how to generate that API key can be found in the QliqSOFT documentation: https://webprod.gliqsoft.com/gliqCONNECT_CloudApiGuide.pdf

7) Click Apply

Step 4: Create Recipients tied to the QligSOFT method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: QliqSOFT

Failover: See Failover Scenarios

ID/PIN: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500



4

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

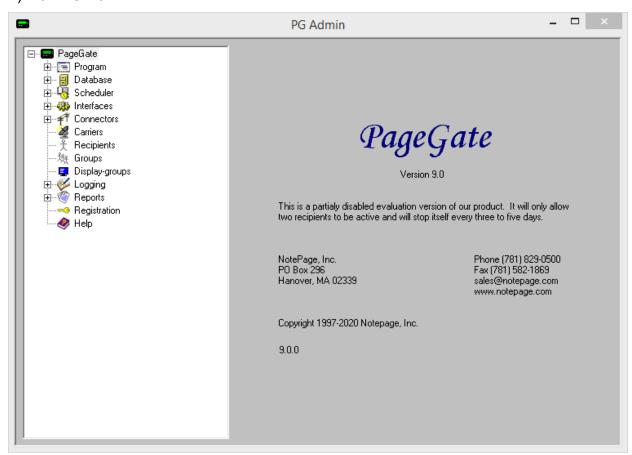
3) Click Apply.

Configuring DocHalo

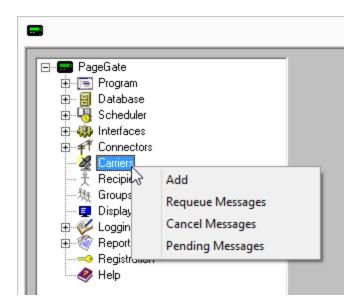
DocHalo supports receiving messages by WCTP, an HTTPS method of delivery..

Step 1: Configure DocHalo as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

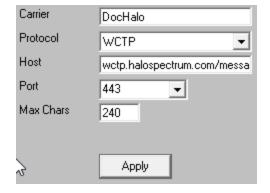
Carrier: DocHalo

Protocol: WCTP

Host: wctp.halospectrum.com/message

Port: 443

Max Chars: 160

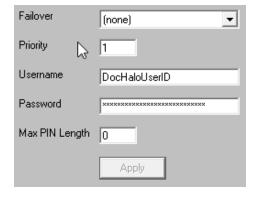


- 4) Go to Carriers DocHalo Advanced
- 5) Specify the following:

Priority: 1

Username: Enter the DocHalo UserlD.

Password: Enter the DocHalo password.



6) Click Apply

Step 2: Create Recipients tied to the DocHalo method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: DocHalo

Failover: See Failover Scenarios

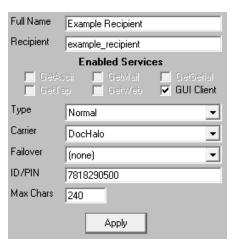
ID/PIN: The 8 or 12 digit DocHalo HDID Examples: DH123456 or DH0001020A3B

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

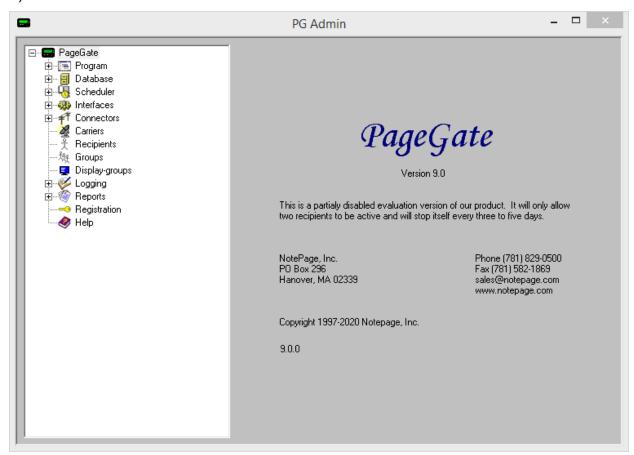
Configuring Voalte

Voalte supports receiving messages by WCTP, an HTTPS method of delivery..

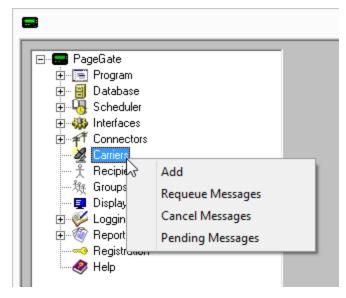


Step 1: Configure Voalte as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

4

Carrier: Voalte

Protocol: WCTP

Host: cws01.voalte.net/wctp

Port: 50100

Max Chars: 6000

- Carrier Voalte

 Protocol WCTP

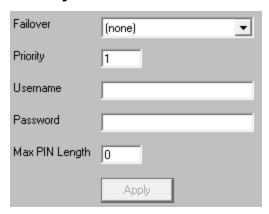
 Host cws01.voalte.net/wctp

 Port 50100

 Max Chars 6000

 Apply
- 4) Go to Carriers Voalte Advanced
- 5) Specify the following:

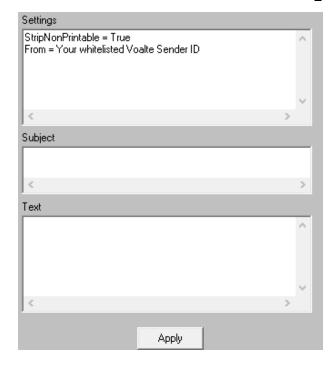
Priority: 1



- 6) Click Apply
- 7) Go to Carriers Voalte Template
- 8) Specify the following in the 'Settings' section:

StripNonPrintable = True

From = Your whitelisted Voalte Sender ID



9) Click Apply.

Step 2: Create Recipients tied to the Voalte method of delivery

1) Right click Recipients, select Add.



4

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric

characters, underscores and dashes.

Type: Normal Carrier: Voalte

Failover: See Failover Scenarios

ID/PIN: Voalte Conact ID

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

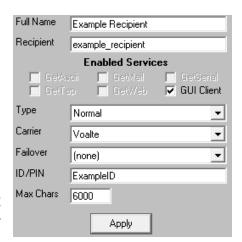
Configuring Zinc

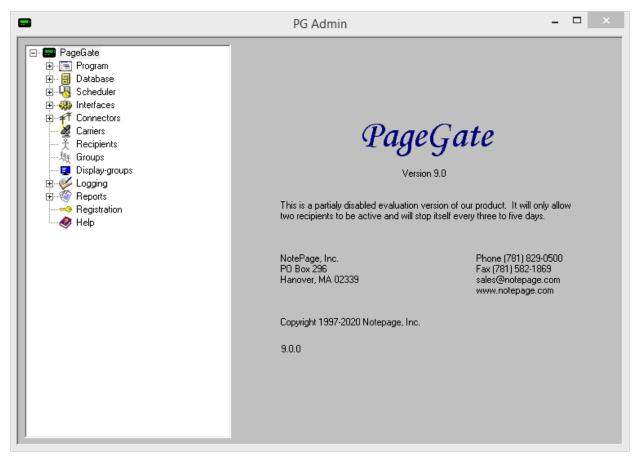
ServiceMax's Zinc supports receiving messages by POST method to their secure API.

For this configuration, you will need to know the Message Bot Identification Token and information on both using their API and determining the token can be found in the Zinc documentation: https://community.servicemax.com/t5/Zinc-Help-Articles/Zinc-How-to-Use-Messaging-API/ba-p/17738

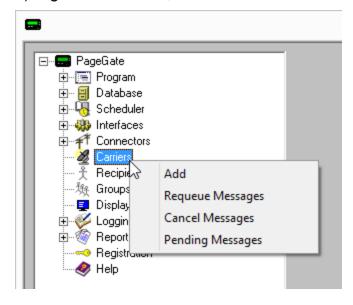
Step 1: Configure Zinc in PageGate

1) Run PG Admin.





2) Right click Carriers, select Add



4

Carrier: Zinc

Protocol: HTTPPOST

Host: api.zincit.io/hooks/v1/:id/message

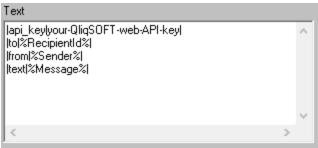
<u>NOTE</u>: The **:id** portion of the URL is determined by the Message Bot Identification Token. Please see <u>Zinc's</u> documentation for more information.

Port: 443

Max Chars: 6000

- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers Zinc Template
- 6) Specify the following in the 'Text' section:

|api_key|your-QliqSOFT-web-API-key| |to|%RecipientId%| |from|%Sender%| |text|%Message%|

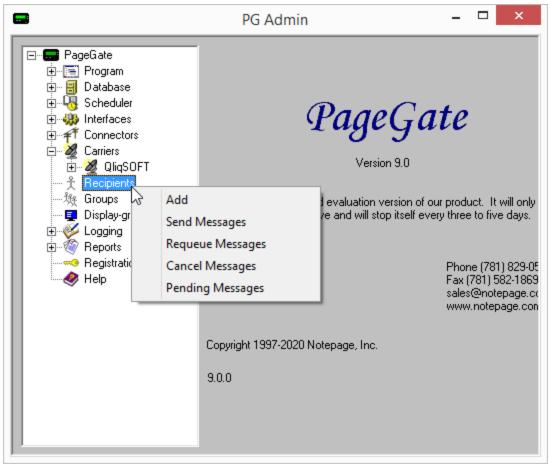


NOTE: You will need your QliqSOFT web API key. Information on how to generate that API key can be found in the QliqSOFT documentation: https://webprod.gliqsoft.com/gliqCONNECT_CloudApiGuide.pdf

7) Click Apply

Step 4: Create Recipients tied to the QliqSOFT method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: QliqSOFT

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.



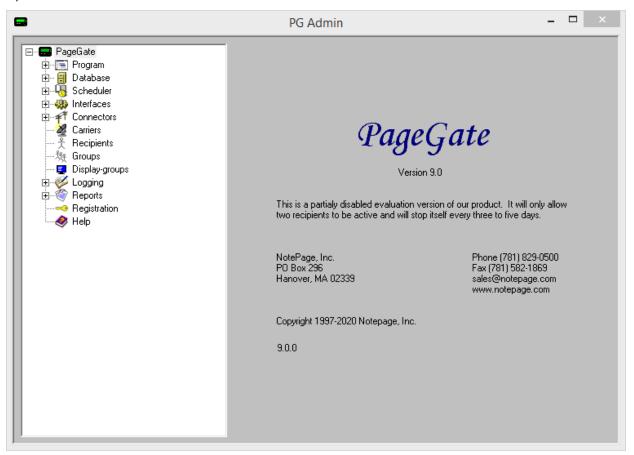
4

Configuring Spok Mobile

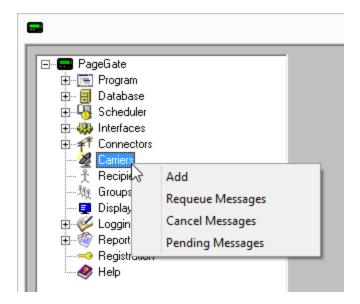
Spok Mobile supports receiving messages by WCTP, an HTTPS method of delivery.

Step 1: Configure SpokMobile as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

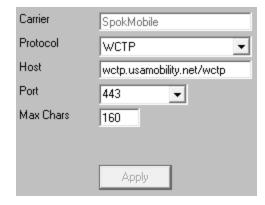
Carrier: SpokMobile

Protocol: WCTP

Host: wctp.usamobility.net/wctp

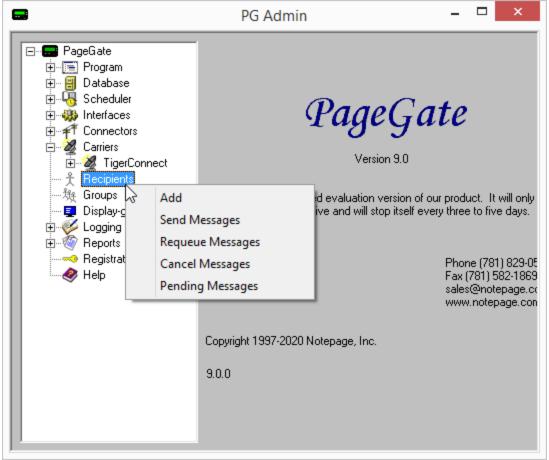
Port: 443

Max Chars: 160



Step 2: Create Recipients tied to the SpokMobile method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

Type: Normal

Carrier: SpokMobile

Failover: See Failover Scenarios

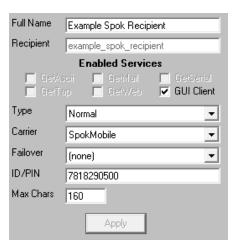
ID/PIN: 10 digit cell phone or pager number

 Correct
 Incorrect

 7818290500
 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.



Carrier Enterprise Systems

The major North American carriers each have their own respective enterprise messaging platforms and these gateways are ultimately faster and more reliable than the free, public SMTP-to-SMS system. These platforms also typically provide multiple APIs, allowing PageGate to use all of them in a failover capacity.

Access to these gateways is usually not provided free of charge and will require a contract of some variety with the carrier.

- Verizon Enterprise Messaging Access Gateway (EMAG)
- AT&T FirstNet
- Sprint Enterprise Messaging Gateway (EMG)

Configuring EMAG

To register on <u>Verizon's EMAG</u> platform, you'll need to contact your Verizon representative, who will provide an intake form.

In the registration process, you'll need to specify whether your EMAG account has the ability to send to all cell phones, also called inter-carrier operability, or <u>just</u> Verizon cell phones.

<u>Note for Public Safety</u>: Verizon offers free access to dispatch related public safety organizations if you ONLY message Verizon phones through EMAG. Enabling inter-carrier operability requires a paid contract.

On the intake form, you're interested in the WCTP, SNPP and SMTP APIs. With all three, we can configure a failover system where the program will use the best method of delivery (WCTP) first, then fail over to the second best (SNPP) and if that fails, it makes a last ditch attempt to send it out via email (SMTP).

For the WCTP and SNPP APIs, you'll need to provide the public IP address your PageGate server resides behind. You'll also be asked to create a username and password that are unique to each API and we'll need those credentials for PageGate's configuration.

For the SMTP API, you'll need to specify whether you have a cloud based solution, like Office 365, or a traditional SMTP server and provide your email domain and server IP information.

It's important to note that EMAG ties your API credentials to your public IP address. If your public IP address changes, you'll definitely want to update that with EMAG and, if possible, communicate the shift ahead of time

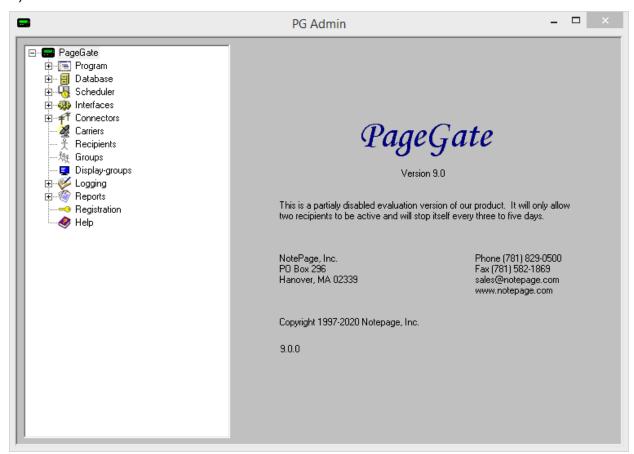
4

Special Notes:

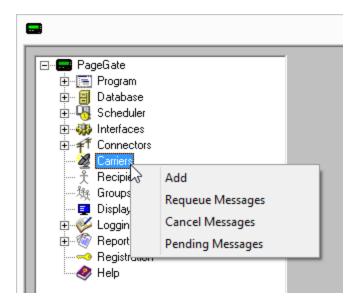
- Port 443 will need to be open for WCTP.
- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

Step 1: Configure EMAG-PRIMARY as a delivery method

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following and click Apply:

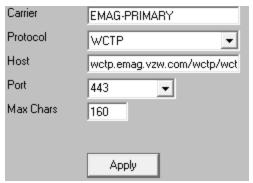
Carrier: EMAG-PRIMARY

Protocol: WCTP

Host: wctp.emag.vzw.com/wctp/wctp

Port: 443

Max Chars: 160

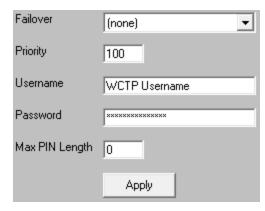


- 4) Go to Carriers EMAG-PRIMARY Advanced
- 5) Specify the following:

Priority: See <u>Prioritizing Messages</u>

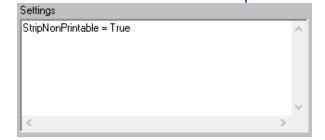
Username: The EMAG WCTP API Username

Password: The EMAG WCTP API Password



- 6) Click Apply
- 7) Go to Carriers EMAG-PRIMARY Template
- 8) Specify the following in the 'Settings' section:

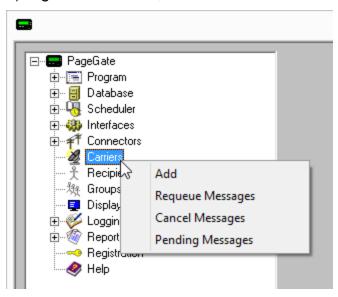
StripNonPrintable = True



9) Click Apply.

Step 2: Configure EMAG-SECONDARY as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

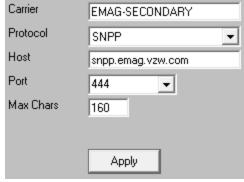
Carrier: EMAG-SECONDARY

Protocol: SNPP

Host: snpp.emag.vzw.com

Port: 444

Max Chars: 160



- 3) Go to Carriers EMAG-SECONDARY Advanced
- 4) Specify the following:

Priority: See <u>Prioritizing Messages</u>

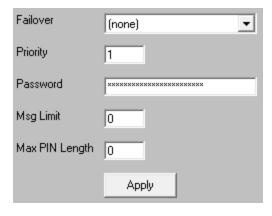
Password: Enter the EMAG SNPP username and password values separated by a single

space.

EXAMPLE:

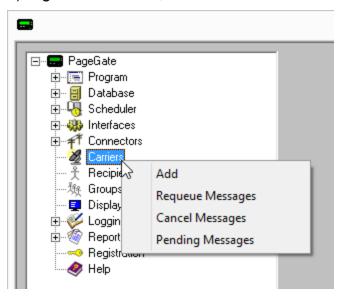
username password
NPSupport PasswordGoesHere

5) Click Apply



Step 3: Configure EMAG-FINAL as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: EMAG-FINAL

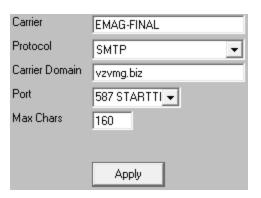
Protocol: SMTP **Host**: vzvmg.biz

Port: Specify the port required by your

SMTP server.

Max Chars: 160

3) Go to Carriers - EMAG-FINAL - Advanced



4

Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Priority: See Prioritizing Messages

- 5) Click Apply
- 6) Go to Carriers EMAG-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com

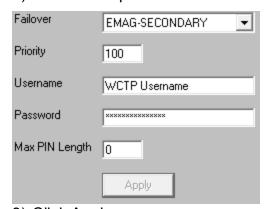




8) Click Apply.

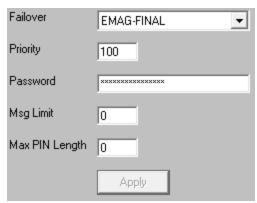
Step 4: Configure the failover system

- 1) Go to Carriers EMAG-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: EMAG-SECONDARY



Click Apply

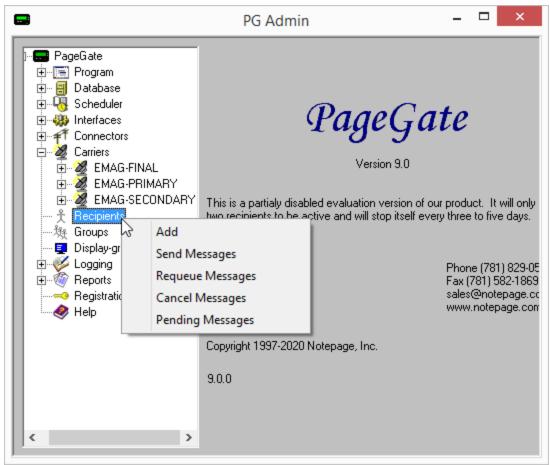
- 4) Go to Carriers EMAG-SECONDARY Advanced
- 5) Click the dropdown arrow next to 'Failover' and select: EMAG-FINAL



6) Click Apply

Step 4: Create Recipients tied to the EMAG-PRIMARY method of delivery

1) Right click Recipients, select Add.



4

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric

characters, underscores and dashes.

Type: Normal

Carrier: EMAG-PRIMARY

Failover: See <u>Failover Scenarios</u>

ID/PIN: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring FirstNet

To begin the process of registering on FirstNet, you'll want to contact your AT&T representative or go to https://www.firstnet.com/signup/decision

Unlike other message delivery services, FirstNet does not whitelist the sender and requires that the sender submit a list of specific numbers to message.

Put another way, gather all of the phone numbers you want to messages as you'll need to submit them to FirstNet for whitelisting. If you try to send to a number that is not whitelisted with FirstNet, their hosts will not accept the traffic.

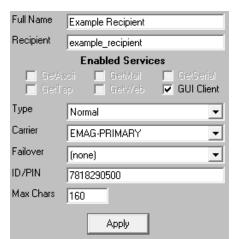
FirstNet supports receiving messages by WCTP, SNPP and SMTP. With all three, we can configure a failover system where the program will use the best method of delivery (WCTP) first, then fail over to the second best (SNPP) and if that fails, it makes a last ditch attempt to send it out via email (SMTP).

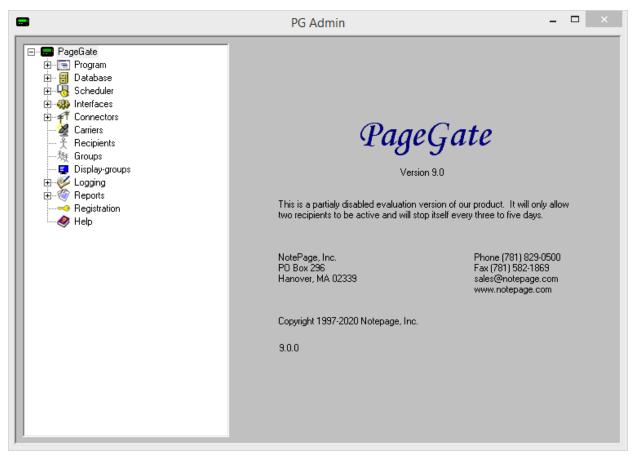
Special Notes:

- Port 443 will need to be open for WCTP.
- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

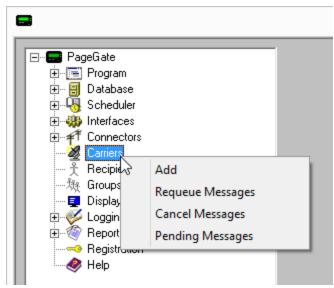
Step 1: Configure FirstNet-PRIMARY as a delivery method

1) Run PG Admin.





2) Right click Carriers, select Add



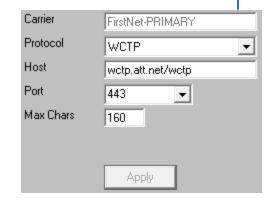
Carrier: FirstNet-PRIMARY

Protocol: WCTP

Host: wctp.att.net/wctp

Port: 443

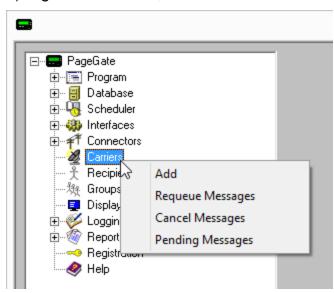
Max Chars: 160



4) Click Apply.

Step 2: Configure FirstNet-SECONDARY as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

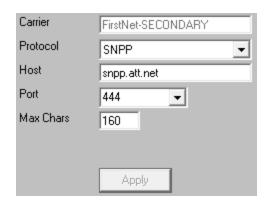
Carrier: FirstNet-SECONDARY

Protocol: SNPP

Host: snpp.att.net

Port: 444

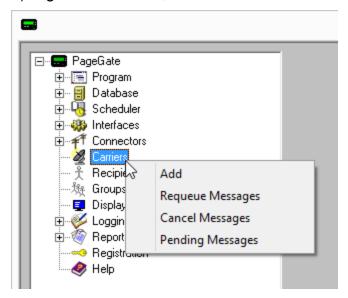
Max Chars: 160



3) Click Apply

Step 3: Configure FirstNet-FINAL as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: EMAG-FINAL

Protocol: SMTP

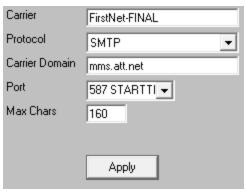
Host: mms.att.net

Port: Specify the port required by your

SMTP server.

Max Chars: 160





4

Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Priority: See <u>Prioritizing Messages</u>

- 5) Click Apply
- 6) Go to Carriers FirstNet-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com

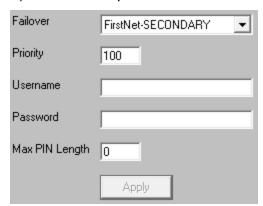




8) Click Apply.

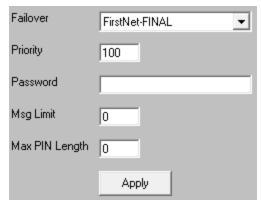
Step 4: Configure the failover system

- 1) Go to Carriers FirstNet-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: FirstNet-SECONDARY



3) Click Apply

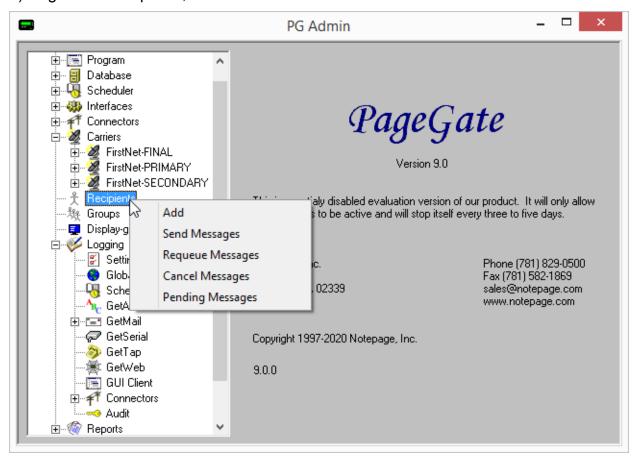
- 4) Go to Carriers FirstNet-SECONDARY Advanced
- 5) Click the dropdown arrow next to 'Failover' and select: FirstNet-FINAL



6) Click Apply

Step 4: Create Recipients tied to the FirstNet-PRIMARY method of delivery

1) Right click Recipients, select Add.



4

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric

characters, underscores and dashes.

Type: Normal

Carrier: FirstNet-PRIMARY

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

3) Click Apply.

Configuring EMG

To begin the process of registering on Sprint's EMG, you'll want to contact your Sprint representative or go to https://emg.sprint.com

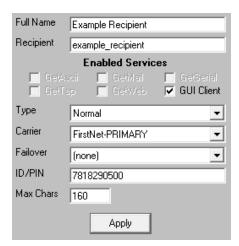
EMG supports receiving messages by SNPP and SMTP. With all both, we can configure a failover system where the program will use the best method of delivery (SNPP) first and if that fails, it makes a last ditch attempt to send it out via email (SMTP).

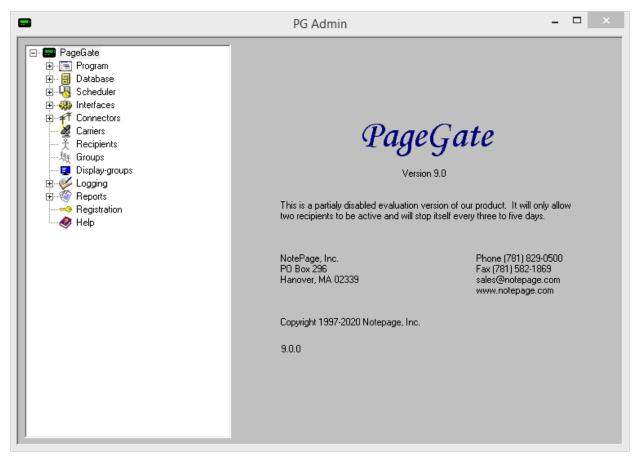
Special Notes:

- Port 444 will need to be open for SNPP.
- To configure the SMTP failover, you will need to know your SMTP server address, port to connect on and required authentication credentials.

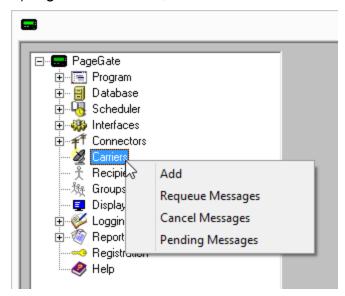
Step 1: Configure Sprint-PRIMARY as a delivery method

1) Run PG Admin.





2) Right click Carriers, select Add



4

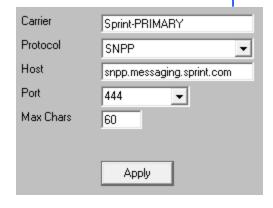
Carrier: Sprint-PRIMARY

Protocol: SNPP

Host: snpp.messaging.sprint.com

Port: 444

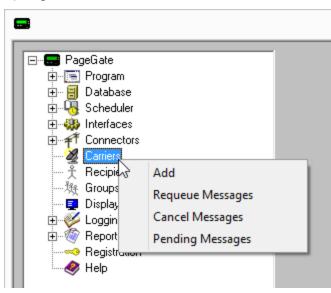
Max Chars: 160



4) Click Apply.

Step 2: Configure Sprint-FINAL as a delivery method

1) Right click Carriers, select Add



2) Specify the following:

Carrier: Sprint-FINAL

Protocol: SMTP

Host: messaging.sprintpcs.com

Port: Specify the port required by your

SMTP server.

Max Chars: 160



Sprint-FINAL

messaging.sprintpcs.com

587 STARTTI ▼

SMTP

Carrier

Protocol

Port.

Max Chars

Carrier Domain

3) Go to Carriers - Sprint-FINAL - Advanced

Select the 'Deliver through outgoing mail server' option and enter your SMTP server address in the 'Relay Server' field.

For example, if you use Office365, you would use smtp.office365.com as the relay server address.

Specify the required username and password.

Priority: See <u>Prioritizing Messages</u>

- 5) Click Apply
- 6) Go to Carriers Sprint-FINAL Template
- 7) Specify the following in the 'Settings' section:

From = The value from the username field EXAMPLE:

From = CAD@notepage.com



(none)

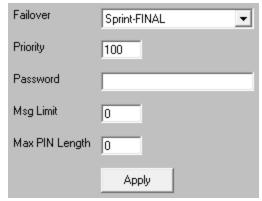
Failover



8) Click Apply.

Step 3: Configure the failover system

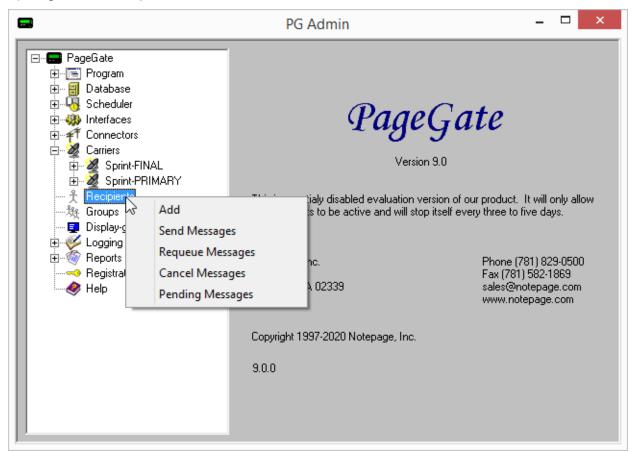
- 1) Go to Carriers Sprint-PRIMARY Advanced
- 2) Click the dropdown arrow next to 'Failover' and select: Sprint-FINAL



3) Click Apply

Step 4: Create Recipients tied to the Sprint-PRIMARY method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

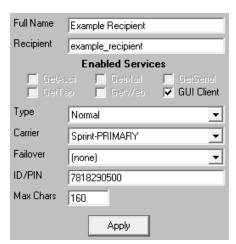
Type: Normal

Carrier: Sprint-PRIMARY

Failover: See <u>Failover Scenarios</u> **ID/PIN**: 10 digit cell phone number

Correct Incorrect 7818290500 1781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.



3) Click Apply.

How to send Pages

PageGate can be configured to deliver messages to pagers with modem, serial or internet methods of delivery. Pagers receive their service through a local paging transmitter or from carriers like USA Mobility and American Messaging and this determines what you'll need to configure in PageGate.

On-site paging transmitters, like those made by Zetron, Glenayre and Motorola, support receiving messages via modem or serial line by the TAP protocol and PageGate supports TAP delivery by either method. For more information on how to configure either a modem or serial TAP carrier, have a look at the <u>Creating a TAP Carrier</u> section of the documentation.

Pagers hosted through a paging company can be messaged with any protocols the carrier supports.

For example, American Messaging and USA Mobility support the SNPP, WCTP, SMTP and TAP protocols. SNPP and WCTP are more efficient and reliable than SMTP and should be implemented where possible. If you're looking for a method of delivery that isn't reliant on your internet connection, most pager companies also still support dial-in TAP terminals.

PageGate also supports sending TAP by TCP/IP as well.

Click here for a list of known SNPP hosts.

Click here for steps to create SNPP carriers.

Click here for a list of known WCTP hosts.

<u>Click here</u> for steps to create WCTP carriers.

Click here for a list of known SMTP addresses.

<u>Click here</u> for steps to create SMTP carries.

Click here for a list of known TAP terminals.

Click here for steps to create TAP carriers.

How to send Email

SMTP is the protocol used to send email of all varieties, including those delivered as SMS; nearly every US and Canadian carrier supports text messaging to their phones using a public access SMTP/Email gateway.

4

PageGate has a full mail server engine as a core part of the program and this gives you the ability to send SMTP/Email messages in one of two ways: Direct and Relayed

To explain the difference between the two, direct delivery allows PageGate to use its own mail server engine to directly negotiate with the receiving mail servers. Relayed delivery configures PageGate to pass all of its traffic through a verified SMTP server for delivery, like an email client.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you have PageGate use direct delivery for SMTP/Email, it has to abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain. This is incredibly important to note because, in an effort to combat spam, all major US and Canadian carriers pay respect to SPF records.

SPF stands for "Sender Policy Framework" and is a record of public IP addresses that are allowed to deliver email on behalf of your email domain. This record is published by whoever owns and operates the email domain. If the PageGate server's public IP address is not part of your email domain's SPF record, the major carriers will filter your messages as potential spam for failing the SPF validation check. If you continue to send traffic that fails SPF validation checks, the receiving servers will eventually blacklist your site from sending any traffic to them.

To check to see if port 25 is open, run the <u>Port Scan</u> in the Program - Tools section of the PageGate Admin.

To verify that your site can perform the necessary MX lookups and to discover what your SPF record is, run DNS Lookup in the Program - Tools section of the PageGate admin.

Due to some of the complications involved in configuring PageGate for direct delivery, it is usually more practical to configure PageGate to relay its SMTP/Email traffic through your company or ISP's SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

For information on how to configure a "Relayed Delivery" SMTP carrier, click here.

For information on how to configure a "Direct Delivery" SMTP carrier, <u>click here</u>. Using webforms, Web APIs and REST APIs

PageGate supports the ability to use HTTP GET and POST methods which can be used to submit web forms, request information from websites and/or WEB APIs and interact with REST APIs.

The website, web form or API you interact with will directly determine what you need to configure in PageGate.

GET and POST are conceptually similar to each other but perform their functions in completely different ways. The GET method carries parameters in the URL string and the POST method carries parameters in the request body. GET can be used to interact with WEB APIs and POST is used to interact with webforms and REST APIs and both can be used to request information from and submit information to them.

• HTTPGET

As an example, ViaNett (<u>vianett.com</u>) is an SMS delivery service in Europe that provides a Web API to send SMS. This is a sample HTTP GET request to send a message via their Web API:

https://smsc.vianett.no/v3/send?

username=UsernameValue&password=PasswordValue&msgid=1234&tel=4711111111 &msg=Hello+World&pricegroup=300&campaignid=12345

As you can see, all variables are declared as part of the URL. If you need to reference JSON, XML or something similar, you'll want to use the POST method.

• HTTPPOST

Web APIs, REST APIs and webforms all have different requirements for the headers and contents they need to see.

Web forms you interact with, whether it be PHP, CGI or something else, will have certain parameters that determine whether you're requesting or submitting data and you'll need to know each required parameter and the value that should be passed in it.

Some APIs want the body in JSON format, others want XML, others will accept both and leave it to the end user to determine which they want to use.

It's important to gather as much information as you can about what API or webform you're interacting with and their documentation will typically provide required variables and how they need to be implemented.

Miscellaneous Methods

Outside of SMS, email and paging, PageGate has the ability to communicate in other methods to a variety of sources and devices. PageGate's miscellaneous delivery methods are:

• XMPP (Extensible Messaging and Presence Protocol)

This protocol allows PageGate to communicate with an XMPP server/chat system such as Jabber. Click here to access the steps to create an XMPP carrier.

FAX

4

This protocol allows PageGate to use a faxmodem to deliver messages to destination Fax machines. Click here to access the steps to create a FAX carrier.

FAXSrv

This protocol allows PageGate to pass facsimile messages to either a local or network available Microsoft fax server. Click here to access the steps to create a FAXSrv carrier.

RawSerial

This protocol allows PageGate to deliver messages as raw data strings over a serial port. Click here to access the steps to create a RawSerial carrier.

RawTCP

This protocol allows PageGate to deliver messages by Raw TCP to a host IP. <u>Click here</u> to access the steps to create a RawTCP carrier.

File

This protocol allows PageGate to output a message as an ascii formatted file to a specified directory. This is incredibly useful when implementing the PageGate Filter Pack as it allows you to put messages through for secondary processing. This protocol also, just as an example, allows you to keep a hard record of messages that are sent from the program by keeping a copy of every message sent as a file in the specified directory. Click here to access the steps to create a File carrier.

• <u>TONE/Touch Tone/DTMF</u> (Dual Tone Multi-Frequency)

This protocol allows PageGate to use a dial-up modem to deliver touch tones to older numeric-only pagers and similar equipment. Click here to access the steps to create a TONE carrier.

• UCP (Universal Computer Protocol)

A delivery protocol for analog modem, or direct serial communications to a wireless provider. Click here to access the steps to create a UCP carrier.

Click here for steps to install PageGate.

<u>Click here</u> for information to configure PageGate to accept messages.

<u>Click here</u> for information to configure PageGate to send messages.

After installing and configuring PageGate, you'll need to start the PageGate Server. The PageGate Server can be run in one of three modes: Application, Windows Service, PG Service

Windows Service and PG Service

We strongly recommend using these run styles.

Running PageGate for the First Time

In these modes, PageGate runs as a Windows Service. Doing so means PageGate is not logon dependent and will automatically start itself after Windows launches.

When using Server 2016 or Server 2019, use the 'PG Service' run style.

When using any other OS, use the 'Windows Service' run style.

To switch PageGate's run style to a Windows Service

- 1) Find the shortcut to the PageGate Admin in your start menu or on your Desktop.
- 2) Right click on the shortcut for the PageGate Admin.
- Left click "Run as Administrator"
- 4) Go to Program Settings.
- 5) In the "Run PageGate as" section, select either Windows Service or PG Service.
- 6) Click Apply.
- 7) When prompted for credentials, leave them blank and click Apply.
- 8) When "Switching Run Styles" goes away, open the Windows Service list.
- 9) Find and start the PageGate service in the Windows Services list.

Application

In this mode, PageGate runs as an application, just like any other program. Doing so makes PageGate logon reliant, which means that a user must be logged in to the computer and you must manually launch the PageGate Server when Windows starts.

To start the PageGate Server in Application mode

- 1) Find the shortcut to the PageGate Server in your start menu or on your Desktop.
- 2) Right click on the shortcut for the PageGate Server.
- 3) Left click "Run as Administrator"

For more information, please review the following sections:

- Example Configuration using the PageGate GUI Client
- Starting and Stopping PageGate
- Monitoring PageGate

Example Configuration using the PageGate GUI Client

Step 1: Install PageGate

- 1) Go to the system that's going to host the database and program for PageGate (I'll refer to it as the PageGate Server).
- 2) Browse to our website, https://www.notepage.net
- 3) Click the Download button under the PageGate section.
- 4) Save the pgsetup.exe file somewhere convenient, like the Desktop.
- 5) Once the file is downloaded, right click on it and select "Run as Administrator"
- 6) You should then be presented with four installation options. Select: Install PageGate Server
- 7) Click next until the installation finishes.
- 8) From your Start Menu or Desktop, right click on the shortcut for the PageGate Admin and select "Run as Administrator"
- 9) You should then be presented with the default setup screen. Click Apply.
- 10) When it asks if you would like to create the Database, Archive and Log directories, say Yes.
- 11) You should then see a message indicating that a new database has been created and that PageGate must be restarted. Click OK.
- 12) Right click on the shortcut for the PageGate Admin and select "Run as Administrator".
- 13) Go to the Program Settings section of the Admin.
- 14) Under 'Run PageGate As', select: Windows Service
- 15) Click Apply.
- 16) You should then be prompted for credentials. Leave both boxes blank and click Apply.
- 17) When "Switching Run Styles" goes away, open the Windows Service list.
- 18) Find and start the PageGate service.

Step 2: Configure PageGate to send messages

Now that we have PageGate installed and the server engine running, all that remains is to configure the program to send messages.

<u>Click here</u> for information on how to configure PageGate to send messages.

Step 3: Share the PageGate server's database

To get the PageGate GUI Client installed and functioning on workstations, there's a little networking setup that has to be done in advance on the server. All you'll need

to do is share the PageGate Database directory (on the PageGate Server) on the network and make a note of the UNC/Networking path to the shared folder.

Step 4: Install PageGate's GUI Client

Once you have the PageGate Server's database shared, here's how to install the PageGate Client on a workstation:

- 1) Go to a system that's going to run the PageGate Client.
- 2) Browse to our website, https://www.notepage.net
- 3) Click the Download button under the PageGate section.
- 4) Save the pgsetup.exe file somewhere convenient, like the Desktop.
- 5) Once the file is downloaded, right click on it and select "Run as Administrator"
- 6) You should then be presented with four installation options. Select: Install PageGate GUI Client
- 7) Click Next until the installation finishes.
- 8) When you run the Client for the first time, it's going to ask you for the server's database path. This is the network path to the PageGate Server's network shared database directory (example: \\servername\\directory\)
- 9) Click Apply.

Starting and Stopping PageGate

Start PageGate by choosing 'PageGate Server' from the Windows start menu. Typically this can be found at Start - Programs - PageGate - PageGate Server.

After PageGate is started, a pager icon will appear in the Windows system tray on the bottom right-hand corner of the screen (next to the clock). This icon is used to stop PageGate, start the PG Admin program, or start the PG Monitor program. Clicking on the pager with the left mouse button will display a menu with these options.

If PageGate is running as an application, the first menu option is the Restore function and will simply remove the pager icon from the system tray, and open a window on your desktop. Use the minimize button to return the icon to the system tray and remove the PageGate window. Quitting the PageGate window by using the 'X' control or by using the 'Quit PageGate' button will stop the entire PageGate Server application.

Running PageGate for the First Time

If PageGate is running as a Windows System service, the first menu option will be 'Start' instead of 'Restore'. This option will start the PageGate system service if it is not already running.

The second menu item is 'PG Admin'. Choosing this item will start PageGate's Administration program (if it is not already running).

The third menu item is 'PG Monitor'. Choosing this item will start PageGate's real-time monitoring program.

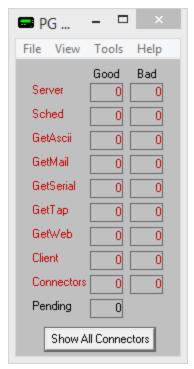
If PageGate is running as an Application, the last option is 'Quit'. Selecting 'Quit' will stop the entire PageGate application. If PG Admin or PG Monitor are running, they will need to be exited individually.

If PageGate is running as a Windows System service, the last option is 'Stop'. This will stop the PageGate Server service from running. If the PG Admin or PG Monitor programs are running, they will need to be quit out of individually.

If PageGate has been setup to run as Windows Service, it will start automatically each time the computer is restarted. Otherwise, you must start PageGate manually from the Windows start menu. (or add it to the computer's startup group).

Monitoring PageGate

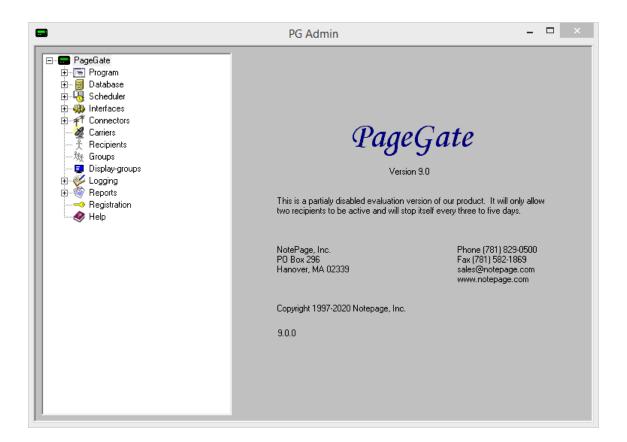
While setting up PageGate and experimenting with its capabilities, PageGate's behavior can be monitored by using the <u>PG Monitor</u>, which is installed along with the PageGate Server.



Running PageGate for the First Time

It can be started from the PageGate group in the Windows Start Menu or by clicking on the icon of the pager in the Windows system tray (down by the clock). Whenever the PageGate server is running, it will send status and logging information to the PG Monitor program. Click here for more information on the PageGate Monitor.

The PageGate Administrator (PG Admin) is used for configuring and controlling all aspects of the PageGate Server. The PageGate Admin takes an object-oriented approach to administering the server; most of its functions and settings can be accessed by manipulating the objects in its object-tree. Many of the functions of PG Admin are only accessible by right-clicking on these objects.



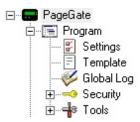
The Admin is automatically installed on the PageGate Server. Workstations that need admin access to the PageGate server should have the <u>Additional PG Admin</u> installed on them.

When running PG Admin for the first time, you will need to use the 'Run as Administrator' option.

Alternately, if the PageGate Server is running, there should be an icon of a pager in the Windows system tray (bottom right corner of the screen, next to the clock). Click the pager icon and you will see a pop-up menu. Choose 'PG Admin' from the menu.

Program

The Program section contains settings and information that relate to the global operations of the PageGate Server.



Settings

This section contains the PageGate server's configuration, including which APIs to run and whether PageGate should run as an application or Windows service.

Global Log

This section contains the global log of activity recorded by the PageGate server, including server start and stop events as well as a record of traffic processed.

Template

This section contains the PageGate server's global template.

Security

This section contains the PageGate server's security settings, users and their permissions.

• Tools

This section contains a series of tools to test internet and hardware functionality.

Start Server

Stop Server

Start Monitor

🗓 🔚 Progr

⊕ 📳 Datat ⊕ 😽 Sche

interf.

⊕ ↑ Conn Carriers ↑ Recipients

幾 Groups

Right clicking on PageGate will bring up a context menu with four options.

Start Server

Selecting this option will start the PageGate server, if it's stopped.

• Stop Server

Selecting this option will stop the PageGate server, if it's started.

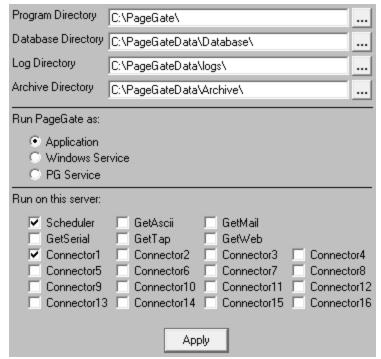
• Start Monitor

Selecting this option will launch the PageGate Monitor application.

Exit

Selecting this option will close the PageGate Admin.

Program Settings



This section can be broken down in to three parts:

Where to store the database, logs and archives.



Setting	Function
Progra m Director y	The Program Directory MUST point to the directory where PageGate is installed and should not be modified after the installation.
Databa se Director y	This directory specifies the PageGate Server's database location. The database contains ALL pertinent information for the PageGate Server and must be shared on the network for the GUI Client and Additional Admin to reference.
Log Director y	This directory specifies where PageGate should keep its log and security log files.
Archive Director y	When the option for PageGate to <u>archive messages</u> is enabled, all archived files will be stored in this directory.

• Which run style to use (Application, Windows Service or PG Service)

Run PageGate as:		
ApplicationWindows ServicePG Service		

We **strongly recommend** running PageGate as a <u>Windows Service</u> or <u>PG Service</u>.

The 'Windows Service' run style tells PageGate to create a service for each component of the program.

The 'PG service' run style tells PageGate to create a single, master service that all elements of the program are run from.

Server 2016 and 2019: Use the 'PG Service' run style.

Desktop and Previous Server Versions: Use the 'Windows Service' or 'PG Service' run styles.

Which which Interfaces to use for input and how many Connectors to use for output

Runo	n this server:				
~	Scheduler	GetAscii	Г	GetMail	
	GetSerial	GetTap		GetWeb	
✓	Connector1	Connector2		Connector3	Connector4
	Connector5	Connector6		Connector7	Connector8
	Connector9	Connector10		Connector11	Connector12
	Connector13	Connector14		Connector15	Connector16
		Арі	oly		

Please see the <u>Interfaces</u> and <u>Connectors</u> sections for more information.

Run Styles

PageGate can be configured to run in three different styles: Application, Windows Service and PG Service.

We **strongly recommend** using the Windows Service or PG Service run styles.

Application

In this mode, PageGate is started and stopped just like any other program and can be automatically run at startup by putting a shortcut to it in the Windows "Startup" group. The disadvantage to this run style, is that if the computer is configured to show a login screen at startup, PageGate cannot automatically start until someone logs onto the computer.

Windows Service or PG Service

The 'Windows Service' run style tells PageGate to create a service for each component of the program.

The 'PG service' run style tells PageGate to create a single, master service that all elements of the program are run from.

Server 2016 and 2019: Use the 'PG Service' run style.

Desktop and Previous Server Versions: Use the 'Windows Service' or 'PG Service' run styles.

- 1) Right click on the shortcut for the PageGate Admin and select "Run as Administrator".
- 2) Go to the Program Settings section of the Admin.
- 3) Under 'Run PageGate As', select: Windows Service or PG Service
- 4) Click Apply.
- 5) You should then be prompted for credentials. *See notes below.
- 6) When "Switching Run Styles" goes away, open the Windows Service list.
- 7) Find and start the PageGate service.

*Windows Credentials and PageGate

This is where things might get a little complicated because this part has more to do with how your network and/or domain are configured than anything native to PageGate; you're interacting with the Windows System Services. Having said that, you can typically use the Windows System Account to run PageGate's services. To do so, when you're prompted for credentials in step 5, leave the username and password fields blank and click on Apply again.

If leaving the username and password fields blank returns an "Invalid account or password" error, that means that the Windows System Account has been disabled and you must provide an appropriate username and password that has the "Create service" and "Log on as service" policies.

However, the Windows System Account typically has no network privileges and cannot access cross-network information.

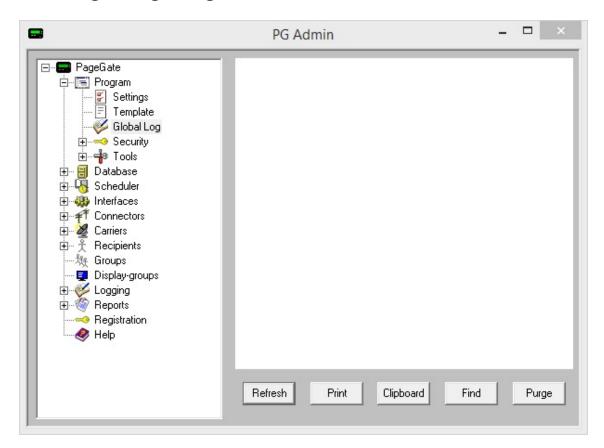
If you have any component of the PageGate server referencing a network resource, like a file path by GetASCII or GetWeb APIs, the corresponding service must have sufficient rights to access those resources (in addition to the 'run as service' right).

In our experience, the easiest thing to do when you want to run PageGate as a service but need to have an interface or connector reference a network path is to have the system services created with the Windows System Account. Then, after the services exist, go in to the properties of the service that corresponds to the API or Connector and assign the service account under the Log On tab of the service.

When using the PG Service run style, you will only have a single, master PageGate service that will need a service account assigned to it.

Global Log

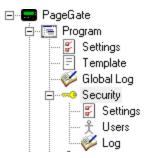
If logging is enabled, this log shows a summary of the events generated by PageGate, including all messages scheduled and sent.



Refresh	Displays the most current entries in the global log.
Print	Sends a copy of everything listed in the Global Log to a printer.
Clipboard	Copies the contents of the Global Log to the Windows Clipboard, allowing it to be pasted into another application.
Find	Deletes the entirety of the Global Log.
Purge	Allows you to search for a variable (such as a carrier or recipient name).

Security

The security section of the PageGate Admin allows you to configure the program's security system, which can be used to restrict access to both PG Admin and the GUI Client.



- <u>Settings</u> will allow you to enable or disable security restrictions to the Admin or GUI Client.
- <u>Users</u> will allow you to create and manage the list of users who have access to the programs and what level of control they have.
- <u>Log</u> shows which user has performed what action(s) at any given date and time. It records each instance of security permissions being used.

Settings

Note: It is entirely possible lock yourself out of the PageGate Admin if you enable the PG Admin security before configuring any <u>security users</u>. Please configure at least one <u>master administrative user</u> before enabling any security in the program.





Enable PG Admin Security	Restricts access to the PG Admin to ONLY those users given rights in the <u>Users</u> section. If this option is not enabled, all users will be able to access all functions of the PG Admin.
	Restricts access to the GUI Client to ONLY those users given
Enable GUI Client Security	rights in the <u>Users</u> section. If this option is not enabled, all users will be able to access all functions of the GUI Client.

Users

The users portion of the Security Settings allows you to create and maintain a list of users that have permission to access certain portions of either the PageGate Admin or the GUI Client.



Add	This allows you to create a new security user profile. Click here for more information.	
Edit	This allows you to edit an existing security user profile.	
Delete	This allows you to remove an existing security profile.	
Close	This closes the Users dialog.	

Adding a Security User



When creating a user to have security rights, there are several settings that need to be considered:

Username	This field is where you assign a unique login name to a user. When a user attempts to access a security enabled PG Admin or GUI Client, they will be prompted for this username.
Use Windows Login Credentials	When this option is checked, both the GUI Client and PG Admin will allow a user logged into windows with this name to access the program. For example, if you create a user named "Johnny" and a workstation is currently logged in as the Windows user "Johnny", it will grant access to the program.
Password	This field is where you assign a unique password to a user. When a user attempts to access a security enabled PG Admin or GUI Client, they will be prompted for this password.
Alias	This field allows you to set a security alias for this user.
Display- group	This field over-rides the Display-group setting in the settings of the GUI Client for this specific user. For more information, please refer to the GUI Client Settings section of the help file.
Sender	This field over-rides the Sender setting in the GUI Client for this specific user. For more information, please refer to the GUI Client Settings section of the help file.
Station	This field over-rides the Station Number of the GUI Client for this specific user. For more information, please refer to the GUI Client Settings section of the help file.
Presets File	This field over-rides the Preset Msgs File setting in the settings of the GUI Client for this specific user. For more information, please refer to the GUI Client Settings section of the help file.

The following rights can be assigned to a user:

Administrato r	This will make this user an administrator capable of adding, editing and removing all recipients, carriers, groups and display groups as well. This also grants this user the ability to administrate the Interfaces, Connectors and other global program values.
Interfaces	Grants this user permission to access and modify settings in the Interfaces section of the Admin.
Connectors	Grants this user permission to access and modify settings in the Connectors section of the Admin.
Carriers	Grants this user permission to access and modify settings in the Carriers section of the Admin.
All Recipients	Grants this user permission to access and modify settings for all recipients in the Recipients section of the Admin.
Own Recipients	Grants this user permission to access and modify settings in the Recipients section but only for those recipients that this user, or this user's <u>alias</u> , has been marked <u>Manager</u> .
All Groups	Grants this user permission to access and modify settings for all groups in the Groups section of the Admin.
Own Groups	Grants this user permission to access and modify settings in the Groups section but only for those groups that this user, or this user's <u>alias</u> , has been marked <u>Manager</u> .
All Display- Groups	Grants this user permission to access and modify settings for all display groups in the Display Groups section of the Admin.
Own Display- Groups	Grants this user permission to access and modify settings in the Display Groups section but only for those display groups that this user, or this user's <u>alias</u> , has been marked <u>Manager</u> .
Reports	Grants this user permission to access the Reports section of the Admin.
Client Administrato r	This will make this user an administrator for the PageGate GUI Client but will not grant them access to the Admin or its functions.
Client	Grants this user permission to access and run the PageGate GUI Client.

Logging In

Note: Not every user is granted administrative privileges. If certain functions are unavailable, the user you have logged in with may not have permission to access to them.



When logging in to the PageGate Admin or PageGate Client, you will receive the login prompt (shown above). Simply type in the username and password that has been assigned, then click Login.

Tools



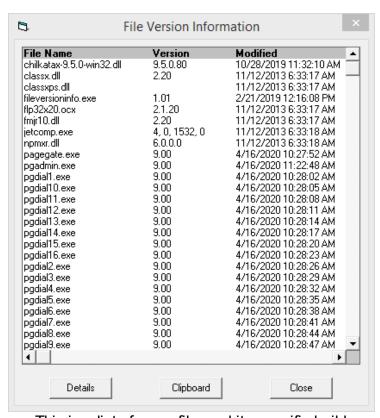
- <u>File Versions</u> provides a quick reference for the specific file version information for your installed copy of PageGate.
- Modem Scan runs a COM port scan to determine if you have a modem connected to any available COM port in the operating system.

- Port Scan provides a utility to see if a range of internet ports related to message delivery are open.
- <u>DNS Lookup</u> attempt to perform a series of DNS lookups, including A, MX and SPF record querying.

File Versions

Clicking on "File Versions" will display the following

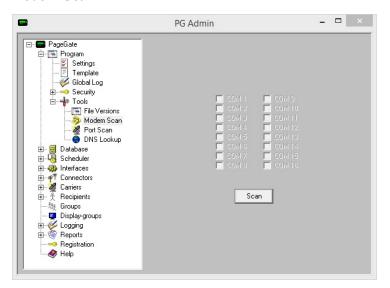
dialog:



This is a list of every file, and its specific build

version, in the PageGate program directory

Modem Scan



The modem scan tool allows PageGate to scan all communication (COM) ports for installed modems. Any COM port found to have a modem installed will have a check placed next to it when the scan completes.

Port Scan

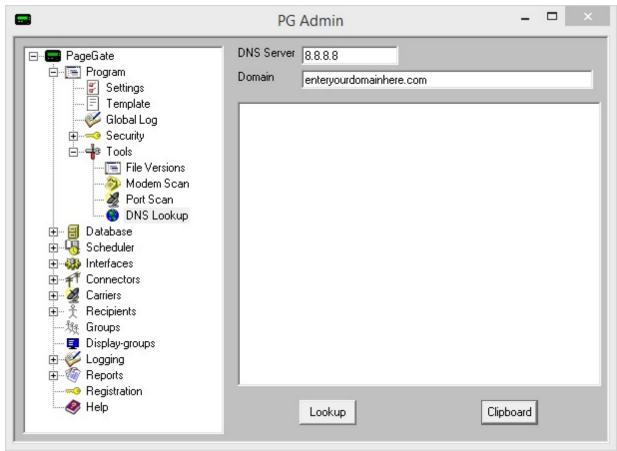
PageGate uses many internet based protocols. This Port Scan tool allows PageGate to determine whether the ports to use these protocols are available or closed.

	P or t	Corr esp ondi ng Prot ocol
	2 5	SMT P/E mail
	4 6 5	SMT P/E mail with SSL/ STA RTL S
	5 8 7	SMT P/E mail with STA RTT LS
	8	WC TP
	1 1 0	POP
	4 4 4	SNP P
	5 3	DNS

DNS Lookup

DNS Lookup provides a utility that will attempt to perform a series of DNS lookups, including A, MX and SPF, on the domain specified.

This is incredibly using when configuring PageGate to send SMTP/Email.



Templates

Templates control how messages are formatted and are a key component in configuring PageGate to send messages.

PageGate comes preloaded with a set of default templates that you may never need to modify. However, the Templates section provides Administrators easy access to modify any or all variables for any or all messages that leave the system.

Message templates are available at the <u>Global</u>, <u>Interface</u>, <u>Connector</u>, <u>Carrier</u> and <u>Recipient</u> levels.

This means that a message template can be configured for all messages that leave the system or messages specific to a given interface, connector, carrier or recipient. The priority order for the templates is as follows:

- 1) Recipient
- 2) Carrier
- 3) Connector
- 4) Interface

5) Global

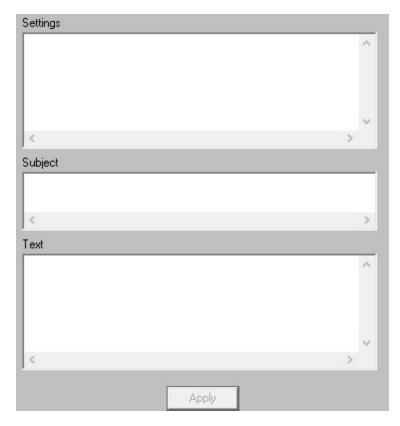
This inter-connected system enables changes to be made for the maximum number of recipients by making a single change to one of the parent templates.

For example, if a Recipient has a template that has been applied to it, PageGate will format any messages delivered to this recipient based on its template regardless of whether Carrier, Connector, Interface or Global templates have been configured. This allows you to create exceptions for Global rules by creating templates unique to a given Recipient, Carrier, Connector or Interface while the rest of your traffic remains formatted to a standard.

Both hard-coded text and PageGate specific macros can be used in each template, combining both static and dynamic elements into the message text. For a full list of variables that can be used, please see the <u>Template Variables</u> section of the manual.

Templates are comprised of three sections: <u>Settings</u>, <u>Subject</u> and <u>Text</u>.

Template Components



All Templates have three sections:

Settings



A <u>Setting variable</u> controls either a delivery response setting or modifies the content of a message. The <u>Settings</u> section of a Template does not use, nor should it reference, a Macro variable and must only use and reference <u>Setting variables</u>. The Settings template is unique in that variables specified in this section are cumulative. So, if you have Settings variables specified in the Global template and have completely different variables specified in a Carrier level template, all Settings specified are respected. However, if you have the same variable specified by multiple Settings templates, the highest order template's value will always be used.

For example, let's say you're configuring PageGate to send email and need to relay your traffic through three SMTP servers. If all three SMTP servers are part of the same domain, you can specify the InternetDomain = variable on a global level. Let's say that two of the SMTP servers are for one domain and one SMTP server is on a completely different domain. At that point, you would use InternetDomain = primarydomain.com in the Global template, then specify InternetDomain = alternatedomain.com in the Carrier template for the alternate SMTP server. Any time PageGate handles traffic for the two primary domain SMTP servers, it will use the global InternetDomain value but when it handles traffic for the alternate SMTP server, it will use that carrier's specified InternetDomain value.

Subject



The Subject section of a template controls the behavior of any Subject Line processed by this template and references Macros. A <u>Macro variable</u> is an inserted value to control, modify and specify the output of a message. The <u>Subject</u> section of a Template should not use or reference any Setting variables and must only use <u>Macro variables</u>. Subject templates will override templates of a lower order. For example, a Recipient level subject template will completely replace the subject line for that recipient and will override any Carrier, Connector, Interface or Program level Subject template you've applied.

• Text



The Message section of the template controls the output and format of the body of any message controlled by this template and references Macros. A <u>Macro variable</u> is an inserted value to control, modify and specify the output of a message. The <u>Message</u> section of a Template should not use or reference any Setting variables and must only use <u>Macro variables</u>. Text templates will override templates of a lower order. For example, a Recipient level text template will completely replace the subject line for that recipient and will override any Carrier, Connector, Interface or Program level Subject template you've applied.

Settings

The Settings section of the template configures protocol negotiation settings and specifies certain content delivery rules. This section is referenced heavily when configuring PageGate to deliver SMTP/Email but also provides the ability to configure specific delivery settings for every protocol.

For instance, not every cellular modem, router and gateway use the same command set even though they use the same base method of communication.

As an example, Airlink and Multitech both produce lines of cellular devices that can be accessed via COM or TCP but each implements a different AT command set. PageGate can automatically negotiate most connections with most devices and does automatically retain which command is best to use but you can decrease the overall amount of time it takes to deliver a message by specifying the necessary value in the Settings template.

This is why it's important to pay respect to the order of operations for the templates:

- 1) Recipient
- 2) Carrier
- 3) Connector
- 4) Interface

5) Global

So, a Settings variable specified on a Carrier level will override any Global value. To use our earlier example, let's say you have an environment in which you're using multiple cellular modems; some of them Airlink, some of them Multitech. Since you have two devices that need to use the same protocol (GSM-AT-IP) but also need it implemented in different ways, you would specify a carrier level template value that configures the Airlink device for one AT command set and the Multitech device for the other. Alternatively, you could tie each cellular modem to a specific Connector, then specify a Connector level template instead.

Variables that can be specified in the Settings section of a template can be broken down in to a few categories: Protocol Delivery and Content Modification

Protocol Delivery

These variables modify the behavior of a protocol and specify certain declarations that must be made during the protocol negotiation sequence.

Variables for SMTP

Variables for GSM-AT-IP

Variables for GSM-AT

Variables for HTTPGET

Variables for HTTPPOST

Variables for SNPP

Variables for WCTP

Variables for TAP

Variables for RawSerial

Variables for RawTCP

Variables for Filter Scripts

Content Modification

These variables modify the contents of the subject and message sections for messages this template applies to.

<u>Click here</u> for a list of content modification variables.

Variables for SMTP/Email

These variables control how PageGate sends SMTP/Email messages.

Generally speaking, you'll want to configure the first five variables in the Global Template.

Variables specified on a carrier level will override variables specified on a global level.

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

<u>Click here</u> for more information on how PageGate sends Email.

Variable	Description and Possible Values
UseAlterna teDNS	Set this to True or False.
	This variable tells PageGate to use an alternate method to get MX records
	from DNS servers.
IEDINO	Example: UseAlternateDNS = True
	If this variable is not present, a False value is assumed.
	This variable sets the value of the %InternetDomain% macro used by the
	SMTPHelloHost and is also used by other protocols when certain values
	need to be transformed in to valid email addresses.
InternetDo	
main	When configured for <u>direct delivery</u> , PageGate must declare an email
	domain name within the <u>SPF record</u> of the system's public IP address.
	When configured for <u>relayed delivery</u> , PageGate must declare the email
	domain name required by the relaying SMTP server.
	This variable should always be set to %InternetDomain%.
SMTPHello Host	Example: SMTPHelloHost = %InternetDomain%
	During the SMTP negotiation sequence, PageGate must declare the
1 1051	domain it is delivering traffic on behalf of in the EHLO/HELO statement.
	This value is specified by the previous InternetDomain variable.

	This value determines what character PageGate will recognize as the delimiter (separator) for the subject part of a message.
SubjectDeli miter	PageGate looks for the SubjectDelimiter within the number of characters specified in the SubjectSearchLength (see below) value. If any character in the SubjectDelimiter string is found, PageGate uses everything before the delimiter as the subject. Multiple delimiters can be specified and you will need to separate each value by a pipe ' ', which functions as an OR statement.
	For example, let's say we wanted a colon (:) to be the SubjectDelimiter value. This is what we would use: SubjectDelimiter = :
	Let's also say we have a message that says "This is the subject: This is the message".
	PageGate program would recognize "This is the subject" as the subject and use it as such because it was followed by a ':'.
	As another example, let's say we have this specified: SubjectDelimiter = \013\010 \013 \010
	This configures PageGate to recognize a Carriage Return + Line Feed OR a Single Carriage Return OR a Single Line Feed as the subject delimiter.
SubjectSe	This variable determines the number of characters within the message to look for the subject.
archLength	For example, SubjectSearchLength = 50 would tell PageGate to scan the first 50 characters of the message for any specified subject delimiter.
SubjectDef ault	In the event that PageGate does not see any variables specified by SubjectDelimiter within the SubjectSearchLength string, this is the default text that will be used as the subject instead.
From	This variable overrides the value passed into PageGate by the APIs/modules/interfaces. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
ReplyTo	If the reply email address should be something other than the 'From' value, this variable allows you to specify the necessary address. Example: ReplyTo = YourEmail@domain.com

То	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or email address.
EnvelopeFr om	This variable is similar to the 'From' variable found above. However, this setting will only change who the message is reported to be from during the communication session with the carrier. It has no effect the message content or values specified by any Macro.
EnvelopeT o	This variable is similar to the 'To' variable found above. However, this setting will only change who the message is set to during the communication session with the carrier. It has no effect the message content or values specified by any Macro .
EnvelopeFr omAsEmai I	Set to True or False. If this variable is not present in the template, a False value is assumed. This variable forces the EnvelopeFrom value to be turned into an valid email address if it isn't already. This variable only applies to the SMTP and WCTP protocols.
InterMessa geDelay	Set this to a number of milliseconds (1000 = 1 second). This variable tells PageGate to delay for the specified number of milliseconds after delivering each message.
SMTPForc eStartTls	Set this to True or False. This variable forces a given connector or carrier to use STARTTLS for its SMTP transactions.
SMTPCon nectTimeo ut	This variable specifies the number of seconds PageGate should wait for a response from an SMTP host. The following example specifies a 40 second time-out: SMTPConnectTimeout = 40
SMTPQpE ncode	By default, PageGate uses Quoted Printable encoding for SMTP/Email. However, there are some systems that can't interpret this format and require plaintext. To turn QP Encoding off, specify the following: SMTPQpEncode = False

Variables for GSM-AT-IP

These variables control how PageGate interacts with cellular modems, routers and gateways accessed by TCP.

It is recommended that you configure these variables on either the Carrier or Connector

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

Variable	Po ssi ble Val ues	Example Statement	Description
UseCarrier Auth	Tru e Fal se	UseCarrier Auth = False	This setting tells the connector whether or not it should use authentication when connecting to the cellular modem, router or gateway. This is enabled by default. This is most often used when multiple makes and models of cellular modem, router or gateway are being used and some devices require authentication but others don't. This allows you to have a single carrier using the GSM-AT or GSM-AT-IP protocols and specialize each connector for the different types of devices in your environment.
GSMUseC mgf	Tru e Fal se	GSMUseC mgf = True	This variable specifies that the AT+CMGF=1 command should be used to enter text delivery mode. If your modem supports AT+CMGF=1, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed. This variable should be used when configuring PageGate to use Multitech cellular hardware and any cellular hardware that uses the standard AT command set.
GSMUse Wscl	Tru e Fal se	GSMUse Wscl = True	This variable specifies that the AT+WSCL=1,2 command should be used to enter text delivery mode. If your modem supports AT+WSCL=1,2, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed. This variable is used for certain types of CDMA cellular hardware.

	Tru		This variable specifies that the AT+CMGS command should be used to deliver text messages.
GSMUseC mgs	e Fal se	GSMUseC mgs = True	If your modem supports AT+CMGS, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed.
GSMUseS msm2m	Tru e Fal se	GSMUseSm sm2m = True	This variable specifies that the AT*SMSM2M command should be used to deliver text messages. If your modem supports AT*SMSM2M, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed. This variable should be used when configuring PageGate to use Airlink cellular hardware and any cellular hardware that requires the AT*SMSM2M command to deliver text messages.
GSMSetT extModeO nce	Tru e Fal se	GSMSetTe xtModeOnce = True	Some cellular modem, routers and gateways only require a single instance of the "Enter Text Deliver Mode" command to be issued. This variable specifies that PageGate should only send the command to enter text delivery mode once until Connector is restarted. This variable should not be used with cellular modems that require the "Enter Text Delivery Mode" command be issued in each session. If this variable is not present, a default value of False is assumed.
InterMessa geDelay	Milli sec ond s	InterMessag eDelay = 1000	This variable tells PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
GSMUseG T	Tru e Fal se	GSMUseGT = True	This variable tells PageGate to wait for a '>' after sending phone number with CMGS command.
GSMCMG LString	The new AT	GSMCMGLStri ng = AT+CMGL=UR EAD	This variable overrides the normal 'check for messages' command. PageGate will use whatever AT command is supplied in this statement instead.

	Co mm and		
GSMCMG LDelay	Milli sec ond s	GSMCMGL Delay = 5000	Some cellular hardware has a delay before it responds to the CMGL request with the list of received SMS. This variable configures PageGate to wait for the specified amount of time.
ModemWa keupCom mand	Text	ModemWak eupComma nd = Custom Variable Here	If your cellular modem, router or gateway requires something other than AT <cr> to wake up, use this variable to specify the necessary command.</cr>
ModemHan gupComma nd		ModemHang upCommand = Custom Variable Here	If your cellular modem, router or gateway requires a special parameter for disconnect/hang-up, use this cariable to specify the necessary command. Default if not set: ATH0 Example: ModemHangupCommand = AT0
UseTelnet	Tru e Fal se	UseTeInet = True	This variable tells PageGate to negotiate telnet terminal capabilities upon connection
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

Variables for GSM-AT

These variables control how PageGate interacts with cellular modems, routers and gateways accessed by COM port (virtual or physical)

It is recommended that you configure these variables on either the Carrier or Connector level.

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

Variable	Po ssi ble Val ues	Example Statement	Description
UseCarrier Auth	Tru e Fal se	UseCarrier Auth = False	This setting tells the connector whether or not it should use authentication when connecting to the cellular modem, router or gateway. This is enabled by default. This is most often used when multiple makes and models of cellular modem, router or gateway are being used and some devices require authentication but others don't. This allows you to have a single carrier using the GSM-AT or GSM-AT-IP protocols and specialize each connector for the different types of devices in your environment.
GSMUseC mgf	Tru e Fal se	GSMUseC mgf = True	This variable specifies that the AT+CMGF=1 command should be used to enter text delivery mode. If your modem supports AT+CMGF=1, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed. This variable should be used when configuring PageGate to use Multitech cellular hardware and any cellular hardware that uses the standard AT command set.
GSMUse Wscl	Tru e Fal se	GSMUse Wscl = True	This variable specifies that the AT+WSCL=1,2 command should be used to enter text delivery mode. If your modem supports AT+WSCL=1,2, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway.If this variable is not present, a default value of False is assumed. This variable is used for certain types of CDMA cellular hardware.

GSMUseC mgs	Tru e Fal se	GSMUseC mgs = True	This variable specifies that the AT+CMGS command should be used to deliver text messages. If your modem supports AT+CMGS, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed.
GSMUseS msm2m	Tru e Fal se	GSMUseSm sm2m = True	This variable specifies that the AT*SMSM2M command should be used to deliver text messages. If your modem supports AT*SMSM2M, set this variable to true for the carrier or connector using the IP capable cellular modem, router or gateway. If this variable is not present, a default value of False is assumed. This variable should be used when configuring PageGate to use Airlink cellular hardware and any cellular hardware that requires the AT*SMSM2M command to deliver text messages.
GSMSetT extModeO nce	Tru e Fal se	GSMSetTe xtModeOnce = True	Some cellular modem, routers and gateways only require a single instance of the "Enter Text Deliver Mode" command to be issued. This variable specifies that PageGate should only send the command to enter text delivery mode once until Connector is restarted. This variable should not be used with cellular modems that require the "Enter Text Delivery Mode" command be issued in each session. If this variable is not present, a default value of False is assumed.
InterMessa geDelay	Milli sec ond s	InterMessag eDelay = 1000	This variable tells PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
GSMUseG T	Tru e Fal se	GSMUseGT = True	This variable tells PageGate to wait for a '>' after sending phone number with CMGS command.
GSMCMG LString	The new AT	GSMCMGLStri ng = AT+CMGL=UR EAD	This variable overrides the normal 'check for messages' command. PageGate will use whatever AT command is supplied in this statement instead.

	Co mm and		
ModemWa keupCom mand	Text	ModemWak eupComma nd = Custom Variable Here	If your cellular modem, router or gateway requires something other than AT <cr> to wake up, use this variable to specify the necessary command.</cr>
ModemHan gupComma nd		ModemHang upCommand = Custom Variable Here	If your cellular modem, router or gateway requires a special parameter for disconnect/hang-up, use this cariable to specify the necessary command. Default if not set: ATH0 Example: ModemHangupCommand = AT0
UseTelnet	Tru e Fal se	UseTeInet = True	This variable tells PageGate to negotiate telnet terminal capabilities upon connection
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

Variables for HTTPGET

These variables control how PageGate implements POST and GET HTTP methods. It is recommended to set these on a Carrier level.

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

	Pos	Exampl	
Variable	sible Valu es	e Statem ent	Description

Response Recipient	Reci pient Grou p	Respon seRecip ient = A recipient or group's name as it exists in the PG Admin	When the HTTP GET or POST transaction completes, the specified recipient or group will receive any responses from the receiving API/web host. For more information, please see the Two Way Messaging section of the documentation.
InterMess ageDelay	Millis econ ds	InterMess ageDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 7818290 500	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

Variables for HTTPPOST

These variables control how PageGate implements POST and GET HTTP methods. It is recommended to set these on a Carrier level.

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

Variable	Poss ible Valu es	Exampl e Statem ent	Description
Response Recipient	Reci pient Grou p	Respon seRecip ient = A recipient or group's name as it exists in the	When the HTTP GET or POST transaction completes, the specified recipient or group will receive any responses from the receiving API/web host. For more information, please see the Two Way Messaging section of the documentation.

		I	
		PG Admin	
InterMessa geDelay	Millis econ ds	InterMess ageDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 7818290 500	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
HttpPostTy	Head Body or UrlHe adBo dy	HttpPostT ype = HeadBod y	HttpPostType = HeadBody configures an HTTP POST carrier to provide header information followed by structured data, usually JSON or XML, in the body.
ре		HttpPostT ype = UrlHeadB ody	HttpPostType = UrlHeadBody configures an HTTP POST carrier to pass parameters in the URL, more like the GET method. This is not a typical use of HTTP POST but is used/required by some APIs.
			This variable tells PageGate to scan any responses back from a GET or POST request for the required keywords or keyphrases. If those keywords or keyphrases are found, the message is treated as successfully delivered. This variable is both case and punctuation sensitive
HttpSucce ssRespons e	Text	See Text Descript ion	and PageGate will look for an exact match to what you enter. Multiple search terms may be used and you'll need to separate each item with a pipe.
			For example, this would only scan for the word success: HttpSuccessResponse = success
			This would scan for the word success in the <reply> tag: HttpSuccessResponse = <reply>success</reply></reply>

		T .	
			This would scan for the word success in the <reply> tag OR the word hijinks: HttpSuccessResponse = <reply>success</reply> hijinks This would scan for the word success OR the word hijinks OR the word actualization: HttpSuccessResponse = success hijinks actualization If this variable is included, any response to a GET/POST request that doesn't include the search term(s) will be treated as a failure.</reply>
HttpErrorR esponse	Text	See Descript ion	This variable tells PageGate to scan any responses back from a GET or POST request for the specified keywords or keyphrases. If those keywords or keyphrases are found, the message is treated as failed or rejected. This variable is both case and punctuation sensitive and PageGate will look for an exact match to what you enter. Multiple search terms may be used and you'll need to separate each item with a pipe. For example, this would only scan for the word failed: HttpErrorResponse = failed This would scan for the word success in the <reply>tag: HttpErrorResponse = <reply>failed</reply> This would scan for the word failed in the <reply> tag OR the word reject: HttpErrorResponse = <reply>failed </reply> reject This would scan for the word failed OR the word reject OR the phrase object not found: HttpErrorResponse = failed reject object not found If this variable is included, any response to a GET/POST request that includes the search term(s) will be treated as a failure.</reply></reply>

Variables for SNPP

These variables control how PageGate implements the SNPP protocol. It is recommended to set these on a Carrier level.

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

Variable	Po ssi ble Val ues	Example Statemen t	Description
SNPPMe ssOnly	Tru e Fal se	SNPPMes sOnly = True	This variable tells PageGate to use the MESS command, instead of the DATA command, during the SNPP delivery sequence.
InterMess ageDelay	Milli sec ond s	InterMessag eDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
From	Tex t	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Tex t	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

Variables for WCTP

These variables control how PageGate implements the WCTP protocol. It is recommended to set these on a Carrier level.

Variable	Description and Possible Values
WCTPRe sponsesT o	This variable tells PageGate to include the sendResponsesToID field in the message envelope. A value of 'none' will instead send an allowResponse field with the value of 'false'

	Example: WCTPResponsesTo = email@domain.com
	This variable determines the domain name PageGate will pass during the WCTP negotiation sequence.
InternetDo main	Example: InternetDomain = exampledomain.com
	If this variable has already been implemented for SMTP/Email , it does not need to be specified again at a carrier level unless the receiving WCTP host requires you to specify a domain name other than your email domain.
From	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
	Example: From = CAD
То	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
	Example: To = 7818290500
Envelope From	This variable is similar to the 'From' variable found above. However, this setting will only change who the message is reported to be from during the communication session with the carrier. It has no effect the message content or values specified by any Macro.
Envelope FromAsE mail	Set to True or False. Example: EnvelopeFromAsEmail = True This variable forces the EnvelopeFrom value to be turned into an valid email address if it isn't already. This variable only applies to the SMTP and WCTP protocols. If this variable is not present in the template, a False value is assumed.
InterMess ageDelay	Set this to a number of milliseconds (1000 = 1 second). This variable tells PageGate to delay for the specified number of milliseconds after delivering each message.

Variables for TAP

These variables control how PageGate implements the TAP protocol. It is recommended to set these on a Carrier level.

Variable	Po ssi ble Val ues	Examp le Statem ent	Description
ModemWa keupCom mand	Tex t	Modem Wakeup Comman d = Custom Variable Here	If your modem requires something other than AT <cr> to wake up, use this variable to specify the necessary command.</cr>
From	Tex t	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Tex t	To = 7818290 500	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
lgnoreCD	Tru e Fal se	lgnoreC D = True	This variable tells PageGate to ignore the Carrier Detect signal when establishing a connection.
InterMessa geDelay	Milli sec ond s	InterMes sageDel ay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.

Variables for Raw TCP

These variable control how PageGate implements Raw TCP communication. It is recommended to set these on a Carrier level.

Variable	Po ssi ble Val ues	Example Statemen t	Description
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UseTelnet	Tru e Fal se	UseTelnet = True	This variable tells PageGate to negotiate telnet terminal capabilities upon connection
From	Tex t	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Tex t	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
InterMess ageDelay	Milli sec ond s	InterMessag eDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.

Variables for Raw Serial

These variables control how PageGate implements Raw Serial communication. It is recommended to set these on a Carrier level.

Variable	P os si bl e Va lu es	Example Statemen t	Description
ModemW akeupCo mmand	Te xt	ModemWak eupComma nd = Custom Variable Here	This variable is used if a custom initialization string is required to engage the serial line.
From	Te xt	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.

То	Te xt	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
lgnoreCD	Tr ue Fa Ise	IgnoreCD = True	This variable tells PageGate to ignore the Carrier Detect signal when connecting to a serial line. If this variable is not present, a False value is assumed.
InterMess ageDelay	Mil lis ec on ds	InterMessag eDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.

Variables for TONE

Variable	P os si bl e Va lu es	Example Statemen t	Description
ModemW akeupCo mmand	Te xt	ModemWak eupComma nd = Custom Variable Here	This variable is used if a custom initialization string is required to engage the serial line.
From	Te xt	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Te xt	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
lgnoreCD	Tr ue Fa Ise	IgnoreCD = True	This variable tells PageGate to ignore the Carrier Detect signal when connecting to a serial line. If this variable is not present, a False value is assumed.

InterMess ageDelay	Mil lis ec on ds	InterMessag eDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
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Variables for UCP

Variable	P os si bl e Va lu es	Example Statemen t	Description
ModemW akeupCo mmand	Te xt	ModemWak eupComma nd = Custom Variable Here	This variable is used if a custom initialization string is required to engage the serial line.
From	Te xt	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Te xt	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.
IgnoreCD	Tr ue Fa Ise	lgnoreCD = True	This variable tells PageGate to ignore the Carrier Detect signal when connecting to a serial line. If this variable is not present, a False value is assumed.
InterMess ageDelay	Mil lis ec on ds	InterMessag eDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.

Content Modification Variables

These variables modify the subject line and message text values processed by the template.

Variabl e	Pos sibl e Valu es	Exampl e Stateme nt	Description
StripNo nPrinta ble	True or Fals e	StripNon Printable = True	Non-printable characters are things like carriage returns, line feeds and other white space characters. By default, this value is Globally set to False. This value should be set to True for Carriers that use the SMTP protocol. Also, if you want PageGate to remove all non-printable characters from the body of a message, this value should be set to True. If this variable is not present, a False value is assumed.
StripAl pha	True or Fals e	StripAlph a = True	This variable tells PageGate to remove all alpha characters from a message, thereby leaving the message with only numeric characters. For example, if this variable is set to True, it would turn this message: This is a test 1234 in to this message: 1234 If this variable is not present, a False value is assumed.
Expand Tabs	True or Fals e	ExpandT abs = True	This variable replaces all tab characters with 4 spaces. This applies to both subject and message text. If this variable is not present in the template, a False value is assumed.
StripCh aracter s	See Des c.	See Descripti on.	This variable removes the specified characters from all message subjects and bodies controlled by this template. Multiple delimiters can be specified and you will need to separate each value by a pipe ' ', which functions as an OR statement. For example, this statement will remove all asterisks: StripCharacters = * This statement will remove all asterisks, semicolons and colons: StripCharacters = * ; :

Variabless for Filter Scripts

These variables are used to modify the behavior of a filter script.

Variable	Description	Example Statement
	This applies a filter to processed data. This allows the interfaces to apply the initial layer of data sorting and collection and then applies the filter to the result.	
	GetAscii Standard polling: Filter is applied	
	against temp file with recipient, sender	
	and message	
	Advanced polling: Filter is applied against temp file with recipient, sender and message, and after lookup substitution	
Interface Filter	GetMail Filter is applied against temp file with recipient, sender and message, after they have been extracted from the email, and decoding has taken place	InterfaceFilter = c: \092PageGateData\092Filters\092you rfilter.xml
	GetSerial Filter is applied against temp file with recipient, sender and message, and after lookup substitution	
	GetTap Filter is applied against each message that is received. The file processed by PGFilter will have ld as first line, second line blank, and message on remaining lines.	
	GetWeb Filter is applied against temp file with recipient, sender and message	

This can be used on an interface or global level. If used in an interface, it applies the filter to that interface. If used on a global level, it applies the filter to all input from all interfaces.

This applies a filter to raw, unprocessed data. This applies the filter before the interface has a chance to read the data. The specific behavior varies depending on the interface in question.

GetAscii

Standard polling: Filter is applied against the raw text file before GetAscii tries to process it

Advanced polling: Filter is applied against each record that is found, before it is processed any further (record pattern matching done first)

GetMail

RawInterf aceFilter

Filter is applied against the raw file received from the PageGate mail server process. All headers are intact and no decoding has taken place yet. Envelope values for recipient and sender are not available for modification in the raw mail file (because they are read from the envelope).

GetSerial

Filter is applied against each record found before it is processed any further (record pattern matching is done first)

GetTap

Filter is applied against each message that is received.

GetWeb

RawInterfaceFilter = c: \092PageGateData\092Filters\092you rfilter.xml

	Filter is applied against raw text file created by webgate.exe CGI program This can be used on an interface or global level. If used in an interface, it applies the filter to that interface. If used on a global level, it applies the filter to all input from all interfaces.		
	This applies a filter to outbound		
	messages.		
	This can be applied on a recipient,		
	carrier, connector or global level.		
	If used in a recipient template, all		
	messages delivered to that recipient	ConnectorFilter = c:	
Filter	will be processed through the filter.	\092PageGateData\092Filters\092you	
	If used in a carrier template, all	rfilter.xml	
	messages delivered through that		
	carrier will be processed through the		
	filter.		
	If used in the program template, it		
	applies to all output from the program.		
	This applies a filter to the messages delivered by a connector. This filter can only modify the contents of a message and cannot modify the recipient or sender information.	Filter = c:	
Connecto rFilter	This can be applied on a connector or global level.	\092PageGateData\092Filters\092you rfilter.xml	
	If used in the program template, it		
	applies to all connectors in the		
	program.		
SubjectFi Iter	This applies a filter to the subject line of any outbound email. This value is only referenced by the SMTP protocol and is not referenced by other protocols.	SubjectFilter = c: \092PageGateData\092Filters\092you rfilter.xml	

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This can be applied on a recipient, carrier, connector or global level.

If used in a recipient template, all SMTP/email messages delivered to that recipient will have their subject lines processed through the filter.

If used in a recipient template, all SMTP/email messages delivered to through that SMTP/email carrier will have their subject lines processed through the filter.

If used in the program template, all SMTP/email traffic sent from the system will have its subject line processed through the filter.

Macros

This is the master list of all Macro variables that can be used in a <u>Subject</u> or <u>Text</u> Template.

Variable	Description
% InternetDo main%	This variable inserts the setting specified Internet Domain Setting.
%Subject %	This variable inserts the Subject text.
% SubjectDel imiter%	This variable inserts the Subject Delimiter.
% Message %	This variable inserts the body of the Message.
%Sender %	This variable inserts the Sender of the Message.
% SenderMa ilbox%	If the Sender value is an email address, this variable inserts only the portion of the Sender's Address before the @.

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% SenderDo main%	If the Sender value is an email address, this variable inserts only the portion of the Sender's Address after the @.
% Recipient %	This variable inserts the Recipient field of a Recipient's record or Group field of a Group record.
% RecipientF ullName%	This variable inserts the Full Name field of a Recipient's record or the Description field of a Group record.
% OriginalRe cipient%	This variable inserts the intended Original Recipient of a message. For example, if the message was originally addressed to a group, this will be the group's name.
% LastRecipi ent%	This variable inserts the Last Recipient a message delivery attempt was addressed to. this can be used when a message has "failed over" to another recipient, to insert the previous recipient's name.
% RecipientI d%	This variable inserts the ID/PIN field of a Recipient's record.
% Recipient Mailbox%	If the Recipient of a message is an email address, this variable inserts only the portion of the Recipient's Address before the @.
% Recipient Domain%	If the Recipient of a message is an email address, this variable inserts only the portion of the Recipient's Address after the @.
% Comment 1%	This variable inserts the Comment 1 field of a Recipient or Group's Record.
% Comment 2%	This variable inserts the Comment 2 field of a Recipient or Group's Record.
% Comment 3%	This variable inserts the Comment 3 field of a Recipient or Group's Record.
% Comment 4%	This variable inserts the Comment 4 field of a Recipient or Group's Record.

%Date%	This variable inserts the Date as specified by the operating system.
%Time%	This variable inserts the Time as specified by the operating system.
% MilitaryTim e%	This variable inserts the Time as specified by the operating system output in a 00:00 - 24:00 format.
% Requested Date%	This variable inserts the Date on which a request to deliver a message was requested.
% Requested Time%	This variable inserts the Time on which a request to deliver a message was requested.
% Requested MilitaryTim e%	This variable inserts the Time on which a request to deliver a message was requested output in a 00:00 - 24:00 format.
% TimeZone %	This variable inserts the Time Zone as specified by the operating system.
% ShortTime Zone%	This variable inserts the Time Zone as specified by the operating system output in short code.
%Station %	This variable inserts the PageGate Station ID value.
% LoginNam e%	This variable inserts the Windows Login Name of the user who performs a given action (such as sending a message).
% Computer Name%	This variable inserts the Windows Computer of the a computer that performs a given action (such as sending a message).
%Reliapage %	PageGate will sequentially number each message it sends to recipients. This is useful for detecting if a message has been missed (a number is missing).

Subject

The Subject section of a template controls the behavior of any Subject Line processed by this template.

Since Subject Templates may be applied on a Global, Carrier, Connector or Recipient level, it is entirely possible to create a standard format for all message subjects using a <u>Global Template</u>, then specify exceptions to this global rule in the <u>Carrier</u>, <u>Connector</u> or <u>Recipient</u> templates.

Generally speaking, the <u>SMTP or Email protocol</u> is the only protocol that actively references the Subject line during its protocol negotiation sequence. As such, you may want to format special Subject Templates for each of your SMTP carriers but that is not required. This can be also accomplished by a single <u>Global Template</u>, if you want to apply these settings to all messages.

When configuring a Subject template, you can use plain text, macros or a mix and match of both. Please see the Macros section for a list of variables that can be used in this section.

For example, you could format a subject template like this: Message from %Sender%

and any message processed by this template would include the text "Message from TheSenderValue" in the subject.

You could also use only plain text to configure a static subject. For example: Message from CAD

Or you could use only Macros. For example: %Date% %Time%

Text

The Message section of the template controls the output and format of the body of any message controlled by this template.

Since Message Templates may be applied on a Global, Carrier, Connector or Recipient level, it is entirely possible to create a standard format for all Messages using a Global Template, then specify exceptions to this global rule in the Carrier, Connector or Recipient templates.

When configuring a Text template, you can use plain text, macros or a mix and match of both. Please see the <u>Macros</u> section for a list of variables that can be used in this section.

For example, you could format a text template like this:

%Date% %Time% %Messsage%

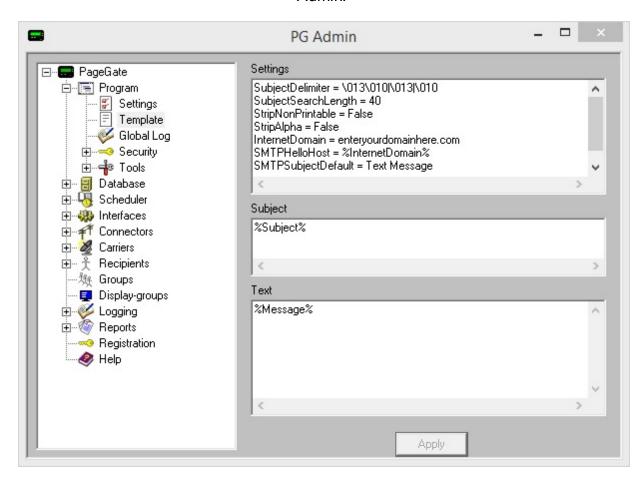
and any message processed by this template would have the date and time stamp before the body of the message.

You could also completely override messages processed by this template by using plaintext and not referencing the %Message% variable. For example: This is a message from your automated messaging system.

or

You have received a notification on %Date% at %Time%. Global Templates

PageGate's Global Template is contained in the Program - Template section of the PG Admin.

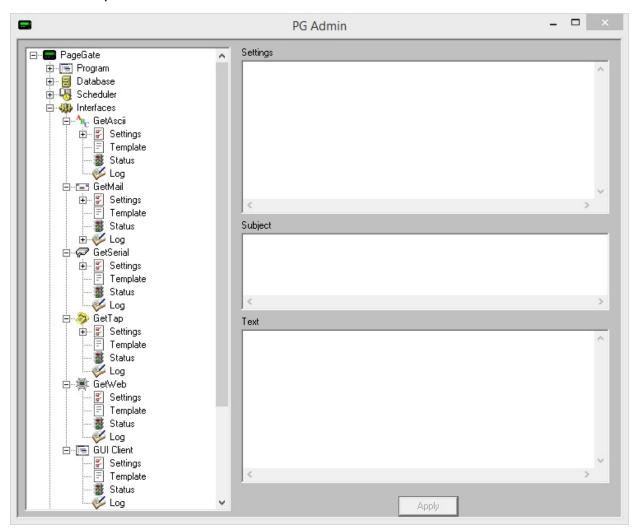


The Global Template controls the behavior of all messages processed by the PageGate Server. When <u>configuring PageGate to send Email/SMTP</u>, it is incredibly important to properly configure certain global variables. There are also some template variables that modify certain commands and responses to commands in certain protocol negotiations as well.

PageGate is pre-loaded with a default template that provides most base functionality, so you may not need to modify the Global Template. However, it is very, very important to make sure that this Template is formatted properly.

To format the Global Template, please review the <u>Template Components</u> section of the documentation.

Interface Templates



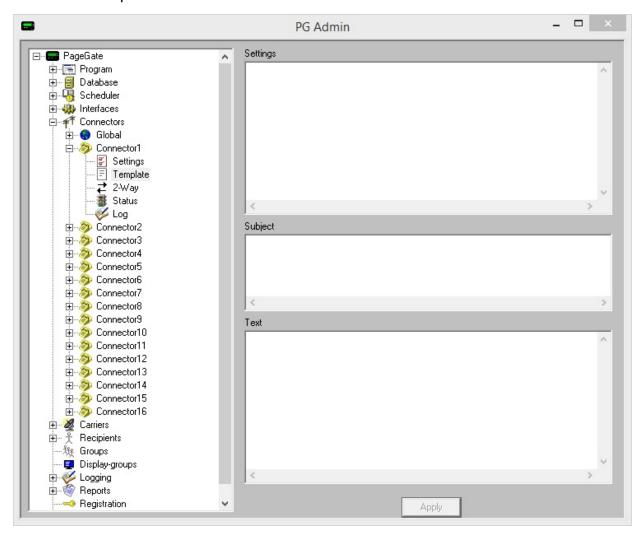
Templates applied to a specific interface format, or re-format, all messages processed by this interface. Interface level variables will override the same variables specified on a Global level but will be overridden by variables specified at a Connector, Carrier or Recipient level.

For example, if the Interface Template formats the message to standardize the Sender's Name to a static value, but a Connector, Carrier or Recipient template specifies a different value, messages passed through those Carriers or to those Recipients will use the

Sender's Name variable from their own templates and ALL other variables from higher level templates.

To format an Interface Template, please review the <u>Template Components</u> section of the documentation.

Connector Templates

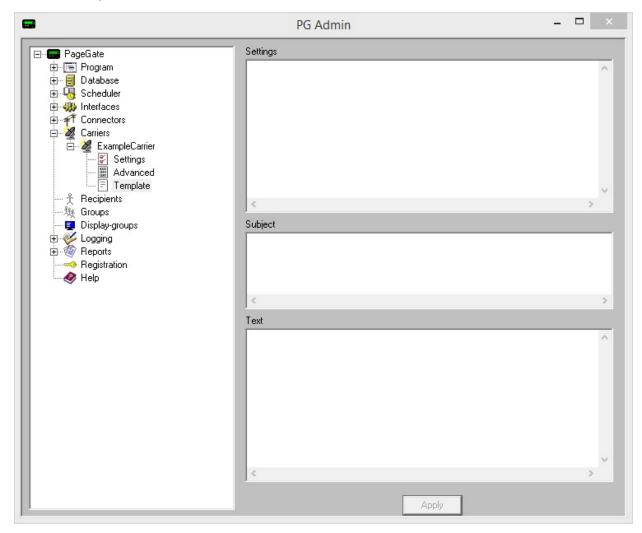


Templates applied to a specific connector format, or re-format, all messages passed through this connector. Connector level variables will override the same variables specified on a Global or Interface level but will be overridden by variables specified at a Carrier or Recipient level.

For example, if the Connector Template formats the message to standardize the Sender's Name to a static value, but a Carrier or Recipient template specifies a different value, messages passed through those Carriers or to those Recipients will use the Sender's Name variable from their own templates and ALL other variables from higher level templates.

To format a Connector Template, please review the <u>Template Components</u> section of the documentation.

Carrier Templates



Carrier level templates are most often used to apply specific settings or formatting requirements to your method of delivery and most of the variables you'll apply will be in the Settings section. For more information, please review the Template Components section of the documentation. Applying a custom template to a carrier tells PageGate to format messages delivered via this carrier in a certain way. Most carriers do not require a custom template but there may be things you want to customize about the look, output or specific format of your messages.

However, some protocols require a formatted Text template to function in the first place.

The following protocols require a custom text template to function properly:

- HTTPGET
- HTTPOST

- Fax
- FaxSrv

All delivery protocols have specific variables that can be used in the Settings section of a corresponding carrier template. These variables can be broken down in to a few categories: Protocol Delivery and Content Modification

Protocol Delivery

These variables modify the behavior of a protocol and specify certain declarations that must be made during the protocol negotiation sequence.

Variables for SMTP

Variables for GSM-AT-IP

Variables for GSM-AT

Variables for HTTPGET

Variables for HTTPPOST

Variables for SNPP

Variables for WCTP

Variables for TAP

Variables for RawTCP

Variables for RawSerial

Variables for TONE

Variables for UCP

Content Modification

These variables modify the contents of the subject and message sections for messages this template applies to.

Click here for a list of content modification variables.

Templates for HTTP GET Carriers

Templates for HTTP GET carriers tell PageGate what variables and data to declare in the URL passed to the API.

All variables are declared in the 'Text' section of the template as follows:

|<name1>|<value1>|

|<name2>|<value2>|

etc.



Each value you specify will need to correspond to a variable that the receiving API will recognize. For example, let's say we wanted to send a message to an API that looked for to, from, subject and text as variables. We would need to format the text template as follows:

|to|%RecipientId%| |from|%Sender%| |subject|%Subject%| |text|%Message%|

NOTE: | a pipe character.

The following parameters can be specified in the 'Settings' section of an HTTP GET carrier

Variable	Poss ible Valu es	Example Statemen t	Description
Response Recipient	Recip ient Grou p	Response Recipient = A recipient or group's name as it exists in the PG Admin	When the HTTP GET transaction completes, the specified recipient or group will receive any responses from the receiving API/web host. For more information, please see the Two Way Messaging section of the documentation.
InterMessa geDelay	Millis econ ds	InterMessa geDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

Templates for HTTP POST Carriers

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

Templates for HTTP POST carriers tell PageGate how to interact and how to structure data passed to a web form, Web API or REST API.

It's important to gather as much information as you can about what API or webform you're interacting with and their documentation will typically provide required variables and how they need to be implemented.

Conceptually, the 'Settings' section of a POST carrier template tells PageGate if the API requires any special interaction and the 'Text' section determines what variables to declare and how to structure the message body.

These values can be used in the 'Settings' section of an HTTP POST carrier:

Variable	Pos sible Valu es	Exampl e Statem ent	Description
Response Recipient	Reci pient Grou p	Respon seRecip ient = A recipient or group's name as it exists in the PG Admin	When the HTTP GET or POST transaction completes, the specified recipient or group will receive any responses from the receiving API/web host. For more information, please see the Two Way Messaging section of the documentation.
HttpPostT ype	Hea dBo dy	HttpPostT ype = HeadBod y	This variable configures an HTTP POST carrier to provide header information followed by structured data, usually JSON or XML, in the body.
HttpSucce ssRespon se	Text	See Descript ion	This variable tells PageGate to scan any responses back from a GET or POST request for the required keywords or keyphrases. If those keywords or keyphrases are found, the message is treated as successfully delivered.

		I	
			This variable is both case and punctuation sensitive and PageGate will look for an exact match to what you enter.
			Multiple search terms may be used and you'll need to separate each item with a pipe.
			For example, this would only scan for the word success: HttpSuccessResponse = success
			This would scan for the word success in the <reply> tag:</reply>
			HttpSuccessResponse = <reply>success</reply>
			This would scan for the word success in the <reply> tag OR the word hijinks:</reply>
			HttpSuccessResponse = <reply>success</reply> hijinks
			This would scan for the word success OR the word hijinks OR the word actualization: HttpSuccessResponse = success hijinks actualization
			If this variable is included, any response to a GET/POST request that doesn't include the search term(s) will be treated as a failure.
			This variable tells PageGate to scan any responses back from a GET or POST request for the specified keywords or keyphrases. If those keywords or keyphrases are found, the message is treated as failed or rejected.
	Text	See Descript ion	This variable is both case and punctuation sensitive and PageGate will look for an exact match to what you enter.
HttpErrorR esponse			Multiple search terms may be used and you'll need to separate each item with a pipe.
			For example, this would only scan for the word failed: HttpErrorResponse = failed
			This would scan for the word success in the <reply> tag:</reply>
			HttpErrorResponse = <reply>failed</reply>

,	9		U
		This would scan for the word failed in the <reply or="" reject:<="" td="" the="" word=""><td>> tag</td></reply>	> tag
		HttpErrorResponse = <reply>failed</reply> reje	ect
		This would scan for the word failed OR the word OR the phrase object not found:	reject
		HttpErrorResponse = failed reject object not four	nd
		If this variable is included, any response to a	
		GET/POST request that includes the search term be treated as a failure.	n(s) will

This is how to use the 'Text' section of an HTTP POST carrier:

Each value you specify will need to correspond to a variable that the receiving API will recognize. For example, let's say we wanted to send a message using <u>Twilio's API</u>. We know they're looking that looked for to, from and body as variables. We would need to format the text template as follows:

|to|%RecipientId%| |from|%Sender%| |body|%Message%|

NOTE: | is a pipe character and is found on most keyboards above the backslash character, \.

Some APIs, like <u>MessageBird</u>, require an authentication variable in the body of the POST and those are declared like any other variable.

Example:

|Authorization|AccessKeyPasteYourAccessKeyHere|

|recipients|%RecipientId%| |originator|%Sender%| |body|%Message%|

Templates for Faxing

When sending a fax from PageGate, you may want to modify the output so that the information maintains the look of a facsimile transmission rather than raw text output.

To apply a template to a Fax or FaxSrv carrier, all you have to do is go in to the Template sub-section of that carrier. In the "Message" section, you can enter the template and all important variables.

The following is an **example** of a Faxing Template:

```
FROM <Your Name here>

TO: %Reci pi ent % %Comment 1% %Comment 2% %Comment 3% %Comment 4%

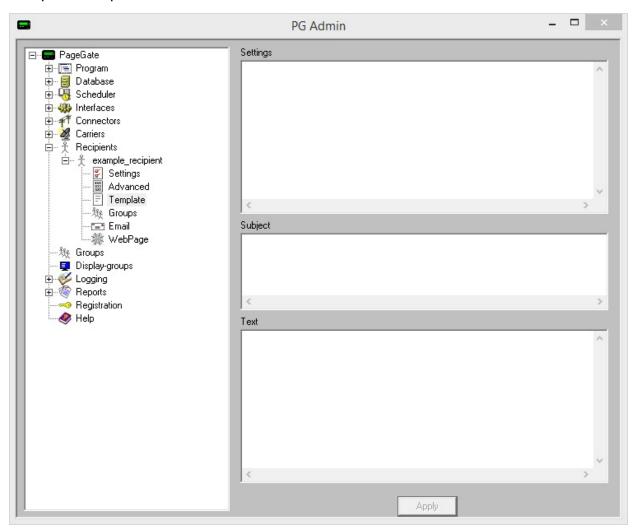
SENT: %Dat e% %Ti me%

SUBJECT: %Subj ect %

MESSAGE:

%Message%
```

After entering the template information, click on Apply. Recipient Templates



Templates applied to a specific Recipient format, or re-format, all messages passed to this Recipient. Recipient level variables will override the same variables specified in any other Template. Recipient level variables will not, and can not, be overridden by Global, Interface, Connector or Carrier templates.

For example, if the Recipient Template formats the message to standardize the Sender's Name to a static value, but a Carrier or Global template specifies a different value, messages passed to this Recipient will use the static Sender's Name value you've specified and will ignore any Sender's Name variables in the Global, Interface, Connector or Carrier level templates.

To format a Recipient Template, please review the <u>Template Components</u> section of the documentation.

Success and Failure Notification Templates

Note: This feature requires the GetMail Interface to be a part of your license.

This type of template is completely unlike the other Templates. These templates trigger a specific behavior within the program and are not contained within the Administrative GUI.

This feature will allow you to configure PageGate to send notifications when a message succeeds or when a message fails.

When a message is successfully delivered, PageGate looks for a file named successnotifylist.txt in the PageGate program folder. This file can contain a list of email addresses that will receive notification that the message was successful. You can use the special value %Sender % on one of the lines to have the sender of the message in the list.

In addition you will need to create a file named success.mtp and place it in the PageGate program directory. This file is used as a template for what is sent in the success notification message. It uses the same variables as the <u>Macros</u>.

The same process happens for a failed message, but it uses a failurenotifylist.txt and a failure.mtp file instead.

Create a successnotifylist.txt file in the PageGate folder with a single line containing %Sender%

Do the same for a failurenotifylist.txt file.

The success.mtp file should look like this:

Subject: Successful Message To %Recipient%

Message Info:

Recv: %RequestedDate% %RequestedTime%

Sent: %Date% %Time%

To: %Recipient% From: %Sender% Msg: %Message%

The failure.mtp file should look like this:

Subject: Failed Message To %Recipient%

Message Info:

Recv: %RequestedDate% %RequestedTime%

Fail: %Date% %Time%

To: %Recipient% From: %Sender% Msg: %Message%

Database

The Database section is where any database related settings and functions, like how much information to store in the database or synchronizing multiple PageGate servers, are configured.



Settings

This section controls message retention and archiving options.

Status

This section displays relevant information about the database, including file size.

• Tools



This section allows you to import and export recipients as well as rebuild the database in the event of corruption.

Password Protect

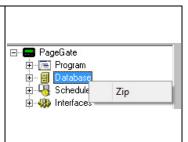
This section allows you to password protect the PageGate databases.

• Synchronization

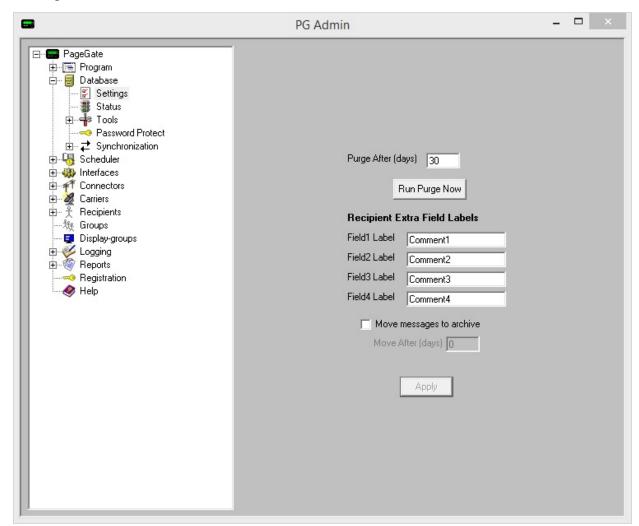
This section allows you to configure multiple PageGate servers to synchronize their data with each other.

Right clicking on Database will provide a context menu to Zip the database.

This will create a compressed file named pagegate.mdb.zip output in the PageGate database directory and is useful in the event that you need to email your database to Tech Support or for backup purposes.

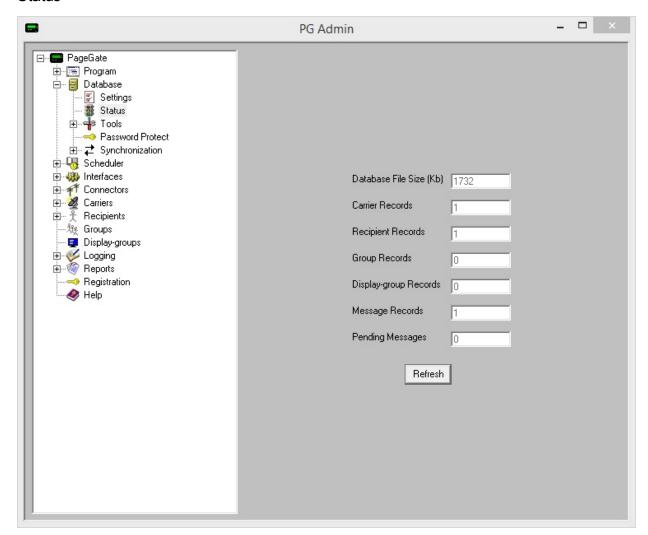


Settings



Setting	Function
Purge After (days)	This field sets the number of days that PageGate will keep old messages in the messages table. After X days, where X is the number you enter, PageGate will purge old messages from the database.
Run Purge Now	Messages are normally purged from the database during the midnight cleanup routine. Messages can be manually purged from the database by clicking this button.
Field 1, 2, 3, and 4 Label	Four extra pieces of information can be stored with each recipient and group. This is where you can set the labels that are shown with each piece of information.
Move messages to archive	Checking this option will allow PageGate to move "purged" messages to the <u>Archive Directory</u> .
Move After (days)	This determines the number of days that messages are moved to the <u>Archive Directory</u> .

Status

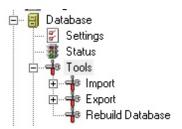


Setting	Function
Database File Size (Kb)	Displays the current file size of the database in kilobytes.
Carrier Records	Displays the current number of carrier records in the database.
Recipient Records	Displays the current number of recipient records in the database.
Group Records	Displays the current number of group records in the database.
Display-group Records	Displays the current number of Display-group records in the database.
Message Records	Displays the current number of messages in the messages table.
Pending Messages	Displays the current number of messages waiting to be processed in the messages table.



Tools

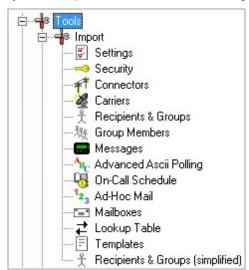
This section allows you to import and export information as well as rebuild the database in the event of corruption.



- Import
- Export
- Rebuild Database

Import

This section allows you to import information in to PageGate's database.

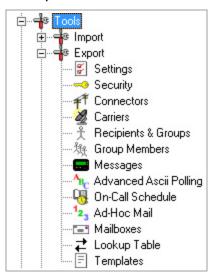


Menu Item	Function
Settings	Imports the global settings for PageGate, including registration and Program Settings .
Security	Imports the Security <u>Settings</u> and <u>Users</u> .
Connectors	Imports the Connectors settings.
Carriers	Imports a list of Carriers and their respective settings.
Recipients & Groups	Imports a list of Recipients and Group names.
Group Members	Imports a list of recipients as members of a group.

Messages	Imports the messages contained within the text file.
Advanced ASCII Polling	Imports the Advanced Polling settings for the GetASCII module.
On-Call Schedule	Imports a schedule to send messages to on-call groups.
Ad-Hoc Mail	Imports a range of PIN numbers for use with the ad-hoc mail option.
Mailboxes	Imports information about the mail settings for each recipient or group.
Lookup Table	Imports the Lookup Table settings used with the GetASCII and GetSerial interfaces.
Templates	Imports all Templates from a selected text file.
Recipients & Groups (simplified)	A simplified form of the Recipients and Groups import file.

Export

This section allows you to export information from the PageGate database.



Menu Item	Function
Settings	Exports the existing global settings for PageGate, including registration and <u>Program Settings</u> .
Security	Exports the existing Security <u>Settings</u> and <u>Users</u> .
Connectors	Exports the existing Connectors settings.
Carriers	Exports the Carriers and their respective settings.
Recipients & Groups	Exports a list of Recipients and Group names.
Group Members	Exports a list of recipients currently set as members of a group.
Messages	Exports the messages table of the database.
Advanced ASCII Polling	Exports the Advanced Polling settings for the GetASCII module.
On-Call Schedule	Exports the existing schedule of messages to send to on-call groups.
Ad-Hoc Mail	Exports the range of PIN numbers set for use by the ad-hoc mail option.
Mailboxes	Exports the mail settings set for each recipient or group.
Lookup Table	Exports the Lookup Table settings used by the GetASCII and GetSerial interfaces.
Templates	Exports all Templates to text files.

Rebuild Database

This option will compact and rebuild the PageGate database. When you click on the Rebuild Database option, you will receive the following prompt:



All of PageGate's modules **must** be stopped in order to rebuild the database. This can be accomplished by clicking on the pager icon in the Windows system tray (next to the clock) and choosing 'Quit' or 'Stop'.

No part of PageGate can be running when this rebuild takes place. Please be sure to shut down all instances of the GUI Client and PageGate Admin.

When you click on Yes, the rebuild will take place. After the rebuild has finished, you should receive this prompt:



After you click on OK, it is safe to run the PageGate Server, Admin and Client once more.

If PageGate is running as an Application, restart PageGate by choosing 'PageGate Server' from the Windows start menu.

If PageGate is running as a Windows Service, click on the pager icon in the Windows system tray (next to the clock) and choose 'Start' from the popup menu.

Note: An external rebuild utility is included with PageGate. It is called 'Jetcomp.exe' and can be found in the PageGate program directory. This utility can be used in cases where the PG Admin program is unable to start due to certain types of database corruption. After the database is rebuilt, you will have to restart the PageGate Server module.

Password Protect

The password protect option allows you to set a password specifically on the database. This does not have anything to do with the other <u>Security</u> features of PageGate; Entering a database password will restrict access to the database from programs like Microsoft Access.

When you click the Password Protect option, you will receive this prompt:



When you click on Yes, you will be prompted with this:



Enter a password, then click on Apply.

When you receive the following prompt:



Click OK for the password to be accepted.

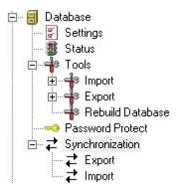
NOTE: Without the password, the database cannot be opened. If this password is set, the next time each PageGate GUI Client is started, the you will need to enter it (you will be prompted for it automatically). The PageGate GUI Client will only prompt for this password once, and then it will be stored for the future (unless the password is changed again).

DO NOT LOSE THIS PASSWORD.

If this password is lost, the database may become permanently inaccessible!

Synchronization

This section allows you to configure multiple PageGate servers to synchronize their data with each other.



Export

This section should be used on the primary PageGate server that is going to push updates out to the secondary PageGate server(s).

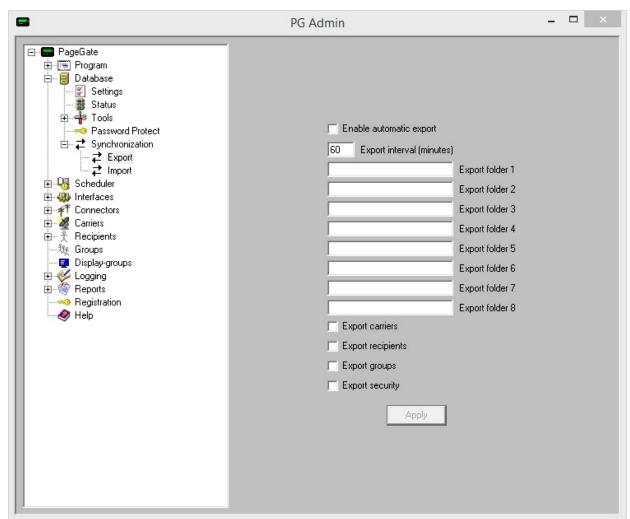
• Import

This section should be used on the secondary PageGate server(s) that should receive updates from the primary PageGate server.

Export

NOTE: This option should only be configured on the Master PageGate Server. Do NOT configure the Synchronization Export on Secondary PageGate Servers.

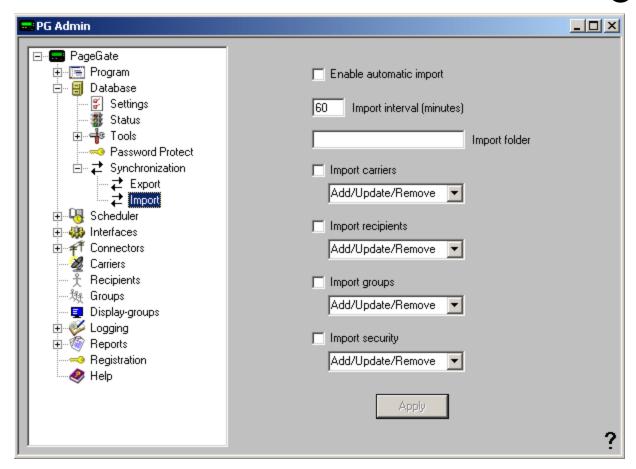




Option	Function
Enable automatic export	This option will export changes made to the master database to each of the slave databases.
Export interval (minutes)	This field sets the interval at which changes are exported to the slave databases. It is not recommended to have this set lower than once per hour.
Export folder 1 - 8	This field sets the path to the database directory of the secondary servers.
Export Carriers	This option will export the carriers from the master database to the secondary databases.
Export Recipients	This option will export the recipients from the master database to the secondary databases.
Export Groups	This option will export the groups from the master database to the secondary databases.
Export Security	This option will export the security settings and users from the master database to the secondary databases.

Import

NOTE: This option should only ever be set on the Slave PageGate Servers. Do NOT configure the Synchronization Import on the Master PageGate Server.



Option	Function
Enable automatic import	Enabling this option will import changes made to the master database into each the slave database this copy of the Admin controls.
Import interval (minutes)	This field sets the interval at which changes are imported to the slave database. It is not recommended to have this set lower than once per hour.
Import Carriers	Enabling this option will import the carriers from the master database.
Import Recipient	Enabling this option will import the recipients from the master database.
Import Groups	Enabling this option will import the recipients from the master database.
Import Security	Enabling this option will import the security settings and users from the master database.

When enabling the option to import Carriers, Recipients, Groups, or Security Settings, you will be presented with four options:

Option	Function
Add/Update/Rem ove	This option will allow the imported entries to Add new recipients, Updated existing recipients, or Remove existing recipients that are not on the list of recipients to be imported.
Add Only	This option will only allow new recipients to be added upon import.
Update Only	This option will only update existing recipients upon import.
Add/Update	This option will allow new recipients to be created and existing recipients can be updated upon import.

Scheduler

The PageGate Scheduler is the main, core processing component of the PageGate server. While there aren't many settings controlled by this section of the PG Admin, it is incredibly important to run the PageGate Scheduler as all functions for all APIs and Connectors are governed by the Scheduler.



Settings

This section controls how often the PageGate Scheduler polls the PageGate database.

Status

This section displays the running status of the PageGate Scheduler.

Log

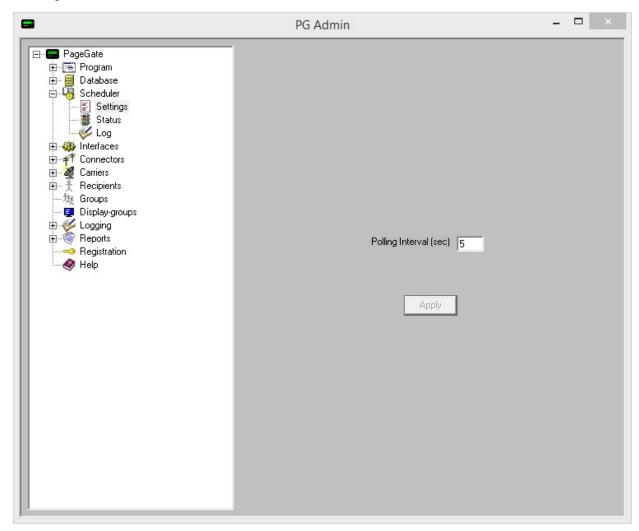
This section contains a log of everything recorded by the PageGate Scheduler.

Right clicking on Scheduler will provide a context menu with two options.

• Start Selecting this option will start the PageGate Scheduler, if stopped.

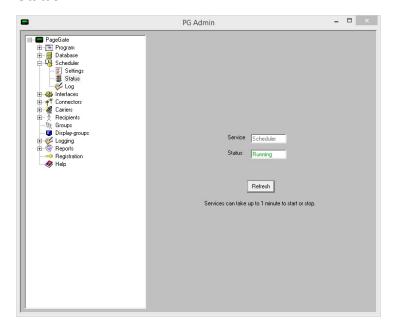
• Stop Selecting this option will stop the PageGate Scheduler, if started.

Settings



In the Settings of the PageGate Scheduler, you can modify the scheduler's polling interval. This value represents how often, in seconds, the scheduler should poll the database for new information but does not affect how often the scheduler updates the database when processing messages.

Status



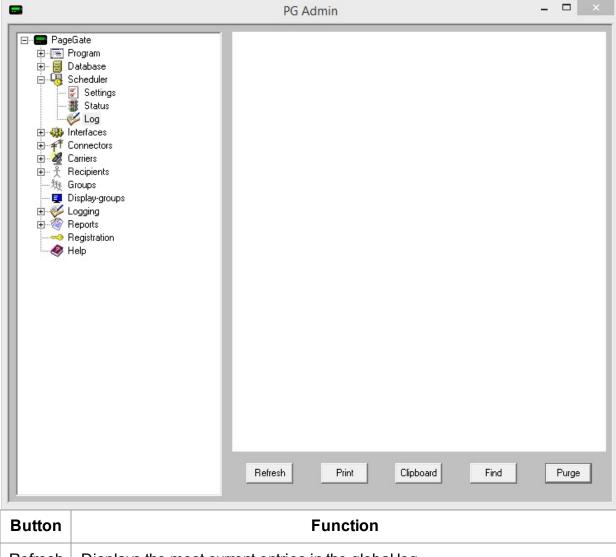
The status subsection of Scheduler will show you if the PageGate Scheduler is currently running or stopped. There are three ways to start the scheduler:

- 1) Restart the PageGate Server application or service.
- 2) Reboot the computer.
- 3) To manually stop or start the PageGate Scheduler, right click on the word Scheduler. When you do, it will come up with the Start and Stop options.

Note: If the PageGate Scheduler is not enabled in the <u>"Run on this server"</u> section of the <u>PageGate Admin's program settings on the PageGate server</u>, the scheduler will not be able to run and PageGate will not function properly.

Log

If logging is enabled, this log shows a summary of the events generated by the PageGate Scheduler.



Button	Function
Refresh	Displays the most current entries in the global log.
Print	Sends a copy of everything listed in the Scheduler Log to a printer.
Find	Allows you to search for a variable (such as a carrier or recipient name).
Purge	Deletes the entirety of the Scheduler Log.
Clipboar d	Copies the contents of the Scheduler Log to the Windows Clipboard, allowing it to be pasted into another application.

Interfaces

The Interfaces section is where you'll configure your APIs to accept information from different sources. Each interface controls behavior for that API, so it's important to understand which API you want to implement. <u>Click here</u> for more information on how PageGate accepts messages.



The APIs that can be configured in the PageGate Admin are:

GetASCII

Also known as the Command Line/ASCII interface, this interface is capable of monitoring a directory or series of directories on the local hard drive or across the network for ascii file output and also provides a command line interface for other applications to use. This module allows many 'off the shelf' and custom applications, such as SolarWinds' Network Performance Monitor, SolarWinds' Orion, Paessler's PRTG and several CAD programs, among many others, to tell PageGate when a message needs to be sent.

GetMail

This interface allows you to receive SMTP/Email traffic and translate it in to outbound messages in a different format. For example, you could email a message to PageGate to deliver as a message to pagers, cell phones and/or other email addresses.

GetSerial

This interface allows PageGate to monitor a serial/RS232 port, virtual or physical, for raw data text strings to be parsed in to outbound messages.

GetTap

This interface gives PageGate the ability to monitor a serial port or modem to receive TAP transmitted pages, effectively allowing PageGate to function as a TAP receiver or a TAP terminal for any devices and systems that can transmit that protocol, such as a Motorola or Zetron paging terminal.

GetWeb

This interface provides a CGI executable that can be hosted on a web server and a series of pre-formatted templates to publish a website messaging interface. Web Developers can use this web server interface to send messages to PageGate from their webpages (HTML, ASP, JavaScript, Java, etc.). This means that you can host messaging websites on your local intranet or, if GetWeb is interfaced with an outward facing web server, on the internet.

GUI Client

A Windows based program installed on workstations on the same network as the PageGate server. This program provides a graphical user interface to send and schedule messages.

Additional APIs



PageGate also supports additional APIs that are not controlled by the PageGate Admin. These include the <u>SNPP Server</u>, <u>TAP IP Server</u>, <u>TAP to ASCII</u> and <u>Serial to ASCII</u> modules.

Right clicking on Interfaces will provide a context menu with two options.

• Start All Selecting this option will start all configured and enabled Interfaces, if stopped.

• Stop All Selecting this option will stop the all configured and enabled Interfaces, if started.

GetAscii

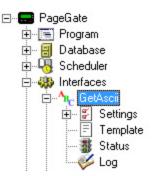
ASCII is, literally, text. What you're reading on the screen right now are ascii characters. HTML, XML and JSON are examples of command formatted ascii text, which means that GetASCII can be configured to read in and recognize values in those formats as well. However, this API is one of PageGate's powerhouse interfaces and is used in a variety of implementations.

For example, if you use the SNPP Server or TAP over IP Server, these reference the GetASCII module. This module also powers the <u>Filter Pack</u> and can be implemented with the <u>2-way</u> reply system for <u>use with cellular infrastructure</u> to allow you much greater control over who receives what replies.

On the surface, GetASCII is incredibly easy to implement, especially if you're just having it read input from network monitoring programs and CAD systems. However, you can implement incredibly intricate and complex operations to process data from numerous locations, then format and reformat that data into any configuration want before delivering it.

For example, if you have a mapping data program that outputs an ascii log file, you can configure GetASCII to monitor that log for any mapping data, then feed that data through a <u>filter pack</u> to turn it in to an alert to your personnel.

It's also important to note that PageGate can use the <u>File</u> protocol to write files that GetASCII can process. This allows you to take information from other APIs, whether PageGate's or a web API, and pass it to the GetASCII module for message and data parsing.



Settings

This section controls the implementation of the GetASCII module. This is where you configure all directories and text processing parameters.

Status

This section displays the running/not running status of the interface.

Template

This section allows you to configure a custom template for messages processed by this API.

Log

This section is a record of all activity performed by the interface.

This interface allows PageGate to monitor a directory or series of directories on the local hard drive or across the network for ascii file. This API also provides a command line interface for other applications to use. This module allows many 'off the shelf' and custom applications, such as SolarWinds' Network Performance Monitor, SolarWinds' Orion, Paessler's PRTG and several CAD programs, among many others, to tell PageGate when a message needs to be sent.

In addition to the interface presented in the PageGate Admin, the GetASCII module provides two <u>command line interface</u> executables, allowing other programs to pass parameters to the GetASCII module directly. For more information, please see the <u>Command Line Interface</u> section of the documentation.

There are two ways to implement GetASCII: Standard Polling and Advanced Polling

Standard Polling

GetASCII has a standard file format and file naming convention that it will recognize without the need to configure specific parsing parameters. You'll need to configure the basic polling directory to tell PageGate where to look for these files. Once you have that specified, you can output a file with a .asc extension in the folder and PageGate will read it in, looking for the standard format. The file should be formatted as follows:

Recipient Value Sender Value Message Value

So, for example, we could create a file named test.asc, format it as shown below and drop it in the basic polling directory:

ITDept

CAD

This is a test

and that would send a message to the recipient or group named ITDept from the sender CAD and the message would say "This is a test".

Notes:

The basic polling directory must be configured to use Advanced Polling. Typically speaking, we recommend creating c:\PageGateData\ASCI\ as the basic polling folder. It is not recommended to have the Standard and Advanced polling locations pointed at the same folder. This can cause file read errors if an advanced routine polls for files with the extension .asc

Advanced Polling

When your data won't follow the standard file format or naming convention, you'll need to configure the Advanced Polling options to tell GetASCII how to interpret the ascii data it needs to handle. The Advanced Polling is used when you want to process free floating, HTML, XML, JSON or other ascii formatted data.

For more information, please see the Advanced Polling section of the documentation.

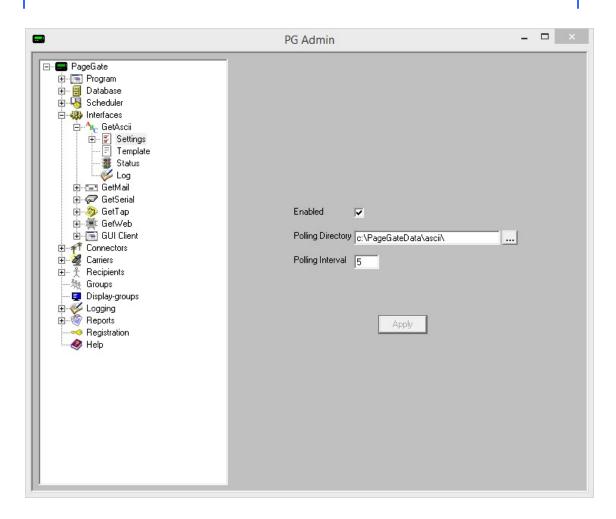
Right clicking on GetASCII will provide a context menu with two options.

• Start
Selecting this option will start the GetAsscii interface, if stopped.

• Stop
Selecting this option will stop the GetASCII interface, if started.

Settings

This section and its sub-sections contain all configuration settings for the implementation of the GetASCILAPI.



The Settings section determines the basic polling directory. When using <u>Standard Polling</u>, this is the directory that will host the <u>command line executables</u> as well as the directory to which you should output standard formatted files for processing.

Setting	Function
Enabled	When the Enabled checkbox is checked, it tells the PageGate server to run the GetASCII module.
Polling Directory	This field specifies basic polling location to monitor for ascii files named something.asc to be processed. This value can be set to a local path (c:\PageGateData\ascii for example) or a UNC path (\server\path\). If you're running PageGate as a Windows Service and GetASCII is referencing a UNC path, you must provide a service account to the PageGate GetASCII Windows service.
Polling Interval	This field determines how often the GetASCII module looks for new ascii files in the specified Polling Directory.

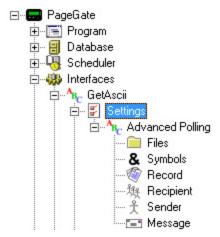
Expanding the Settings menu will display the following menu items:



<u>Click here</u> to go to the <u>Advanced Polling</u> section of the documentation for more information.

Advanced Polling

This section is where you'll configure PageGate's advanced ascii parsing parameters. This is most often used when you need to process ascii data that doesn't follow PageGate's standard format or file naming convention. This allows you to process XML, HTML, JSON and similarly styled content as well as the ability to process free floating data within an ascii file.



Files

This section determines the directory or series of directories that GetASCII should look for content within and also specifies style of implementation as well as the naming convention of the files being worked with.

Symbols

This section determines certain special characters and their functions.

Record

This section is where you configure the pattern recognition to determine what represents the start and end of valid data to process.

Recipient

This section is where you configure the pattern recognition to determine what represents who the messages should go to. This section can also be set to a static recipient, to indicate that all traffic processed from the serial line should be sent to the specified individual or group.

Sender

This section is where you configure the pattern recognition to determine what represents who or what sent the messages. This section can also be set to a static sender to indicate that all traffic processed from the serial line should declare that it is from the specified value.

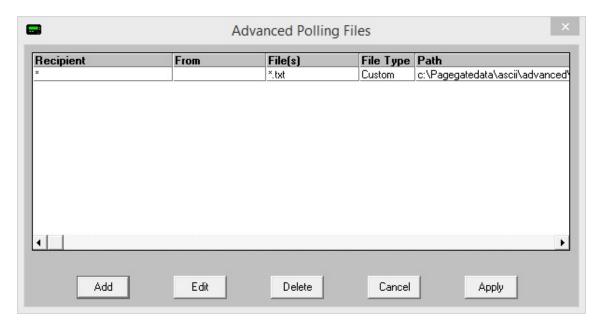
• Message

This section is where you configure the pattern recognition to determine what represents the body of the message to be delivered. This section can also be set to a static message to provide the message text to be delivered.

Advanced Polling Example

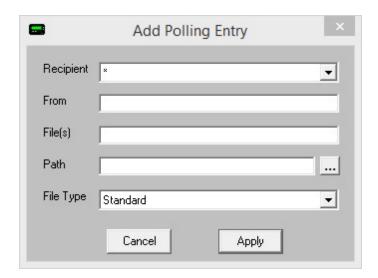
This section shows an example of how to implement the GetASCII module's Advanced Polling to process XML, HTML and similar ascii formatted languages.

This section determines the directory or series of directories that GetASCII should look for content within and also specifies style of implementation as well as the naming convention of the files being worked with.



Option	Function
Add	Adds a new Advanced Polling rule.
Edit	Edits an existing Advanced Polling rule
Delete	Removes an existing Advanced Polling rule.
Cancel	Cancels all recent changes.
Apply	Applies new changes and rules.

To add an Advanced Polling Files option, click on the Add button.



Setting	Function
Recipient	By default, this field is set to all recipients (*). If the asterisk option (*) is used, this tells GetASCII that the recipient information will be contained within the file(s) processed. If you select a recipient or group from the dropdown list, all messages contained in the files specified in the 'File(s)' and 'Path' fields will be delivered solely to the selected recipient or group.
From	This field is only used when a specific recipient or group is specified in the Recipient field. If a specific recipient is used in the recipient field above, the 'From' field becomes part of each message collected by this polling entry.
File(s)	This field determines the naming convention of the file(s) you want GetASCII to look for. Wildcard characters (* and ?) may be used. For example, an entry of *.txt will poll all files that end with .txt An entry of *.?at will collect files like cat, bat, and rat, but not 'flat'. An entry of custom*.xml will collect files like custom1.xml and custom_naming_scheme.xml or customer1234.xml
Path	This field determines the directory that this Advanced Polling entry will monitor. This can be set to a local path (c:\ascii for example) or a UNC path (\\server\path\). Wildcard characters are not valid in this field.

If you're <u>running PageGate as a Windows Service</u> and your Advanced Polling is referencing a UNC path, you must <u>provide a service account</u> to the PageGate GetASCII Windows service.

There are four options for the file type of each Advanced Polling rule:

Standard

Selecting this option tells GetASCII that text file(s) being referenced are in the <u>standard ascii format</u>.

This is option is usually used when files are in the <u>standard ascii</u> <u>format</u>, but aren't named with the standard .asc extension or are written to a directory other than the <u>basic polling directory</u>. When the Standard file type is selected, the other Advanced Polling sections (<u>Symbols</u>, <u>Record</u>, <u>Recipient</u>, <u>Sender</u>, and <u>Message</u>) are **not** referenced in the file read process.

Custom

When the Custom file type is selected, the other Advanced Polling options (<u>Symbols</u>, <u>Record</u>, <u>Recipient</u>, <u>Sender</u>, and <u>Message</u>) are used. Each text file must contain a single message, but the message information is not in the regular format and must be extracted from the text file using the Advanced Polling configuration.

File Type

Adding

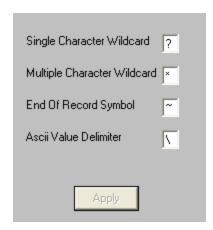
The ascii file specified by the File(s) field periodically has message information added to the end of the file. With this file type the GetASCII Interface will read in any new data added to the file and extract the message information using the Symbols, Recipient, Sender, and Message options.

Changing

The ascii file changes periodically. Each time the file specified in the File(s) field is changed, the GetASCII Interface will attempt to extract message information from it using the Symbols, Recipient, Sender, and Message options. This option is different from Adding because the Adding option only looks at the end of the file specified. The Changing option assumes the entire file will be modified, not appended to.

Symbols

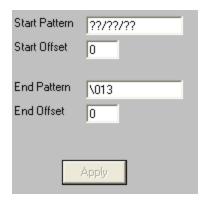
This section determines certain special characters and their functions.



Setting	Function	
Single Character Wildcard	When scanning through the ascii data, this character can be used stand in for any single character. For example, let's say you use Fire? That would tell the GetASCII module to recognize any word that begawith Fire and had one extra letter on the end. So, it would recognize Fire or Fired but would not recognize Fire alone.	an
	As another example, let's say you use ??/??/???? That would tell GetSerial to recognize any date stamp in the two digmonth, two digit day, four digit year configuration.	git
	When scanning through the ascii data, this character can be used stand in for any character or group of characters.	to
Multiple Character Wildcard	For example, let's say you use Fire* That would tell the GetASCII module to recognize any instance of the working regardless of whether there are any characters after the word. So, would recognize Fire, Fired, Fires, Firehouse or Fireman and it wou also recognize 'Fire' in phrases like Fire Sale or Fire Department.	it
	As another example, let's say you use *age* That would tell GetSerial to recognize any reference to the three letter age close to each other, regardless of whether that was in the work PageGate or NotePage or ageless or damage. Any instance of the three characters together will be recognized.	rd
End of Record Symbol	This character stands for the end of record symbol.	
ASCII Value Delimiter	This symbol is used to help represent non-printable characters the normally can't be typed like horizontal tabs, carriage returns and lir feeds. This character is always followed three numbers which represe the decimal value for a character.	ne
	For example, this represents a carriage-return: \013	
	For a full list of ascii codes, visit http://www.asciitable.com/	
Apply	Applies all changes made to the Symbols.	

Record

This section is where you configure the pattern recognition to determine what represents the start and end of a message sequence.



• Start Pattern

This value determines the start of relevant information. For example, let's say this is the contents of a file you need to process:

SubscriberName=AgencyToDispatch [MESSAGE]
Line1=Type of call
Line2=Address information.
Line3=Cross-street information.
Line4=Dispatcher notes.

You would want to use * as the Start Pattern as we want GetASCII to recognize that the relevant data begins at the very first character of the file.

Start Offset

This value determines how many characters before or after the identified start pattern to begin character processing. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will begin the data record 5 characters after the first character in the Start Pattern. A value of -5 means that GetSerial will begin the data record 5 characters before the first character the Start Pattern.

Using our example, you would set the Start Offset to 0 to indicate that the relevant data begins at the very first character read in.

Note: the value -999 has special meaning, and is typically used in conjunction with the use of the Multiple Character Wildcard in the search strings.

If -999 is used as a Start Offset, an offset of one character past the string that matches the start pattern, is used. This will cause the number of characters that were found to match the Start Pattern to be skipped, even though the actual number of characters in the Start Pattern matching string aren't known ahead of time.

End Pattern

This value determines the end of relevant information. For example, let's say this is the contents of a file you need to process:

SubscriberName=AgencyToDispatch [MESSAGE]
Line1=Type of call
Line2=Address information.
Line3=Cross-street information.
Line4=Dispatcher notes.

You would want to use ~ as the End Pattern as that tells PageGate that the very last character in the file is the end of relevant information.

End Offset

This value determines how many characters before or after the identified end pattern to end character processing. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will end the data record 5 characters after the last character in the End Pattern. A value of -5 means that GetSerial will end the data record 5 characters after the last character the End Pattern. To use our earlier example, if we don't want the word END to be a part of the record processed, we would set the Start Offset value to -3. That way, the data record ends three characters before the last character of END.

Note: the value -999 has special meaning, and is typically used in conjunction with the use of the Multiple Character Wildcard in the search strings.

If -999 is used as an End Offset, an offset of one character before the string that matches the end pattern, is used. This will cause the number of characters that were found to match the End Pattern to be skipped, even though the actual number of characters in the End Pattern matching string aren't known ahead of time.

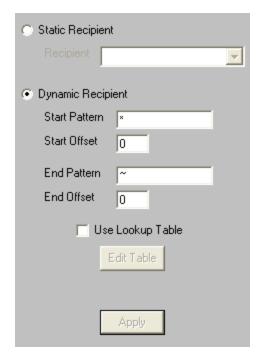
Recipient

IMPORTANT

This character, unless specified otherwise in the <u>Symbols</u> section, represents the character that tells PageGate that the three characters following it represent an ascii decimal value/ascii code. For instance, if you want to tell PageGate to look for a carriage return, you would use a backslash and the three character ascii decimal value representing a carriage return. Written out, that would be \013

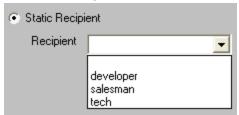
For a full list of ascii codes, visit http://www.asciitable.com/

This section is where you tell GetASCII what represents who the messages should go to.



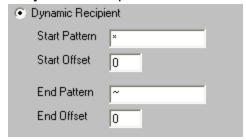
There are two possible configurations you can use:

Static Recipient



Selecting this option tells the GetASCII module that all messages processed from the ascii file should go to the specified recipient or group.

• Dynamic Recipient



Selecting this option tells the GetASCII module to look for specific patterns that denote where the recipient information is located in within the <u>record</u>.

Start Pattern

This value determines the first character in the recipient value.

For example, let's say this is the <u>record</u> identified and let's also say that who the message needs to go to is contained in the SubscriberName= field:

SubscriberName=AgencyToDispatch

[MESSAGE]

Line1=Type of call

Line2=Address information.

Line3=Cross-street information.

Line4=Dispatcher notes.

You would want to use SubscriberName= as the Start Pattern of the recipient information. Note: Start patterns are included in the recipient processed unless you specify the otherwise with the Start Offset. See below.

Start Offset

This value determines how many characters before or after the identified start pattern to accept as the recipient value. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will begin looking for the recipient value 5 characters after the first character in the Start Pattern. A value of -5 means that GetSerial will begin looking for the recipient value 5 characters before the first character the Start Pattern.

To use our earlier example, we would want a Start Offset of 15 because there are 15 characters in SubsciberName= and we don't want that text included as part of the recipient or group designation.

End Pattern

This value determines the last character in the recipient value.

Using our earlier example, we've already specified that the recipient value starts with SubscriberName= but what does it end with?

SubscriberName=AgencyToDispatch [MESSAGE]

Line1=Type of call

Line2=Address information.

Line3=Cross-street information.

Line4=Dispatcher notes.

This is where things are ultimately up to your preferences. The first thing that technically follows the recipient name in our example is a carriage return followed by a line feed (represented visually as a line break but as two ascii codes/characters in the text being processed), not the text [MESSAGE]. However, you could tell PageGate to use either \013 (the ascii value representing a carriage return) or [MESSAGE] as the End Pattern as both

clearly identify the end of recipient information. However, you would use a different End Offset for each. See below.

End Offset

This value determines how many characters before or after the identified End Pattern to stop character recognition. The discovered value is not included in the overall statement. This field can be set to positive or negative values.

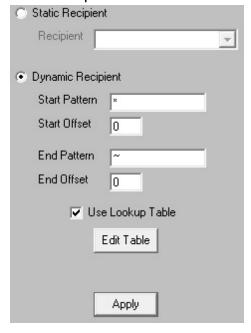
For instance, a value of 5 means GetASCII will stop looking for the recipient value 5 characters after the first character in the End Pattern. Using our earlier example, if your End Pattern is [MESSAGE] and you specify a value of 5, the data for the recipient will end with [MESS and you don't want that. If your End Pattern is \013 and you specify a value of 5, the data for the recipient will end with <CR><LF>[ME and you don't want that.

On the other side of the coin, a value of -5 means GetASCII will stop looking for the recipient value 5 characters before the first character the End Pattern. Using our earlier example, if your end pattern is either \013 or [MESSAGE] and you specify a value of -5, the first five characters in the recipient line will be lost and you don't want that.

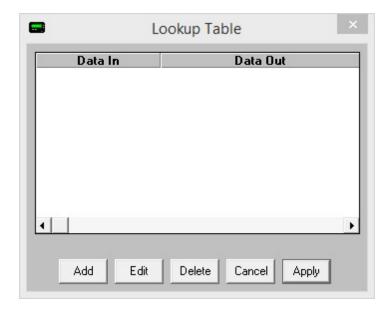
To use our earlier example, if we have \013 specified as the End Pattern, you would use a End Offset of -1 thereby telling GetASCII not to include the carriage return as pert of the recipient or group designation. If we have [MESSAGE] specified as the End Pattern, we would use an End Offset of 0.

Lookup Table

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed. To enable this feature, check Use Lookup Table and click Edit Table.

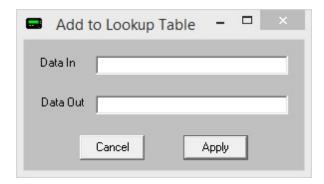


This feature enables PageGate to perform basic search and replace commands on values read in as the Recipient, which allows you to interchange or translate values as needed.



Button	Function
Add	Adds a new search and replace value.
Edit	Edits an existing search and replace value.
Delete	Removes an existing search and replace value.
Cancel	Closes the table without saving changes.
Apply	Applies updates made to the table.

When adding new entries to the table, you'll be presented with this dialog:



• Data In

This value represents what you want to search for. Wildcard characters can be used.

Data Out

This value represents what you want to replace the text with.

For example, if we had a 'Data In' value of oranges and a 'Data Out' value of bananas, the program would replace any instance of the word oranges with the word bananas.

To provide a more practical example, let's use the <u>example from the GetASCII - Settings - Recipient section</u> of the documentation and say that we needed to translate AgencyToDispatch in to recipient or group name as you've entered it in to the PageGate Admin. You could use a 'Data In' value of AgencyToDispatch and a 'Data Out' value of Station14 so any messages that came addressed to the literal text AgencyToDispatch were routed to the group called Station14 in PageGate.

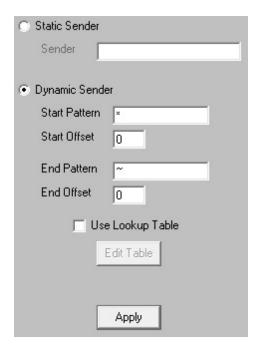
Sender

IMPORTANT

This character, unless specified otherwise in the <u>Symbols</u> section, represents the character that tells PageGate that the three characters following it represent an ascii decimal value/ascii code. For instance, if you want to tell PageGate to look for a carriage return, you would use a backslash and the three character ascii decimal value representing a carriage return. Written out, that would be \013

For a full list of ascii codes, visit http://www.asciitable.com/

This section is where you tell GetASCII who or what sent the messages.



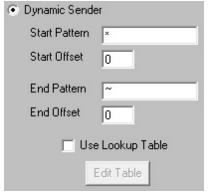
There are two possible configurations you can use:

Static Sender



Selecting this option tells the GetASCII module that all messages processed should identify themselves as having been sent from the specified value. This is the value used in the majority of GetASCII implementations.

• Dynamic Sender



Selecting this option tells the GetASCII module to look for specific patterns that denote where the sender information is located in within the record.

Start Pattern

This value determines the first character in the sender value.

Start Offset

This value determines how many characters before or after the identified start pattern to accept as the sender value. This field can be set to positive or negative values.

For instance, a value of 5 means that GetASCII will begin looking for the sender value 5 characters after the first character in the Start Pattern. A value of -5 means that GetASCII will begin looking for the sender value 5 characters before the first character the Start Pattern.

End Pattern

This value determines the last character in the sender value.

End Offset

This value determines how many characters before or after the identified End Pattern to stop character recognition. This field can be set to positive or negative values.

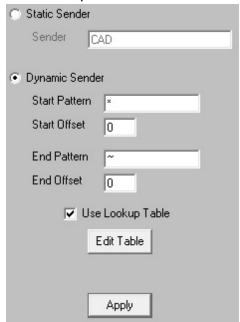
For instance, a value of 5 means that GetASCII will stop looking for the sender value 5 characters after the first character in the End Pattern. A value of -5 means that GetASCII



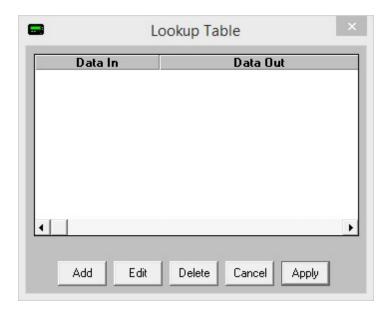
will stop looking for the sender value 5 characters before the first character the End Pattern.

Lookup Table

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed. To enable this feature, check Use Lookup Table and click Edit Table.

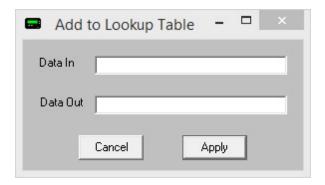


This feature enables PageGate to perform basic search and replace commands on values read in as the Sender, which allows you to interchange or translate values as needed.



Button	Function
Add	Adds a new search and replace value.
Edit	Edits an existing search and replace value.
Delete	Removes an existing search and replace value.
Cancel	Closes the table without saving changes.
Apply	Applies updates made to the table.

When adding new entries to the table, you'll be presented with this dialog:



Data In

This value represents what you want to search for. Wildcard characters can be used.

Data Out

This value represents what you want to replace the text with.

For example, if we had a 'Data In' value of oranges and a 'Data Out' value of bananas, the program would replace any instance of the word oranges with the word bananas.

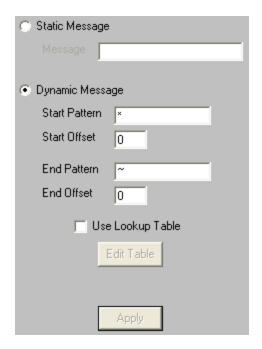
To provide a more practical example, let's say we wanted to translate A834 in to Dispatch Center. You would use a 'Data In' value of A834 and a 'Data Out' value of Dispatch Center. Message

IMPORTANT

This character, unless specified otherwise in the <u>Symbols</u> section, represents the character that tells PageGate that the three characters following it represent an ascii decimal value/ascii code. For instance, if you want to tell PageGate to look for a carriage return, you would use a backslash and the three character ascii decimal value representing a carriage return. Written out, that would be \013

For a full list of ascii codes, visit http://www.asciitable.com/

This section is where you tell GetASCII what represents the message.



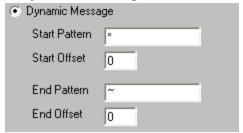
There are two possible configurations you can use:

Static Message



Selecting this option allows you to specify a pre-canned message when a file is read in. This is useful for configuring a system so that any time a file appears in the folder GetASCII is monitoring, a pre-canned message is sent to the necessary recipients and groups.

Dynamic Message



Selecting this option tells the GetASCII module to look for specific patterns that denote where the message is located in within the <u>record</u>.

Start Pattern

This value determines the first character in the message value.

To use <u>the example we've been working with</u>, the record originally started as: SubscriberName=AgencyToDispatch

[MESSAGE]

Line1=Type of call

Line2=Address information.

Line3=Cross-street information.

Line4=Dispatcher notes.

We then configured GetASCII to treat SubscriberName=<value> as the recipient line, which removes it from the data string. So, by the time the Message processing happens, this is the remaining data:

[MESSAGE]

Line1=Type of call

Line2=Address information.

Line3=Cross-street information.

Line4=Dispatcher notes.

As a result, we would want a Start Pattern of Line1= to indicate that the message begins with that text. This effectively removes the [MESSAGE] line as irrelevant data.

Start Offset

This value determines how many characters before or after the identified start pattern to accept as the message. This field can be set to positive or negative values.

For instance, a value of 5 means that GetASCII will begin looking for the message 5 characters after the first character in the Start Pattern. A value of -5 means that GetASCII will begin looking for the message 5 characters before the first character the Start Pattern.

Using our example, you would want to set the Start Offset to 6 because there are 6 characters in Line1=

End Pattern

This value determines the last character in the message.

In our example, you would want to set the End Pattern to the <u>End of Record symbol</u> in the <u>GetASCII - Settings - Symbols</u> section. This tells PageGate that the last character of the data line is the termination point for the message. So, by configuring a Start Pattern of Line1= and ~ for the End Pattern, we're telling PageGate that all of the remaining relevant data is between Line1= and the end of the file.

End Offset

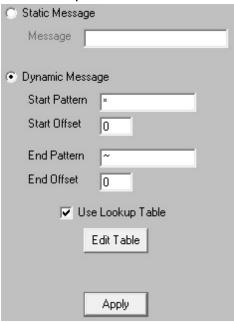
This value determines how many characters before or after the identified End Pattern to stop character recognition. This field can be set to positive or negative values.

For instance, a value of 5 means that GetASCII will stop looking for the message 5 characters after the first character in the End Pattern. A value of -5 means that GetASCII will stop looking for the message 5 characters before the first character the End Pattern.

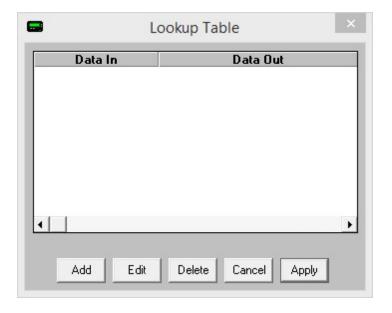
In our example, you would set the End Offset to 0 to indicate that the last character of the file was the last relevant character to process.

Lookup Table

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed. To enable this feature, check Use Lookup Table and click Edit Table.

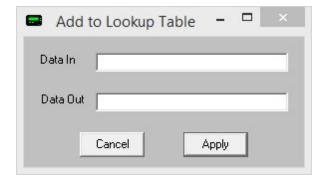


This feature enables PageGate to perform basic search and replace commands on values in the body of the message, which allows you to interchange or translate values as needed.



Button	Function
Add	Adds a new search and replace value.
Edit	Edits an existing search and replace value.
Delete	Removes an existing search and replace value.
Cancel	Closes the table without saving changes.
Apply	Applies changes made to the table.

When adding new entries to the table, you'll be presented with this dialog:



• Data In

This value represents what you want to search for. Wildcard characters can be used.

Data Out

This value represents what you want to replace the text with.



For example, if we had a 'Data In' value of oranges and a 'Data Out' value of bananas, the program would replace any instance of the word oranges with the word bananas.

To provide a more practical example, let's use the <u>example from the GetASCII - Settings - Message section</u> of the documentation. This is the message being processed:

Type of call

Line2=Address information.

Line3=Cross-street information.

Line4=Dispatcher notes.

Assuming that * is your <u>multiple character wildcard</u>, to remove the text Line2=, Line3=, Line4=, etc from the body of the message, you would use the following:

Data In: *Line2=*

Data Out: Leave this field completely empty.

Data In: *Line3=*

Data Out: Leave this field completely empty.

and so on.

Advanced Polling Example

PageGate's GetASCII module can be configured to read any ascii formatted content, regardless of whether that content is a stream of text or a formatted language like HTML, XML, Jave, etc. In this example, you'll be going through how to configure PageGate to read XML content but you can use these steps just as easily for HTML, JSON or another ascii text formatted language by replacing the XML flags with the appropriate language's flags/tags/statements/etc.

First, we'll need to create a basic polling directory and get the module online:

- 1) In Windows, create a sub-directory of your PageGateData folder and name it ASCII Note: This is arbitrary and you can name the folder whatever you like). For example, if you're using PageGate's default directories, you would create C:\PageGateData\ASCII\
- 2) Open the PG Admin.
- Go to Interfaces GetASCII Settings.
- 4) Set the "Polling Directory" to the ASCII folder you created in step 1. By default, C: \PageGateData\ASCII\
- 5) Check Enabled.
- 6) Click Apply.
- 7) When prompted, you do want to enable this for all existing groups and recipients.

- 8) Go to Program Settings.
- 9) In "Run on this server", check GetASCII
- 10) Click Apply.
- 11) When prompted for credentials, please reference the <u>Windows Credentials</u> section of the Run Style documentation.
- 12) When "Switching Run Styles" goes away, open the Windows Services list

Next, we'll need to configure the GetASCII module to process your XML content:

- 1) Go to Interfaces GetASCII Settings Advanced Polling Files.
- 2) Click Add.
- 3) Specify the following:

Recipient: *

From: Enter a sender's value. CAD, for example.

File(s): If you want the program to read all XML files from the folder, use *.xml If you want the program to only read for a specific file name, use filename.xml Combinations of the two are allowed. For example, you could use 2017*.xml and the program would only look for files that began with 2017 and had an extension of xml. Path: Enter the directory the .xml files will be in.

File Type: Custom

- 4) Click Apply.
- 5) Click Apply.
- 6) Go to Interfaces GetASCII Settings Advanced Polling Record
- 7) Specify the following:

Start Pattern: *
Start Offset: 0

End Pattern: ~ End Offset: 0

General Notes: This effectively tells PageGate that the data to be processed is the first character in the file until the last character of the file.

- 8) Click Apply.
- 9) Go to Interfaces GetASCII Settings Advanced Polling Recipient.



10) If you want all of the processed content always delivered to the same recipient or group, select Static Recipient and select the recipient or group to which these messages should be delivered.

If there is an XML tag that denotes who these messages should go to, select Dynamic Recipient and specify the following:

Start Pattern: <YourRecipientXMLTag>

Start Offset: Set this to the number of characters contained in your xml tag. For example, if your XML tag is <Recipient>, you would set Start Offset to 11 as there are 11 characters in <Recipient>.

End Pattern: </YourRecipientXMLTag>

End Offset: 0

- 11) Click Apply.
- 12) Go to Interfaces GetASCII Settings Advanced Polling Sender.
- 13) Select Static Sender and enter a value in to the Sender's Name field. For example, you could use CAD.
- 14) Click Apply.
- 15) Go to Interfaces GetASCII Settings Advanced Polling Message.
- 16) Select Dynamic Message and specify the following:

If the entire message is contained within a single XML tag, you would specify the following:

Start Pattern: <XMLMessageTag>

Start Offset: 0

End Pattern: </XMLMessageTag0>

End Offset: 0

For example, let's say that your message is contained in XML content like this: <Message>The entire body of the message is contained in this field.</Message>

You would use the following:

Start Pattern: <Message>

Start Offset: 0

End Pattern: </Message>

End Offset: 0

As another example, let's say your message is containex in XML content like this: <Message>

You would use this:

Start Pattern: <Message>

Start Offset: 0

End Pattern: </Message>

End Offset: 0

If the message is contained across multiple XML tags with no over-arching header tag, you would specify the following:

Start Pattern: <FirstRelevantTag>

Start Offset: 0

End Pattern: </LastRelevantTag>

End Offset: 0

For example, let's say your message is contained in XML content like this:

<message line 1>First line of the message</message line 1>

<irrelevant data>Value</irrelevant data>

<irrelevant data>Value/irrelevant data>

<message line 2>Second line of the message</message line 2>

<message line 3>Third line of the message<message line 3>

You would use the following:

Start Pattern: <message line 1>

Start Offset: 0

End Pattern: </message line 3>

End Offset: 0

- 17) Check "Use Lookup Table". This function will allow us to remove the raw text XML tags from the text to be delivered.
- 18) Click Edit Table.
- 19) Click Add.



General Notes: The Data In value represents the data you want either removed or modified. If you want the data removed, eave the Data Out field completely empty.

For example, if you wanted to change every instance of the word pecans to the word oranges, you would use this:

Data In: *pecans*
Data Out: oranges

However, if you wanted to remove every instance of the word pecans, you would use this:

Data In: *pecans*

Data Out:

To make this a bit more relevant for XML content, however, let's say we wanted to completely remove an entire XML statement as it didn't contain any relevant data. We would use this:

Data In: *<value>*</value>*

Data Out:

With that, we're telling PageGate to completely remove the entire XML statement from the text processed. For example, *<DATE>*</DATE>* tells PageGate that there isn't any relevant data in the <DATE> tag and to simply remove the entire section from what needs to be delivered.

As another example, if you want the data in the <ServerName> tag but you don't want the actual text <ServerName> to appear in the text delivered, you would use this:

Data In: *<ServerName>*

Data Out:

and you would want to add an additional entry to remove the </ServerName> closing tag:

Data In: *</ServerName>*

Data Out:

Just to note, anything expressed as a \XXX value is an ASCII code (http://www.asciitable.com/). For example, \009 is a tab, \013 is a carriage return and \010 is a line feed.

For example, if you want PageGate to replace all instances of three carriage return/line feed statements in a row and with a single carriage return/line feed, you would use this:

Data In: *\013\010\013\010\013\010*

Data Out: \013\010

As another example, if you want to remove all tabs from the data, you would use this:

Data In: *\009*
Data Out:

- 20) After you've added the necessary entries, click on Apply.
- 21) Click Apply.

Status

This section displays the current status of the GetASCII module.

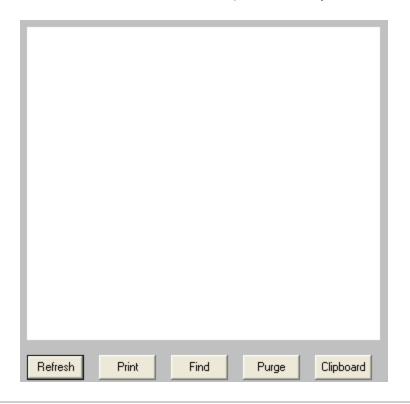


If the status of GetASCII is stopped, it indicates that the module is not running and this can be caused by a few things.

- GetASCII will need to be checked in the <u>"Run on this server"</u> section in the <u>Program Settings section of the PageGate Admin.</u>
- Enabled must be checked in the <u>settings of the GetASCII module</u>.
- The PageGate server must be running. If you're running PageGate as an application,
 launch the PageGate server from the shortcut in the start menu. If you're running
 PageGate as a Windows Service, start the PageGate service. For more information,
 see the Run Styles section of the documentation.

Log

This log is a record of information and traffic processed by the GetASCII module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

Command Line Interface

The Command Line Interface function of GetASCII can be used to send messages to PageGate from:

Command Line	Messages can be sent from a command prompt.
Windows Command Line	Messages can be sent from the Windows Run menu.
Third Party Applications	Messages can be sent from any application that can issue a command line command (shell command).
Custom Applications	This is a popular interface for developers who want an easy way to add messaging to their application.

The most basic components of the Command Line interface are the sendpage.exe and sendpage32.exe files. By default, these files are hosted in the <u>Polling Directory</u> specified in the <u>base settings</u> of the GetASCII module but you can copy these files to any location to have them function and output at that location.

The difference between the sendpage.exe and sendpage32.exe files is that the sendpage.exe is intended to be run from a DOS Command Line or by 16-bit applications and sendpage32.exe is a 32-bit program, which is what most Windows based applications will use.

To pass a message to sendpage.exe or sendpage32.exe, use this command structure:

sendpage.exe <recipient> <sender> <message>

<recipient> should be replaced with the intended recipient or group's name as it exists in the PageGate Admin. This value keys specifically off of the Recipient field for recipients and the Group field for groups. This is a required value.

<sender> should be replaced with who or what is sending the message. This is a required value.

<message> should be replaced with what you want the body of the message to say.

Ad-Hoc with the Command Line interface

It's also important to note that you can use <u>Ad-Hoc recipients</u> with the command line interface. When using the sendpage.exe or sendpage32.exe command line executables to pass messaging parameters to PageGate, this is how to call on an ad-hoc recipient: <location of files>\sendpage32.exe <ad-hoc recipient name>;<value>;<value>;<etc><sender> <message>



For example, if you have the sendpage32.exe hosted in c:\PageGateData\ASCI\ and your ad-hoc recipient's name is 'ah', then you sent the following command:

c:\PageGateData\ASCIl\sendpage32.exe ah;7819999998;8290500234 CAD This is a test message

That would send a message to the phone numbers specified from the sender 'CAD' and the message would say 'This is a test message'.

GetMail

PageGate has a fully functional mail server engine as a core part of the program but without the GetMail module, you only ever access the outbound functions of this mail server. The GetMail module unlocks the receiving portion of our mail server engine and a few features associated with the mail server in general. This allows you to receive SMTP/Email traffic and translate it in to outbound messages in a different format. For example, you could email a message to PageGate to deliver as a message to pagers, cell phones and/or other email addresses.

Enabling this interface will allow you to access the <u>Email sub-section</u> of the recipients and groups in the PageGate Admin. This allows you to have all traffic to a recipient or group forwarded to the specified email address as well as allowing PageGate to host a POP accessible mailbox on the PageGate server for this recipient or group.

As mentioned above, GetMail allows you to receive SMTP/Email traffic and translate it in to outbound messages in a different format and it can receive email/SMTP messages in one of two ways:

Sub-domain hosting

The best method of email integration is to have PageGate host a sub-domain off of your existing domain. To do this, you'll want to talk to your mail server administrator and ask them to create this sub-domain for you, then redirect the MX record for that sub-domain to the internal IP address of the PageGate server. For example, let's say you have an email domain of example.com. So, you might have something.example.com or messaging.example.com or pg.example.com created and redirected to the internal IP of the PageGate server. At that point, PageGate 'owns' the sub-domain and processes all traffic intended for it.

So, let's say that we have a group called sales_team and we have GetMail configured to use messaging.example.com. You could send an email to sales_team@messaging.example.com and that email would be delivered to all members of the group as it exists in PageGate.

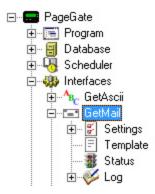
POP Mailbox

POP is a relatively antiquated method of receiving email and many modern mail servers don't support it. However, if your mail server does still support POP mailboxes, you can

configure GetMail to periodically check those email addresses, then read in any email waiting in the mailbox and deliver that traffic to a recipient or group of your specification.

If your POP server requires SSL/TLS authentication, be sure to set the Pop_Delivery_Port registry value to 995. For more information, please see the <u>Advanced Server Settings</u> section.

With the ubiquity of email, more and more modern applications are integrating the ability to send email. If your application has the ability to send email, it can easily be integrated with PageGate by using the GetMail module. It is worth noting that this interface can be used to integrate applications running on different platforms (Unix, Mac, etc.).



Settings

This section controls the implementation of the GetMail API.

Status

This section displays the running/not running status of the interface.

Template

This section allows you to configure a custom template for messages processed by this API.

Log

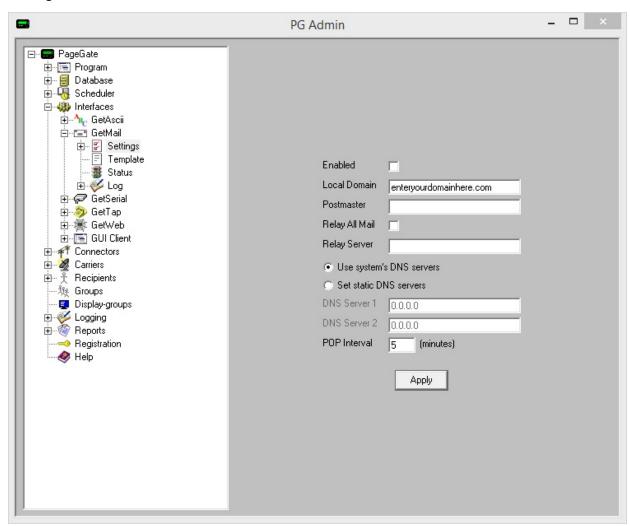
This section contains a log of all activity recorded by the PageGate Mail Server and GetMail module.

Right clicking on GetMail will provide a context menu with two options.

• Start
Selecting this option will start the GetMail module and PageGate Mail Server service, if stopped.

• Stop
Selecting this option will stop the GetMail module and PageGate Mail Server service, if started.

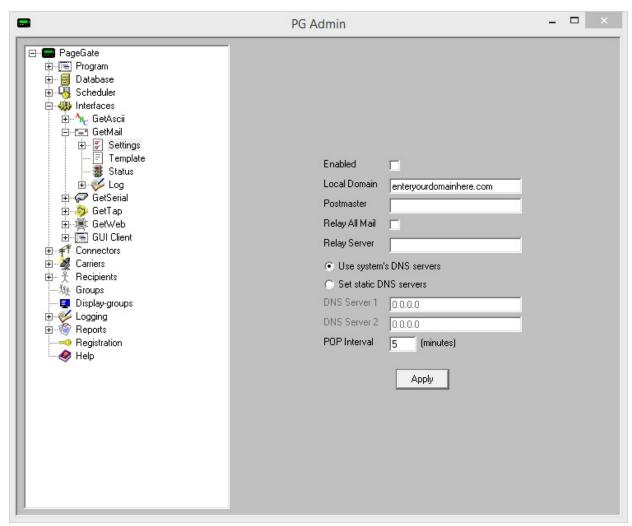
Settings



Setting	Function
Enable	When the Enabled checkbox is checked, it tells the PageGate server to run the
d	GetMail module.
	This is a multi-purpose field. If the GetMail module is only being configured to send or check email, this field needs to be the sending domain. For example, if

	your email address was support@notepage.com , you would put notepage.com in the Local Domain as that is the domain the messages are being sent from.
	If the GetMail module is being configured to function as a POP3 server, the Local Domain needs to be set to the domain used by PageGate when receiving email. This is an internet domain name, not a Microsoft networking domain. Only email with an address in this domain will be accepted by PageGate. This setting must be a valid domain name for to work properly (Note: an IP address can be used here instead of a domain name, if email is addressed to match. This is commonly done during testing when a domain name has not yet been assigned to this machine).
Postma ster	The Postmaster setting needs to be set to a valid email address. This email address is sent all warnings, alerts, and bad messages generated by the GetMail module. Leaving this field blank will drop all messages that would normally go to the postmaster. The Postmaster setting is also used when no valid Sender's Information is present in an outbound email message.
Relay All Mail	This option should only be checked if port 25 is not open on your network. To determine whether port 25 is open or closed on your network, please run a Portstand .
Relay Server	This field allows you to specify a relay server for SMTP messages to be routed through. This option should only be used if port 25 is not open on your network. To determine whether port 25 is open or closed on your network, please run a Port Scan.
DNS Server 1	This field allows you to specify the primary DNS server for SMTP delivery and is only valid if port 25 is open on your network. To determine whether port 25 is open or closed on your network, please run a Port Scan .
DNS Server 2	This field allows you to specify the secondary DNS server for SMTP delivery and is only valid if port 25 is open on your network. To determine whether port 25 is open or closed on your network, please run a Port Scan .
POP Interval	If any of the GetMail Module's POP functions are used, this setting determines how often (in minutes) their processes occur.

Expanding Settings will display the following menu:



• Ad-Hoc

This section configures PageGate's mail server to accept certain values to pass to an Ad-Hoc recipient.

Domain POP

A relatively antiquated but still supported method of mail collection for an entire email domain.

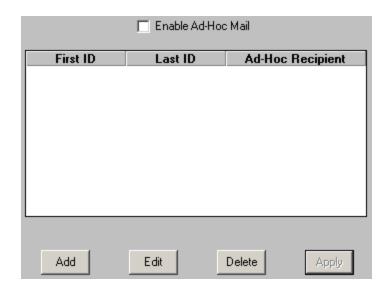
DUN

A relatively antiquated but still supported method of mail collection involving a Dial Up Network.

AdHoc

This section controls how GetMail implements AdHoc Email. The interface can handle Ad-Hoc email in two ways, both of which can be used separately or together.

- The first method is to accept email addressed to the ID/PIN number that the message should use for delivery (i.e. <u>1234567@pagingserver.com</u>).
- <u>The second method</u> is to have the Ad-Hoc Email function accept incoming email with the ID/PIN numbers of the intended destination device on the subject line.



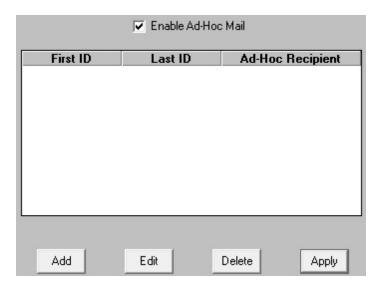
Button	Function
Enable Ad-Hoc Mail	Enables the use of Ad-Hoc ranges for email processing.
Add	Adds a new Ad-Hoc range.
Edit	Edits an existing Ad-Hoc range.
Delete	Removes an existing Ad-Hoc range
Apply	Applies updates made to the

Method 1

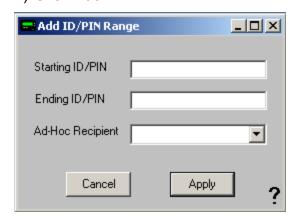
To use this method with email, simply address an email message to the PageGate Server's <u>Local Domain</u> with an ID/PIN number (within the range set in steps 6 and 7 below) as the part of the email address before the @ (i.e. 1234567@mypagegateserver.com).

Before enabling this function, you must first have at least one Ad-Hoc recipient in the program:

- 1) Create an Ad-Hoc recipient.
- 2) Under the 'Enabled Services' section of the recipient, make sure GetMail is checked.
- 3) Select the carrier that messages should be sent to via the Ad-Hoc function. Once the Recipient has been configured, check "Enable Ad-Hoc Mail".



1) Click Add.



- 2) Enter the Starting ID/PIN.
- 3) Enter the Ending ID/PIN.
- 4) Select an Ad-Hoc Recipient from the drop-down menu
- 5) Click Apply.

Method 2

To configure the GetMail module to accept email with the ID/PIN numbers in the subject line of incoming email:

- 1) Create an Ad-Hoc recipient.
- 2) Under the 'Enabled Services' section of the recipient, make sure GetMail is checked.
- 3) Select the carrier that messages should be sent to via the Ad-Hoc function.

To use this new ad-hoc email, send email addressed to the ad-hoc recipient (recipientname@getmaildomain.com) and use one or more ID/PIN numbers (separated by spaces or commas) in the subject line.

PageGate will then use the carrier associated with this ad-hoc recipient to deliver a copy of the email message to each ID/PIN number in the subject.

PageGate can collect all email for and entire domain from a single mailbox. Most Internet Service Providers have the ability to put all email addressed to your domain into a single POP mailbox. This is commonly known as 'Domain POP Mail' or 'Mailbagging'.

It works well with Dial-Up Internet connections or Internet connections that don't have a static IP address.

PageGate will try to collect mail from the mailbox according to the <u>POP Interval</u>. Once the messages have been retrieved, PageGate will sort them into local mailboxes that must set up.

This setup can be used to give the appearance of having a dedicated, in-house mail server to both the workstations on your local area network and the Internet.

Enabled	
POP Mailbox	
POP Password	
POP Server	
☐ Remo	ove Collected Mail From Server
	Apply

To configure the Domain POP section of PageGate:

- Obtain a registered domain name. This can generally be done by contacting your Internet Service Provider or a Domain Hosting Site.
- 2) Have the host of your registered domain name set up mailbagging (domain pop mail)
- 3) If you will be using Dial-Up Networking to connect to the Internet, see the <u>DUN section</u> of the manual.
- 4) Check Enabled in the Domain POP section of the GetMail Settings.
- 5) Enter the name of the mailbox your ISP has configured. Note: Do not include the @domain.com part in the 'POP Mailbox' field.

- 6) Enter the password to access the mailbox in the POP Password field.
- 7) Enter the name of the mail server in the POP Server field. Note: The POP Server is the portion of the address after the @ symbol. Do not include the @ symbol.
- 8) If you want PageGate to remove collected messages from the Domain POP Email Account, put a check in "Remove Collected Mail From Server".
- 9) Click Apply.
- 10) Set up one or more recipients in PageGate. By default, the recipient's name will be the name of their email address.

DUN

DUN is an acronym for <u>Dial-Up</u> <u>Networking</u>.

PageGate can use the Dial-Up Networking function of Windows to connect to the Internet for collecting email. A Dial-Up Networking Connection must first be setup within the operating system in order for this to work.

When the DUN portion of the <u>GetMail Settings</u> is enabled, the POP Interval setting will be used to determine how often PageGate will connect to the Internet to collect email. After PageGate is done receiving messages from the email account(s), it will automatically disconnect from the Internet and wait for the next POP Interval.

If the Dial-Up Networking account is already connected when the POP Interval happens, PageGate will use the current connection but will not disconnect when finished. Basically, PageGate assumes that another application is controlling the Dial-Up session and will not interfere with it.



Setting	Function
Enable Dial-Up	This option enables and disables the Dial-Up Network portion of
Networking	PageGate's GetMail module.



Use This Account	An existing Dial-Up networking connection must be configured in Windows before this setting can be used. Select a Dial-Up networking connection from the drop-down list.
Account Password	Enter the password required by the selected Dial-Up Networking connection.
Coordinate with Connector1	If you don't have access to multiple modems and require the primary Connector to function in tandem with the Dial-Up Networking portion of PageGate, place a check here.

Status

This section displays the current status of the GetMail module.

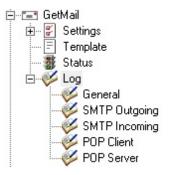


If the status of GetMail is stopped, it indicates that the module is not running and this can be caused by a few things.

- GetMail will need to be checked in the <u>"Run on this server"</u> section in the <u>Program Settings section of the PageGate Admin.</u>
- Enabled must be checked in the <u>settings of the GetMail module</u>.
- The PageGate server must be running. If you're running PageGate as an application, launch the PageGate server from the shortcut in the start menu. If you're running PageGate as a Windows Service, start the PageGate service. For more information, see the Run Styles section of the documentation.

Log

This section contains a record of all functions performed by GetMail and the PageGate Mail Server service. As the GetMail module has many functions, it has five separate logs that correspond to it.



General

This log is a record of information and traffic processed by the GetMail module.

SMTP Outgoing

This log is a record of all outgoing SMTP transactions negotiated by the PageGate Mail Server.

SMTP Incoming

This log is a record of all incoming SMTP transactions negotiated by the PageGate Mail Server.

POP Client

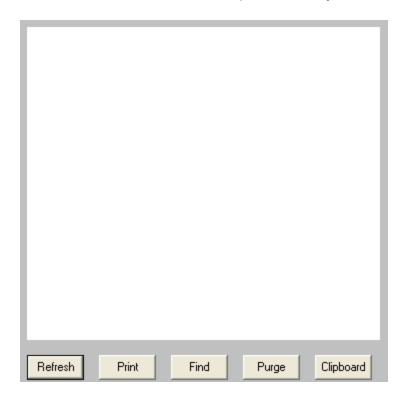
This log is a record of all POP mail collection sessions negotiated by the PageGate Mail Server.

• POP Server

This log is a record of all incoming POP mail collection requests negotiated by the PageGate Mail Server.

General

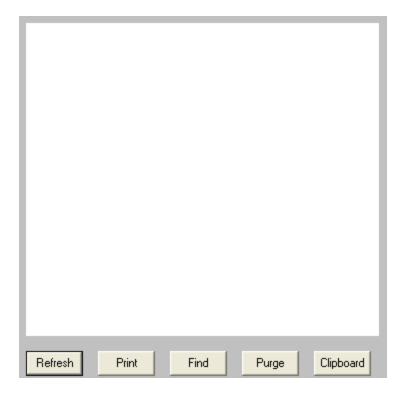
This log is a record of information and traffic processed by the GetMail module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

SMTP Outgoing

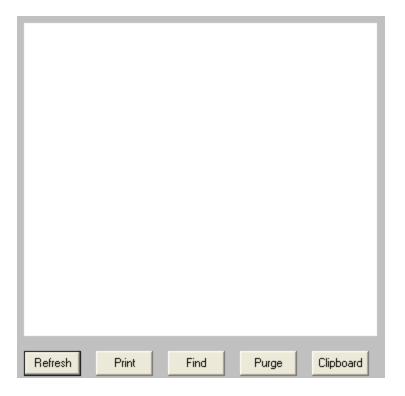
This log is a record of all outgoing SMTP transactions negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

SMTP Incoming

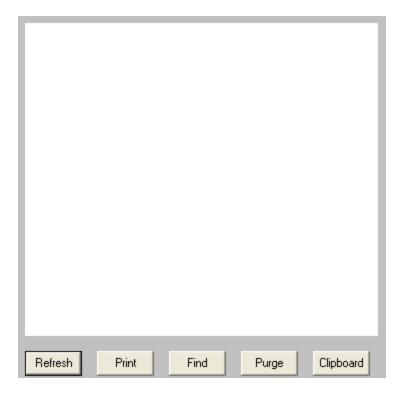
This log is a record of all incoming SMTP transactions negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

POP Client

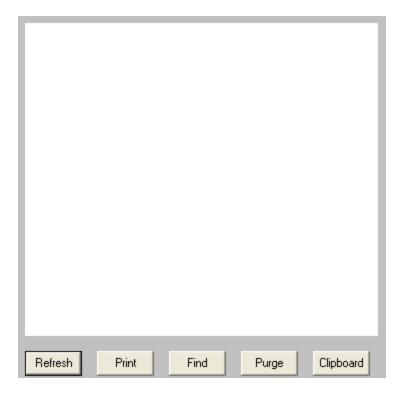
This log is a record of all POP mail collection sessions negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

POP Server

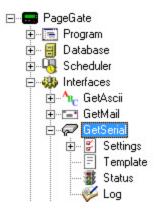
This log is a record of all incoming POP mail collection requests negotiated by the PageGate Mail Server.



Button	Function	
Refresh	Displays the most current entries in the log.	
Print	Sends a copy of everything listed in the log to a printer.	
Find	Allows you to search for something within the log.	
Purge	Deletes the entirety of this log.	
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.	

GetSerial

This interface allows PageGate to monitor a serial/RS232 port (virtual or physical) for raw data ascii strings to be parsed in to outbound messages. When a data string is sent to a monitored serial port, GetSerial pattern matches sections of the data string to parse information for messaging.



• Settings

This section controls the implementation of the GetSerial API.

Status

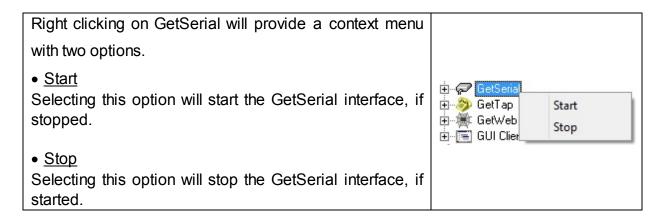
This section displays the running/not running status of the interface.

• Template

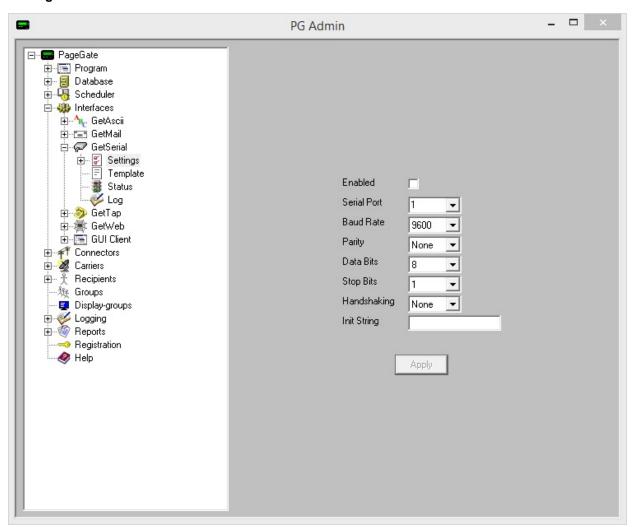
This section allows you to configure a custom template for messages processed by this API.

Log

This section is a record of all activity performed by the interface.

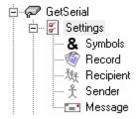


Settings



Setting	Function
Enabled	When the Enabled checkbox is checked, it tells the PageGate server to run the GetSerial module.
Serial Port	This field determines the Communications (COM) Port the GetSerial module will monitor for incoming data.
Baud Rate	This setting must match the Baud Rate the sending device uses.
Parity	This setting must match the Parity the sending device uses.
Data Bits	This setting must match the Data Bits the sending device uses.
Stop Bits	This setting must match the Stop Bits the sending device uses.
Handsh aking	If the sending device uses handshaking for flow control, GetSerial must mirror the handshaking method (Xon/Xoff or RTS). If the sending device does not use handshaking, this field must be set to None.
Init String	Init strings are not typically used with Serial Connections but may be used if a modem is attached to the same COM port specified in the Serial Port setting.

Expanding the Settings section will provide the following menu items:



This is where you'll configure PageGate to recognize the patterns in the stream of data being read in on the RS232/Serial line.

Symbols

This section determines certain special characters and their functions.

Record

This section is where you configure the pattern recognition to determine what represents the start and end of valid data to process.

Recipient

This section is where you configure the pattern recognition to determine what represents who the messages should go to. This section can also be set to a static recipient, to indicate that all traffic processed from the serial line should be sent to the specified individual or group.

• Sender

This section is where you configure the pattern recognition to determine what represents who or what sent the messages. This section can also be set to a static sender to indicate that all traffic processed from the serial line should declare that it is from the specified value.

• Message

This section is where you configure the pattern recognition to determine what represents the body of the message to be delivered. This section can also be set to a static message to provide the message text to be delivered.

Symbols

This section determines certain special characters and their functions.



Setting	Function
	When searching for pattern matches in the data strings on the RS232/Serial line, this character can be used to stand in for any single character.
Single Character Wildcard	For example, let's say you use Fire? That would tell the GetSerial module to recognize any word that began with Fire and had one extra letter on the end. So, it would recognize Fires or Fired.
	As another example, let's say you use ??/??/???? That would tell GetSerial to recognize any date stamp in the two digit month, two digit day, four digit year configuration.
	When searching for pattern matches in the data strings on the RS232/Serial line, this character can be used to stand in for any character or group of characters.
Multiple Character Wildcard	For example, let's say you use Fire* That would tell the GetSerial module to recognize any instance of the word Fire, regardless of whether there are any characters after the word. So, it would recognize Fire or Fired or Fires but it would also recognize the Fire in Fire Sale or Fire Department.
	As another example, let's say you use *age* That would tell GetSerial to recognize any reference to the three letters age close to each other, regardless of whether that was in the word PageGate or NotePage or ageless or damage. Any instance of the three characters together will be recognized.
End of Record Symbol	This character stands for the end of record symbol.
ASCII Value Delimiter	This symbol is used to help represent non-printable characters that normally can't be typed like horizontal tabs, carriage returns and line feeds. This character is always followed three numbers which represent the decimal value for a character. For example, this represents a carriage-return: \013
A 1	For a full list of ascii codes, visit http://www.asciitable.com/
Apply	Applies all changes made to the Symbols.

Record

This section is where you configure the pattern recognition to determine what represents the start and end of a message sequence.



Start Pattern

This value determines the start of relevant information. For example, let's say this is a data string read in on the RS232/Serial line:

CODE 17 START A04 Refrigeration Unit 003 Temperature High 84.31 N773 END A9.3178

You would want to use START as the Start Pattern as that begins the section of information relevant for your message. Start patterns are included in the record processed unless you specify the otherwise with the Start Offset.

Start Offset

This value determines how many characters before or after the identified start pattern to begin character processing. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will begin the data record 5 characters after the first character in the Start Pattern. A value of -5 means that GetSerial will begin the data record 5 characters before the first character the Start Pattern. To use our earlier example, if we don't want the word START to be a part of the record processed, we would set the Start Offset value to 5. That way, the data record begins five characters after the first character in START.

End Pattern

This value determines the end of relevant information For example, let's say this is a data string read in on the RS232/Serial line:

CODE 17 START A04 Refrigeration Unit 003 Temperature High 84.31 N773 END A9.3178

You would want to use END as the End Pattern as that ends the section of information relevant for your message. End patterns are included in the record processed unless you specify the otherwise with the End Offset.

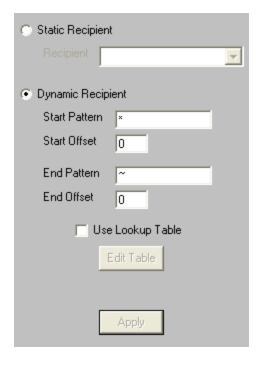
End Offset

This value determines where in the data stream the record of relevant information ends and does so by determining how many characters before or after the identified End Pattern to begin. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will end the data record 5 characters after the last character in the End Pattern. A value of -5 means that GetSerial will end the data record 5 characters after the last character the End Pattern. To use our earlier example, if we don't want the word END to be a part of the record processed, we would set the Start Offset value to -3. That way, the data record ends three characters before the last character of END.

Recipient

This section is where you configure the pattern recognition to determine what represents who the messages should go to.



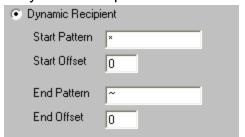
There are two possible configurations you can use:

Static Recipient



Selecting this option tells the GetSerial module that all messages processed from the RS232/Serial line should go to the specified recipient or group.

Dynamic Recipient



Selecting this option tells the GetSerial module to look for specific patterns that denote where the recipient information is located in within the <u>record</u>.

• Start Pattern

This value determines the first character in the recipient value.

For example, let's say this is a data string identified as the <u>record</u> and let's also say that the first three characters represent the recipient or group this message should go to: A04 Refrigeration Unit 003 Temperature High 84.31 N773

or another example:

B16 Refrigeration Unit 007 Temperature High 92.74 N712

or another example:

A29 Refrigeration Unit 005 Temperature High 85.93 N798

You would want to use * as the Start Pattern as the recipient information is the first value in the string of data. Start patterns are included in the recipient processed unless you specify the otherwise with the Start Offset.

Start Offset

This value determines how many characters before or after the identified start pattern to accept as the recipient value. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will begin looking for the recipient value 5 characters after the first character in the Start Pattern. A value of -5 means that GetSerial will begin looking for the recipient value 5 characters before the first character the Start Pattern.

To use our earlier example, we would want a Start Offset of 0 because we want everything from the first character in the data stream.

End Pattern

This value determines the last character in the recipient value.

Using our earlier example, we've already specified that the recipient value starts at the very first character in the stream.

A04 Refrigeration Unit 003 Temperature High 84.31 N773

or another example:

B16 Refrigeration Unit 007 Temperature High 92.74 N712

or another example:

A29 Refrigeration Unit 005 Temperature High 85.93 N798

Assuming ? represents the <u>single character wildcard value assigned in the Symbols section</u>, you would want to use ??? as the End Pattern as the first three character sequence in the data represents the recipient value.

End Offset

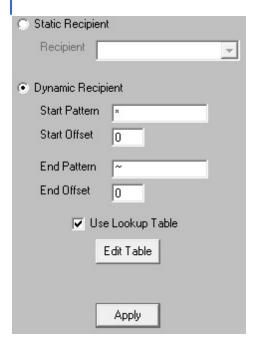
This value determines how many characters before or after the identified End Pattern to stop character recognition. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will stop looking for the recipient value 3 characters after the first character in the End Pattern. A value of -5 means that GetSerial will stop looking for the recipient value 5 characters before the first character the End Pattern.

To use our earlier example, since we have ??? specified as the End Pattern and that three character value represents the recipient value, we would set the Start Offset value to 3. That way, the data record ends three characters after the first character in the file.

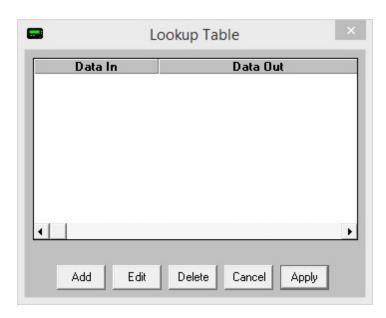
Lookup Table

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed. To enable this feature, check Use Lookup Table and click Edit Table.



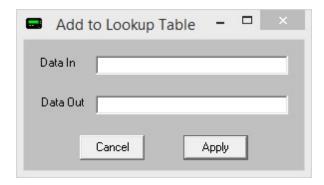
Lookup Table

This feature enables PageGate to perform basic search and replace commands on values read in as the Recipient, which allows you to interchange or translate values as needed.



Button	Function
Add	Adds a new search and replace value.
Edit	Edits an existing search and replace value.
Delete	Removes an existing search and replace value.
Cancel	Closes the table without saving changes.
Apply	Applies updates made to the table.

When adding new entries to the table, you'll be presented with this dialog:



Data In

This value represents what you want to search for. Wildcard characters can be used.

Data Out

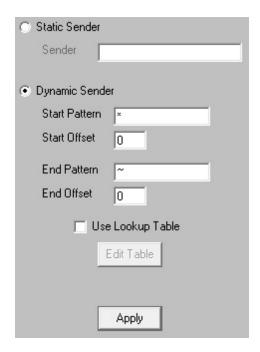
This value represents what you want to replace the text with.

For example, if we had a 'Data In' value of oranges and a 'Data Out' value of bananas, the program would replace any instance of the word oranges with the word bananas.

To provide a more practical example, let's use the <u>example from the GetSerial - Settings - Recipient section</u> of the documentation and say that we needed to translate A04 in to recipient or group name as you've entered it in to the PageGate Admin. You could use a 'Data In' value of A04 and a 'Data Out' value of ITDept so any messages that came in for A04 were routed to the group called ITDept in PageGate.

Sender

This section is where you configure the pattern recognition to determine what value represents who or what sent the messages read in from the RS232/Serial line.



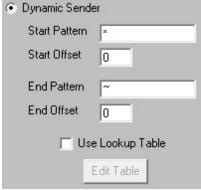
There are two possible configurations you can use:

Static Sender



Selecting this option tells the GetSerial module that all messages processed should identify themselves as having been sent from the specified value. This is the value that is used in the majority of GetSerial implementations.

• Dynamic Sender



Selecting this option tells the GetSerial module to look for specific patterns that denote where the sender information is located in within the <u>record</u>.

Start Pattern

This value determines the first character in the sender value.

Start Offset

This value determines how many characters before or after the identified start pattern to accept as the sender value. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will begin looking for the sender value 5 characters after the first character in the Start Pattern. A value of -5 means that GetSerial will begin looking for the sender value 5 characters before the first character the Start Pattern.

End Pattern

This value determines the last character in the sender value.

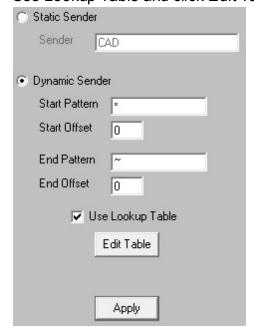
End Offset

This value determines how many characters before or after the identified End Pattern to stop character recognition. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will stop looking for the sender value 5 characters after the first character in the End Pattern. A value of -5 means that GetSerial will stop looking for the sender value 5 characters before the first character the End Pattern.

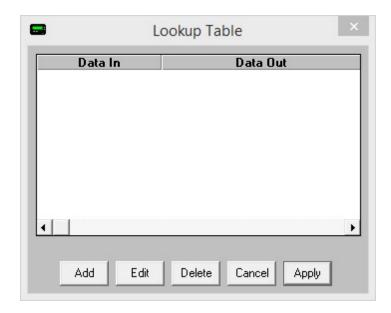
Lookup Table

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed. To enable this feature, check Use Lookup Table and click Edit Table.



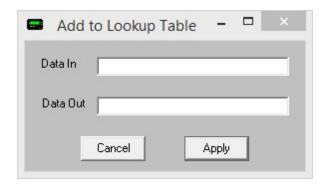
Lookup Table

This feature enables PageGate to perform basic search and replace commands on values read in as the Sender, which allows you to interchange or translate values as needed.



Button	Function
Add	Adds a new search and replace value.
Edit	Edits an existing search and replace value.
Delete	Removes an existing search and replace value.
Cancel	Closes the table without saving changes.
Apply	Applies updates made to the table.

When adding new entries to the table, you'll be presented with this dialog:



• Data In

This value represents what you want to search for. Wildcard characters can be used.

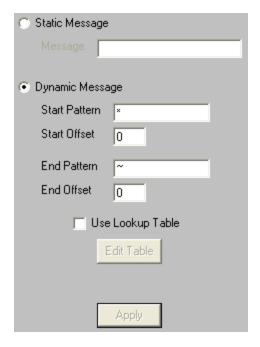
Data Out

This value represents what you want to replace the text with.

For example, if we had a 'Data In' value of oranges and a 'Data Out' value of bananas, the program would replace any instance of the word oranges with the word bananas.

To provide a more practical example, let's say we wanted to translate A834 in to Dispatch Center. You would use a 'Data In' value of A834 and a 'Data Out' value of Dispatch Center. Message

This section is where you configure the pattern recognition to determine what value represents the messages read in from the RS232/Serial line.



There are two possible configurations you can use:

Static Message



Selecting this option allows you to specify a pre-canned message to be delivered when activity is detected on the serial line.

Dynamic Message

Dynamic Message				
Start Pattern	×			
Start Offset	0			
End Pattern	~			
End Offset	0			

Selecting this option tells the GetSerial module to look for specific patterns that denote where the message is located in within the <u>record</u>.

Start Pattern

This value determines the first character in the message value.

To use the example we've been working with, the record originally started as: A04 Refrigeration Unit 003 Temperature High 84.31 N773

We then configured GetSerial to treat A04 as the recipient value, which removes it from the data string. So, by the time the Message processing happens, this is the remaining data:

Refrigeration Unit 003 Temperature High 84.31 N773

As a result, we would want a Start Pattern of * to indicate that the message begins at the first remaining character.

Start Offset

This value determines how many characters before or after the identified start pattern to accept as the message. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will begin looking for the message 5 characters after the first character in the Start Pattern. A value of -5 means that GetSerial will begin looking for the message 5 characters before the first character the Start Pattern.

Using our example, you would want to set the Start Offset to 0.

End Pattern

This value determines the last character in the message.

In our example, you would want to set the End Pattern to the <u>End of Record symbol</u> in the <u>GetSerial - Settings - Symbols</u> section. This tells PageGate that the last character of the data line is the termination point for the message. So, by configuring a * for the Start Pattern and a ~ for the End Pattern, we're telling PageGate that all of the remaining data is relevant and needs to be in the body of the message delivered.

End Offset

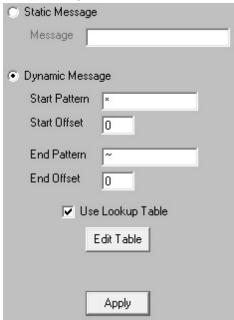


This value determines how many characters before or after the identified End Pattern to stop character recognition. This field can be set to positive or negative values.

For instance, a value of 5 means that GetSerial will stop looking for the message 5 characters after the first character in the End Pattern. A value of -5 means that GetSerial will stop looking for the message 5 characters before the first character the End Pattern.

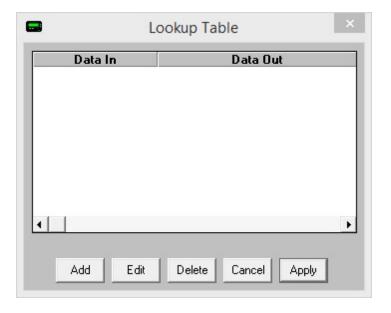
Lookup Table

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed. To enable this feature, check Use Lookup Table and click Edit Table.



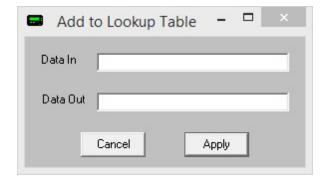
Lookup Table

This feature enables PageGate to perform basic search and replace commands on values in the body of the message, which allows you to interchange or translate values as needed.



Button	Function
Add	Adds a new search and replace value.
Edit	Edits an existing search and replace value.
Delete	Removes an existing search and replace value.
Cancel	Closes the table without saving changes.
Apply	Applies updates made to the table.

When adding new entries to the table, you'll be presented with this dialog:



• Data In

This value represents what you want to search for. Wildcard characters can be used.

Data Out

This value represents what you want to replace the text with.



For example, if we had a 'Data In' value of oranges and a 'Data Out' value of bananas, the program would replace any instance of the word oranges with the word bananas.

To provide a more practical example, let's use the <u>example from the GetSerial - Settings - Message section</u> of the documentation and say that we needed to translate 84.31 in to Building 14, Floor 3, Room 6. You would use a 'Data In' value of 84.31 and a 'Data Out' value of Building 14, Floor 3, Room 6. As another example, let's say you wanted to translate N773 in to Service contract Norwood, Account 773. You would use a 'Data In' value of N773 and a 'Data Out' value of Service contract Norwood, Account 773. Status

This section displays the current status of the GetSerial module.

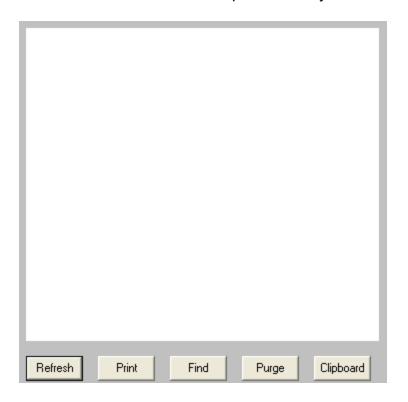


If the status of GetSerial is stopped, it indicates that the module is not running and this can be caused by a few things.

- GetSerial will need to be checked in the <u>"Run on this server"</u> section in the <u>Program Settings section of the PageGate Admin.</u>
- Enabled must be checked in the <u>settings of the GetSerial module</u>.
- The PageGate server must be running. If you're running PageGate as an application,
 launch the PageGate server from the shortcut in the start menu. If you're running
 PageGate as a Windows Service, start the PageGate service. For more information,
 see the Run Styles section of the documentation.

Log

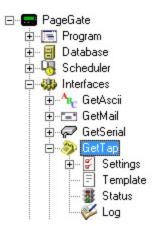
This log is a record of information and traffic processed by the GetSerial module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GetTap

This interface allows PageGate to monitor a serial port or answer a modem call to receive TAP transmitted pages. This allows PageGate to function as a TAP receiver or a TAP terminal for any devices and systems that can transmit that protocol, such as a Zetron or Motorola paging terminal as well as a few CAD systems. This also allows PageGate to function as a TAP receiver for any installation of NotePager Pro, allowing satellite offices to submit messages for processing with a centralized, master server.



• <u>Settings</u>

This section controls the implementation of the GetTap API.

Status

This section displays the running/not running status of the interface.

• Template

This section allows you to configure a custom template for messages processed by this API.

• Log

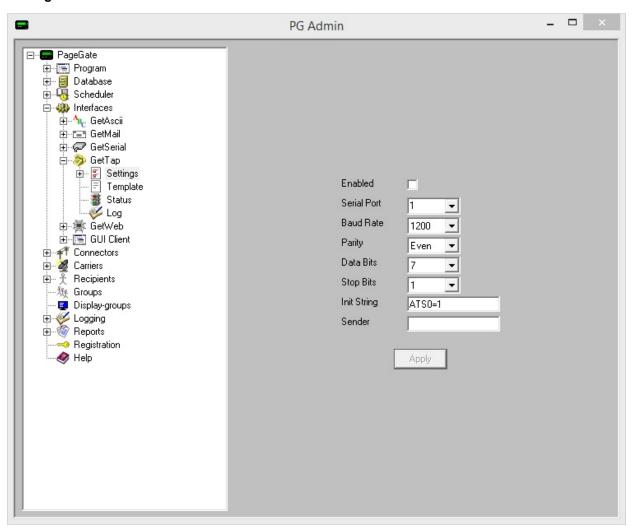
This section is a record of all activity performed by the interface.

Right clicking on GetTap will provide a context menu with two options.

• Start
Selecting this option will start the GetTap interface, if stopped.

• Stop
Selecting this option will stop the GetTap interface, if started.

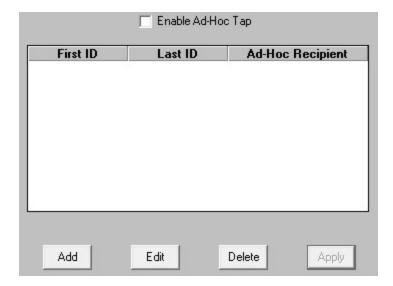
Settings



Setting	Function
Enabled	When the Enabled checkbox is checked, it tells the PageGate server to run the GetTap module.
Serial Port	This field determines the Communications (COM) Port the GetTap module will monitor for incoming data. This field can be set to use the COM port of a modem or a serial port.
Baud Rate	Choose the baud rate at which incoming connections will be established. By default, the baud rate is 1200.
Parity	Choose the parity with which incoming connections will be established. By default, the parity is even.
Data Bits	Choose the data bits the incoming connections will be established with. By default, the data bits is 7.
Stop Bits	Choose the stop bits the incoming connections will be established with. By default, the stop bits is 1.
Init String	The init string is a set of commands sent to the modem to configure it for incoming calls. The init string also turns certain modem connection features on and off. For example, most systems using the TAP protocol communicate at 1200 baud with no error correction or data compression. By default, the Init String field is set to ATS0=1 - this init string resets the modem to factory defaults and sets the modem to answer on the first ring. If you specified a Serial Port connected directly to a serial cable, instead of a modem, please set the Init String field to the word 'direct' (without the quotes).

AdHoc

This function configures the GetTap module to accept ID/PIN values within a certain range and pass them through as the ID/PIN the message should ultimately be delivered to. For example, if the TAP system sending information in to the GetTap API uses ten digit phone number as the ID/PIN value, you could have that passed through in-state to the ad-hoc recipient without needing to configure a static recipient value to correspond to the ID passed.

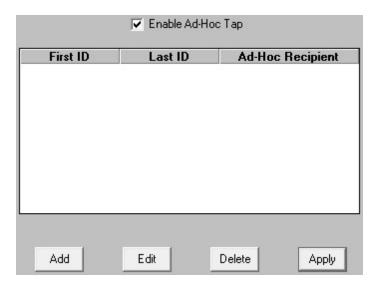


Button	Function
Enable Ad-Hoc Tap	Enables the use of Ad-Hoc ranges for processing TAP ID's.
Add	Adds a new Ad-Hoc range.
Edit	Edits an existing Ad-Hoc range.
Delete	Removes an existing Ad-Hoc range
Apply	Applies updates made to the

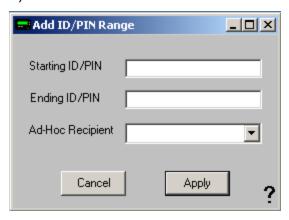
Before enabling this function, you must first have at least one Ad-Hoc recipient in the program:

- 1) Create a new Ad-Hoc recipient.
- 2) Under the 'Enabled Services' section of the recipient, make sure GetTap is checked.
- 3) Select the carrier that messages should be sent to via the Ad-Hoc function.

Once the Recipient has been configured, check "Enable Ad-Hoc Tap".



1) Click Add.



- 2) Enter the Starting ID/PIN.
- 3) Enter the Ending ID/PIN.
- 4) Select an Ad-Hoc Recipient from the drop-down menu
- 5) Click Apply.

Status

This section displays the current status of the GetTap module.

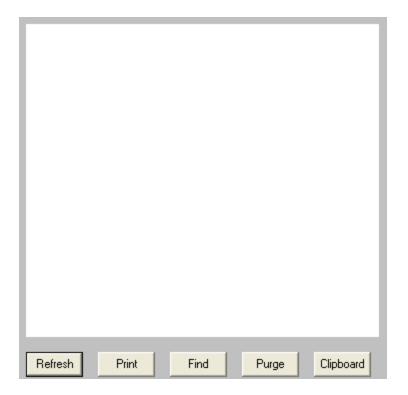


If the status of GetTap is stopped, it indicates that the module is not running and this can be caused by a few things.

- GetTap will need to be checked in the <u>"Run on this server"</u> section in the <u>Program Settings section of the PageGate Admin.</u>
- Enabled must be checked in the <u>settings of the GetTap module</u>.
- The PageGate server must be running. If you're running PageGate as an application, launch the PageGate server from the shortcut in the start menu. If you're running PageGate as a Windows Service, start the PageGate service. For more information, see the Run Styles section of the documentation.

Log

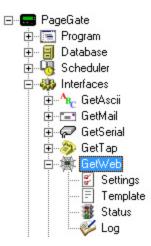
This log is a record of information and traffic processed by the GetTap module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GetWeb

This interface provides a CGI executable that can be hosted on a web server and a series of pre-formatted templates to publish a website messaging interface. This allows you to host messaging websites on your local intranet or, if GetWeb is interfaced with an outward facing web server, on the internet. Web Developers can also use this web server interface to send GET/POST requests to notify PageGate when a message needs to be sent, who the message should go to, who sent the message and what the message should say. This interface can also be used to enable PageGate to receive notifications from applications running on different platforms (Unix, Mac, etc.).



Settings

This section controls the implementation of the GetWeb API.

Status

This section displays the running/not running status of the interface.

• Template

This section allows you to configure a custom template for messages processed by this API.

Log

This section is a record of all activity performed by the interface.

Right clicking on GetWeb will provide a context menu with two options.

• Start
Selecting this option will start the GetWeb interface, if stopped.

• Stop
Selecting this option will stop the GetWeb interface, if started.

The GetWeb module provides a CGI executable that can be implemented in one of two ways

Hosting messaging websites

This option allows you to host a messaging website or series of messaging websites on your web server and GetWeb comes pre-loaded with a few stock templates to help you get started with this process. It should be noted that these templates are completely customizable and can be edited in any way you see fit.

GUI List Template Configuration

This template should be tied to a group and provides a messaging website which offers a list of recipients and groups available to be messaged. Which recipients are groups are available to message is controlled by the member list of the group that the template is tied to. If a recipient or group is a member of the group the template is tied to, they show up on the website. If they aren't, they don't.

Adhoc Template Configuration

This template should be tied to an Ad-Hoc recipient and provides a messaging website which offers a field to enter a phone number to message rather than a static list to choose from.

POST/GET request to GetWeb's CGI Executable

GetWeb's CGI executable can be used with either a POST or GET method.

The POST method can be used by creating a form on your webpage and pointing to the webgate.exe program in the FORM ACTION statement.

The GET method is more popular with scripting languages such as JavaScript and Java. It allows the GetWeb CGI to be called with a command similar to one that could be entered into a browser's URL field.

For more sophisticated webpages that use javascript, java, or another higher-end language than HTML, the webgate.exe CGI program can be called directly rather than using it only with an HTML form.

Standard Messaging

The three variables the webgate.exe CGI receiver is expecting to see are USER, FRM and MSG. USER specifies who the message should go to, FRM specifies who or what sent the message and MSG specifies the text to be sent.

Example:

http://www.mydomain.com/scripts/webgate.exe? USER=pageme&FRM=fromme&MSG=This+is+a+test

This would send a message to the recipient 'pageme', from 'fromme', with a message of 'This is a test'

Ad-Hoc Messaging

The four variables the webgate.exe CGI receiver is expecting to see are USER, SUBJECT, FRM and MSG. USER specifies the ad-hoc recipient, SUBJECT specifies the phone numbers that should receive the message, FRM specifies who or what sent the message and MSG specifies the text to be sent.

Example:

http://www.mydomain.com/scripts/webgate.exe?
USER=ADHOCMETHOD&Subject=PhoneNumber,PhoneNumber,PhoneNumber,etc&FR
M=fromme&MSG=This+is+a+test

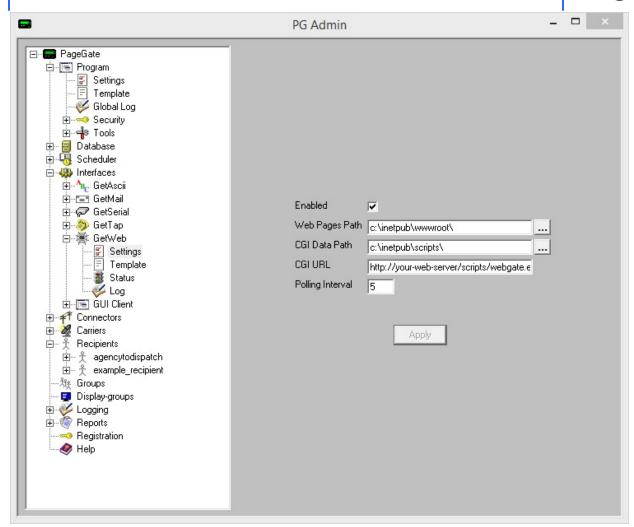
This would send the message "This is a test" to the phone numbers specified in the "Subject" parameter.

Using Scripts

You can also find examples of Linux and Powershell scripts that can be used with GetWeb in this section of the documentation.

Settings

This section is where you tell the GetWeb API what directory to reference on the web server to publish your messaging websites and what directory hosts the CGI executable.



Setting	Function
Enabled	When the Enabled checkbox is checked, it tells the PageGate server to run the GetWeb module.
Web Pages Path	This field determines the location on the web server where PageGate will publish your messaging website(s). This field should be set to a directory on the web server where new content should be created. If you have IIS installed locally and the Default Website referencing the default IIS location, set this field to: c:\inetpub\wwwroot\
CGI Data Path	This field determines the location on the web server where PageGate will host its CGI executable. This field should be set to the web server's scripting directory.
	For IIS installations on Windows 7, 8, 10, Server 2008, Server 2012 or Server 2016 please see the Configuring IIS 7.5, 8 and 10 section for steps on configuring IIS to allow GetWeb's CGI executable to function.

CGIURL	This field determines the URL used in the FORM action and should be set to the URL and directory of the web server hosting webgate.exe If you have IIS installed locally and are using the default configuration described in the local IIS installation section of the documentation, set this to: http://your-web-server/scripts/webgate.exe Be sure to replace your-web-server with the machine name or IP address of the PageGate server.
Polling	The setting in this field determines how often the GetWeb module looks for
Interval	new messages in the CGI Data Path.

The GetWeb module provides a CGI executable that can be implemented in one of two ways

Hosting messaging websites

This option allows you to host a messaging website or series of messaging websites on your web server and GetWeb comes pre-loaded with a few stock templates to help you get started with this process. It should be noted that these templates are completely customizable and can be edited in any way you see fit.

• GUI List Template Configuration

This template should be tied to a group and provides a messaging website which offers a list of recipients and groups available to be messaged. Which recipients are groups are available to message is controlled by the member list of the group that the template is tied to. If a recipient or group is a member of the group the template is tied to, they show up on the website. If they aren't, they don't.

Adhoc Template Configuration

This template should be tied to an Ad-Hoc recipient and provides a messaging website which offers a field to enter a phone number to message rather than a static list to choose from.

POST/GET request to GetWeb's CGI Executable

The webgate CGI can be used with either a POST or GET method.

The POST method can be used by creating a form on your webpage and pointing to the webgate.exe program in the FORM ACTION statement.

The GET method is more popular with scripting languages such as JavaScript and Java. It allows the GetWeb CGI to be called with a command similar to one that could be entered into a browser's URL field.

For more sophisticated webpages that use javascript, java, or another higher-end language than HTML, the webgate.exe CGI program can be called directly rather than using it only with an HTML form. Here is a sample calling command that can be used in the URL field in a browser to call webgate.exe:

http://www.mydomain.com/scripts/webgate.exe? USER=pageme&FRM=fromme&MSG=This+is+a+test

This would send a message to the recipient 'pageme', from 'fromme', with a message of 'This is a test'

Just to note, the three variables the webgate.exe CGI receiver is expecting to see are USER, FRM and MSG. USER specifies who the message should go to, FRM specifies who or what sent the message and MSG specifies the text to be sent.

Configuring IIS 7.5, 8 and 10 for GetWeb

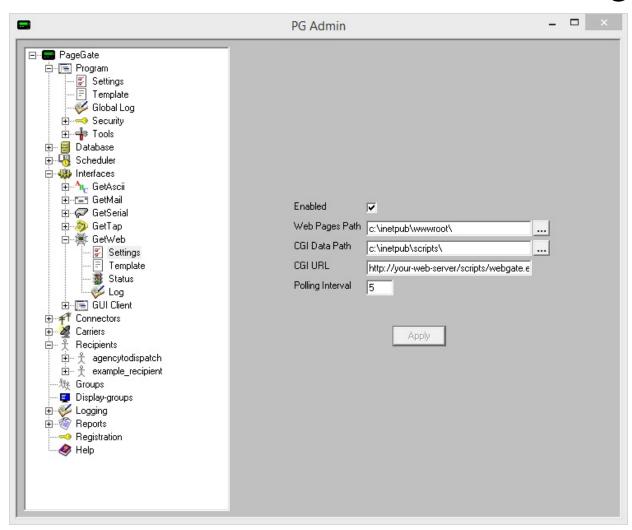
GetWeb can be configured to reference either a local installation of IIS or, if the appropriate directories on the web server are accessible on the network, a web server on the same network.

<u>Click here</u> for steps on how to configure a local installation of IIS for GetWeb.

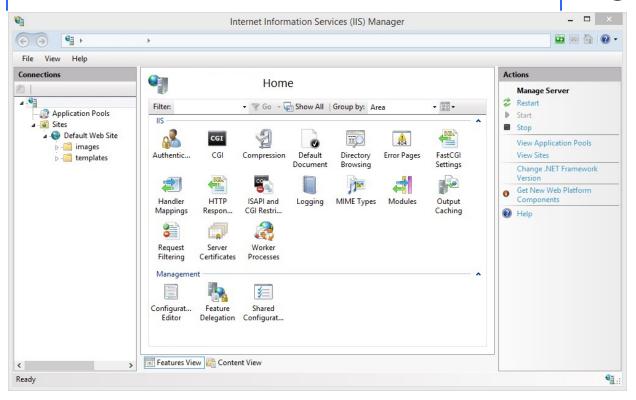
<u>Click here</u> for steps on how to configure GetWeb to reference a web server accessible by UNC path.

Local IIS Installation

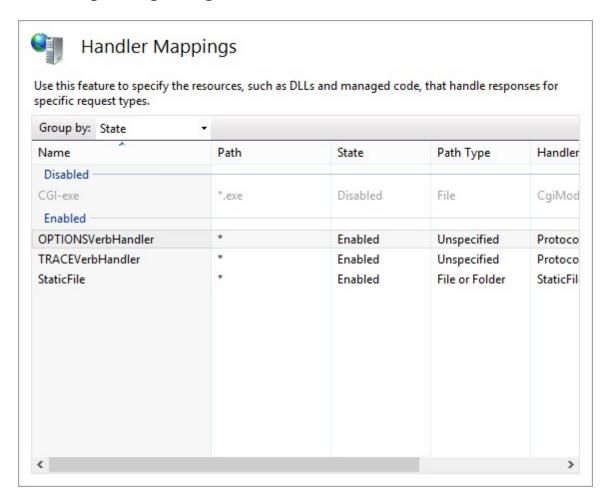
- After installing IIS, if the directory does not already exist, create the directory c: \inetpub\scripts\
- Open the PageGate Admin.
- Go to Interfaces GetWeb Settings.
- 4) Set the "Web Pages Path" to: c:\inetpub\wwwroot\
- 5) Set the "CGI Data Path" to: c:\inetpub\scripts\
- 6) Set the "CGI URL" to: http://your-web-server/scripts/webgate.exe but replace your-web-server with the machine name or IP address of the PageGate server.
- Check Enabled
- 8) Click Apply.
- 9) If prompted, you do want to enable this for all existing groups and recipients.



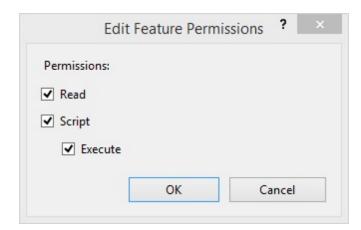
10) Open the IIS Admin and select the server object (the first thing in the list in the menu on the left side).



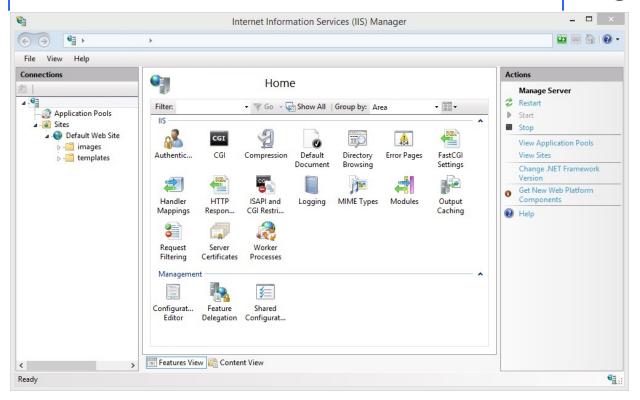
11) Open Handler Mappings.



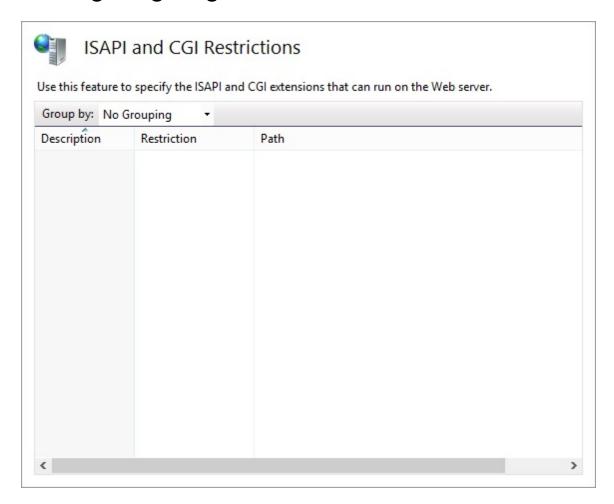
- 12) Right click CGI-exe, left click Edit Feature Permissions
- 13) Check Execute.



- 14) Click OK.
- 15) Select the Server Object again.

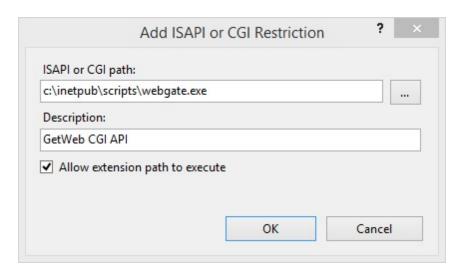


16) Open ISAPI and CGI Restrictions.

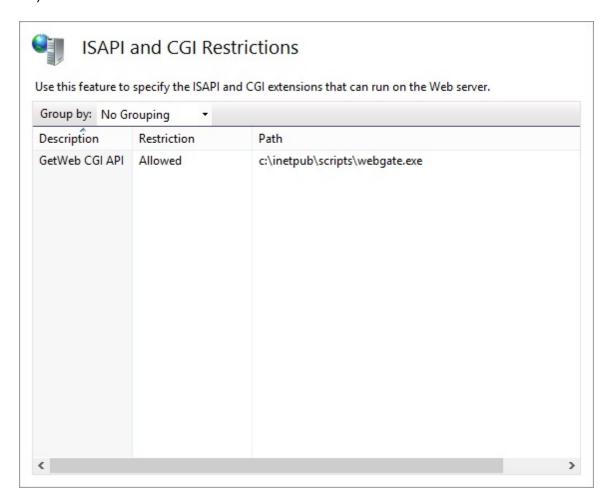


- 17) Right click in the box and select Add.
- 18) Set the ISAPI or CGI path to: c:\inetpub\scripts\webgate.exe
- 19) Set the Description to: GetWeb CGIAPI
- 20) Check "Allow extension path to execute".

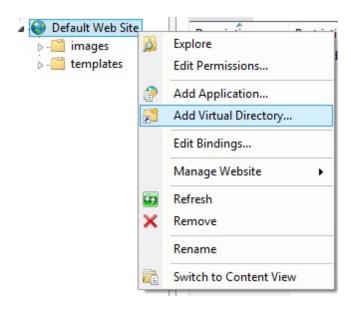
Chapter 6 Configuring PageGate: The Admin



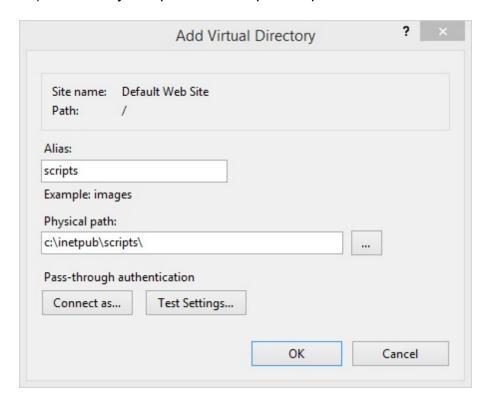
21) Click OK.



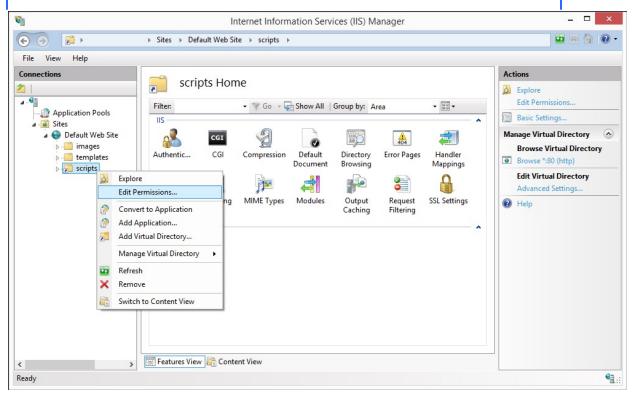
22) Right click Default Web Site, left click Add Virtual Directory.



- 23) Set the Alias to: scripts
- 24) Set the Physical path to: c:\inetpub\scripts\



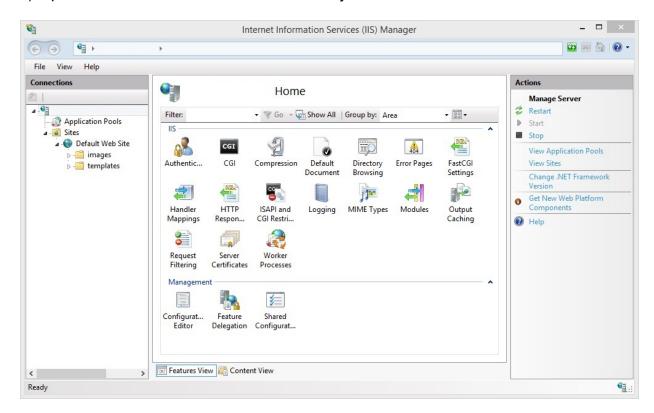
- 25) Click OK.
- 26) Right click on the new scripts virtual directory, left click Edit Permissions.



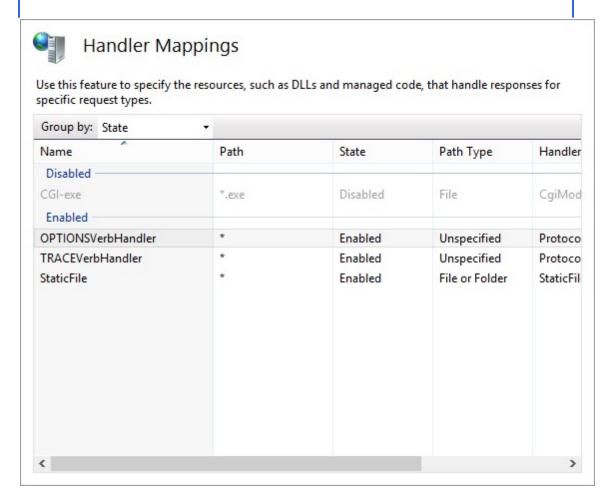
- 27) Select the Security tab.
- 28) Click Edit.
- 29) Click Add.
- 30) Type Domain Users, left click Check Names.
- 31) Click OK.
- 32) Grant them the Modify permission.
- 33) Click Add.
- 34) Type IUSR, left click Check Names.
- 35) If prompted, select the local IUSR account.
- 36) Click OK.
- 37) Grant then the Modify permission.
- 38) Click Add.
- 39) Type Domain Admin, left click Check Names.
- 40) Click OK.
- 41) Grant them the Full Control permission.

Network Web Server

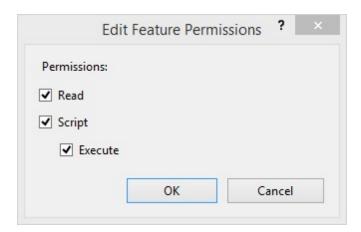
1) Open the IIS Admin and select the server object.



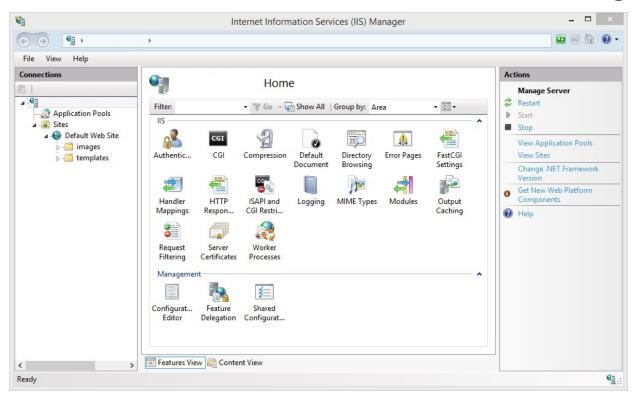
2) Open Handler Mappings.



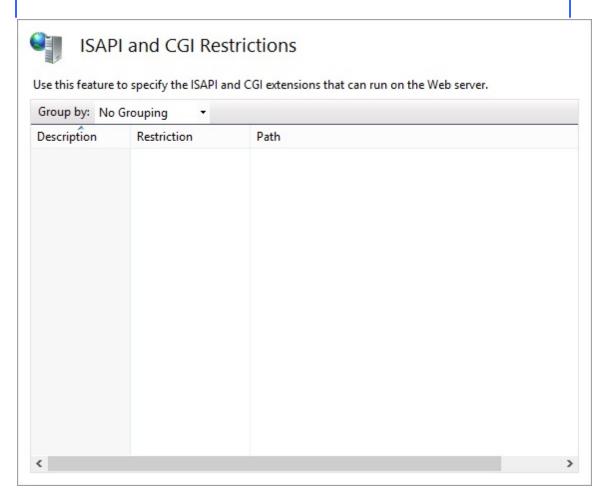
- 3) Right click CGI-exe, left click Edit Feature Permissions
- 4) Check Execute.



- 5) Click OK.
- 6) Select the Server object again.



7) Open ISAPI and CGI Restrictions.



- 8) Right click in the box and select Add.
- 9) Set the ISAPI or CGI path to the directory on the web server where webgate.exe is being hosted. This should correspond to the folder specified in GetWeb's <u>Settings</u>.
- 10) Set the Description to: GetWeb CGIAPI
- 11) Check "Allow extension path to execute".
- 12) Click OK.

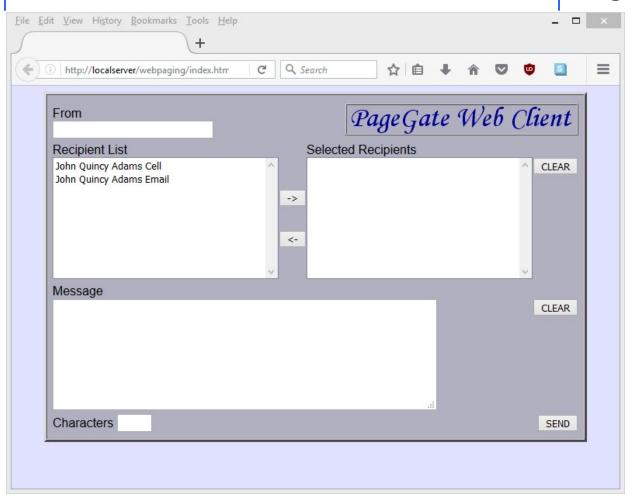
Example image:



GUI List Template Configuration

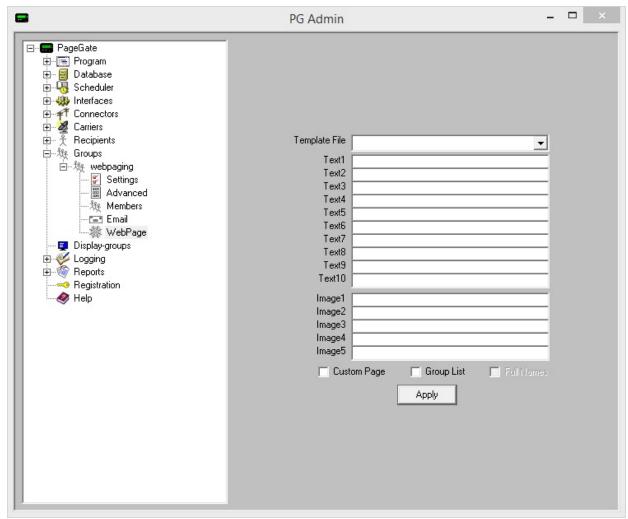
NOTE: You must configure the <u>GetWeb API's settings</u> before you can implement this.

This template will format a messaging website to provide a list of recipients and groups available to be messaged and the page will look something close to the image shown below.

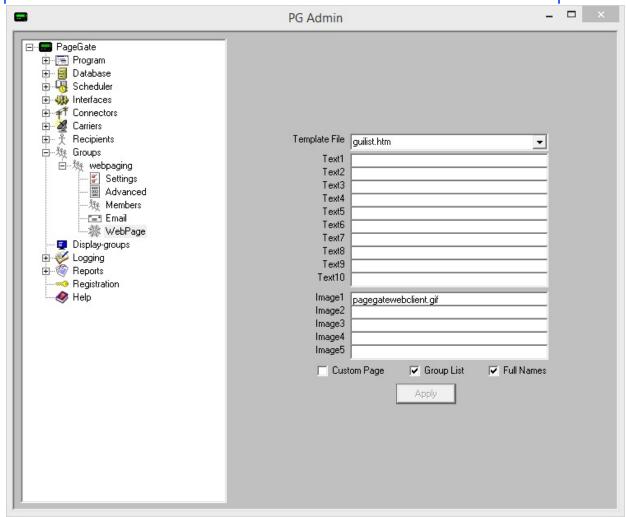


To configure GetWeb to publish this style of messaging website, you'll first need to create a <u>Group</u> to tie the webpage to as the member list of the group controls who is available in the Recipient List shown above. Once you have the group created, this is what you'll want to do:

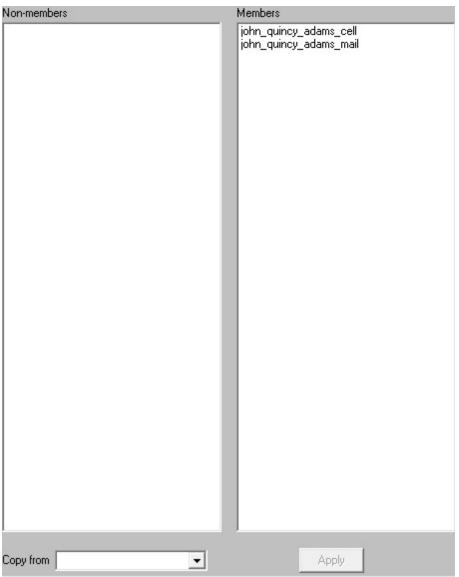
- 1) Open the PageGate Admin.
- 2) Go to Groups <YourGroupName> WebPage.



- 3) In the 'Template File' dropdown menu, select: guilist.htm
- 4) In the Image1 field, enter: pagegatewebclient.gif
- 5) Check Group List.
- 6) Check Full Names.



- 7) Go to the Members sub-section of your new webpaging group.
- 8) Add all recipients and groups who should be available to message



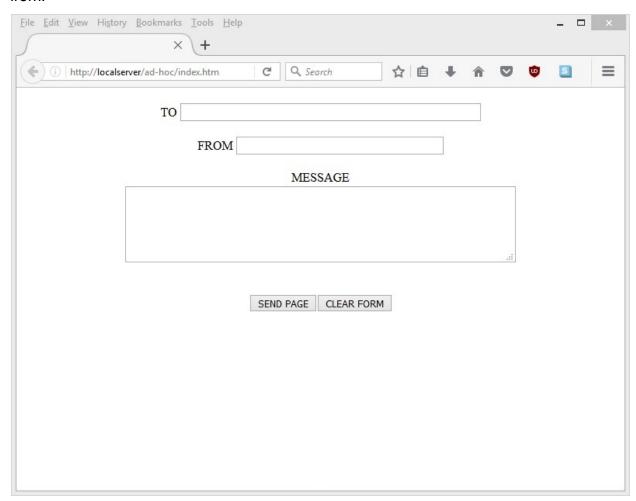
9) Click Apply.

As soon as you do, PageGate will publish a directory to the <u>Web Pages path</u> specified in the <u>GetWeb Settings</u> that matches the name of the group and publish the index.htm and default.htm files to it. This makes a new messaging website, accessible by going to http://<yourwebserver>/<yourgroupname>/

For example, let's say that our web server's host name is webhost and that our group's name was webpaging. You would go to http://webhost/webpaging/

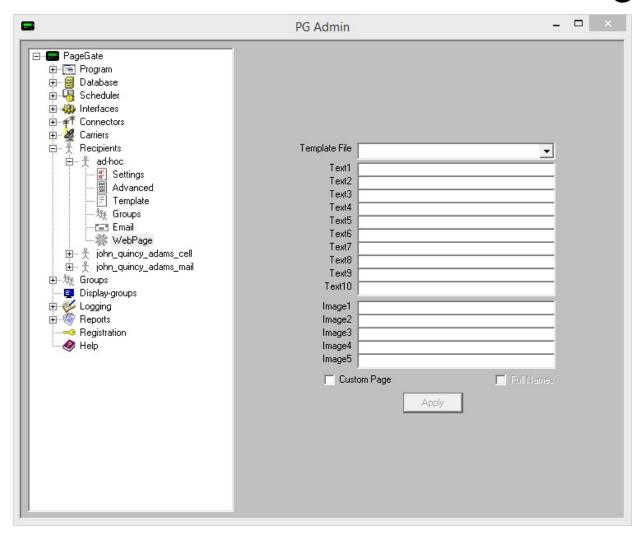
NOTE: You must configure the <u>GetWeb API's settings</u> before you can implement this.

This template should be tied to an <u>Ad-Hoc recipient</u> and provides a messaging website which offers a field to enter a phone number to message rather than a static list to choose from.

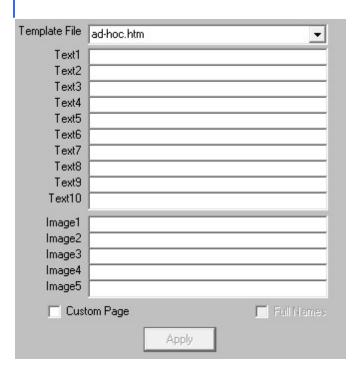


To configure GetWeb to publish this style of messaging website, you'll first need to create an <u>ad-hoc recipient</u> to tie the template to. Once you have the <u>ad-hoc recipient</u> created, this is what you'll want to do:

- 1) Open the PageGate Admin.
- 2) Go to Recipients <YourAdHocRecipient> WebPage.



3) In the 'Template File' dropdown menu, select: ad-hoc.htm



4) Click Apply.

As soon as you do, PageGate will publish a directory to the <u>Web Pages path</u> specified in the <u>GetWeb Settings</u> that matches the name of the ad-hoc recipient and publishes the index.htm and default.htm files to it. This makes a new messaging website, accessible by going to http://<yourwebserver>/<youradhocrecipientname>/

For example, let's say that our web server's host name is webhost and that our group's name was ad-hoc. You would go to http://webhost/ad-hoc/

Status

This section displays the current status of the GetWeb module.



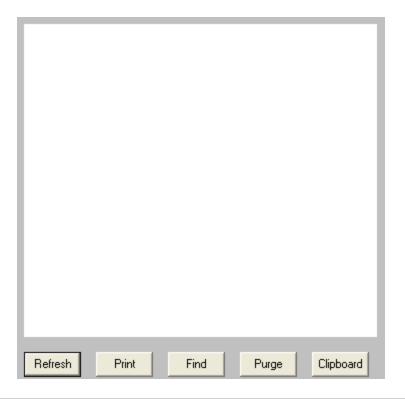
If the status of GetWeb is stopped, it indicates that the module is not running and this can be caused by a few things.

GetWeb will need to be checked in the <u>"Run on this server"</u> section in the <u>Program - Settings section of the PageGate Admin.</u>

- Enabled must be checked in the <u>settings of the GetWeb module</u>.
- The PageGate server must be running. If you're running PageGate as an application, launch the PageGate server from the shortcut in the start menu. If you're running PageGate as a Windows Service, start the PageGate service. For more information, see the Run Styles section of the documentation.

Log

This log is a record of information and traffic processed by the GetWeb module.



Button	Function	
Refresh	Displays the most current entries in the log.	
Print	Sends a copy of everything listed in the log to a printer.	
Find	Allows you to search for something within the log.	
Purge	Deletes the entirety of this log.	
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.	

Supported Scripts

It's quite easy to use a script to pass information to GetWeb's CGI executable. Below, you'll find examples of both Linux and Powershell scripts to use as a guide:

Linux Script

#!/bin/bash

set each part of the URL to send

UrlToCgi=\$(printf "http://127.0.0.1/scripts/webgate.exe")

RecipientVar=\$(printf "?USER=")

Recipient=\$(printf "pageyou")

SenderVar=\$(printf "&FRM=")

Sender=\$(printf "fromme")

MessageVar=\$(printf "&MSG=")

set message to all the text sent on the command line

Message=\$@

url encode message text

Message=\$(php -r "echo urlencode(\"\$Message\");")

build the request URL

FullUrl=\$UrlToCgi\$RecipientVar\$Recipient\$SenderVar\$Sender\$MessageVar\$Message

send the request

wget -O- "\$FullUrl"

Powershell Script

set each part of the URL to send

\$UrlToCgi="http://127.0.0.1/scripts/webgate.exe"

\$RecipientVar="?USER="

\$Recipient="pageyou"

\$SenderVar="&FRM="

\$Sender="fromme"

\$MessageVar="&MSG="

set message to all the text sent on the command line

\$Message=\$args

url encode message text

[uri]::EscapeUriString(\$Message)

build the request URL

\$FullUrl=\$UrlToCgi + \$RecipientVar + \$Recipient + \$SenderVar + \$Sender +

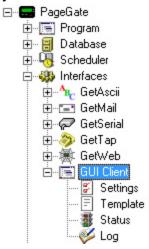
\$MessageVar + \$Message

send the request

Invoke-WebRequest -Uri \$FullUrl

GUI Client

The GUI Client API is a Windows based program installed on workstations on the same network as the PageGate server. This program provides a graphical user interface to send and schedule messages. Since the PageGate Client is its own application, the PageGate Admin's GUI Client section is only used to enable or disable this interface, modify the template tied to this interface, to check the status of the interface and to review the log of traffic submitted by the workstation clients.



Settings

This section controls whether the GUI Client interface is enabled or disabled.

Status

This section displays the running/not running state of the interface.

Template

This section allows you to configure a custom template for messages processed by this API.

Log

This section displays a record of all messages submitted by the GUI Client.

<u>Click here</u> for information on how to install, configure and implement the PageGate GUI Client.

Settings



The only setting for the GUI Client contained within the PageGate Admin is whether the GUI Client module is Enabled or Disabled. By default, the GUI Client is set to Enabled.

To disable the GUI Client interface, uncheck Enabled and click Apply.

To enable the GUI Client interface, check Enabled and click Apply. **Status**

The status subsection of GUI Client will show you if the GUI Client module is currently running or stopped.

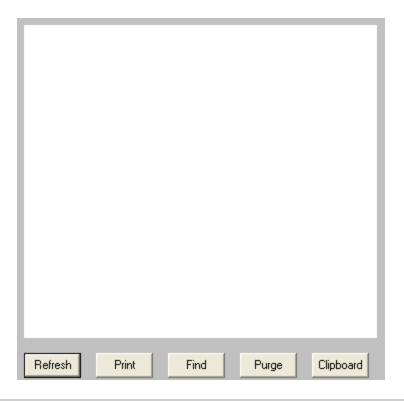


If the Status of GUI Client is Stopped, that indicates that either the module is not enabled or the PageGate server is not active.

- Enabled must be checked in the <u>settings of the GUI Client module</u>.
- The PageGate server must be running. If you're running PageGate as an application, launch the PageGate server from the shortcut in the start menu. If you're running PageGate as a Windows Service, start the PageGate service. For more information, see the Run Styles section of the documentation.

Log

This log is a record of information and traffic submitted by workstations using the GUI Client.



Button	Function	
Refresh	Displays the most current entries in the log.	
Print	Sends a copy of everything listed in the log to a printer.	
Find	Allows you to search for something within the log.	
Purge	Deletes the entirety of this log.	
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.	

Additional APIs

• SNPP Server

This API allows you to host an SNPP server to receive messages in the SNPP protocol.

• TCP Server Module

This module allows PageGate to run a TCP server/listener, enabling it to accept TCP packets from any source.

• <u>UDP Server Module</u>

This module allows PageGate to run a UDP server/listener, enabling it to accept UDP packets from any source.

TAP to ASCII

This API allows you to monitor a COM port (physical or virtual) for either modem or serial messages in the TAP protocol. When a monitored modem or serial port passes a TAP message, the TAP to ASCII module records the information and submits it to the GetASCII API for processing.

• TAP IP Server

This API allows you to receive the TAP protocol by TCP/IP instead of the standard modem or serial/RS232 line.

Serial to ASCII

This API allows you to monitor a serial/RS232 port (physical or virtual) for raw data ascii strings to be parsed in to outbound messages. When a data string is sent to a monitored serial port, the Serial to ASCII module records the information and submits it to the GetASCII API for processing.

Filter Pack

The filter pack is a series scripts that allow you to modify any input from any API based on nearly any selection criteria of your choosing. These scripts also allows you to read any plaintext content generated by another application; whether that's another program's log files, XML or HTML content, delimited text or anything that can be read as plaintext. **SNPP Server**

This interface allows PageGate to function as an SNPP server to receive this protocol. Messages received by this API are output to a directory as a text file that is then read in by the GetASCII API.

Step 1: Create a directory for the SNPP Server

- 1) In Windows, create a new directory for the SNPP Server. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called SNPP as a sub-directory of PageGate's database directory (By default, c: \PageGateData\SNPP\).
- 2) In Windows, browse in to the PageGate program directory.
- 3) Move the snppserver.exe, pininfo.txt and snpp.ini files to the folder you created in step 1.

Step 2: Configure the SNPP Server's settings

1) The first thing we'll need to do is modify the snpp.ini file. Open the file in notepad.

To give you a little more information, the snpp.ini file controls the behavior of the SNPP Server. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 2) Change the OutputFolder= value to the directory you created in step 1. By default, C: \PageGateData\SNPP\
- 3) Change the LogFolder= value to your <u>logging directory</u>. If you are unsure of what this folder is, open the PageGate Admin and go to the <u>Program Settings</u> section. By default, C:\PageGateData\Logs\
- 4) Save the .ini file and close notepad.
- 5) Open pininfo.txt in notepad.

This file tells the SNPP server what range of numbers can be passed to the server. The format of the entries defined in this text file are:

"Starting PIN", "Ending PIN", "recipient type"

If you would like ID numbers in a range to be recognized as the recipient's name (not using ad-hoc, but using numeric recipient names in PageGate), use the text "PG_Recipient" as shown below:

```
"0001","9999", "PG_Recipient"
```

If you would like ID numbers in a range to be passed through PageGate as intact ID's to another source in an <u>ad-hoc</u> range, use the name of a <u>Recipient in PageGate whose type is Ad-Hoc</u>.

```
"0000001","4999999","adhoc1"
```

To have it accept all potential alphanumeric values, use the following statements:

```
"*","*","PG_Recipient"
"*","*","adhocrecipient"
```

6) After declaring the appropriate ID ranges, save and close the file.

Step 3: Run the SNPP Server

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the SNPP Server's program directory. By default, c: \PageGateData\SNPP\
- 3) Type the following and hit enter:

snppserver /install

- 4) Exit the command prompt.
- 5) Open the Services list in Windows.
- 6) Go in to the Properties of the PageGate SNPP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Step 4: Configure the GetASCII API to process the SNPP Server's messages

- 1) Go to Interfaces GetASCII Settings.
- 2) Set the 'Polling Directory' to the output folder. By default, C:\PageGateData\SNPP\
- 3) Check Enabled.
- 4) Click Apply.
- 5) Go to Program Settings.
- 6) In the 'Run on this server' section, check GetASCII
- 7) Click Apply.
- 8) If prompted for credentials, leave them blank and click Apply again.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling Files</u> section to specify the SNPP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc and it is a Standard file type.

TCP Server Module

This interface allows PageGate to function as a TCP server to receive TCP packets from a variety of sources. Messages received by this API are output to a directory as a text file that is then read in by the GetASCII API.

Step 1: Create a directory for the TCP Server

1) In Windows, create a new directory for the TCP Server. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called



TCP as a sub-directory of PageGate's database directory (By default, c: \PageGateData\TCP\).

- 2) In Windows, browse in to the PageGate program directory.
- 3) Move the pgtcpserver.exe and pgtcp.ini files to the folder you created in step 1.

Step 2: Configure the TCP Server's settings

1) The first thing we'll need to do is modify the pgtcp.ini file. Open the file in notepad.

To give you a little more information, this INI file controls the behavior of the TCP Server. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 2) Configure the port the TCP server should listen to. By default, the port is set to 5002.
- 3) Change the OutputFolder= value to the directory you created in step 1. By default, C: \PageGateData\TCP\
- 4) Change the LogFolder= value to your <u>logging directory</u>. If you are unsure of what this folder is, open the PageGate Admin and go to the <u>Program Settings</u> section. By default, C:\PageGateData\Logs\
- 5) Next, we'll need to set the end of record delimiter but let's go in to what that means first. When the TCP Server is receiving information, it doesn't really know what in the data is important; it's just receiving TCP packets of data. The end of record delimiter tells the TCP server that the expressed series of characters denotes a break in the data stream.

For example, the TCP server could receive a series of 5 packets:

- a) This is
- b) a
- c) test message #
- d) This is a new
- e) message

If you set EndOfRecordDelimiter = #, that tells the TCP server that everything before every # received is a data block to be parsed.

Put another way, the end of record delimiter tells the TCP server how to break down the information it's receiving in to processable chunks.

It's the "over" of a CB radio conversation.

5) Below that, there are RequiredText and RequiredTextOperator values that can be set.

RequiredText specifies text that must appear for a data block to be processed and you may specify multiple values by separating each with a | (pipe).

The RequiredTextOperator specifies whether you're using OR or AND logic.

For example, let's say you specify the following: RequiredText=alarm|notification RequiredTextOperator=AND

That tells the TCP server that both the words alarm AND notification need to appear in a received data block for that data block to be treated as a message to send.

As another example:
RequiredText=alarm|alert
RequiredTextOperator=OR

That tells the TCP server that either the words alarm or alert need to appear in a received data block for that data block to be treated as a message to send.

6) Next we have EndOfRecordTimeout, whose value is expressed in milliseconds. This value tells the TCP server how long to wait before timeout after receiving data, to accept a data record.

By default, this is set to 3000 milliseconds or 3 seconds.

- 7) RejectOnTimeout determines whether timeouts should post a rejection notice or not. By default, this is set to true.
- 8) AcceptResponse determines what the TCP server will echo to the sending system upon acceptance of a data block.
- 9) RejectResponse determines what the TCP server will echo to the sending system upon rejection of a data block.
- 10) Last, we have two optional settins: StaticRecipient and StaticSender

StaticRecipient allows you to specify the name of a specific recipient or group in PageGate that ALL traffic from the TCP server should be passed through.

StaticSender allows you to hard code a sender's name that should be associated with ALL traffic from the TCP server.

11) Save the .ini file and close notepad.

Step 3: Run the TCP Server

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the TCP Server's program directory. By default, c: \PageGateData\TCP\
- 3) Type the following and hit enter: pgtcpserver /install
- 4) Exit the command prompt.
- 5) Open the Services list in Windows.
- 6) Go in to the Properties of the PageGate TCP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Step 4: Configure the GetASCII API to process the TCP Server's messages

- 1) Go to Interfaces GetASCII Settings.
- 2) Set the 'Polling Directory' to the output folder. By default, C:\PageGateData\TCP\
- 3) Check Enabled.
- 4) Click Apply.
- 5) Go to Program Settings.
- 6) In the 'Run on this server' section, check GetASCII
- 7) Click Apply.
- 8) If prompted for credentials, leave them blank and click Apply again.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling</u> <u>Files</u> section to specify the TCP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc and it is a Standard file type.

UDP Server Module

This interface allows PageGate to function as a UDP server to receive UDP packets from a variety of sources. Messages received by this API are output to a directory as a text file that is then read in by the GetASCIIAPI.

Step 1: Create a directory for the UDP Server

- 1) In Windows, create a new directory for the UDP Server. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called UDP as a sub-directory of PageGate's database directory (By default, c: \PageGateData\UDP\).
- 2) In Windows, browse in to the PageGate program directory.
- 3) Move the pgudpserver.exe and pgudp.ini files to the folder you created in step 1.

Step 2: Configure the UDP Server's settings

1) The first thing we'll need to do is modify the pgudp.ini file. Open the file in notepad.

To give you a little more information, this INI file controls the behavior of the UDP Server. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 2) Configure the port the UDP server should listen to. By default, the port is set to 5002.
- 3) Change the OutputFolder= value to the directory you created in step 1. By default, C: \PageGateData\UDP\
- 4) Change the LogFolder= value to your <u>logging directory</u>. If you are unsure of what this folder is, open the PageGate Admin and go to the <u>Program Settings</u> section. By default, C:\PageGateData\Logs\
- 5) Next, we'll need to set the end of record delimiter but let's go in to what that means first. When the UDP Server is receiving information, it doesn't really know what in the data is important; it's just receiving UDP packets of data. The end of record delimiter tells the UDP server that the expressed series of characters denotes a break in the data stream.

For example, the UDP server could receive a series of 5 packets:

- a) This is
- b) a
- c) test message #
- d) This is a new
- e) message



If you set EndOfRecordDelimiter = #, that tells the UDP server that everything before every # received is a data block to be parsed.

Put another way, the end of record delimiter tells the UDP server how to break down the information it's receiving in to processable chunks.

It's the "over" of a CB radio conversation.

5) Below that, there are RequiredText and RequiredTextOperator values that can be set.

RequiredText specifies text that must appear for a data block to be processed and you may specify multiple values by separating each with a | (pipe).

The RequiredTextOperator specifies whether you're using OR or AND logic.

For example, let's say you specify the following: RequiredText=alarm|notification RequiredTextOperator=AND

That tells the UDP server that both the words alarm AND notification need to appear in a received data block for that data block to be treated as a message to send.

As another example:
RequiredText=alarm|alert
RequiredTextOperator=OR

That tells the UDP server that either the words alarm or alert need to appear in a received data block for that data block to be treated as a message to send.

6) Next we have EndOfRecordTimeout, whose value is expressed in milliseconds. This value tells the UDP server how long to wait before timeout after receiving data, to accept a data record.

By default, this is set to 3000 milliseconds or 3 seconds.

- 7) RejectOnTimeout determines whether timeouts should post a rejection notice or not. By default, this is set to true.
- 8) AcceptResponse determines what the UDP server will echo to the sending system upon acceptance of a data block.
- 9) RejectResponse determines what the UDP server will echo to the sending system upon rejection of a data block.
- 10) Last, we have two optional settins: StaticRecipient and StaticSender

StaticRecipient allows you to specify the name of a specific recipient or group in PageGate that ALL traffic from the UDP server should be passed through.

StaticSender allows you to hard code a sender's name that should be associated with ALL traffic from the UDP server.

11) Save the .ini file and close notepad.

Step 3: Run the UDP Server

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the UDP Server's program directory. By default, c: \PageGateData\UDP\
- 3) Type the following and hit enter: pgudpserver /install
- 4) Exit the command prompt.
- 5) Open the Services list in Windows.
- 6) Go in to the Properties of the PageGate UDP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Step 4: Configure the GetASCII API to process the UDP Server's messages

- 1) Go to Interfaces GetASCII Settings.
- 2) Set the 'Polling Directory' to the output folder. By default, C:\PageGateData\UDP\
- 3) Check Enabled.
- 4) Click Apply.
- 5) Go to Program Settings.
- 6) In the 'Run on this server' section, check GetASCII
- 7) Click Apply.
- 8) If prompted for credentials, leave them blank and click Apply again.



Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling Files</u> section to specify the UDP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc and it is a Standard file type.

TAP to ASCII

This interface is a companion module for GetTAP and unlocks the ability to monitor additional serial/RS232 ports or modems, up to as many as you need. Messages received by this API are output to a directory as a text file that is then read in by the GetASCII API. This API requires the GetASCII API to function.

Step 1: Create a directory for the TAP to ASCII receiver

- 1) In Windows, create a new directory for the TAP to ASCII receiver. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called TAP2ASCIIX where X is the number of the interface running as a sub-directory of PageGate's database directory (By default, c:\PageGateData\TAP2ASCII1\).
- 2) Unzip the TAP to ASCII file you were sent upon purchasing the API in to the folder you created in step 1.

Step 2: Configure the TAP to ASCII receiver's settings

1) The first thing we'll need to do is modify the TAP2ASCII.ini file. Open the file in notepad.

To give you a little more information, the TAP2ASCII.ini file controls the behavior of the TAP to ASCII receiver.

- 2) Change RunStyle=Application to RunStyle=Service
- 3) Change SwitchStyle=False to SwitchStyle=True
- 4) Set DataFolder= to the directory you created in step 1. By default, DataFolder=C: \PageGateData\TAP2ASCII1\
- 5) Set ComPort= to the serial or modem port that should be monitored.
- 6) Set ComSettings= to the communication parameters required. Values must be passed as baud rate, parity, databits, stopbits

For example, this string would use 9600 baud, no parity, 8 data bits and 1 stop bit: ComSettings=9600,n,8,1

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and this string would use 1200 baud, even parity, 7 data bits and 1 stop bit: ComSettings=1200,e,7,1

7) Set InitString= to the word 'direct' for RS232/serial connections. Example, InitString=direct

Set InitString= to the appropriate AT command string to initialize your modem in 'answer' mode. For most modems, you can use ATS0=1 to configure the modem to answer after 1 ring. Example, InitString=ATS0=1

8) Save the .ini file and close notepad.

Step 3: Run the TAP to ASCII receiver

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the TAP to ASCII receiver's program directory. By default, c: \PageGateData\TAP2ASCII1\
- 3) Type the following and hit enter: TAP2ASCII1 /install
- 4) Exit the command prompt.
- 5) Open the Services list in Windows.
- 6) Find and start the TAP 2 ASCII 1 service.

Step 4: Configure the GetASCII API to process the TAP to ASCII receiver's messages

Note: You must configure a basic polling directory before specifying these advanced polling settings.

- 1) Go to Interfaces GetASCII Settings Advanced Polling Files.
- 2) Click Add.
- 3) Specify the following:

Recipient: *

From: Leave blank or specify a value

File(s): *.t2a

Path: Specify the output path of the TAP to ASCII receiver. By default, c:

\PageGateData\TAP2ASCII1\

File Type: Standard

4) Click Apply, then click Apply again.

TAP IP Server

The TAP IP Server allows PageGate to receive the TAP protocol by TCP request instead of serial or modem line. Messages received by this API are output to a directory as a text file that is then read in by the <u>GetASCII API</u>. This API requires the GetASCII API to function.

Step 1: Create a directory for the TAP IP Server

- 1) In Windows, create a new directory for the TAP IP receiver. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called IPTAP as a sub-directory of PageGate's database directory (By default, c: \PageGateData\IPTAP\).
- 2) In Windows, browse in to the PageGate program directory.
- 3) Move the TaplpServer.exe, pininfo.txt and tapip.ini files to the folder you created in step 1.

Step 2: Configure the TAP IP Server's settings

1) The first thing we'll need to do is modify the tapip.ini file. Open the file in notepad.

To give you a little more information, the tapip.ini file controls the behavior of the TAP IP Server. If you are running the evaluation version, it will stop itself every 3-5 days, and/or after 500 messages, whichever comes first.

- 2) Change the OutputFolder= value to the directory you created in step 1. By default, C: \PageGateData\IPTAP\
- 3) Change the LogFolder= value to your <u>logging directory</u>. If you are unsure of what this folder is, open the PageGate Admin and go to the <u>Program Settings</u> section. By default, C:\PageGateData\Logs\
- 4) Save the .ini file and close notepad.
- 5) Open pininfo.txt in notepad.

This file tells the SNPP server what range of numbers can be passed to the server. The format of the entries defined in this text file are:

"Starting PIN", "Ending PIN", "recipient type"

If you would like ID numbers in a range to be recognized as the recipient's name (not using ad-hoc, but using numeric recipient names in PageGate), use the text "PG_Recipient" as shown below:

```
"0001","9999", "PG_Recipient"
```

If you would like ID numbers in a range to be passed through PageGate as intact ID's to another source in an <u>ad-hoc</u> range, use the name of a <u>Recipient in PageGate whose type</u> is Ad-Hoc.

```
"0000001","4999999","adhoc1"
```

To have it accept all potential alphanumeric values, use the following statements:

```
"*","*","PG_Recipient"
"*","*","adhocrecipient"
```

6) After declaring the appropriate ID ranges, save and close the file.

Step 3: Register the TAP IP Server

Without its registration, the TAP IP Server can be run in a demo mode where it will stop the service/shut itself off every 3 to 5 days or every 100 messages, whichever happens first.

To register the TAP IP Server:

- 1) Open the tapip.ini file in notepad.
- 2) Add the following line to the bottom of the file: Registration= Your PageGate version 9 registration key number
- 3) Save and close the tapini.ini file.

Step 4: Run the TAP IP Server

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the TAP IP Server's program directory. By default, c: \PageGateData\IPTAP\
- 3) Type the following and hit enter: tapipserver /install
- 4) Exit the command prompt.
- 5) Open the Services list in Windows.

- 6) Go in to the Properties of the PageGate TAP IP Server service.
- 7) Change the Startup Type to Automatic and Start the Service.

Step 5: Configure the GetASCII API to process the TAP IP Server's messages

- 1) Go to Interfaces GetASCII Settings.
- 2) Set the 'Polling Directory' to the output folder. By default, C:\PageGateData\IPTAP\
- 3) Check Enabled.
- 4) Click Apply.
- 5) Go to Program Settings.
- 6) In the 'Run on this server' section, check GetASCII
- 7) Click Apply.
- 8) If prompted for credentials, leave them blank and click Apply again.

Note: If you are already using the GetASCII module, you can use the <u>Advanced Polling Files</u> section to specify the TAP IP Server's output folder as a secondary polling location. The File(s) value will need to be set to *.asc and it is a Standard file type.

Serial to ASCII

This interface is a companion module for GetSerial and unlocks the ability to monitor additional serial/RS232 ports (physical or virtual), up to as many as you need. Messages received by this API are output to a directory as a text file that is then read in by the GetASCII API. This API requires the GetASCII API to function.

Step 1: Create a directory for the Serial to ASCII receiver

- 1) In Windows, create a new directory for the Serial to ASCII receiver. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called S2ASCIIX where X is the number of the interface running as a sub-directory of PageGate's database directory (By default, c:\PageGateData\S2ASCII1\).
- 2) Unzip the Serial to ASCII file you were sent upon purchasing the API in to the folder you created in step 1.

Step 2: Configure the Serial to ASCII receiver's settings

1) The first thing we'll need to do is modify the Serial2ASCII.ini file. Open the file in notepad.

To give you a little more information, the Serial2ASCII.ini file controls the behavior of the Serial to ASCII receiver.

- 2) Change RunStyle=Application to RunStyle=Service
- 3) Change SwitchStyle=False to SwitchStyle=True
- 4) Set DataFolder= to the directory you created in step 1. By default, DataFolder=C: \PageGateData\S2ASCII1\
- 5) Set ComPort= to the serial/RS232 port that should be monitored.
- 6) Set ComSettings= to the communication parameters required. Values must be passed as baud rate, parity, databits, stopbits

For example, this string would use 9600 baud, no parity, 8 data bits and 1 stop bit: ComSettings=9600,n,8,1

and this string would use 1200 baud, even parity, 7 data bits and 1 stop bit: ComSettings=1200,e,7,1

- 7) The behavior of the <u>Symbols</u>, <u>Record</u>, <u>Recipient</u>, <u>Sender</u> and <u>Message</u> sections follows that of the GetSerial module. Click here for more information.
- 8) After configuring all appropriate input parameters, save and close the .ini file.

Step 3: Run the Serial to ASCII receiver

- 1) Open a command prompt with elevated permission.
- 2) Change directory to the Serial to ASCII receiver's program directory. By default, c: \PageGateData\S2ASCII1\
- 3) Type the following and hit enter: Serial2ASCII1 /install
- 4) Exit the command prompt.

- 5) Open the Services list in Windows.
- 6) Find and start the Serial 2 ASCII 1 service.

Step 4: Configure the GetASCII API to process the TAP to ASCII receiver's messages

Note: You must configure a basic polling directory before specifying these advanced polling settings.

- 1) Go to Interfaces GetASCII Settings Advanced Polling Files.
- 2) Click Add.
- 3) Specify the following:

Recipient: *

From: Leave blank or specify a value

File(s): *.s2a

Path: Specify the output path of the TAP to ASCII receiver. By default, c:

\PageGateData\Serial2ASCII1\

File Type: Standard

4) Click Apply, then click Apply again.

Filter Pack

The filter pack is a scripting system that allows you to modify any input in to or output from any of PageGate's interfaces based on nearly any criteria of your choosing.

Things you can do with the filtering system:

- Conditionally modify who a message is intended to go to based on key words or key phrases.
 - All fire, rescue and accident calls should be dispatched but non-emergency calls should not be.
 - Only alarms with "CRITICAL" in them should be delivered.

Exam ples:

- Messages with the keyphrase "HAZARD" should go to a high priority group instead of the normal distribution list.
- Replies with the word 'subscribe' should perform one action but replies with the word 'unsubscribe' should perform another.
- Modify the contents or structure of data to turn it in to something more user-friendly and readable.

 Pull content from an API (like the National Weather Service, a Ticket Tracking system like Jira or ServiceNow, etc)

Exam ples:

- Parse XML, HTML, JSON or any other form of delimited text in to readable message content
- Trigger a Powershell or other script.

Descr iption:

 This allows you to have PageGate trigger other applications or processes by tying them to a conditional filter in PageGate. Powershell is incredibly powerful and with the right script, you could have PageGate execute functions that would modify another application's database, perform network or domain lookup functions or anything else made available by Powershell.

This is certainly not a comprehensive list of things you could do and, effectively, this filter allows you to modify any input fed in to or output delivered from PageGate based on nearly any selection criteria of your choosing.

Over the course of this documentation, we'll be going over how to configure, code and implement PageGate's filtering system.

First, the filter scripts require the file 'pgfilter.exe' to reside in the PageGate program directory and will need to reference an XML file containing the script, which can reside in any directory the PageGate server has access to (whether that's on the local hard drive or on a network share via UNC path). You should receive all necessary files for the filtering system upon purchase but if you do not have them, please contact our sales or support departments.

Second, it's important to understand the chain of events that triggers the script to run.

For more detailed information, please see: <u>How to Implement the Script</u>

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function	
cter		
~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.	
?	Single character wildcard.	
*	Multiple character wildcard.	

IMPORTANT

ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output.

This character is used when you want to represent a character as represented by its $\frac{\mathsf{ASCIIDecimal}}{\mathsf{Decimal}}$ value. For example, since the filter directly references the character \sim in its function, if you want to use the \sim character in your text, you'll need to represent it with its ASCII value. The ASCII value of \sim is: \126

Note: PageGate's <u>filter script</u> supports <u>RegEx expressions</u>, which can allow you to implement an incredibly intricate system.

How to Implement the Script

Step 1: Copy the filter's executable in to the PageGate program directory

The file 'pgfilter.exe' must reside in the PageGate program folder. If you do not have a copy of this file, please contact our sales and registration department at sales@notepage.com or by phone at 781-829-0500.

Step 2: Determine what you want filtered

Filter scripts are called through PageGate's template system and can be broken down in to two categories: Inbound and Outbound

Inbound filters can trigger on and modify content passed to the program. These filters are applied to the program's input interfaces and on a global level to effect all input interfaces.

Outbound filters can trigger on and modify messages delivered by the program. These filters can be applied to a recipient, carrier, connector and on a global level.

You can have a system reference multiple filters for different purposes at the same time.

For example, you could configure an inbound filter to strip XML and JSON formatting from received data as well as a global outbound filter that inserted a custom header before every message. You could then make exceptions to that global rule by configuring unique filters for a carrier, recipient or connector.

You could also configure an SMS reply processing system that filtered reply messages containing certain keywords to specific recipients and groups while also implementing an outbound filter to customize the contents or formatting of messages delivered to them.

You could do everything described all at once. It really is just a matter of determining what you want to do, then implementing an appropriate solution.

Step 3: Write the filter

Each filter exists as an XML file in a directory of your choosing; this directory just needs to be accessible to the PageGate server, whether that's on the local hard drive or via UNC to

a network path. The XML file containing your filter may also be called anything you like, you can give the file any name as long as its extension is .xml

Steps for writing filters can be found here.

Step 4: Reference the filter

After writing a filter, you'll need to add reference it in the 'Settings' section of a template in PG Admin.



IMPORTANT

Due to the way PageGate is programmed, the character '\' is system reserved. When referencing file paths in the template, you will need to use the ASCII value for a backslash. \ must be followed by the three digit ASCII code 092.

For example, c:\092PageGateData\092

Inbound Filters

Value	Description	Example
InterfaceFil ter	This applies a filter to processed data. This allows the interfaces to apply the initial layer of data sorting and collection and then applies the filter to the result.	InterfaceFilter = c: \092PageGateData\092Filters\ 092yourfilter.xml

GetAscii

Standard polling: Filter is applied against temp file with recipient, sender and message Advanced polling: Filter is applied against temp file with recipient, sender and message, and after lookup substitution

GetMail

Filter is applied against temp file with recipient, sender and message, after they have been extracted from the email, and decoding has taken place

GetSerial

Filter is applied against temp file with recipient, sender and message, and after lookup substitution

GetTap

Filter is applied against each message that is received. The file processed by PGFilter will have ld as first line, second line blank, and message on remaining lines.

GetWeb

Filter is applied against temp file with recipient, sender and message

This can be used on an interface or global level. If used in an interface, it applies the filter to that interface. If used on a global level, it applies the filter to all input from all interfaces.

This applies a filter to raw, unprocessed data. This applies the filter before the interface has a chance to read the data. The specific behavior varies depending on the interface in question.

Rawlnterfa ceFilter

GetAscii

Standard polling: Filter is applied against the raw text file before GetAscii tries to process it

Advanced polling: Filter is applied against each record that is found, before it is

RawInterfaceFilter = c: \092PageGateData\092Filters\ 092yourfilter.xml processed any further (record pattern matching done first)

GetMail

Filter is applied against the raw file received from the PageGate mail server process. All headers are intact and no decoding has taken place yet. Envelope values for recipient and sender are not available for modification in the raw mail file (because they are read from the envelope).

GetSerial

Filter is applied against each record found before it is processed any further (record pattern matching is done first)

GetTap

Filter is applied against each message that is received.

GetWeb

Filter is applied against raw text file created by webgate.exe CGI program

This can be used on an interface or global level. If used in an interface, it applies the filter to that interface. If used on a global level, it applies the filter to all input from all interfaces.

Outbound Filters

Value	Description	Example
Filter	This applies a filter to outbound messages. This can be applied on a recipient, carrier, connector or global level. If used in a recipient template, all messages delivered to that recipient will be processed through the filter.	ConnectorFilter = c: \092PageGateData\092Filters\ 092yourfilter.xml

	If used in a carrier template, all messages	
	delivered through that carrier will be	
	processed through the filter.	
	If used in the program template, it applies to	
	all output from the program.	
	This applies a filter to the messages delivered by a connector. This filter can only modify the contents of a message and cannot modify the recipient or sender information.	Filter = c:
Connector Filter	This can be applied on a connector or global	\092PageGateData\092Filters\
i iitei	level.	092yourfilter.xml
	If used in the program template, it applies to	
	all connectors in the program.	
	This applies a filter to the subject line of any outbound email. This value is only referenced by the SMTP protocol and is not referenced by other protocols.	
	This can be applied on a recipient, carrier,	
	connector or global level.	
SubjectFilt er	If used in a recipient template, all SMTP/email messages delivered to that recipient will have their subject lines processed through the filter.	SubjectFilter = c: \092PageGateData\092Filters\ 092yourfilter.xml
	If used in a recipient template, all SMTP/email messages delivered to through that SMTP/email carrier will have their subject lines processed through the filter.	
	If used in the program template, all SMTP/email traffic sent from the system will have its subject line processed through the filter.	

Hierarchy

An Interface (and Global) template can have both a RawInterfaceFilter and an InterfaceFilter. Both filters will run in that order if they are both set.

6

Connectors will run any outbound filter according to which template has the highest priority. In order, they are:

- 1) Recipient
- 2) Carrier
- 3) Connector
- 4) Global

After implementing a filter script, it is highly recommend that you go through a <u>debugging process</u> to verify what you've configured. See <u>Debugging the Script</u> for more information.

Debugging the Script

To debug the filter script, you'll first need to set the <u>Debug tag</u> to true.

By setting Debug to True, that puts the script in to debugging mode. When in debugging mode, the script will display a window that shows the result of every component of your filter. It will display whether the filter performed its functions successfully or if there was an error and, if there was an error, what the error was related to. For example, "Match not found" in the event that your search criteria couldn't be found.

This makes tracking down errors in the script much easier than it otherwise would be.

If you're using preproc.bat, rename it to preprocv.bat

If you're using pstproc.bat, rename it to pstprocv.bat

The v in the file name stands for Verbose, so you're effectively putting the script in to a mode that will display far more information on the screen.

The Filter Script

Filters can be simple or complex depending on what you want to do. The most basic filters are search and replace functions, where you remove specific patterns like XML tags from text or replace short-codes with more verbose information. The more advanced filters can conditionally modify who receives a message, what the message says and execute functions via batch file or Powershell script, among other things.

The filters themselves are written in XML and, to start, you may want to look at the complete filter script template. That will give you a general overview of each section and all of the possible values you could use in them.

To break things down, there is one major section, Filter, that determines what each section of the script will do. Additionally, there are two conditional sections, InputFile and OutputFile, plus an optional debugging mode:

Filter

The Filter section determines what you want to do with the data read as input. A single filter script may reference multiple individual <Filter> sections to perform multiple tasks

within the same data set. It's also important to note that the filter system supports the use of Regex, allowing for a high level of customization and control.

• <u>InputFile</u>

Most scripts will not need this parameter. When using the filter system in conjunction with the GetAscii interface or a FILE protocol carrier, the InputFile section determines which file(s) you want the filter to scan.

OutputFile

Most scripts will not need this parameter. When using the filter system in conjunction with the GetAscii interface or a FILE protocol carrier, the OutputFile section determines what you want to name the files output by the filter's modifications.

Debug

The Debug section determines whether you want a debug level review of the filter to appear before the filter completes its actions. This is incredibly useful when first configuring a script and we recommend that this flag be enabled until the filter is ready to put in to production.

For most scripts, you'll want to start with the <u>Filter</u> section.

The Complete Filter Script Template

Note: The InputFile and OutputFile sections are not required for most scripts. For more information, please see
The Filter Script.

```
<InputFile>
      <Name>
            (Parameter), static input filename
      </Name>
      <Delete>
            True, (False)
      </Delete>
<OutputFile>
      <Name>
            (InputFile), static output filename
      </Name>
</OutputFile>
<Debug>
      True, (False)
</Debug>
<Filter>*
      <Search>*
            <Type>
```

```
(Literal), RegEx
              </Type>
              <Section>
                    (All), Recipient, Sender, Message, Temp, Flag
              </Section>
              <Text>*
                    search text, True, False
                     must be quoted to retain beginning and/or ending whitespace
              </Text>
       </Search>
       <Replace>*
             <Type>
                    (Literal), RegEx, And, Or
              </Type>
              <Section>
                    (All), Recipient, Sender, Message, Temp, Flag
              </Section>
              <Scope>
                    (Match), Section
              </Scope>
              <All>
                    True, (False)
              </All>
              <Text>*
                    replacement text, True, False
                    must be quoted to retain beginning and/or ending whitespace
              </Text>
       </Replace>
       <Continue>
             (True), False
       </Continue>
       <Abort>
              True, (False)
      </Abort>
</Filter>
<Filter>...
Notes:
      Sections with * are required
      Remove all *'s from a live filter.
      Values in () are default values if section is not present
```



The first Command Line parameter is the name of the InputFile to be processed If an <InputFile><Name> section is used, its value overrides the Command Line parameter value

The default settings file name is pgfilter.xml

The settings file name can be set by using settingsfile= as the first parameter on the Command Line. The input file name would then be the second parameter

OutputFile Name supports variables:

%InputFilePathAndName%

%InputFilePath%

%InputFileName%

%InputFileNameBase%

%InputFileNameExtension%

Section values for Recipient, Sender, Message, and All really just mean:

Recipient: first line of text, Sender: second line of text,

Message: third and remaining lines of text

All: the entire contents of the file

Literal search text special characters:

~ as first character means start of section/file

~ as last character means end of section/file

? matches a single character

* matches anything (including nothing)

\ following 3 digits are a decimal character value

the ~, ?, *, and \ characters must use \ with decimal equivalent to be used

literally

RegEx replacement:

Backreferences are allowed in replacement text

If the replacement scope is not 'match' or the replacement section is not the

same

as the search section, then only the literal replacement type can be used, because RegEx can only make replacements in the original searched text

(the

%Match% and %Group% macros can still be used in the literal replacement

text)

Literal search text variables

%Recipient% - the current value for Recipient %Sender% - the current value for Sender %Message% - the current value for Message %All% - the current value for All of the text %Temp% - the current value for the Temp variable \following 3 digits are a decimal character value

Literal replacement text variables:

%Match% - the actual text that matched the search text (Literal or RegEx match types)

%Group1%, %Group2%, %Group3% - RegEx group backreferences obtained from a RegEx search

%Recipient% - the current value for Recipient %Sender% - the current value for Sender %Message% - the current value for Message %All% - the current value for All of the text %Temp% - the current value for the Temp variable \following 3 digits are a decimal character value

The default value of the Temp variable is an empty string The default value of the Flag variable is false

RegEx uses a Pearl compatible implementation syntax good reference: http://www.regular-expressions.info/tutorialcnt.html

Filter

The Filter section determines what you want to do with the data read as input. A single filter script may reference multiple individual <Filter> sections to perform multiple tasks within the same data set. You can also find <u>filter statement examples here</u> and <u>complete script examples here</u>.

Flag	Values and Description	
Search	Please review the Search section for a detailed explanation of this tag and	
Sealch	its components.	
Donlago	Please review the Replace section for a detailed explanation of this tag and	
Replace	its components.	
	This tag determines whether or not you want the script to continue to the next action if it finds a match. This tag can be set to a value of True or False.	
Continue	For example, let's say we're <u>searching</u> for the text 345 within the <u>input file</u> 's data. Let's also say that no match for 345 can be found in the input data. If Continue is set to True, the filter will move to the next specified <filter> section. If Continue is set to False, the script will immediately terminate upon not finding a match.</filter>	
Abort	If the search section finds a match and Abort has a value of True, the script is aborted. Basically, the input data is left unchanged and no more filter blocks are processed. It just abruptly ends the filter processing and quits out without saving anything.	

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function	
cter		
~	\sim as first character means start of section/file, \sim as last character means end of section/file. For example, \sim 123 \sim would only find 123 and not 01234 or 1237, etc. \sim 123 would find 12340 but would not find 01234. 123 \sim would find 0123 but would not find 01234.	
?	Single character wildcard.	
*	Multiple character wildcard.	
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output.	
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.	

The Search section determines what you want the filter to look for.

<Search> <Section>

```
See Values and Description
      </Section>
      <Type>
            See Values and Description
      <Text>
            See Values and Description
      </Text>
</Search>
```

Flag	Values and Description	
	•	g determines where the filter should look for the data specified in the (see below).
	Value s	Explanation
	All	All tells the filter to search the entire data set read from the input file.
	Recipi ent	Recipient tells the filter to search only in the first line of the file.
	Sende r	Sender tells the filter to search only in the second line of the file.
Section	Messa ge	Message tells the filter to search only in the third and following lines of the file.
	Temp	Temp is a string variable that can be passed strings of characters to hold, then use its value to search on later. Temp does not support boolean operators. For example, you can have certain information stored in the Temp value, then both search on and output that Temp value in successive Filter tags. See Example 1 and Example 3 .
	Flag	Flag is a boolean value that can only hold a true or false statement. However, you can run "And" or "Or" statements against it for advanced logic chains. See Example 3 .
	Values	: Literal or RegEx
Туре	This tag	determines whether you want to use literal text or a RegEx statement ext tag.
Text (Literal)	to the T	pe tag is set to Literal, this tells the filter to search on the text entered in ext tag. For example, you could enter the literal text Fire Department if nted the filter to key off of the literal text "Fire Department" (without the
	This tag	supports the following boolean parameters:

	* - Multiple Character Wildcard		
	For example, fire* would find fire, firewood, fireplace, fireman and similar.		
	2. Cinale Character Wildowy		
	? - Single Character Wildcard		
	For example, fire? would fine fires, fired but would not find fire.		
	~ as first character means start of section/file		
	~ as last character means end of section/file		
	For example, ~12345~ would only read 12345. Without the ~ before and after		
	the string, the filter would recognize 12345 in 0123456.		
	and during, the inter would recognize 12040 in 0120400.		
	This tag also supports the following variables:		
	%Recipient% - the current value for Recipient		
	%Sender% - the current value for Sender		
	%Message% - the current value for Message		
	%All% - the current value for All of the text		
	%Temp% - the current value for the Temp variable		
	\-following 3 digits are a decimal character value. See Below.		
	The PageGate Filter script supports RegEx expressions. RegEx uses a Pearl		
Text	compatible implementation syntax and a good reference guide for the		
(Regex)	language can be found here:		
	http://www.regular-expressions.info/tutorialcnt.html		

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function	
cter		
~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.	
?	Single character wildcard.	
*	Multiple character wildcard.	
\	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output. This character is used when you want to represent a character as represented by its ASCII Decimal value. For example, since the filter directly references the	
	character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.	

The Replace section determines what you want to do with the data found in the <u>Search</u> section.

```
<Replace>
      <Section>
            See Values and Description
      </Section>
      <Type>
            See Values and Description
      </Type>
      <Scope>
            See Values and Description
      </Scope>
      <All>
            See Values and Description
      </All>
      <Text>
            replacement text goes here
            must be quoted to retain beginning and/or ending whitespace
            See Values and Description
      </Text>
</Replace>
```

Flag	Values and Description		
	Values:	All, Recipient, Sender, Message, Temp, Flag	
	This tag determines which section the filter perform the replacement within.		
	Value	Explanation	
	All	All tells the filter to replace any instance of the searched text within the entire data set read from the input file.	
	Recipi ent	Recipient tells the filter to replace values only in the first line of the file.	
Secti	Sende r	Sender tells the filter to replace values only in the second line of the file.	
	Mess age	Message tells the filter to replace values only in the third and following lines of the file.	
	Temp	Temp is a string variable that can be passed strings of characters to hold, then use its value to search on later. Temp does not support boolean operators. For example, you can have certain information stored in the Temp value, then both search on and output that Temp value in successive Filter tags.	

	Flag	Flag is a boolean value that can only hold a true or false statement. However, you can run "And" or "Or" statements against it for advanced logic chains.
	Values	Literal BogEv And Or
	values	: Literal, RegEx, And, Or
Туре	This tag determines whether you want to use literal text or a RegEx statement in the Text tag. This tag can also be used as a situational boolean operator to determine how to proceed.	
Турс	The boolean values (Or & And) modify the Flag value. So, for example, you could have the filter search for a value and set it as the Flag, then have the replace filter use "Or" to indicate that the Flag value may be more than one thing. You could also use the And operator to tell the filter that the Flag value must contain multiple variables to be matched. See Example 1 and Example 3 .	
Scop e	Values	: Match or Section
All	Values	: True or False
	If the Type tag is set to Literal, this tells the filter to search on the text entered in to the Text tag. For example, you could enter the literal text Fire Department if you wanted the filter to key off of the literal text "Fire Department" (without the quotes).	
	This tag supports the following boolean parameters: * - Multiple Character Wildcard	
Text		ample, fire* would find fire, firewood, fireplace, fireman and similar.
(Liter al)		gle Character Wildcard ample, fire? would fine fires, fired but would not find fire.
	~ as la	st character means start of section/file st character means end of section/file ample, ~12345~ would only read 12345. Without the ~ before and after the the filter would recognize 12345 in 0123456.
Text (Reg ex)	compa	ageGate Filter script supports RegEx expressions. RegEx uses a Pearl tible implementation syntax and a good reference guide for the language found here: http://www.regular-expressions.info/tutorialcnt.html

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

	· · · · · · · · · · · · · · · · · · ·
Chara	Function
cter	

~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
١	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output. This character is used when you want to represent a character as represented by its ASCII Decimal value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.

To better demonstrate how some of the flags function, here are a few examples of complete filter statements and an explanation of what they do.

Here is an example of a <u>Literal Text Replacement Command</u>.

Here is an example of an Abort Command.

This Filter statement tells the script to terminate if the Flag variable is set to False:

```
<Filter>
      <Search>
            <Section>
                   Flag
            </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   False
            </Text>
      </Search>
      <Replace>
            <Section>
                   Flag
            </Section>
            <Scope>
                   Section
            </Scope>
            <Type>
```

```
And
</Type>
<Text>
False
</Text>
<All>
False
</All>
</Replace>
</Continue>
False
</Continue>
</Filter>
```

This Filter statement tells the script to replace one piece of literal text with another. More specifically, this statement tells the script to search for the literal text Boiler Room and replace it with boiler tech group.

```
<Filter>
      <Search>
            <Section>
                   ΑII
             </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   Boiler Room
             </Text>
      </Search>
      <Replace>
             <Section>
                   Temp
            </Section>
             <Scope>
                   Section
             </Scope>
            <Type>
                   Literal
            </Type>
            <Text>
                   boiler tech group
            </Text>
             <All>
                   False
```

```
</All>
</Replace>
</Filter>
InputFile
```

The InputFile section determines which file(s) you want the filter to scan.

Flag	Values and Description
Name	Values: Parameter or Static Input File Name This tag determines the name(s) of the file(s) that you want the filter to modify. Just to note, the value Parameter is literal and not figurative. To use this value, you'll want to use the text Parameter, including the capital P. When the filter is engaged by the pstproc.bat file, it is fed the file name being used by the filter. The Parameter value tells the filter that it should simply accept the file name as it was passed by the batch file. Alternatively, you can specify a static file for input. For example, c: \PageGateData\Filter\winsck9000.log would tell the filter to only read from a specific file named winsck9000.log. As another example, you could specify c: \PageGateData\Filter*.log and that would tell the filter to read all log files placed in the directory.
	Values: True or False
Delete	This tag determines whether you want the filter to delete the input file when it has finished processing it. If you do, set this tag to True. If you do not, set this tag to False.

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	

~	~ as first character means start of section/file, ~ as last character means end of section/file. For example, ~123~ would only find 123 and not 01234 or 1237, etc. ~123 would find 12340 but would not find 01234. 123~ would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
\	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must be followed by a three digit code to indicate the character to be output. This character is used when you want to represent a character as represented by its ASCII Decimal value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need
	to represent it with its ascii value. The ascii value of ~ is \126.

OutputFile

The OutputFile section determines what you want to name the files output by the filter's modifications. This section is defined as follows:

Flag	Values and Description
	Values: InputFile or Static Input File Name
	This tag determines the names of the files that you want the filter to output after it has modified the data read from the input file.
	The value InputFile (this is case sensitive) tells the filter that the file output should mirror the original input file's name. So, for example, if the file read was named example.txt, then the file output would also be called example.txt
Name	Alternatively, you can specify a static naming convention for the output files. This value also supports the following variables: %InputFileName% %InputFileNameBase% %InputFileNameExtension% %InputFilePathAndName% %InputFilePath%

So, for example, you could specify this as the value: c:\PageGateData\ASCII\% InputFileNameBase%.asc

That would tell the filter that it should use the original name of the file read but the output file should have the extension .asc instead of the extension on the

As an important note, due to the way this script is programmed, certain characters are treated as command characters instead of literal text characters. The following characters represent certain command functions in the script:

Chara	Function
cter	
~	\sim as first character means start of section/file, \sim as last character means end of section/file. For example, \sim 123 \sim would only find 123 and not 01234 or 1237, etc. \sim 123 would find 12340 but would not find 01234. 123 \sim would find 0123 but would not find 01234.
?	Single character wildcard.
*	Multiple character wildcard.
	<u>IMPORTANT</u>
	ASCII value prefix (Ex: \013 for a carriage return, \010 for a line feed). The \ must
	be followed by a three digit code to indicate the character to be output.
\	This character is used when you want to represent a character as represented by its <u>ASCII Decimal</u> value. For example, since the filter directly references the character ~ in its function, if you want to use the ~ character in your text, you'll need to represent it with its ascii value. The ascii value of ~ is \126.

Debug

The Debug section determines whether you want a debug level review of the filter to appear before the filter completes its actions. This is incredibly useful when first configuring a script and we recommend that this flag be enabled until the filter is ready to put in to production. This section is defined as follows:

<Debug>
 See Values and Description
</Debug>

original file.

Flag	Values and Description
	Values: True or False
Debug	This tag determines whether you want to review the debug level information for the filter before it completes its actions. Set this flag to True to review the debugging information, set this flag to False if you do not.

Please see Debugging the Script for more information.

Complete Script Examples

Due to the complex nature of the Filter script, we've created a few examples of how scripts can be implemented. This is by no means a complete list of everything that the script can do and is intended to be a set of examples to guide you through the possibilities the script offers.

Example 1

In this example, we've configured the filter script to search the message read from the input file for the text BIOHAZARD and replace it with bio_hazard. We're then inserting the static text WARNING! EXTREME HAZARD DETECTED: before the matched search string.

Example 2

In this example, we've configured the filter to scan through XML tags for the text Technical or Network in the <AlertType> tag, then pull in information from the <Incident> and <Description> tags. This collated data is then being passed to a statically named group in PageGate: techsupervisors.

Example 3

In this example, we've configured the filter to scan for certain keywords and key phrases. If it finds them, messages containing that text should not be allowed to go through and should instead be filtered.

Example 4

In this example, we've configured the filter script for a dispatching agency that needs all fire, rescue and accident calls dispatched but does not want non-emergency calls dispatched. To do this, the script reads in the entire input file and looks for certain flags like FIRE, DISPATCHED or RESCUE, DISPATCHED or ACCID, DISPATCHED.

If it finds any of those three strings, the script then begins massaging and reformatting the data to remove unwanted information and to determine who the message should go to and what the message should say.

In this particular example, all fire and rescue calls need to be delineated from each other so that the fire calls go to the fire department and the rescue calls go to the rescue department but all accident calls should go to both fire and rescue departments.

Example 5

In this example, we're using an <u>HTTPGET</u> carrier to poll data from the National Weather service to have it delivered as an SMS.

Example 6

This example is designed to work with an <u>SMS Replies</u> system and is configured to look for the words 'subscribe' and 'unsubscribe' in the body of reply messages. If it finds 'subscribe', it reconfigures the message to go to the recipient or group in PageGate named 'subscribe'. If it finds 'unsubscribe', it reconfigures the message to go to the recipient or group named 'unsubscribe'.

Example 7

This example is designed to work with an <u>SMS Replies</u> system and is configured so that any time someone replies to a message with 'unsubscribe' or 'subscribe', those replies execute a batch file or script contained within a batch file. This can be especially useful if you're using an SQL environment and have PageGate's database linked to it with ODBC expressions. In theory, you could code a script to be executed that would automatically remove an entry from the users table of the database any time the 'unsubscribe' script was executed.

Example 8

This example is designed to work with an <u>SMS Replies</u> system. This script is configured with a list of 'allowed' phone numbers and is also configured to scan the sender value of all replies. If the sender's phone number isn't in the 'allowed' list, the message is filtered as spam.

Example 1

Example 1

In this example, we've configured the filter script to search the message read from the input file for the text 'BIOHAZARD'. If it is found then the script will replace the current Recipient with 'bio_hazard' to indicate that all messages containing the word BIOHAZARD should go to the bio_hazard group. We're then inserting the static text 'WARNING! EXTREME HAZARD DETECTED:' before the matched search string.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

This section of the filter configures the script to look for a static file named Example.txt in the same directory as the script and, when the script completes, it will not delete the original file and will output to a static file named Output.txt to the directory in which the script resides.

```
<OutputFile>
      <Name>
            Output.txt
      </Name>
</OutputFile>
<Debug>
      False
</Debug>
# This section of the filter configures the script to search
# for BIOHAZARD and if found, replaces the Recipient
# with bio hazard.
<Filter>
      <Search>
            <Section>
                   Message
            </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   BIOHAZARD
            </Text>
      </Search>
      <Replace>
            <Section>
                   Recipient
            </Section>
            <Type>
                   Literal
             </Type>
             <Scope>
                   Section
             </Scope>
             <Text>
                   bio hazard
            </Text>
      </Replace>
      <Continue>
            True
      </Continue>
```

```
</Filter>
# This section of the filter configures the script to insert
# WARNING! EXTREME HAZARD DETECTED: before the BIOHAZARD text
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   BIOHAZARD
             </Text>
      </Search>
      <Replace>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Scope>
                   Match
             </Scope>
             <Text>
                   WARNING! EXTREME HAZARD DETECTED: %Match%
             </Text>
      </Replace>
</Filter>
This is an example of the input file for filter example 1. This is what it looks like before the
filter engages.
supervisors
AlarmMonitor
BIOHAZARD ROOM 354
Another example:
it alerts
AlarmMonitor
BIOHAZARD RULES IN EFFECT FOR WING 2
When the data from example 1 is put through the example 1 filter, this is the output:
bio hazard
```

AlarmMonitor

WARNING! EXTREME HAZARD DETECTED: BIOHAZARD ROOM 354

or like this:

```
bio_hazard
AlarmMonitor
WARNING! EXTREME HAZARD DETECTED: BIOHAZARD RULES IN EFFECT FOR WING 2
Example 2
```

Example 2

In this example, we've configured the filter to scan through an XML file for the text 'Technical' or 'Network' in the <AlertType> tag. It will then temporarily store the information from the <Incident> and <Description> tags in the Temp variable. This collected data is then being passed to a statically named group in PageGate: techsupervisors.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

```
<InputFile>
      <Name>
             Parameter
      </Name>
      <Delete>
             True
      </Delete>
<Debug>
      False
</Debug>
<OutputFile>
             c:\PageGateData\ASCII\%InputFileNameBase%.asc
      </Name>
</OutputFile>
# This section of the Filters tells the script to look for
# any lines that have<AlertType>Technical</AlertType> and
# set the Flag variable to True if it is found
<Filter>
      <Search>
             <Section>
```

```
</Section>
              <Type>
                    Literal
             </Type>
             <Text>
                    <AlertType>Technical</AlertType>
              </Text>
       </Search>
       <Replace>
             <Section>
                    Flag
             </Section>
              <Scope>
                    Section
              </Scope>
              <Type>
                    Or
             </Type>
             <Text>
                    True
              </Text>
       </Replace>
</Filter>
# This section of the Filters tells the script to look for any
# lines that have the<AlertType>Network</AlertType> and
# set the Flag variable to True if it is found
<Filter>
       <Search>
             <Section>
             </Section>
             <Type>
                    Literal
              </Type>
             <Text>
                    <AlertType>Network</AlertType>
              </Text>
       </Search>
       <Replace>
              <Section>
                    Flag
              </Section>
```

```
<Scope>
                    Section
             </Scope>
             <Type>
                    Or
             </Type>
             <Text>
                    True
             </Text>
      </Replace>
</Filter>
# This Filter section tells the script to abort if no instances of
# the two search strings can be found:
<Filter>
      <Search>
             <Section>
                    Flag
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    False
             </Text>
      </Search>
      <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    And
             </Type>
             <Text>
                    False
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
```

This section of the filter tells the script to grab data # contained in the < Incident > tag.

```
<Filter>
       <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    <Incident>*</Incident>
             </Text>
       </Search>
      <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
                    %Match%
             </Text>
      </Replace>
</Filter>
# This section of the filter tells the script to grab data from
# the <Description> tag
<Filter>
       <Search>
             <Section>
                    Αll
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
```

```
<Description>*</Description>
             </Text>
      </Search>
      <Replace>
             <Section>
                   Temp
             </Section>
             <Scope>
                   Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   %Temp% %Match%
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# < Incident > from the message.
<Filter>
      <Search>
             <Section>
                   Temp
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   <Incident>
             </Text>
      </Search>
      <Replace>
             <Section>
                   Temp
             </Section>
             <Scope>
                   Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
```

```
</Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# </lncident> from the message.
<Filter>
      <Search>
             <Section>
                   Temp
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   </Text>
      </Search>
      <Replace>
             <Section>
                   Temp
             </Section>
             <Scope>
                   Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# < Description > from the message.
<Filter>
      <Search>
             <Section>
                   Temp
             </Section>
```

```
<Type>
                   Literal
             </Type>
             <Text>
                   <Description>
             </Text>
      </Search>
      <Replace>
             <Section>
                   Temp
             </Section>
             <Scope>
                   Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section of the filter removes the tag
# </Description> from the message.
<Filter>
      <Search>
             <Section>
                   Temp
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   <Incident>
             </Text>
      </Search>
      <Replace>
             <Section>
                   Temp
             </Section>
             <Scope>
                   Match
```

```
</Scope>
             <Type>
                    Literal
             </Type>
             <Text>
             </Text>
      </Replace>
</Filter>
# This Filter tells the script to output the file in the standard
# PageGate GetASCII file format for direct processing:
<Filter>
      <Search>
             <Section>
                    Flag
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    True
             </Text>
       </Search>
       <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
                    TechSupervisors\013\010CAD\013\010%Temp%
             </Text>
      </Replace>
</Filter>
```

This is example XML content to be processed by filter example 2. This is what it looks like before the filter engages.

```
<XML>
```

- <AlertType>Technical</AlertType>
- <Requester>Station 3</Requester>
- <Assets>PC01, PC02</Assets>
- <Category>Desktop Support</Category>
- <Incident>Replace Computers/Incident>
- <Description>Workstations 01 and 02 should be replaced on Thursday
- </XML>

Another example:

- <XML>
- <AlertType>Network</AlertType>
- <Requester>Admin Group</Requester>
- <Assets>Router</Assets>
- <Category>Network Support</Category>
- <Incident>DNS Failure/Incident>
- <Description>DNS failures detected in node 2/Description>
- </XML>

When the data from filter example 2 is processed by filter example 2, this is the output

content:

techsupervisors

CAD

Replace Computers, Workstations 01 and 02 should be replaced on Thursday

Another example:

techsupervisors

CAD

DNS Failure, DNS failures detected in node 2

Example 3

In this example, we're scanning for keywords and keyphrases that indicate a message shouldn't be sent. If the filter finds any of the keywords or keyphrases, it will filter those messages from going through. For this example, we've configured the filter to look for the key phrases "Return from Alarm" and "Alarm Acknowledged" as well as potential partial matches.

```
<InputFile>
<Name>
Parameter
</Name>
<Delete>
True
</Delete>
```

```
<Debug>
True
</Debug>
<OutputFile>
<Name>
    c:\PageGateData\output\%InputFileNameBase%.asc
</Name>
</OutputFile>
<Filter>
<Comment>look for Return From Alarm/Comment>
<Search>
    <Section>
        ΑII
    </Section>
    <Type>
        Literal
    </Type>
    <Text>
        Return From Alarm
    </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
<Filter>
<Comment>look for Partial Phrases of Return From Alarm
<Search>
    <Section>
        ΑII
    </Section>
    <Type>
        Literal
    </Type>
```

```
<Text>
        Retu*
    </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
<Filter>
<Comment>look for Alarm Block Acknowledged</Comment>
<Search>
    <Section>
         ΑII
    </Section>
    <Type>
        Literal
    </Type>
    <Text>
        Alarm Block Acknowledged
    </Text>
</Search>
<Replace>
<Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
<Filter>
<Comment>look for Partial "Alarm Block Acknowledged" phrases
<Search>
    <Section>
        ΑII
    </Section>
    <Type>
        Literal
    </Type>
```

```
<Text>
Block
</Text>
</Search>
</Replace>
</Text>
</Text>
</Replace>
<Abort>
True
</Abort>
</Filter>
Example 4
```

Example 3

In this example, we've configured the filter script for a dispatching agency that needs all fire, rescue and accident calls dispatched but does not want non-emergency calls dispatched. To do this, the script reads in the entire input file and looks for certain keywords like FIRE, DISPATCHED or RESCUE, DISPATCHED or ACCID, DISPATCHED.

If it finds any of those three strings, the script then reformats the data, removes unwanted information, and determines who the message should be sent to.

In this particular example, all fire and rescue calls need to be separated from each other so that the fire calls go to the fire department and the rescue calls go to the rescue department, but all accident calls should go to both fire and rescue departments.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

This section of the filter configures the script to accept whatever file name is passed by the preproc.bat file, to delete the input file when it's finished and to output the reformatted data to the c:\PageGateData\ASCIN folder with a file name mirroring the original file but with a .asc extension instead of the original file's extension.

```
<Debug>
      False
</Debug>
<OutputFile>
      <Name>
             c:\PageGateData\ASCI\%InputFileNameBase%.asc
      </Name>
</OutputFile>
# The next three sections of the Filters tells the script to look for any lines that have
# the text ,FIRE,DISPATCHED| or ,RESCUE,DISPATCHED| or ACCID,DISPATCHED| in
the input file
# and sets the temporary Flag variable to True if any are found
# look for lines with station FIRE, DISPATCHED identifier
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    ,FIRE,DISPATCHED|
      </Search>
      <Replace>
             <Section>
                   Flag
             </Section>
             <Scope>
                   Section
             </Scope>
             <Type>
                   Or
             </Type>
             <Text>
                   True
             </Text>
      </Replace>
```

</Filter>

```
# look for lines with station RESCUE, DISPATCHED identifier
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,RESCUE,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                   Flag
             </Section>
             <Scope>
                   Section
             </Scope>
             <Type>
                   Or
             </Type>
             <Text>
                   True
             </Text>
      </Replace>
</Filter>
# look for lines with station ACCID, DISPATCHED identifier
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,ACCID,DISPATCHED|
             </Text>
      </Search>
      <Replace>
```

```
<Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Or
             </Type>
             <Text>
                    True
             </Text>
       </Replace>
</Filter>
# This section test the value of the Flag variable
# and aborts out of the script if it is not set to True
# Note that the values in the <Replace> section really
# don't matter because the script is aborting
# abort if FIRE/RESCUE/ACCID DISPATCHED not found
<Filter>
      <Search>
             <Section>
                    Flag
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    False
             </Text>
       </Search>
       <Replace>
             <Section>
                    Flag
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    And
             </Type>
             <Text>
```

```
False
              </Text>
       </Replace>
       <Continue>
              False
       </Continue>
</Filter>
# Now that the filter has determined that there is relevant data
# in the message file, these filter statements will search for
# department names and store what is found in the Temp variable
# look for lines with station F-BAY identifier
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
              <Text>
                    /F-BAY
              </Text>
       </Search>
       <Replace>
              <Section>
                     Temp
              </Section>
              <Scope>
                     Section
              </Scope>
              <Type>
                    Literal
              </Type>
              <Text>
                    F-BAY
              </Text>
       </Replace>
</Filter>
# look for lines with station F-STU identifier
<Filter>
       <Search>
```

```
<Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    /F-STU
             </Text>
       </Search>
       <Replace>
             <Section>
                    Temp
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
                    F-STU
             </Text>
       </Replace>
</Filter>
# This Filter section tells the script to abort if no
# acceptable station is found within the data
# (the Temp variable is still blank)
<Filter>
       <Search>
             <Section>
                    Temp
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
             </Text>
       </Search>
       <Replace>
             <Section>
                    Flag
```

```
</Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    And
             </Type>
             <Text>
                    False
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# This Filter section tells the script to grab a portion of the data read for modification:
# It grabs everything between the first character of the line and ,DISPATCHED| keyword
# and removes everything else
<Filter>
      <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    *,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Section
             </Scope>
             <Type>
                    Literal
             </Type>
             <Text>
                    %Match%
```

</Text>

```
</Replace>
</Filter>
# This Filter flag takes the data read by the previous statement and modifies it:
# It gets rid of extra stuff between date/time and address and replaces it with
# a carriage return and line feed
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
              <Text>
                    (Eastern Daylight Time)*/%Temp%,F,
              </Text>
       </Search>
       <Replace>
              <Section>
                    ΑII
              </Section>
              <Scope>
                     Match
              </Scope>
              <Type>
                    Literal
              </Type>
              <Text>
                     \013\010
              </Text>
       </Replace>
</Filter>
# The next two filter sections separate the rescue calls from the fire calls
# so that they go to two different agencies/organizations/units.
<Filter>
       <Search>
              <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
```

```
<Text>
                  FIRE
            </Text>
      </Search>
      <Replace>
            <Section>
                  Temp
            </Section>
            <Scope>
                  Section
            </Scope>
            <Type>
                  Literal
            </Type>
            <Text>
                   %Temp%-FIRE
            </Text>
      </Replace>
</Filter>
<Filter>
      <Search>
            <Section>
                  ΑII
            </Section>
            <Type>
                  Literal
            </Type>
            <Text>
                  RESCUE
            </Text>
      </Search>
      <Replace>
            <Section>
                  Temp
            </Section>
            <Scope>
                  Section
            </Scope>
            <Type>
                  Literal
            </Type>
            <Text>
                  %Temp%-RESCUE
```

```
</Text>
      </Replace>
</Filter>
# The next three Filter sections remove the text ,DISPATCHED| from the message
# and replaces it with more readable text
# get rid of DISPATCHED on RESCUE
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   ,RESCUE,DISPATCHED|
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Match
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   \013\010RESCUE
             </Text>
      </Replace>
</Filter>
# get rid of DISPATCHED on FIRE
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
```

```
</Type>
            <Text>
                   ,FIRE,DISPATCHED|
      </Search>
      <Replace>
            <Section>
                   ΑII
            </Section>
            <Scope>
                   Match
            </Scope>
            <Type>
                   Literal
            </Type>
            <Text>
                   \013\010FIRE
            </Text>
      </Replace>
</Filter>
# get rid of DISPATCHED on ACCID
<Filter>
      <Search>
            <Section>
                   ΑII
            </Section>
            <Type>
                   Literal
            </Type>
            <Text>
                   ,ACCID,DISPATCHED|
             </Text>
      </Search>
      <Replace>
            <Section>
                   Αll
            </Section>
             <Scope>
                   Match
            </Scope>
             <Type>
                   Literal
             </Type>
```

```
<Text>
                   \013\010ACCID
             </Text>
      </Replace>
</Filter>
# This Filter section tells the script to output the file in the standard
# PageGate GetASCII file format for direct processing:
# convert to standard .asc format
<Filter>
      <Search>
             <Section>
                   Flag
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   True
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Section
             </Scope>
             <Type>
                   Literal
             </Type>
             <Text>
                   %Temp%\013\010CAD\013\010Dispatch %Temp%\013\010%All%
             </Text>
      </Replace>
</Filter>
This is example content to be processed by filter example 3. This is what it looks like
before the filter engages.
2018-08-23 14:07:30.307 (Eastern Daylight Time) CISCOUNITSTAT||T=1|
V=6233M070737305319||T=4|V=02||T=0|V=U,00/F-BAY,P,PRIMARY STREET/CROSS
STREET, INJ ACCID, DISPATCHED||
```

When the data from filter example 4 is processed by filter example 4, this is the output content:

```
F-BAY
DISPATCH
P,PRIMARY STREET/CROSS STREET,INJ ACCID
Example 5

Example 4
```

This filter script is designed to work with the National Weather service's XML content, which is generated by polling their web API.

Note: The <InputFile> and <OutputFile> sections are not icluded, so the script will use the filename passed in by PageGate, and write the script's results back to the same filename when done.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

This section of the filter grabs the data from the <weather> XML tag.

```
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   <weather>*</weather>
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Section
             </Scope>
             <Text>
                   Weather: %Match%
             </Text>
      </Replace>
</Filter>
```

```
# This section of the filter grabs the data from the <temp_f> XML tag.
<Filter>
<Search>
     <Section>
         ΑII
     </Section>
     <Type>
         Literal
     </Type>
     <Text>
         <temp f>*</temp f>
     </Text>
</Search>
<Replace>
     <Section>
         Temp
     </Section>
     <Scope>
         Section
     </Scope>
     <Type>
         Literal
     </Type>
     <Text>
         %Temp% \013\010Temperature: %Match%
     </Text>
</Replace>
</Filter>
# This section of the filter grabs the data from the <windchill f> XML tag.
<Filter>
<Search>
     <Section>
         ΑII
     </Section>
     <Type>
         Literal
     </Type>
     <Text>
         <windchill f>*</windchill f>
     </Text>
</Search>
<Replace>
```

```
<Section>
         Temp
     </Section>
     <Scope>
         Section
     </Scope>
     <Type>
         Literal
     </Type>
     <Text>
         %Temp% \013\010Windchill: %Match%
     </Text>
</Replace>
</Filter>
# This section removes the literal text <weather> from the text to be processed.
<Filter>
      <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    <weather>
             </Text>
      </Search>
      <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section removes the literal text </weather> from the text to be processed.
<Filter>
      <Search>
```

```
<Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    </weather>
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Match
             </Scope>
             <Text>
             </Text>
      </Replace>
</Filter>
# This section removes the literal text <temp f> from the text to be processed.
<Filter>
      <Search>
             <Section>
                   ΑII
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                    <temp_f>
             </Text>
      </Search>
      <Replace>
             <Section>
                   ΑII
             </Section>
             <Scope>
                   Match
             </Scope>
             <Text>
```

```
</Text>
       </Replace>
</Filter>
# This section removes the literal text </temp f> from the text to be processed.
<Filter>
       <Search>
             <Section>
                    ΑII
              </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    </temp f>
              </Text>
       </Search>
       <Replace>
             <Section>
                    Αll
             </Section>
             <Scope>
                    Match
             </Scope>
             <Text>
             </Text>
       </Replace>
</Filter>
# This section removes the literal text <windchill f> from the text to be processed.
<Filter>
       <Search>
             <Section>
                    Αll
             </Section>
              <Type>
                    Literal
             </Type>
              <Text>
                    <windchill f>
              </Text>
       </Search>
```

```
<Replace>
             <Section>
                    ΑII
              </Section>
              <Scope>
                    Match
              </Scope>
              <Text>
              </Text>
       </Replace>
</Filter>
# This section removes the literal text </windchill f> from the text to be processed.
<Filter>
       <Search>
             <Section>
                    ΑII
              </Section>
              <Type>
                    Literal
              </Type>
             <Text>
                     </windchill f>
              </Text>
       </Search>
       <Replace>
             <Section>
                    ΑII
              </Section>
              <Scope>
                    Match
              </Scope>
              <Text>
             </Text>
       </Replace>
</Filter>
# This section provides the recipient and sender information necessary
# to process this data in to an SMS. Effectively, what you're doing is
# telling the program who this weather data should go to by outputting
# information in the GetASCII API's basic format. The \013\010
# statements represent a carriage return followed by a line feed and are
```

```
# required. With the example provided below, this will process all
# traffic to a single recipient or group named customer-phone.
<Filter>
      <Search>
             <Section>
                    ΑII
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
             </Text>
      </Search>
      <Replace>
             <Section>
                    ΑII
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    customer-phone\013\010Weather\013\010%Match%
             </Text>
      </Replace>
</Filter>
```

This is an example of the raw XML content pulled from the National Weather Service for the Boston-Lo

```
<?xml version="1.0" encoding="ISO-8859-1"?>
<?xml-stylesheet href="latest_ob.xsl" type="text/xsl"?>
<current observation version="1.0"</p>
      xmlns:xsd="http://www.w3.org/2001/XMLSchema"
      xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
      xsi:noNamespaceSchemaLocation="http://www.weather.gov/view/current_observation.xsd">
      <credit>NOAA's National Weather Service</credit>
      <credit URL>http://weather.gov/</credit URL>
      <image>
             <url>http://weather.gov/images/xml logo.gif</url>
             <title>NOAA's National Weather Service</title>
             <link>http://weather.gov</link>
      </image>
      <suggested pickup>15 minutes after the hour</suggested pickup>
      <suggested pickup period>60</suggested pickup period>
      <location>Boston, Logan International Airport, MA</location>
```

<station id>KBOS</station id>

```
<a href="mailto:latitude"></a>
      <longitude>-71.01056</longitude>
      <observation time>Last Updated on Nov 27 2017, 10:54 am EST</observation time>
    <observation time rfc822>Mon, 27 Nov 2017 10:54:00 -0500
      <weather>Mostly Cloudy</weather>
      <temperature string>45.0 F (7.2 C)</temperature string>
      <temp f>45.0</temp f>
      <temp c>7.2</temp c>
      <relative humidity>48</relative humidity>
      <wind string>from the West at 16.1 gusting to 25.3 MPH (14 gusting to 22 KT)
      <wind dir>West</wind dir>
      <wind degrees>280</wind degrees>
      <wind mph>16.1</wind mph>
      <wind gust mph>25.3</wind gust mph>
      <wind kt>14</wind kt>
      <wind gust kt>22</wind gust kt>
      string>1012.4 mb</pressure string>
      pressure mb>1012.4</pressure mb>
      oressure in>29.90sure in>
      <dewpoint string>26.1 F (-3.3 C)</dewpoint string>
      <dewpoint f>26.1</dewpoint f>
      <dewpoint c>-3.3</dewpoint c>
      <windchill string>38 F (3 C)</windchill string>
      <windchill f>38</windchill f>
      <windchill c>3</windchill c>
      <visibility mi>10.00</visibility mi>
      <icon url base>http://forecast.weather.gov/images/wtf/small/</icon url base>
      <two day history url>http://www.weather.gov/data/obhistory/KBOS.html</two day history url>
      <icon url name>bkn.png</icon url name>
      <ob url>http://www.weather.gov/data/METAR/KBOS.1.txt</ob url>
      <disclaimer url>http://weather.gov/disclaimer.html</disclaimer url>
      <copyright url>http://weather.gov/disclaimer.html</copyright url>
      <privacy policy url>http://weather.gov/notice.html</privacy policy url>
</current observation>
```

When the data from the National Weather Service is processed by filter example 5, this is

the output content:

Windchill: 38

customer-phone Weather Weather: Mostly Cloudy Temperature: 45.0

6

Example 6

Example 5

This filter script is designed to work with an <u>SMS Replies</u> system and is configured to look for the words 'subscribe' and 'unsubscribe' in the body of reply messages. If it finds 'subscribe', it reconfigures the message to go to the recipient or group in PageGate named 'subscribe'. If it finds 'unsubscribe', it reconfigures the message to go to the recipient or group named 'unsubscribe'.

Note: The <InputFile> and <OutputFile> sections are not icluded, so the script will use the filename passed in by PageGate, and write the script's results back to the same filename when done.

Note: Lines prefaced with # are comment lines for description purposes. The filter ignore any lines that begin with #

```
# look for 'unsubscribe' in message text (all lower case)
# if found, route the message to 'unsubscribe' recipient
<Filter>
       <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    unsubscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient-or-group-here
             </Text>
       </Replace>
       <Continue>
             False
       </Continue>
```

```
</Filter>
# look for 'Unsubscribe' in message text (begins with capital)
# if found, route the message to 'unsubscribe' recipient
<Filter>
      <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    Unsubscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient-or-group-here
             </Text>
       </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'subscribe' in message text (all lower case)
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    subscribe
```

```
</Text>
      </Search>
      <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    subscribe-recipient-or-group-here
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'Subscribe' in message text (begins with capital)
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    Subscribe
             </Text>
      </Search>
      <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    subscribe-recipient-or-group-here
             </Text>
      </Replace>
      <Continue>
```

False </Continue>

</Filter>

Example 7

This filter script is designed to work with an <u>SMS Replies</u> system and is configured so that any time someone replies to a message with 'unsubscribe' or 'subscribe', those replies will be sent to an 'unsubscribe' or 'subscribe' recipient in PageGate that will execute a batch file or script contained within a batch file.

To do so, there's a bit of preparation you'll need to do to tell PageGate what script to run. It's also important to note that this batch file can be used to execute powershell commands.

Step 1: Create a directory for your batch file

1) Create a directory for the batch file(s) to reside in. This will also be the output folder for the carrier we'll create in Step 2. For example, c:\PageGateData\unsubscribe\

Step 2: Create a FILE Carrier

- 1) Open PG Admin.
- 2) Right click Carriers, select Add.
- 3) Give the carrier a name, something straightforward like BATCH.
- 4) Set Protocol to: FILE
- 5) Set File Path to the directory you created in Step 1 above. By default, c: \PageGateData\unsubscribe\

Step 3: Create a recipient named 'unsubscribe' and tie it to the FILE carrier

- 1) Right click Recipients, select Add.
- 2) Name the recipient: unsubscribe
- 3) Set Carrier to the FILE carrier you created in step 2. By default, BATCH.
- 4) Click Apply.

Step 4: Place and edit the appropriate script files

- Open the directory you created in step 1 above. By default, c: \PageGateData\unsubscribe\
- 2) Copy pstproc.bat from the PageGate program directory in to that folder.
- 3) Edit pstproc.bat to execute the desired effect.

Step 5: Configure the SMS Replies Filter System

```
# look for 'unsubscribe' in message text
# if found, route the message to 'unsubscribe' recipient
<Filter>
       <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    unsubscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    unsubscribe-recipient
             </Text>
       </Replace>
       <Continue>
             False
       </Continue>
</Filter>
# look for 'Unsubscribe' in message text
# if found, route the message to 'unsubscribe' recipient
<Filter>
       <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    Unsubscribe
             </Text>
```

```
</Search>
      <Replace>
             <Section>
                   Recipient
             </Section>
             <Scope>
                   Section
             </Scope>
             <Text>
                   unsubscribe-recipient
             </Text>
      </Replace>
      <Continue>
             False
      </Continue>
</Filter>
# look for 'subscribe' in message text
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                   Message
             </Section>
             <Type>
                   Literal
             </Type>
             <Text>
                   subscribe
             </Text>
      </Search>
      <Replace>
             <Section>
                   Recipient
             </Section>
             <Scope>
                   Section
             </Scope>
             <Text>
                   subscribe-recipient
             </Text>
      </Replace>
      <Continue>
             False
```

```
</Continue>
</Filter>
# look for 'Subscribe' in message text
# if found, route the message to 'subscribe' recipient
<Filter>
      <Search>
             <Section>
                    Message
             </Section>
             <Type>
                    Literal
             </Type>
             <Text>
                    Subscribe
             </Text>
       </Search>
       <Replace>
             <Section>
                    Recipient
             </Section>
             <Scope>
                    Section
             </Scope>
             <Text>
                    subscribe-recipient
             </Text>
       </Replace>
       <Continue>
             False
      </Continue>
</Filter>
Example 8
```

This example is designed to work with an <u>SMS Replies</u> system. This script is configured with a list of 'allowed' phone numbers and is also configured to scan the sender value of all replies. If the sender's phone number isn't in the 'allowed' list, the message is filtered as spam.

```
<Filter> <Comment>
```

This filter is scanning the sender value for a series of phone numbers. In this example, we're using a simple Regex string to create an 'or' statement. So, we're scanning for the first number or the second number or the third number and so on.

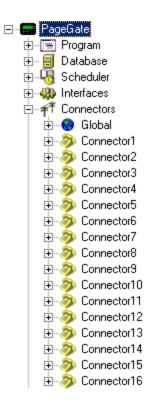
</Comment>

```
<Search>
    <Section>
         Sender
     </Section>
     <Type>
         Regex
     </Type>
     <Text>
         (phonenumber1|phonenumber2|phonenumber3|phonenumber4|etc)
</Search>
<Replace>
<Comment>
If the filter finds any of the specified phone numbers, it assigns the intended delivery group
or recipient.
</Comment>
     <Section>
         Recipient
     </Section>
     <Scope>
         Section
     </Scope>
    <Text>
         name of messaging group or recipient
     </Text>
</Replace>
<Continue>
    False
</Continue>
</Filter>
Connectors
```

PageGate can be broken down in to two general categories: Input and Output.

On the input side of things, we have <u>APIs</u> that allow PageGate to accept alerts, notifications, dispatches and messaging requests from a variety of sources.

On the output side of things, we have the <u>Carriers</u> and Connectors. The <u>carriers</u> tell PageGate what communication method to use and the connectors are directly responsible for negotiating those communication sessions and the connectors actually perform the delivery.



Each connector in the program can handle any protocol at any time, so think of a connector as a pathway PageGate can use to deliver traffic. A connector can use a TCP based protocol like SMTP just as easily as it can use a cellular modem connected by RS-232 or USB.

Global

This section configures the basic behavior of the connectors as well as displays the general status of all connectors.

Connector 1 through 16

These sections control the communication settings of each connector.

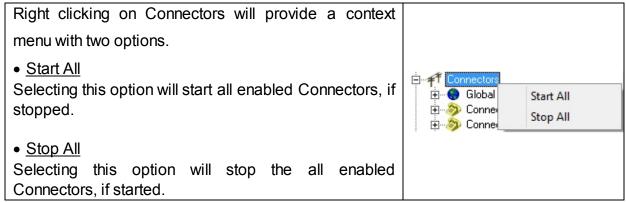
In concept, a connector in PageGate is just a pathway to deliver messages as any connector in the program can, in most cases, handle any protocol at any time. So, you could implement a series of <u>carriers configured to use different delivery methods</u> and have all traffic processed through a single connector. However, each connector can only establish one message delivery sequence at a time. Also, each protocol has its own average negotiation time.

Protocol(s)	Average Negotiation Time
HTTPGET, HTTPPOST, AwsSNS	
GSM-AT, GSM-AT-IP, File	3 seconds
SNPP, WCTP	4 seconds
SMTP, Serial TAP, TAP over IP, FaxSrv	5 seconds
Modem TAP, Fax, TONE, UCP	6+ seconds

So, as an example of how to work out the math on how many connectors you may need, let's say that you wanted to deliver 400 SMTP based messages.

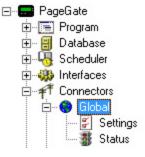
At a delivery rate of 1 message every 5 seconds, it would take approximately 2000 seconds (or 33.33 minutes) for a single connector to deliver all 400 messages.

If you had two connectors, that would take approximately 1000 seconds (16.67 minutes), if you had three, it would take approximately 667 seconds (11.12 minutes) and so on.



Global

This section is where you can configure the global behavior of the connector system and see the general status of all connectors.



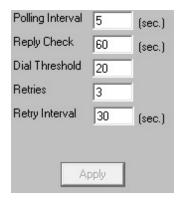
Settings

This section controls the global behavior of the connector system.

Status

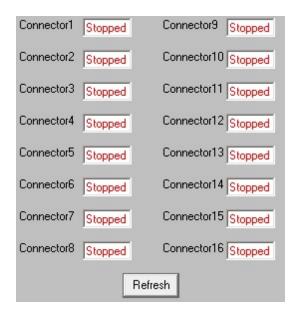
This section displays the general status of all connectors.

Settings



Setting	Function
Polling Interval	This field determines how often the connector system polls the database for updates to the messages table of the database from the <u>Scheduler</u> .
Reply Check	When implementing a <u>cellular modem</u> , <u>router or gateway</u> , this field determines how often the connector system should poll the modem for reply messages in memory.
Dial Threshol d	This field determines is the number of messages any one Connector can have in queue before passing off additional messages to the next Connector in sequence. For example, let's say that you have the Dial Threshold set to 20 and that both Connectors 1 and 2 are enabled. Then let's say you queue 30 messages for PageGate to deliver. Connector 1 will first 20 and give the next 10 to
	Connector2 for processing.
Retries	This determines the number of attempts the Connectors will make when delivering a message. If a message cannot be delivered after the specified number of retries, it is marked bad.
Retry Interval	This field determines how long each Connector waits between successive retries.
Apply	This button saves any changes recently made to the Global Settings of the Connectors.

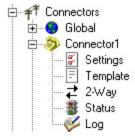
Status



If the status of a connector is stopped, it indicates that the connector is not running and this can be caused by a few things.

- The appropriate connector will need to be checked in the <u>"Run on this server"</u> section in the <u>Program - Settings section of the PageGate Admin.</u>
- The PageGate server must be running. If you're running PageGate as an application, launch the PageGate server from the shortcut in the start menu. If you're running PageGate as a Windows Service, start the PageGate service. For more information, see the Run Styles section of the documentation.

Connectors



Settings

This section controls the implementation of the selected connector

2-Way

When implementing a <u>cellular modem</u>, <u>router or gateway</u>, this section is used to poll the cellular device for replies.

• <u>Template</u>

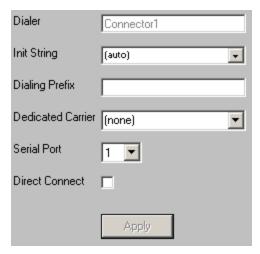
This section allows you to configure a custom template for messages processed by this connector.

Status

This section displays the general status of the connector.

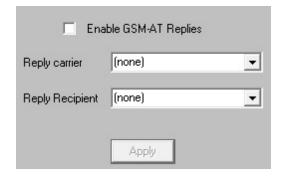
• Log

This section is a record of all activity performed by the connector. **Settings**



Setting	Function
Dialer	This field tells you which Connector's settings you're currently viewing.
Init String	If this connector has been configured to use a modem, cellular modem, cellular router or cellular gateway, this value is passed to the device.
Dialing Prefix	If this connector has been configured to use a dial-up modem, this field determines any dialing prefix required to reach an external line.
Dedicat ed Carrier	This setting allows you to specify that this Connector can only handle messages from one carrier. This setting preempts the <u>dialer threshold</u> .
Serial Port	This setting is used if the Connector needs to be configured to use a modem, serial or USB connected cellular modem or to send data through a serial/RS232 connection. This field should reflect the COM port of the device you want to reference. A value of 0 tells PageGate that this connector is a should not be given any traffic
Direct Connec t	for protocols that require serial/COM ports. This option should only be checked if the selected Connector is going to send information through a serial/RS232 connection.
Apply	This button saves all modifications made to the Connector settings.

2-Way



• Enable GSM-AT Replies

Enabling this option will configure the connector to periodically check for messages in the cellular modem's memory at an interval specified in the connector system's <u>Global</u> settings.

Reply carrier

Unfortunately, not all cellular hardware uses the same command set and processes to check for reply messages. For example, some cellular routers require you to provide login and password information to send SMS, others don't. If your cellular hardware requires authentication or has a special process to check for reply messages, select the GSM-AT or GSM-AT-IP carrier you have configured for your cellular hardware. If your cellular modem supports the standard AT+CMGL command, leave this set to (none).

Reply Recipient

This field determines who or what the reply messages should go to. For example, if all replies should go to a dispatch supervisor or a group of field techs, you can select them or their group as the reply recipient.

However, you can also implement a far more intricate system if you're licensed for the GetASCII API and there are many possible ways to implement this system.

First, it's important to note that the 2-way system can be fed through PageGate's <u>Filter Pack</u> to allow for conditional sending. For instance, with the filter pack, you can tell PageGate to conditionally change who receives the message based on what the text in the reply is. As an example, you could configure a filter system so that any time the word lunch shows up in a reply message, that reply is sent to the cafeteria group instead of the general replies group.

You could configure a system where replies from a certain phone number will always be copied to certain recipients or groups.

6

You could configure a system where certain keywords or phrases are replaced with other keywords or phrases. For example, you could translate a code like PD4N in to 4th Precinct.

You could configure a system to describe every element I've just described all at once.

However, you must own and implement the <u>Filter Pack</u> to have the functionality necessary to do conditional sending as described.

Without the filter pack, you can still implement a basic reply system solely with the GetASCII API.

This is an example of how that system can be implemented:

- 1) Create a new folder on the local hard drive for the reply processing. We recommend creating c:\PageGateData\Replies\
- 2) <u>Create a File protocol</u> carrier and set its file path to the folder you created in step 1. Leave the extension at .txt and set Max Chars to 6000.
- 3) <u>Create a recipient</u> and tie it to the File protocol carrier. Set its Full Name field to Replies and set its Recipient field to replies.
- 4) Go in to the Template sub-section of your new recipient.
- 5) Copy and paste the following in the Text section:

sms_replies_group

%Sender%

This message was received by the Cellular SMS Modem. It was generated either from a customer cellular phone or from the cellular network and may be a reply.

FROM: %Sender%

ON: %Date% AT: %Time% Message: %Message%

- 6) <u>Create a new group</u>. Set its Description field to SMS Replies Group and its Group field to sms replies group
- 7) Populate the group with members that should receive reply messages.
- 8) Go to Connectors Connector X 2-Way.
- 9) Check "Enabled GSM-AT replies"
- 10) Set the Reply Recipient to: replies



11) Create a new folder on the local hard drive for the GetASCII module's basic polling directory. We recommend creating: C:\PageGateData\ASCII\

Note: If you have already configured a basic polling directory, you do not need to do steps 9, 10 or 11.

- 12) Go to Interfaces GetASCII Settings
- 13) Set the Polling Directory to: c:\PageGateData\ASCIN
- 14) If unchecked, check Enabled, then click on Apply.
- 15) Go to Interfaces GetASCII Settings Advanced Polling Files
- 16) Add a new entry with the following settings:

Recipient: *

From:

File(s): *.txt

Path: Specify the folder you created in step 1, recommended c:\PageGateData\Replies\

File Type: Standard

17) Click Apply.

By configuring this example of a 2-way system, all replies will be read in and delivered to the replies recipient, which will output a file formatted to the template's specifications. The GetASCII API will then read in the re-formatted reply and send it to the recipients that are members of the group named sms_replies_group.

Status

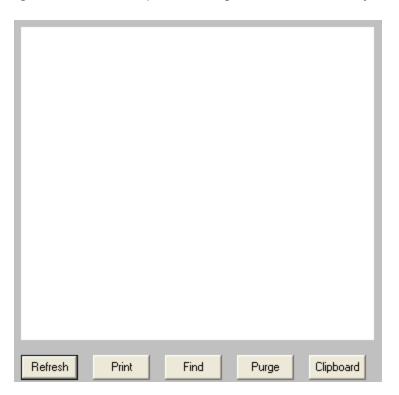


If the status of a connector is stopped, it indicates that the connector is not running and this can be caused by a few things.

 The appropriate connector will need to be checked in the <u>"Run on this server"</u> section in the <u>Program - Settings section of the PageGate Admin.</u> The PageGate server must be running. If you're running PageGate as an application, launch the PageGate server from the shortcut in the start menu. If you're running PageGate as a Windows Service, start the PageGate service. For more information, see the Run Styles section of the documentation.

Log

This log is a record of all protocol negotiations handled by this connector.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

Carriers

Carriers are, generally speaking, the service providers for the devices you want to send messages to, whether you're sending to cell phones or pagers. When the term is used in PageGate, however, it's referencing one of the outbound communication methods the program supports.

In concept, a carrier tells PageGate how to talk to the outside world with one of the supported protocols (see below), a <u>recipient</u> tells PageGate who to talk to and the <u>connector</u> modules do the talking.

Right clicking on Carriers will provide a context menu with four options.

Add

Selecting this option allows you to create a new carrier.

Requeue Messages

Selecting this option allows you to requeue a range of previously delivered messages to ALL carriers.

Cancel Messages

Selecting this option allows you to cancel all past due, pending and/or repeating messages for ALL carriers.

Pending Messages

Selecting this option will display a list of all messages for all carriers in the pending queue.

PageGate supports the following delivery protocols:

<u>AWS SNS</u> (Amazon Web Services Simple Notification System)
 A method used to communicate with the AWS SNS system for SMS delivery.

• <u>SMTP</u> (Simple Mail Transfer Protocol)

The protocol used to deliver email.

• SNPP (Simple Network Paging Protocol)

A standard message delivery protocol for internet communication to a wireless provider.

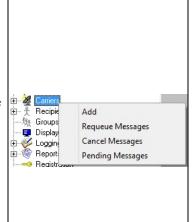
• WCTP (Wireless Communications Transfer Protocol)

A standard message delivery for Internet communications to a wireless provider (both HTTP and HTTPS are supported).

• GSM-AT (Global System for Mobile communication AT Command Set)

A method used to communicate with a cellular modem or other connected wireless device that provides a COM port in Windows and supports the AT command set for SMS delivery.

• <u>GSM-AT-IP</u> (Global System for Mobile communication AT Command Set over IP)
A method used to communicate with a cellular modem, router, gateway or other connected wireless device that accepts AT commands by TCP for SMS delivery.



HTTPGET

The GET method of passing CGI parameters to a web API.

• HTTPPOST

The POST method of passing CGI parameters to a web API.

File

Output a message as an ascii formatted file to a specified directory.

• XMPP (Extensible Messaging and Presence Protocol)

A method used to communicate with a variety of notification and chat programs, such as Jabber.

• <u>TAP</u> (Telocator Alphanumeric Protocol)

The standard message delivery protocol for analog modem, or direct serial communications to paging providers and terminals.

• TAP-IP (Telocator Alphanumeric Protocol delivered by TCP/IP)

This protocol is used to send messages to a receiving TAP system, normally paging transmitters, by TCP/IP.

• FAX (Facsimile Machines)

Message delivery to destination Fax machines via faxmodem.

FAXSrv

This protocol allows PageGate to integrate with a Microsoft fax server for facsimile messages.

RawSerial

Transmission of message text over a standard serial/RS232 port (direct connect or via modem).

RawTCP

Transmission of message text to a host via a TCP/IP connection

• TONE (Dual Tone Multi-Frequency)

A way to deliver touch tone messages to older numeric-only pagers and similar equipment.

• <u>UCP</u> (Universal Computer Protocol)

A delivery protocol for analog modem, or direct serial communications to a wireless provider.

For a detailed and contextualized breakdown of what these protocols mean for delivering your messages, have a look at the How PageGate Sends Messages section of the documentation.

Creating a new Carrier

To create a new carrier, you'll need some basic information about the types of messages you want to deliver and we would strongly recommend having a look at the How PageGate Sends Messages section of the documentation for more information on that. However, once you know which protocol(s) you want to implement for message delivery, you'll need to create a new carrier or series of carriers.

 How to create an AWS SNS Carrier (Amazon Web Services Simple Notification System)

A method used to communicate with the AWS SNS system for SMS delivery.

- <u>How to create an SMTP Carrier</u> (Simple Mail Transfer Protocol) The protocol used to deliver email and email to SMS messages.
- How to create an SNPP Carrier (Simple Network Paging Protocol)
 A standard message delivery protocol for internet communication to a wireless provider.
- <u>How to create a WCTP Carrier</u> (Wireless Communications Transfer Protocol)
 A standard message delivery for Internet communications to a wireless provider (both HTTP and HTTPS are supported).
- How to create a GSM-AT Carrier (Global System for Mobile communication AT Command Set)

A method used to communicate <u>cellular modem</u> or <u>other connected wireless device</u> that provides a COM port in Windows and supports the AT command set for SMS delivery.

 How to create a GSM-AT-IP Carrier (Global System for Mobile communication AT Command Set over IP)

A method used to communicate with a with a NotePage SMS Gateway App enabled Android phone, <u>cellular modem</u>, <u>router</u>, <u>gateway</u> or <u>other connected wireless device</u> that accepts AT commands by TCP for SMS delivery.

How to create an HTTPGET Carrier

The GET method of passing parameters to a web API.

How to create an HTTPPOST Carrier

The POST method of passing parameters to a weborm, Web API or REST API.

How to create a File Carrier

Output a message as an ascii formatted file to a specified directory.

• How to create an XMPP Carrier (Extensible Messaging and Presence Protocol)

A method used to communicate with a variety of notification and chat programs, such as Jabber.

• <u>How to create a TAP Carrier</u> (Telocator Alphanumeric Protocol)
This protocol is used to send messages to a receiving TAP system, normally paging transmitters, by dial-up modem or serial connection.

- <u>How to create a TAP-IP Carrier</u> (Telocator Alphanumeric Protocol delivered by TCP/IP) This protocol is used to send messages to a receiving TAP system, normally paging transmitters, by TCP/IP.
- How to create a FAX carrier (Facsimile Machines)
 Message delivery to destination Fax machines via faxmodem.
- How to create a FAXSrv Carrier

This protocol allows PageGate to integrate with a Microsoft fax server for facsimile messages.

How to create a RawSerial Carrier

Transmission of message text over a standard serial/RS232 port (direct connect or via modem).

How to create a RawTCP Carrier

Transmission of message text to a host via a TCP/IP connection

- How to create a Touch-Tone/DTMF Carrier (Dual Tone Multi-Frequency)
 A way to deliver touch tone messages to older numeric-only pagers and similar equipment.
- How to create a UCP Carrier (Universal Computer Protocol)

A delivery protocol for analog modem, or direct serial communications to a wireless provider.

Creating an AWS SNS Carrier

Step 1: Create an Amazon Web Services Account

- 1) Go to https://aws.amazon.com/
- 2) Click an AWS Create Account
- 3) Enter the email address and password.
- 4) Enter payment information (required by Amazon)
- 5) Choose your support plan.

Step 2: Create an Access Key for PageGate to use

Creating an access key can be done by providing PageGate access to the root account and password or you can tie the AWS SNS permissions to a specific user account..

If you want PageGate to use the root account, you would do the following:

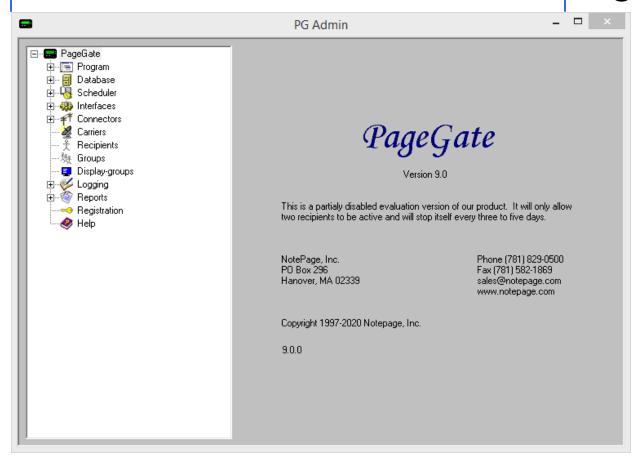
- 1) Log in to your AWS account.
- 2) In the upper right hand corner, click on your account's name and select 'My Security Credentials'
- 3) Click 'Create new Access Key'
- 4) Copy the 'Access Key ID' and 'Secret Access Key' values as we'll need both in PageGate.

If you want to grant the ability to use AWS SNS to an existing account, you would do the following:

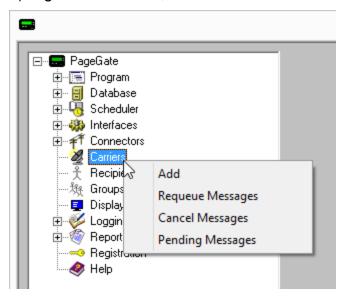
- 1) Log in to your AWS account.
- 2) In the upper right hand corner, click on your account's name and select 'My Security Credentials'
- 3) On the left hand side, click 'Users'
- 4) Select the user in question.
- 5) Click 'Add Permissions'
- 6) Select 'Attach existing policies directly'
- 7) In the 'Filter policies' field, enter: SNS
- 8) Check 'AmazonSNSFullAccess'
- 9) Click Next.
- 10) Click 'Add Permissions'
- 11) Select the 'Security Credentials' tab for that user.
- 12) Click 'Create Access Key'
- 13) Copy the 'Access Key ID' and 'Secret Access Key' values as we'll need both in PageGate.

Step 3: Configure AWS SNS in PageGate

1) Run PG Admin.



2) Right click Carriers, select Add



3) Specify the following:

Carrier

Protocol

Host

Port

Max Chars

AWSSNS

AwsSns

443

160

Apply

sns.SNSHost.amazonaws.com

Carrier: AWSSNS
Protocol: AwsSns

Host: Please see Amazon's SNS documentation

https://docs.aws.amazon.com/sns/latest/dg/sns-supported-

regions-countries.html

The 'Endpoint' value is what you will use in the this field.

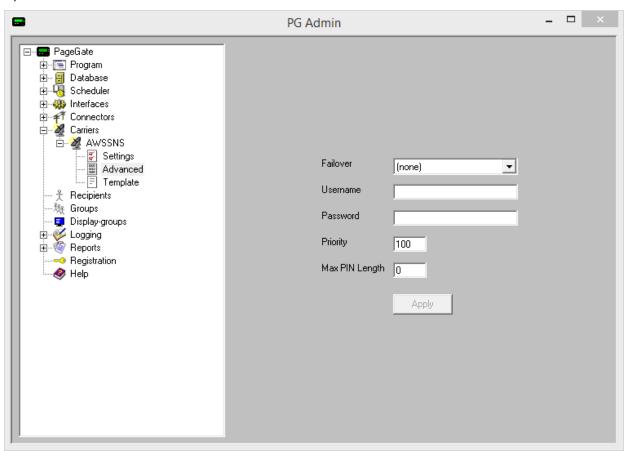
Examples:

sns.us-east-1.amazonaws.com

sns.us-west-2.amazonaws.com

Max Chars: 160

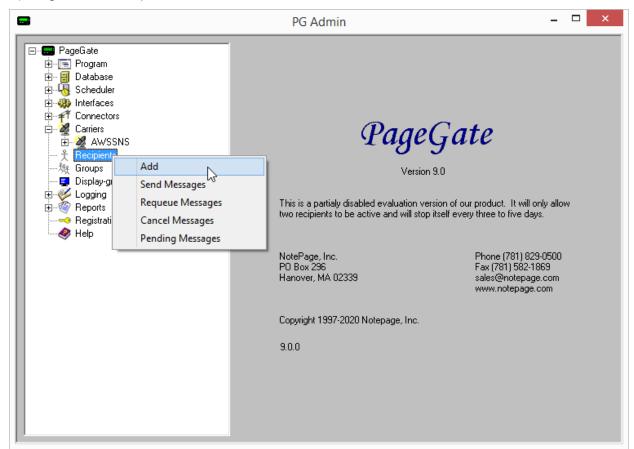
- 4) Click Apply to add the new delivery method.
- 5) Go to Carriers AWSSNS Advanced



- 6) Enter the Access Key ID value in the Username field.
- 7) Enter the Secret Access Key value in the Password field.
- 8) Click Apply.

Step 4: Create Recipients tied to the AWSSNS method of delivery

1) Right click Recipients, select Add.



2) Specify the following:

Full Name: The name of the recipient

Recipient: This field will automatically populate but can be edited and may ONLY contain alphanumeric characters, underscores and dashes.

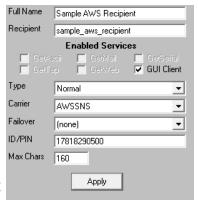
Type: Normal

Carrier: AWSSNS

Failover: See Failover Scenarios

ID/PIN: cell phone number, including country code.

NOTE: For messaging in North America, it is imperative that you provide the 1 in front of the phone number. AWS SNS treats the first character of the phone number as the country



code and you can unintentionally send international SMS if you do not provide the 1.

Correct Incorrect 17818290500 781829500

Max Chars: Specify the number of characters you want the ability to send to this recipient. If this value is higher than the carrier's "Max Chars" value, PageGate will break up long messages in to multiple blocks.

Click Apply.

Creating an SMTP Carrier

SMTP is the protocol used to send email of all varieties, including those delivered as SMS; nearly every US and Canadian carrier supports text messaging to their phones using a public access SMTP/Email gateway.

PageGate has a full mail server engine as a core part of the program and this gives you the ability to send SMTP/Email messages in one of two ways: Direct and Relayed

To explain the difference between the two, direct delivery allows PageGate to use its own mail server engine to directly negotiate with the receiving mail servers. Relayed delivery configures PageGate to pass all of its traffic through a verified SMTP server for delivery, like an email client.

Technically, direct delivery is more efficient and reliable because it removes at least one hop in the delivery sequence and also means that PageGate isn't reliant on another mail server for delivery. However, when you have PageGate use direct delivery for SMTP/Email, it has to abide by all of the rules required of a mail server because the program will be functioning as a mail server to deliver SMTP/Email on behalf of your email domain. This is incredibly important to note because, in an effort to combat spam, all major US and Canadian carriers pay respect to SPF records.

SPF stands for "Sender Policy Framework" and is a record of public IP addresses that are allowed to deliver email on behalf of your email domain. This record is published by whoever owns and operates the email domain. If the PageGate server's public IP address is not part of your email domain's SPF record, the major carriers will filter your messages as potential spam for failing the SPF validation check. If you continue to send traffic that fails SPF validation checks, the receiving servers will eventually blacklist your site from sending any traffic to them.

Due to some of the complications involved in configuring PageGate for direct delivery, it is usually more practical to configure PageGate to relay its SMTP/Email traffic through your company or ISP's SMTP/Email server. However, doing so makes PageGate reliant on that mail server for message delivery.

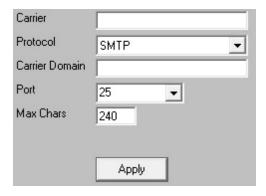
For information on how to configure a "Relayed Delivery" SMTP carrier, click here.

For information on how to configure a "Direct Delivery" SMTP carrier, <u>click here</u>. Creating a Relayed SMTP Carrier

1) Right click Carriers.



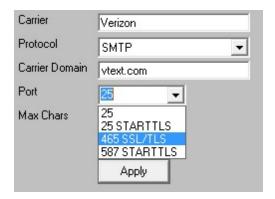
- 2) Select Add.
- 3) Select the SMTP protocol.



- 4) Enter a name in the Carrier field.
- 5) In the Carrier Domain field, enter the messaging domain of this carrier. Click here for a list of known SMTP messaging domains.

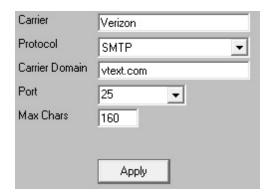
Note: Do not use the @ in this field. For example, you would use vtext.com as the Carrier Domain if you were configuring Verizon and you would use txt.att.net if you were configuring AT&T.

6) In the Port field, specify the port and handshaking method required by your SMTP/Email server.

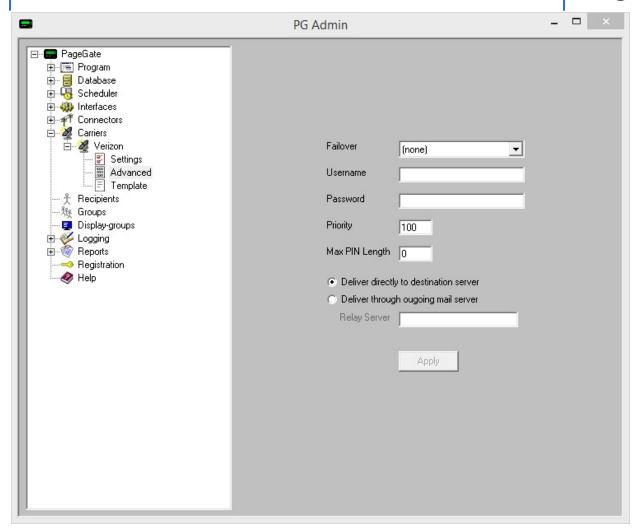


7) In the Max Chars field, enter the maximum number of characters you want to send in a single message. For SMS hosts, set this value to 160. For pager hosts, set this value to 240. For standard email, set this value to 6000.

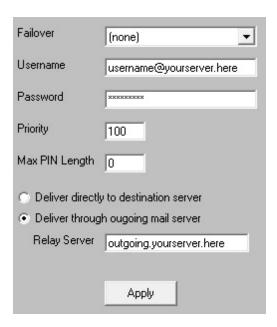
Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 8) Click Apply.
- 9) Go in to the Advanced sub-section of your new carrier.



- 10) Select Deliver through outgoing mail server.
- 11) Enter your SMTP server address in the Relay Server field.
- 12) If your SMTP server requires authentication (a username and password), enter your authentication credentials in the username and password fields.



- 13) Click Apply.
- 14) Go to Program Template.
- 15) In the Settings section, set the InternetDomain = variable to match the email domain of the SMTP server you're relaying your messages through.



16) Click Apply.

Click here for a list of Settings Variables that can be used with SMTP Carriers

Creating a Direct Delivery SMTP Carrier

When you have PageGate use direct delivery for SMTP/Email, it has to abide by all of the rules required of a mail server because the program **will be functioning as a mail server** to deliver SMTP/Email on behalf of the email domain you specify in the program's <u>global template</u>. This is incredibly important to note because, in an effort to combat spam, all major US and Canadian carriers pay respect to SPF records.

SPF stands for "Sender Policy Framework" and is a record of public IP addresses that are allowed to deliver email on behalf of your email domain. This record is published by

whoever owns and operates the email domain. If the PageGate server's public IP address is not part of your email domain's SPF record, the major carriers will filter your messages as potential spam for failing the SPF validation check. If you continue to send traffic that fails SPF validation checks, the receiving servers will eventually blacklist your site from sending any traffic to them.

The public IP address that the PageGate server sits behind must be a part of the SPF record for your email domain.

To use direct delivery, port 25 must be accessible from the PageGate server. If port 25 is not open, you cannot use direct delivery and must use <u>relayed delivery</u> instead.

To determine if port 25 is open for the PageGate server, there is a test you can run with the Telnet Client in Windows or with a program like Putty or Hyperterminal.

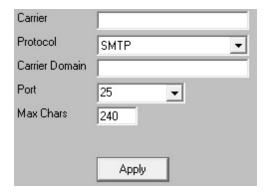
After installing the Telnet Client in Windows, <u>click here</u> for the steps to test if port 25 is open.

If port 25 is open AND the public IP address of the PageGate server is part of the SPF record for your email domain, you can configure PageGate to directly deliver SMTP/Email traffic.

1) Right click Carriers.



- 2) Select Add.
- 3) Select the SMTP protocol.

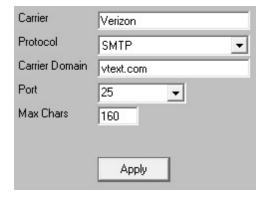


- 4) Enter a name in the Carrier field.
- 5) In the Carrier Domain field, enter the messaging domain of this carrier. Click here for a list of known SMTP messaging domains.

Note: Do not use the @ in this field. For example, you would use vtext.com as the Carrier Domain if you were configuring Verizon and you would use txt.att.net if you were configuring AT&T.

- 6) In the Port field, select: 25
- 7) In the Max Chars field, enter the maximum number of characters you want to send in a single message. For SMS hosts, set this value to 160. For pager hosts, set this value to 240. For standard email, set this value to 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 8) Click Apply.
- 9) Go to Program Template.
- 10) In the Settings section, set the InternetDomain = variable to match the email domain whose SPF record the PageGate system's public IP address is a part of.



11) Click Apply.

Click here for a list of settings Template Variables that can be used with SMTP Carriers

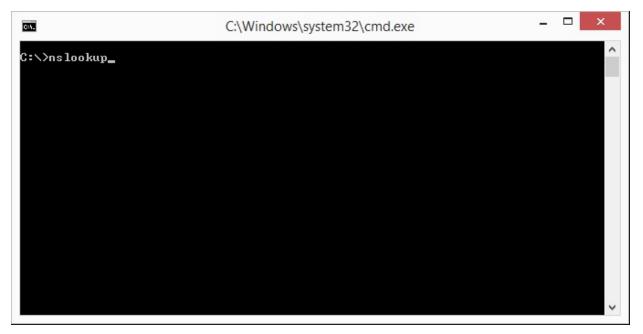
Testing Port 25

To check if port 25 is open for your PageGate server, you'll first need to install the telnet client. After the telnet client has been installed, this test will let you know if port 25 is open or closed.

1) In Windows, run a Command Prompt.



2) Type the following and hit enter: nslookup



3) Type the following and hit enter: set type=mx

```
C:\Vindows\system32\cmd.exe - nslookup

C:\Vnslookup
Default Server: google-public-dns-a.google.com
Address: 8.8.8.8

> set type=mx_
```

4) Type the following and hit enter: vtext.com

```
C:\Nislookup
Default Server: google-public-dns-a.google.com
Address: 8.8.8.8

> set type=mx
> vtext.com_
```

5) Make a note of the first mail exchanger response.

6) Type the following and hit enter: exit

```
C:\mslookup
Default Server: google-public-dns-a.google.com
Address: 8.8.8.8

> set type=mx
> vtext.com
Server: google-public-dns-a.google.com
Address: 8.8.8.8

Non-authoritative answer:
vtext.com
net
vtext.com
MX preference = 10, mail exchanger = smtpin02.vzw.a.cloudfilter.
net
vtext.com
net
> exit
```

7) Type the following and hit enter: telnet <First mail exchanger> 25 In this case, we would use telnet smtpin01.vzw.a.cloudfilter.net 25

```
C:\\nslookup
Default Server: google-public-dns-a.google.com
Address: 8.8.8.8

> set type=mx
> vtext.com
Server: google-public-dns-a.google.com
Address: 8.8.8.8

Non-authoritative answer:
vtext.com
net
vtext.com
MX preference = 10, mail exchanger = smtpin02.vzw.a.cloudfilter.net
vtext.com
net
vtext.com
Server: google-public-dns-a.google.com
Address: 8.8.8.8

Non-authoritative answer:
vtext.com
NX preference = 10, mail exchanger = smtpin01.vzw.a.cloudfilter.net
> exit
C:\>telnet smtpin02.vzw.a.cloudfilter.net 25
```

If port 25 is open and there are no outstanding issues with the public IP address the system sits behind, you'll receive a 220 response and can use direct delivery.

If port 25 is open but there is an outstanding issue with the public IP the system sits behind, you'll receive a 554 or a 421 rejection notice. These responses indicate that your public IP is on a blacklist, so you will need to determine which blacklists you're on.

To do that, from the computer running PageGate, go to www.whatismyipaddress.com and make a note of your public IP address. Then click on the Blacklist Check option at the top of the page and run the test. Any list that has a red! next to it is a list the IP address is on,

so you'll want to go to each of those links and go through their provided lookup and removal steps. Once your IP is off of those blacklists, you can use direct SMTP from that system.

If port 25 isn't open at all, you'll receive a response that says "Unable to establish a connection to the host on port 25". If port 25 isn't open, you may be able to have it opened but you will need to speak with your network administrator or internet service provider's tech support.

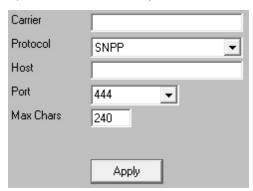
If port 25 is closed and cannot be opened, you must <u>relay your traffic through an SMTP</u> server.

Creating an SNPP Carrier

1) Right click Carriers.



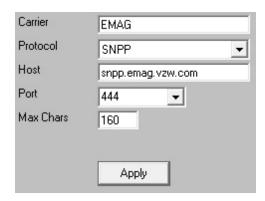
- 2) Select Add.
- 3) Select the SNPP protocol.



- 4) Enter a name in the Carrier field.
- 5) Enter the SNPP host you want to communicate with.
- 6) Unless the host specifically requires a connection on something other than port 444, leave the port at 444.
- 7) In the Max Chars field, enter the maximum number of characters you want to send in a single message. For SMS hosts, set this value to 160. For pager hosts, set this value to 240. The maximum value for this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character

limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



8) Click Apply.

If this host requires authentication (a username and password), you can configure that in the Advanced sub-section of the carrier. Please see the <u>Editing Carriers</u> portion of the manual.

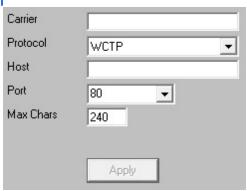
Click here for a list of Settings Variables that can be used with SNPP Carriers

Creating a WCTP Carrier

Right click Carriers.



- 2) Select Add.
- 3) Select the WCTP protocol.

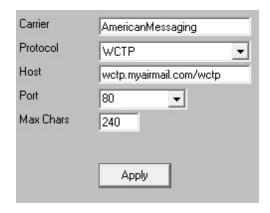


- 4) Enter a name in the Carrier field.
- 5) Enter the WCTP host you want to communicate with.

Note: Do not use the HTTP or HTTPS prefix in the Host field. These values are automatically inserted based on port selection.

- 6) If the host requires a connection on a secure port, enter it in the Port field. Otherwise, leave the port at 80.
- 7) In the Max Chars field, enter the maximum number of characters you want to send in a single message. For SMS hosts, set this value to 160. For pager hosts, set this value to 240. The maximum value for this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



8) Click Apply.

If this host requires authentication (a username and password), you can configure that in the Advanced sub-section of the carrier. Please see the <u>Editing Carriers</u> portion of the manual.

Click here for a list of Settings Variables that can be used with WCTP Carriers

Creating a GSM-AT Carrier

Cellular Modems

The GSM-AT protocol is used when you want to communicate with a cellular modem by COM port, whether physical or virtual.

A cellular modem connects to a PC by USB or RS232 and provides a COM port in the operating system.

If PageGate is running in a virtual environment, you can also connect a cellular modem to a COM port virtualizer that provides the COM port to the virtual machine. This grants PageGate access to the cellular modem, which allows it to send and receive text messages just like a cell phone does.

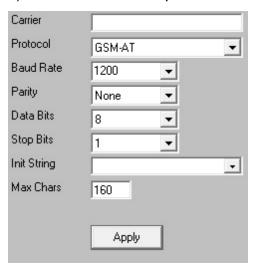
Good examples of cellular modem are:

- Multitech's MTC-H5 and MTR-LNA4
- US Robotics' USR3500
- Microhard's IP4NG
- AirPrime 73xx and 75xx
- Skyus-DS
- BlueOcean GSM and GPRS series
- Duxbury 120 and 180
- Siemens MTC45MC, MTC45TC, TC35, TC65
- Wavecom Fastrack GSM Modems
- 1) Right click Carriers.



2) Select Add.

3) Select the GSM-AT protocol.



- 4) Enter a name in the Carrier field.
- 5) Set the Baud Rate, Parity, Data Bits and Stop Bits to match the device's requirements.

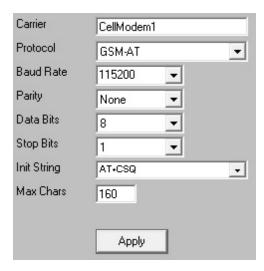
By default, most cellular modems use the following parameters:

Baud Rate: 115200

Parity: None
Data Bits: 8
Stop Bits: 1

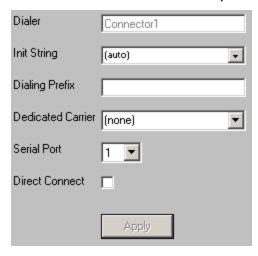
- 6) The Init String field optional for a GSM-AT carrier. To have the program perform a signal quality check on the cellular modem before each delivery, click inside the Init String field and type the following: AT+CSQ
- 7) Set the Max Chars to: 160

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 8) Click Apply.
- 9) Go to Connectors Connector X Settings.

Note: Any connector can use a cellular modem but a connector can only be tied to one cellular modem at a time. Multiple connectors cannot reference the same cellular modem.



- 10) Set the Serial Port field to match the COM port of your modem.
- 11) Click Apply.

When configuring PageGate to use a cellular router or gateway, each manufacturer uses a slightly different command set to perform the same tasks and there are <u>certain Settings</u> <u>template variables</u> that you can apply to GSM-AT-IP carriers to decrease the amount of time it takes to negotiate connections with your hardware.

To implement a two-way messaging system, please see the <u>Two Way Messaging</u> section of the documentation.

Click here for a list of Settings Variables that can be used with GSM-AT Carriers

Creating a GSM-AT-IP Carrier

Cellular Gateways/Routers

The GSM-AT-IP protocol is used when you want to communicate with a cellular modem, router or gateway by Telnet or SSH.

Cellular routers and gateways can be accessed via TCP by Telnet or SSH. You don't have to connect these devices to a PC, they just need to be connected to your network and configured appropriately to receive messaging commands.

Good examples of cellular routers/gateways are:

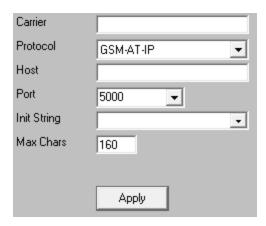
- Multitech's MTR-LNA7, MTR-LVW2 and MTR-LAT1
- Airlink's GX450, RV50, RV55 and LX40
- Microhard IP4nGii
- Cisco Series 800, 900

For clientele in the UK and EU regions

- ConiuGo GmbH 700600150S
- ConiuGo GmbH 700600160S
- ConiuGo GmbH 700600170S
- Right click Carriers.

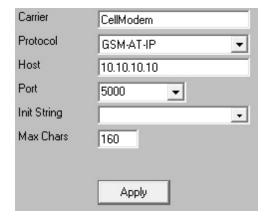


- 2) Select Add.
- 3) Select the GSM-AT-IP protocol.



- 4) Enter a name in the Carrier field.
- 5) In the Host field, enter the host IP address of the cellular router or gateway.
- 6) Edit the Port field to match the port required by the cellular router or gateway.
- 7) The Init String field optional for GSM-AT-IP carriers. To have the program perform a signal quality check on the cellular modem before each delivery, click inside the Init String field and type the following: AT+CSQ
- 8) Set the Max Chars to: 160

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



9) Click Apply.

When configuring PageGate to use a cellular router or gateway, each manufacturer uses a slightly different command set to perform the same tasks and there are <u>certain Settings</u> <u>template variables</u> that you can apply to GSM-AT-IP carriers to decrease the amount of time it takes to negotiate connections with your hardware.

To implement a two-way messaging system, please see the <u>Two Way Messaging</u> section of the documentation.

Click here for a list of Settings Variables that can be used with GSM-AT-IP Carriers

Creating an HTTP GET Carrier

PageGate supports the ability to use HTTP GET and POST methods which can be used to submit web forms, request information from websites and/or WEB APIs and interact with REST APIs.

The website, web form or API you interact with will directly determine what you need to configure in PageGate.

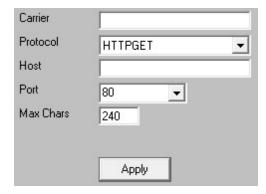
GET and POST are conceptually similar to each other but perform their functions in completely different ways.

The GET method carries parameters in the URL string and the POST method carries parameters in the request body.

1) Right click Carriers.



- 2) Select Add.
- 3) Select the HTTPGET protocol.



- 4) Enter a name in the Carrier field.
- 5) Set the host field to the URL of the API you wish to reach.
- 6) Set the Port field to the port required by the web API.
- 7) Set the Max Chars to 160 for SMS or 240 for pager messages. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 8) Click Apply.
- 9) Go in to the Template sub-section of your new HTTPGET carrier.
- 10) Configure a template for this carrier.

Templates for HTTP GET Carriers

Templates for HTTP GET carriers tell PageGate what variables and data to declare in the URL passed to the API.

All variables are declared in the 'Text' section of the template as follows:

|<name1>|<value1>|

|<name2>|<value2>|

etc.

Each value you specify will need to correspond to a variable that the receiving API will recognize. For example, let's say we wanted to send a message to an API that looked for

to, from, subject and text as variables. We would need to format the text template as follows:

|to|%RecipientId%| |from|%Sender%| |subject|%Subject%| |text|%Message%|

NOTE: | a pipe character.

The following parameters can be specified in the 'Settings' section of an HTTP GET carrier

Variable	Poss ible Valu es	Example Statemen t	Description
Response Recipient	Recip ient Grou p	Response Recipient = A recipient or group's name as it exists in the PG Admin	When the HTTP GET transaction completes, the specified recipient or group will receive any responses from the receiving API/web host. For more information, please see the Two Way Messaging section of the documentation.
InterMessa geDelay	Millis econ ds	InterMessa geDelay = 1000	This variable forces PageGate to delay for the specified number of milliseconds (1000 = 1 second) after delivering each message.
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 781829050 0	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

Creating an HTTP POST Carrier

This protocol allows PageGate to communicate with a webform, REST and Web APIs.

Since the API you interact with will likely require authentication, it's important to note there are multiple styles of authentication and the APIs you use will directly determine which to implement in PageGate.

Using the Username and Password in the carrier settings configure PageGate to use Basic HTTP Authentication, which is fairly standard.

Other forms of authentication, like authorization headers or required API keys in the XML/JSON/etc body, are configured in the <u>POST carrier's template</u>.

For example, another standard is to use the Authorization header which is typically in the format:

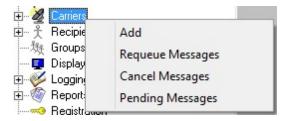
Authorization: <type> <credentials>

<type> and <credentials> will be defined in the receiving APIs documentation.

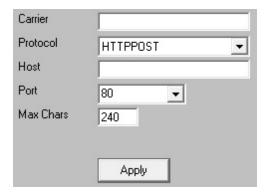
Some APIs use a custom header or authentication included in HTTP GET parameters or POST parameters.

Authorization can also be part of the POST body. For example, you might have to include API keys or something similar as part of the JSON or XML body.

1) Right click Carriers.

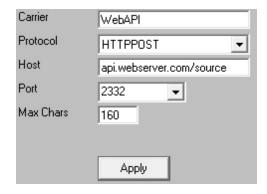


- Select Add.
- 3) Select the HTTPPOST protocol.



- 4) Enter a name in the Carrier field.
- 5) Set the host field to the URL of the API you wish to reach.
- 6) Set the Port field to the port required by the API or webform, typically 443.
- 7) Set the Max Chars to 160 for SMS or the maximum number of characters the API can handle in a single transmission. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 8) Click Apply.
- 9) Go in to the Template sub-section of your new HTTPPOST carrier.
- 10) Configure a template for this carrier.

Templates for HTTP POST Carriers

NOTE: When referencing any non-printable character, such as a line feed, carriage return, horizontal tab or similar, you must use the ASCII code for that character and it must be prefixed by a backslash (\).

Templates for HTTP POST carriers tell PageGate how to interact with and structure data passed to a web form, Web API or REST API.

It's important to gather as much information as you can about what API or webform you're interacting with and their documentation will typically provide required variables and how they need to be implemented.



Conceptually, the 'Settings' section of a POST carrier template tells PageGate if the API requires any special interaction and the 'Text' section determines what variables to declare and how to structure the message body.

These values can be used in the 'Settings' section of an HTTP POST carrier:

Variable	Pos sible Valu es	Exampl e Stateme nt	Description
Response Recipient	Reci pient Grou p	Respons eRecipi ent = A recipient or group's name as it exists in the PG Admin	When the HTTP GET or POST transaction completes, the specified recipient or group will receive any responses from the receiving API/web host. For more information, please see the Two Way Messaging section of the documentation.
HttpPostTy pe	Head Body or UrlH eadB ody	HttpPostT ype = HeadBod y HttpPostT ype = UrlHeadB ody	HttpPostType = HeadBody configures an HTTP POST carrier to provide header information followed by structured data, usually JSON or XML, in the body. HttpPostType = UrlHeadBody configures an HTTP POST carrier to pass parameters in the URL, more like the GET method. This is not a typical use of HTTP POST but is used/required by some APIs.
HttpSucce ssRespon se	Text	See Descript ion	This variable tells PageGate to scan any responses back from a GET or POST request for the required keywords or keyphrases. If those keywords or keyphrases are found, the message is treated as successfully delivered. This variable is both case and punctuation sensitive and PageGate will look for an exact match to what you enter. Multiple search terms may be used and you'll need to separate each item with a pipe.

			For example, this would only scan for the word success: HttpSuccessResponse = success
			This would scan for the word success in the <reply> tag:</reply>
			HttpSuccessResponse = <reply>success</reply>
			This would scan for the word success in the <reply> tag OR the word hijinks:</reply>
			HttpSuccessResponse = <reply>success</reply> hijinks
			This would scan for the word success OR the word hijinks OR the word actualization:
			HttpSuccessResponse = success hijinks actualization
			If this variable is included, any response to a GET/POST request that doesn't include the search term(s) will be treated as a failure.
HttpErrorR esponse	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
From	Text	From = CAD	This variable overrides the value passed to PageGate by the input modules/APIs. By specifying this variable, you're telling PageGate to use a single, standardized sender's name for all traffic controlled by this template.
То	Text	To = 78182905 00	This variable overrides the ID/PIN or Email values. By specifying this variable, you're telling PageGate to send all traffic processed by this template to the specified ID or Email address instead.

This is how to use the 'Text' section of an HTTP POST carrier:

Each value you specify will need to correspond to a variable that the receiving API will recognize. For example, let's say we wanted to send a message using <u>Twilio's API</u>. We know they're looking that looked for to, from and body as variables. We would need to format the text template as follows:

|to|%RecipientId%| |from|%Sender%| |body|%Message%|



NOTE: | is a pipe character and is found on most keyboards above the backslash character, \.

Some APIs, like <u>MessageBird</u>, require an authentication variable in the body of the POST and those are declared like any other variable.

Example:

|Authorization|AccessKeyPasteYourAccessKeyHere|

|recipients|%RecipientId%| |originator|%Sender%| |body|%Message%|

Creating a File Carrier

This type of carrier tells PageGate to write a file to a specified directory when a message needs to be sent. This is often used in conjunction with PageGate's <u>two-way messaging</u> <u>system</u> but can be implemented any time you need messages written out as a file to a specified location.

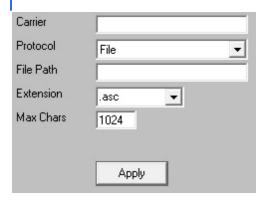
It is also important to note that you must apply a Text template to any File protocol carrier that you create.

This protocol also allows you to write files for the <u>GetASCII API</u> to process, which allows you to take input from other APIs, whether they're PageGate's or a web API, and process it in to a readable message.

1) Right click Carriers.

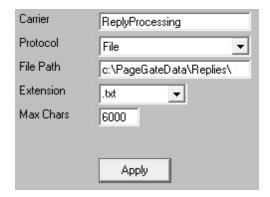


- 2) Select Add.
- 3) Select the File protocol.



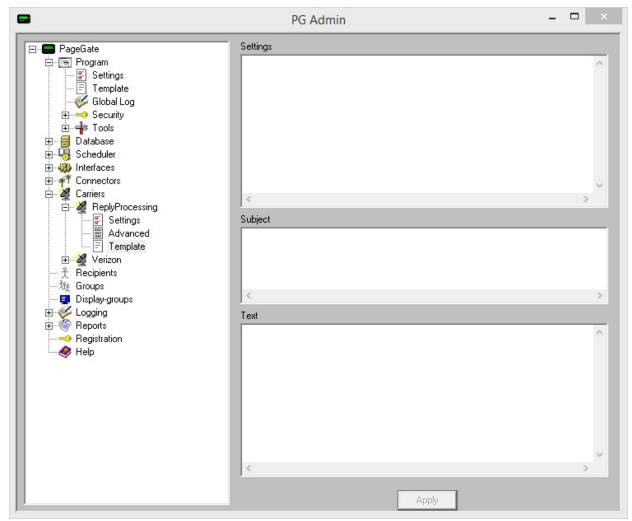
- 4) Enter a name in the Carrier field.
- 5) In the File Path field, enter the location to which you want these files output. This can be set to a local path (example: c:\PageGateData\ASCII\) or it can be set to a network path (\servername\share\). If this carrier is referencing a network path, the PageGate Connector services will need a service account to grant them access to the necessary network resource. Click here for more information.
- 6) Select the extension you want the files to have.
- 7) Set the Max Chars field to the maximum number of characters you want output in a single file. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



8) Click Apply.

Now that we have the carrier created, go in to its Template sub-section.



In the Text section of the template, you'll want to configure a string of <u>Macros</u> to tell PageGate what should be output. For example, if we used the following:

```
%Recipient%
%Sender%
%Message%
```

That tells PageGate to output the recipient's name followed by a carriage return, line feed then the recorded sender value followed by a carriage return, line feed then the body of the message in the file written.

As another example, if we used the following: %Message% has failed to %Recipient% on %Date% at %Time%

That tells PageGate to output the body of the message has failed to the recipient in question on the date of its occurrence at the time of its occurrence.

This allows you to implement the File protocol in any number of ways, from feeding information back in to PageGate's <u>GetASCII API</u> and <u>Filter Pack</u> to outputting a copy of any message as a file for safe keeping or secondary processing by other applications.

Also, bear in mind that while these are examples of what can be done with this type of carrier, it's important to note the base action in play:

You're having PageGate output a text file to a specified location.

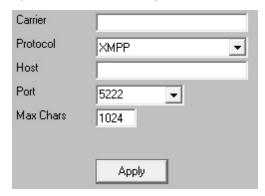
Creating an XMPP Carrier

This protocol allows you to communicate with XMPP servers, which are predominantly used for chat messages. This is a one-way implementation of the protocol and PageGate does not currently listen for replies from the XMPP server.

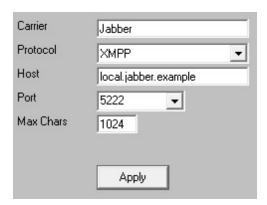
1) Right click Carriers.



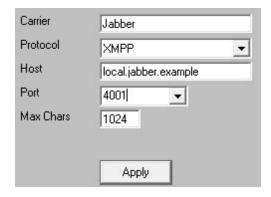
- 2) Select Add.
- 3) Select the XMPP protocol.



- 4) Enter a name in the Carrier field.
- 5) Enter the XMPP host you want to communicate with.



6) Click inside the Port field and enter the port on which the XMPP server requires a connection.



7) In the Max Chars field, enter the maximum number of characters you want to send in a single message. The maximum value for this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.

8) Click Apply.

If this host requires authentication (a username and password), you can configure that in the Advanced sub-section of the carrier. Please see the <u>Editing Carriers</u> section of the manual.

Creating a TAP Carrier

The TAP protocol is used to communicate with paging systems and any other system that supports the TAP protocol and can be implemented in any or all of three ways:

Serial

This method configures PageGate to use a serial/RS232 connection to a paging transmitter.

• Modem

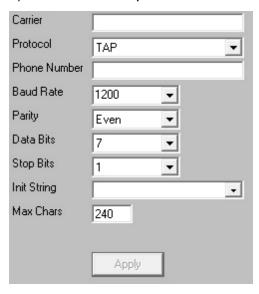
This method configures PageGate to use a dial-up modem to dial in to the receiving paging transmitter to deliver messages.

Creating a Serial/RS232 TAP Carrier

Right click Carriers.



- 2) Select Add.
- 3) Select the TAP protocol.



- 4) Enter a name in the Carrier field.
- 5) Leave the Phone Number field empty.
- 6) Click inside the Init String field and type the following: direct
- 7) Set the Baud Rate, Parity, Data Bits and Stop Bits to match the receiving TAP system's requirements.

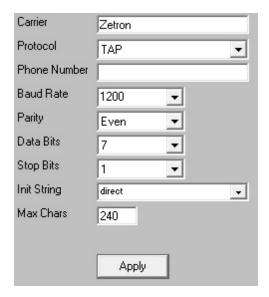
By default, most TAP systems use:

Baud Rate: 1200 Parity: Even

Data Bits: 7 Stop Bits: 1

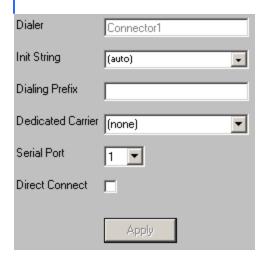
8) Set the Max Chars value to: 240

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 9) Click Apply.
- 10) Go to Connectors Connector X Settings.

Note: Any connector can use a serial connection but a connector can only be tied to one serial connection at a time. Multiple connectors cannot reference the same serial port.



- 11) Set the Serial Port field to match the serial port the RS232 cable is plugged in to.
- 12) Check Direct Connect.



13) Click Apply.

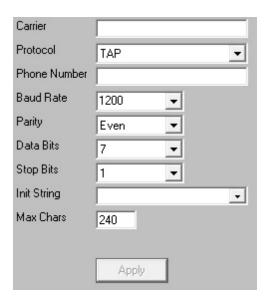
Click here for a list of Settings Variables that can be used with TAP Carriers

Creating a Modem TAP Carrier

1) Right click Carriers.



- 2) Select Add.
- 3) Select the TAP protocol.



- 4) Enter a name in the Carrier field.
- 5) Enter the phone number of the receiving TAP system in the Phone Number field.
- 6) Set the Baud Rate, Parity, Data Bits and Stop Bits to match the receiving TAP system's requirements.

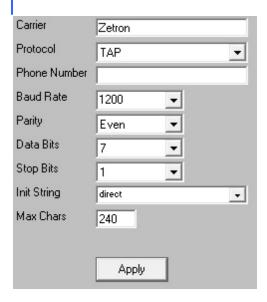
By default, most TAP systems use:

Baud Rate: 1200

Parity: Even
Data Bits: 7
Stop Bits: 1

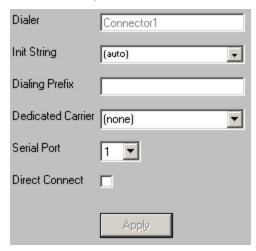
- 7) Click inside the Init String field and type the following: direct
- 8) Set the Max Chars value to 160 for SMS or 240 for pagers. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 9) Click Apply.
- 10) Go to Connectors Connector X Settings.

Note: Any connector can use a modem but a connector can only be tied to one modem at a time. Multiple connectors cannot reference the same modem.



- 11) Set the Serial Port field to match the COM port of the modem.
- 12) Click Apply.

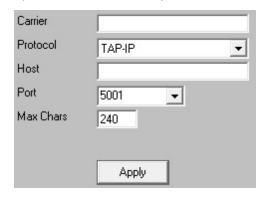
Click here for a list of Settings Variables that can be used with TAP Carriers

Creating a TAP-IP Carrier

1) Right click Carriers.



- 2) Select Add.
- 3) Select the TAP-IP protocol.



- 4) Enter a name in the Carrier field.
- 5) Set the Host field to the IP of the TAP receiver.
- 6) Set the Port field to the port required by the TAP receiver.
- 7) Set the Max Chars value to: 240

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.

8) Click Apply.

Click here for a list of Settings Variables that can be used with TAP Carriers

Creating a FAX Carrier

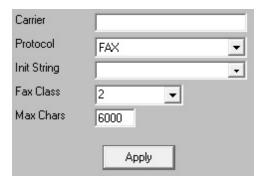
This protocol allows you to tell PageGate to send a fax using a fax capable dial-up modem.

NOTE: While not absolutely required, we would recommend creating a <u>Faxing Template</u> for any FAX Carriers you create.

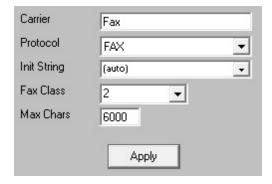
1) Right click Carriers.



- 2) Select Add.
- 3) Select the FAX protocol.

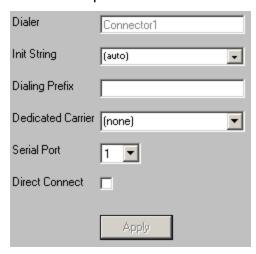


- 4) Enter a name in the Carrier field.
- 5) Set the Init String field to: (auto)
- 6) Set the Fax Class required by the receiving fax machine(s).
- 7) Set the Max Chars value to: 6000



- 8) Click Apply.
- 9) Go to Connectors Connector X Settings.

Note: Any connector can use a modem but a connector can only be tied to one modem at a time. Multiple connectors cannot reference the same modem.



- 10) Set the Serial Port field to match the COM port of your modem.
- 11) Click Apply.

Creating a FAXSrv Carrier

NOTE: This protocol will only work with a Microsoft Fax Server.

For more information on how to configure a Microsoft Fax Server, please review the Microsoft Technet Documentation here:

http://technet.microsoft.com/en-us/library/jj134193.aspx

If you do not configure the Microsoft Fax Server properly, this protocol will not work.

Click here for steps to configure a FAXSrv carrier to use a local Microsoft Fax Server

<u>Click her for steps to configure a FAXSrv carrier to use a network Microsoft Fax Server</u>

Local Microsoft Fax Server Configuration

PageGate can reference a Microsoft Fax Server either on its local system or, if one has been configured on the same network, another server. These steps are for configuring the local Microsoft Fax Server.

Click here for steps on configuring a Network Microsoft Fax server.

Note: Please install the Microsoft Fax Server first.

- If you do not already have a Windows User Account you want PageGate to use, create one.
- 2) In Windows, grant this Account the "log on as service" policy.

- Log out of Windows on the PageGate server, then log back in with the new user account
- 4) Open the Microsoft Fax Service Manager.
- 5) Go to Accounts.
- 6) Create a Fax Account that matches the Windows Logon Name of the PageGate account, which should also be the user account you're logged in with.
- 7) Close the Microsoft Fax Service Manager.
- 8) Run Windows Fax and Scan
- 9) Go to Tools Fax Accounts Add.
- 10) Select "Connect to a Fax Server on my network"
- 11) Enter \\127.0.0.1 and click on Next.

Note: When referencing a Microsoft Fax server, you MUST share the Fax in Devices and Printers, even if the Microsoft Fax Server is installed locally on the PageGate Server. If the Fax in question has not been shared, the PageGate Server will be denied access to it.

- 12) Enter a name or title for this connection, click on Done then click on Close.
- 13) From within Windows Fax and Scan, send a test fax to verify that the connection is established and functions.
- 14) If you have PageGate running as a Windows Service, apply the username and password configured for Faxing in the "Log On" section of the PageGate, PageGate Scheduler and PageGate Connector X services in the Services list. If you are running PageGate as an Application, you MUST be logged in as the Fax Account User in Windows for this to function properly.
- 15) Go through the steps in <u>Creating a FAXSrv Carrier</u>.

The fax document is rendered by notepad.exe and the default settings are unique to the Windows User Account that PageGate is using. To modify the margins, format or output of headers and footers:

- 1) Log in to Windows as the Fax Account User.
- 2) Run Notepad in Windows.
- 3) Go to File Page Setup.
- 4) Make any modifications you wish, then click on OK.

Network Microsoft Fax Server Configuration

Note: This can only be performed on Server based operating systems such as Server 2003, Server 2008, Server 2012 and Server 2016. Presently, according to Microsoft's specifications, you cannot share a Fax on a workstation based operating system such as Windows 7, 8 or 10.

PageGate can reference a Microsoft Fax Server either on its local system or, if one has been configured on the same network, another server. These steps are for configuring a Network Microsoft Fax server.

Click here for steps on how to configure a Local Microsoft Fax Server.

Note: The <u>Microsoft Fax Server</u> must be installed on the remote system for this to function. Do not install the Microsoft Fax Server locally when using this method.

On the server with the fax hardware:

1) Log in to Windows as the account named Administrator.

Note: It is not recommended to log in as any other account, even if your account is an Administrator or is part of the Domain Administrators group. The User Accounts Control in Server 2008, Server 2012 and Server 2016 requires you to log in as the account named Administrator for you to have access to certain security functions, such as configuring a Microsoft Fax Server.

- 2) In Windows, go to Devices and Printers.
- 3) Right click on Fax, left click on Printer Properties.
- 4) Go under the Sharing Tab.
- 5) Click "Change Sharing Options"
- 6) Put a check in "Share this printer"
- 7) Give the Fax a share name.
- 8) If you want the formatting of the faxes to be controlled by the PageGate system, leave "Render print jobs on client computers" checked.
- 9) Go under the Security tab.
- 10) Click Add.
- 11) Add the user you are going to use for PageGate.

Note: If you do not already have a local system or domain user for PageGate to use, please create one and grand it administrative privileges, then add that account.

There's also a bit of standardization with the user account/username that PageGate uses on its own system that will need to be done since it will need to match the name of the Fax Service account. After configuring the domain or local user account for PageGate to use, we must next identify that account as a Fax Account. To do so, please go through these steps:

1) Open the Administrative Tools in Windows.

- 2) Run the Fax Service Manager
- 3) On the left hand side, click on Accounts.
- 4) Make sure that a Fax Service Account that precisely and exactly matches the primary logon for the PageGate Server. This is very important because this account must match the name of the account that the PageGate services use to run, including any domain information.
- 5) If you do not presently have an Account listed that matches the PageGate account, go to Action New Account.
- 6) Enter the username and domain information.
- 7) Click Create to add the account in to the Fax Service Manager.

Now that we've configured the Microsoft Fax Server, we'll need to configure the PageGate server to reference it.

- Log in to Windows as the Service Account that the PageGate Services are using and that the Microsoft Fax Server is referencing. It is very important to log in as that specific user in Windows on the PageGate server.
- 2) In Windows, browse over the network to the Server hosting the shared Microsoft Fax Server.
- 3) In the list of folders and items listed under the server, you should see 'Fax'. Right click on this and left click on Connect.
- 4) If prompted for credentials, provide them. This should also install the necessary fax drivers required to use this interface locally.
- 5) Open the Microsoft Fax Service Manager.
- 6) Go to Accounts.
- 7) Create a Fax Account that matches the Windows Logon Name of the PageGate account, which should also be the user account you're logged in with.
- 8) Close the Microsoft Fax Service Manager.
- 9) Run Windows Fax and Scan
- 10) Go to Tools Fax Accounts Add.
- 11) Select "Connect to a Fax Server on my network"
- 12) Enter the UNC path to your existing Microsoft Fax Server (\\IPorMachineName) and click on Next.

Note: When referencing a Microsoft Fax server across the network, you MUST share the Fax in Devices and Printers on the host system. If the Fax in question has not been shared, the PageGate Server will be denied access to it.

- 13) Enter a name or title for this connection, click on Done then click on Close.
- 14) From within Windows Fax and Scan, send a test fax to verify that the connection to the remote Microsoft Fax Server is established and functions.
- 15) If you have PageGate running as a Windows Service, apply the Domain or Network Windows User Account and password configured for Faxing in the "Log On" section of the PageGate, PageGate Scheduler and PageGate Connector X services in the Services list. If you are running PageGate as an Application, you MUST be logged in as the Fax Account User in Windows for this to function properly.
- 16) Go through the steps in Creating a FAXSrv Carrier.

The fax document is rendered by notepad.exe and the default settings are unique to the Windows User Account that PageGate is using. To modify the margins, format or output of headers and footers:

- 1) Log in to Windows as the Fax Account User.
- 2) Run Notepad in Windows.
- 3) Go to File Page Setup.
- 4) Make any modifications you wish, then click on OK.

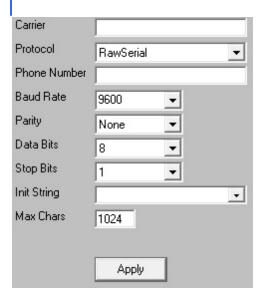
Creating a RawSerial Carrier

This protocol tells PageGate to send a Raw formatted string of data through an RS232/serial line.

1) Right click Carriers.

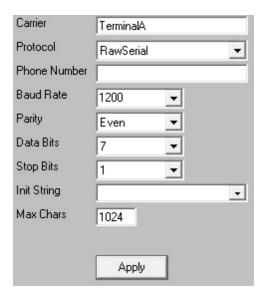


- 2) Select Add.
- 3) Select the RawSerial protocol.



- 4) Enter a name in the Carrier field.
- 5) While it is unlikely that you may need to have a phone number passed as part of the RawSerial transmission, PageGate can still be configured to issue a phone number to the receiving serial device. Most implementations of this protocol will leave this field blank.
- 6) Set the Baud Rate, Parity, Data Bits and Stop Bits to match the requirements of the system or hardware that's going to be receiving this traffic.
- 7) If the receiving system requires a series of characters to be passed before it can accept input, enter that character or character string in to the Init String field.
- 8) Set the Max Chars field to the maximum number of characters you want output in a single transmission. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



9) Click Apply.

If the receiving system has special formatting requirements, you can configure that in the Template sub-section of a carrier.



In the Text section of the template, you can configure a string of plain text and <u>Macros</u> to tell PageGate what should be output and in what order. For example, if we used the following:

%Recipient% %Sender%

%Message%

That tells PageGate to output the recipient's name followed by a carriage return, line feed then the recorded sender value followed by a carriage return, line feed then the body of the message in the file written.

As another example, if we used the following:

USER: %RecipientId% DATA: %Message%

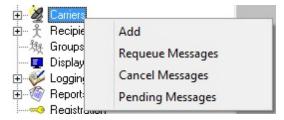
That tells PageGate to output the text USER: before inserting the recipient's ID/PIN value followed by a carriage return, line feed then the text DATA: before inserting the body of the message to be sent.

Click here for a list of Settings Variables that can be used with RawSerial Carriers

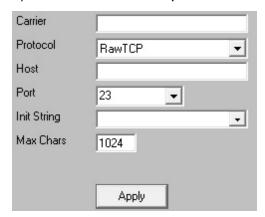
Creating a RawTCP Carrier

This protocol tells PageGate to send a Raw formatted string of data by TCP to a specified IP address and port.

1) Right click Carriers.

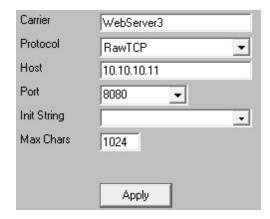


- 2) Select Add.
- 3) Select the RawTCP protocol.



- 4) Enter a name in the Carrier field.
- 5) Enter the host IP address in the Host field.
- 6) Set the Port field to the port required by the receiving host.
- 7) If the receiving system requires a series of characters to be passed before it can accept input, enter that character or character string in to the Init String field.
- 8) Set the Max Chars field to the maximum number of characters you want output in a single transmission. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



9) Click Apply.

If the receiving system has special formatting requirements, you can configure them in the Template sub-section of a carrier.



In the Text section of the template, you can configure a string of plain text and <u>Macros</u> to tell PageGate what should be output and in what order. For example, if we used the following:

%Recipient% %Sender% %Message%

That tells PageGate to output the recipient's name followed by a carriage return, line feed then the recorded sender value followed by a carriage return, line feed then the body of the message in the file written.

As another example, if we used the following:

USER: %RecipientId% DATA: %Message%

That tells PageGate to output the text USER: before inserting the recipient's ID/PIN value followed by a carriage return, line feed then the text DATA: before inserting the body of the message to be sent.

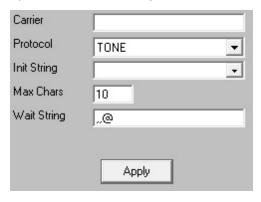
Click here for a list of Settings Variables that can be used with RawTCP Carriers

Creating a TONE Carrier

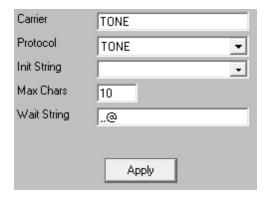
1) Right click Carriers.



- 2) Select Add.
- 3) Select the TONE protocol.

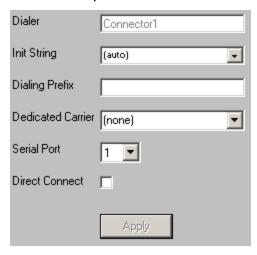


- 4) Enter a name in the Carrier field.
- 5) If your modem requires a special initialization string to send DTMF, enter it in the Init String field.
- 6) Set the Max Chars field to the maximum number of digits you want to transmit in a single dial-in session.
- 7) The Wait String field determines how long the program should pause before transmitting the touch tones in the message. Your modem uses the Hayes AT command set, which means a comma represents a two second pause and an @ represents a 3 second pause.



- 8) Click Apply.
- 9) Go to Connectors Connector X Settings.

Note: Any connector can use a modem but a connector can only be tied to one modem at a time. Multiple connectors cannot reference the same modem.



- 10) Set the Serial Port field to match the COM port of the modem.
- 11) Click Apply.

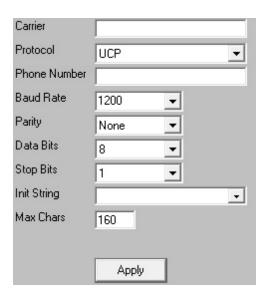
Click here for a list of Settings Variables that can be used with TONE Carriers

Creating a UCP Carrier

Right click Carriers.

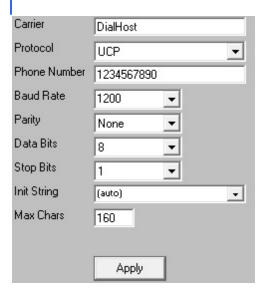


- 2) Select Add.
- 3) Select the UCP protocol.



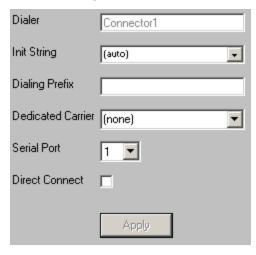
- 4) Enter a name in the Carrier field.
- 5) Enter the phone number of the UCP terminal.
- 6) Set the Init String field to: (auto)
- 7) Set the Baud Rate, Parity, Data Bits and Stop Bits to match the receiving UCP system's requirements.
- 8) Set the Max Chars value to 160 for SMS or 240 for pagers. The maximum value of this field is 6000.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.



- 9) Click Apply.
- 10) Go to Connectors Connector X Settings.

Note: Any connector can use a modem but a connector can only be tied to one modem at a time. Multiple connectors cannot reference the same modem.



- 11) Set the Serial Port field to match the COM port of the modem.
- 12) Click Apply.

Click here for a list of Settings Variables that can be used with UCP Carriers

Context Menu Options

Right clicking on a specific carrier will provide a context menu with four options.

• Requeue Messages

Selecting this option allows you to requeue a range of previously delivered messages for the selected carrier.

Cancel Messages

Selecting this option allows you to cancel all past due, pending and/or repeating messages for the selected carrier.

Pending Messages

Selecting this option will display a list of all messages in the pending queue for the selected carrier.

Delete

Selecting this option will remove the carrier from the list. This cannot be done if there are recipients still tied to this carrier.

Requeue Messages

The Requeue Messages option, when used at the base Carriers tree, allows you to resend any message previously sent to all carriers. If you right click on a specific carrier and select this option, it allows you to resend any message previously sent to the selected carrier.

🖹 🌌 Carriers

± + ↑ Recipients

與 Groups

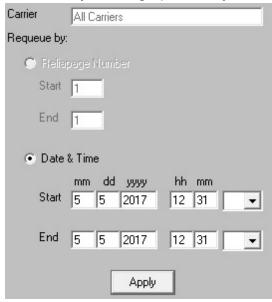
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 Eugging
 Eugging
 Reports
 Registration

Display-groups

Requeue Messages

Cancel Messages

Pending Messages



There are two options for requeuing messages:

• Reliapage

This option allows you to select a range of <u>Reliapage</u> messages to resend. The <u>Reliapage</u> template macro must be included in the recipient, carrier, connector, interface or global template for this to work.

Date and Time

This option allows you to select a date and time range of messages you wish to requeue. Cancel Messages

The Cancel Messages option, when used at the base Carriers tree, allows you to cancel messages for all carriers. If you right click on a specific carrier and select this option, it will only cancel messages for that specific carrier.



Cancel all past due messages

Enabling this option will cancel past due messages. Past Due messages are Repeating Messages that should have been delivered but haven't, which can possibly interfere with the schedule of messages waiting to be sent.

• Cancel all pending messages

Enabling this option will cancel all messages in the pending queue.

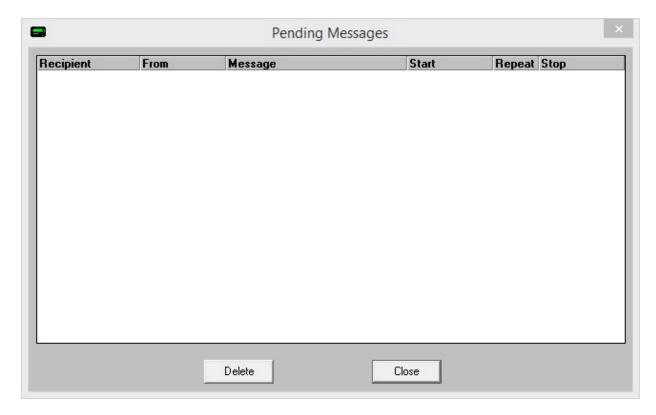
Cancel all repeating messages

Enabling this option will cancel all repeating messages scheduled by the PageGate Client.

For example, if you have a message set to repeat every hour, enabling the "Cancel all repeating messages" option will stop that message from ever happening again where only enabling the "Cancel all past due message" option will only cancel any previous repeating messages that couldn't be delivered out but will not prevent future repeating messages from being sent.

Pending Messages

This section displays a list of all messages currently in the pending queue.



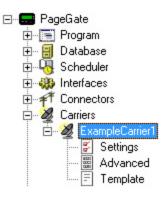
When reviewing pending messages, the "Pending Messages" dialog will display the following information for each Pending Message:

Recipient, sender, content of the message, when the message is to be sent, whether the message will repeat or only send once, and when the message will stop being sent.

Any message displayed in this dialog may be highlighted and deleted via the Delete button.

Carrier Settings

After you've gone through the steps to <u>create a carrier</u>, they'll appear in the Carriers list. Every carrier has three sub-sections:



Settings

This section displays information about the basic configuration of this carrier, including protocol and communication parameters. This section will vary based on the protocol configured for the carrier. For more information about the carriers' basic settings, see the <u>Creating a new Carrier</u> section.

Template

This section allows you to apply a custom template to this carrier.

Advanced

This section allows you to configure failover, authentication credentials, priority level and other delivery settings. The specific options and layout of this section will vary based on the protocol the carrier is configured to use.

- <u>Click here</u> for AWS SNS Advanced Settings
- Click here for SMTP Advanced Settings
- <u>Click here</u> for SNPP Advanced Settings
- Click here for WCTP Advanced Settings
- <u>Click here</u> for GSM-AT Advanced Settings
- Click here for GSM-AT-IP Advanced Settings
- <u>Click here</u> for HTTPGET Advanced Settings
- <u>Click here</u> for HTTPPOST Advanced Settings
- Click here for File Advanced Settings
- <u>Click here</u> for XMPP Advanced Settings
- <u>Click here</u> for TAP Advanced Settings
- Click here for TAP-IP Advanced Settings
- Click here for FAX Advanced Settings
- Click here for FAXSrv Advanced Settings
- Click here for RawSerial Advanced Settings
- <u>Click here</u> for RawTCP Advanced Settings
- Click here for TONE Advanced Settings
- Click here for UCP Advanced Settings

Right clicking on a Carrier will provide a context menu with four options.

Requeue Messages

Selecting this option allows you to requeue a range of previously delivered messages to the selected carrier.

Cancel Messages

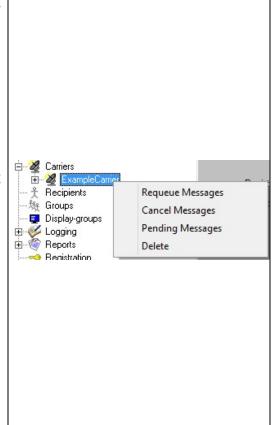
Selecting this option allows you to cancel all past due, pending and/or repeating messages for the selected carrier.

Pending Messages

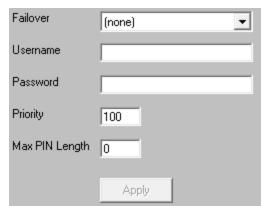
Selecting this option will display a list of all messages in the pending queue for the selected carrier.

• Delete

Selecting this option will remove the carrier from the list. This cannot be done if any recipient is still tied to the carrier.



AWS SNS Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
	For example, you could configure multiple AWS SNS carriers and tie each of them to a separate host (us-east-1, us-west-2, etc) and have one fail over to the other.

Alternately, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate SMS delivery with AWS SNS but if AWS is down or unreachable, you can fail over to SMTP, WCTP, SNPP, TAP or any other delivery method instead. Userna The 'Access Key ID' of an AWS account that has permission to use the AWS SNS. me Passwo The 'Secret Access Key' associated with the 'Access Key ID' used in the rd username field. This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value Priority lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important. Max PIN This field is used to limit the number of digits accepted from a recipient's Length ID/PIN field for this carrier (extra digits are stripped of the beginning). Apply This button saves any changes made to a carrier's Advanced Settings.

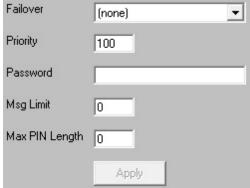
SMTP Advanced Settings



Setting Function	
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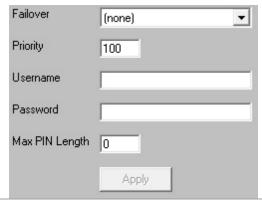
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, if you have multiple SMTP servers, you could configure PageGate to relay through any or all of them in a failover scenario. Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to deliver an email/SMTP message but if it can't, you can have it failover to output the message as a text file to the hard drive to keep a record of failed messages or you could have the program attempt delivery by SNPP, WCTP, cellular hardware, etc.
	If you're having PageGate function as a mail server and are using direct
	delivery, leave this field blank.
Userna me	If you're having PageGate function as a mail client and are using relayed
1110	delivery, enter the SMTP server's required username.
	For more information, see <u>How to send Email</u> .
	If you're having PageGate function as a mail server and are using direct
	delivery, leave this field blank.
Passwo rd	If you're having PageGate function as a mail client and are using relayed
l Id	delivery, enter the SMTP server's required password.
	For more information, see <u>How to send Email</u> .
	This field determines this carrier's place within the priority system.
Priority	By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Deliver directly	Selecting this option tells PageGate that it should function as a mail sever. For more information, see How to send Email .
Deliver through	Selecting this options tells PageGate that it should function as a mail client and relay all traffic for this carrier to the host specified in the Relay Server field. For more information, see How to send Email .
Apply	This button saves any changes made to this carrier's Advanced Settings.

SNPP Advanced Settings



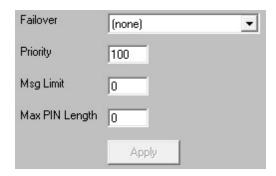
Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you're registered on the Verizon EMAG system. Since they support SNPP, SMTP and WCTP, you could configure the program to failover from SNPP to either SMTP or WCTP and then configure a second layer of failover between SMTP and WCTP. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Passwo rd	If the SNPP host system requires authentication credentials, enter them in this field. Typically speaking, you'll enter the username and password separated by a single space.
Msg Limit	This field determines the number of messages that can be negotiated with the receiving SNPP system in one session. Set this value to what the receiving system supports.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

WCTP Advanced Settings



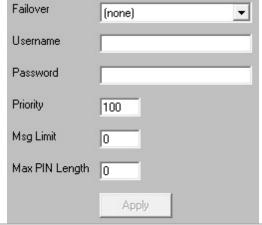
Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you're registered on the Verizon EMAG system. Since they support WCTP, SMTP and SNPP, you could configure the program to failover from WCTP to either SNPP or SMTP and then configure a second layer of failover between SMTP and SNPP. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Userna me	If the WCTP host requires authentication credentials, enter the username here.
Passwo rd	If the WCTP host requires authentication credentials, enter the password here.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

GSM-AT Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two cellular modems. You could configure one cellular modem as the primary method of delivery, then configure a second carrier for the backup modem and configure the first carrier to fail over to the second.
	Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate SMS delivery with your cellular modem but if the hardware is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Msg Limit	This field determines the number of messages that the cellular modem can handle in one block. This setting is directly effected by the make and model of cellular modem you have as different devices have different settings and limitations. Set this field to 5 for most cellular modems but if you notice that you're running in to CMS delivery errors, lower this value as appropriate.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

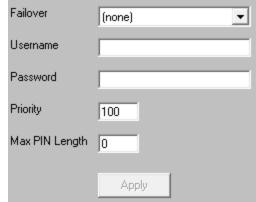
GSM-AT-IP Advanced Settings



Setting Function	
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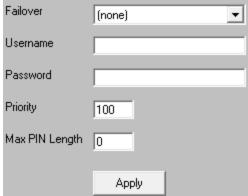
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two cellular routers/gateways. You could configure one cellular router/gateway as the primary method of delivery, then configure a second carrier for the backup router/gateway and configure the first carrier to fail over to the second. As another example, if you had two Android phones with the NotePage Android SMS Gateway installed, you could fail over between them as necessary. Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate SMS delivery with your cellular hardware but if the hardware is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the
Llaama	pending messages to another carrier when the original carrier can't be contacted.
Userna me	If your cellular hardware requires a username to send SMS, enter it here.
Passwo rd	If your cellular hardware requires a password to send SMS, enter it here.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Msg Limit	This field determines the number of messages that the cellular hardware can handle in one block. This setting is directly effected by the make and model of cellular modem, router or gateway you have as different devices have different settings and limitations. It is recommended to set this value to 1 for most GSM-AT-IP carriers.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

HTTPGET Advanced Settings



Setting	Function
	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two separate web APIs, a primary API and a backup API. You could configure two separate HTTPGET carriers, then have one fail over to the other.
<u>r</u>	Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate message delivery with your web API but if the API is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Userna	
me	Killer Mark ADI or to interesting title and interesting the second sector of the sector of th
and	If the Web API you're interacting with requires a login, enter the required username and password here.
Passw ord	
	This field determines this carrier's place within the priority system.
Priority	By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.
	I .

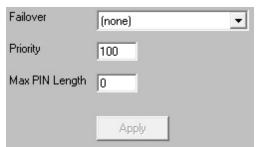
HTTPPOST Advanced Settings



Setti ng	Function
	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two separate web APIs, a primary API and a backup API. You could configure two separate HTTPPOST carriers, then have one fail over to the other.
Failo ver	Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate message delivery with your web API but if the API is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
	Using the Username and Password in the carrier settings configures PageGate to use Basic HTTP Authentication, which is fairly standard.
User name	Other forms of authentication, like authorization headers or required API keys in the XML/JSON/etc body, are configured in the POST carrier's template.
and	
Pass word	For example, another standard is to use the Authorization header which is typically in the format: Authorization: <type> <credentials></credentials></type>
	<type> and <credentials> will be defined in the receiving APIs documentation.</credentials></type>
	This field determines this carrier's place within the priority system.
Priori ty	By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.

Max	
PIN	This field is used to limit the number of digits accepted from a recipient's ID/PIN
Leng	field for this carrier (extra digits are stripped of the beginning).
th	
Appl	This button saves any changes made to a carrier's Advanced Settings.
у	This bullon saves any changes made to a carrier's Advanced Sellings.

File Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two separate locations that you could write files to, a primary location and a backup location. You could configure two separate File carriers, then have one fail over to the other. Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to write a file to the location specified in the settings of your File carrier but if the destination is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original
	carrier can't be contacted. This field determines this carrier's place within the priority system.
Priority	By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

XMPP Advanced Settings

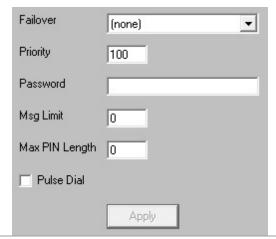


Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, if you have multiple possible XMPP servers that you can communicate with, you can configure each as a separate carrier, then configure one to be the failover for the other. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
	Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate a chat session with your XMPP server but if that server is unreachable, you can have it failover to an SMTP/Email delivery method instead.
Userna me	Enter your XMPP server's required username.
Passwo rd	Enter your XMPP server's required password, if any.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Msg Limit	This field determines the number of messages that can be negotiated with the XMPP server in one session. Since most XMPP servers only require you to authenticate once before sending a series of messages, you can usually leave this at 0. However, if your XMPP server does require you to authenticate every message, set this field to 1.



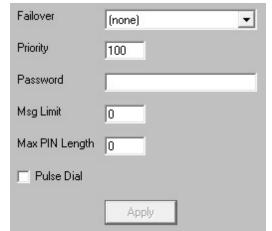
Max PIN	This field is used to limit the number of digits accepted from a recipient's
Length	ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

TAP Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, some carriers support multiple TAP terminals. Other carriers support both SNPP and WCTP hosts. If you configure multiple TAP Terminals or hosts for one carrier, you can specify a failover. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Passwo rd	If the receiving TAP system requires authentication credentials, enter them in this field.
Msg Limit	This field determines the number of messages that can be negotiated with the receiving TAP system in one session. Most TAP terminals can receive up to 25 messages in a single transmission but set this value appropriate to what the receiving system supports.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Pulse Dial	If you need to use pulse dialing instead of tone dialing, check this option.
Apply	This button saves any changes made to a carrier's Advanced Settings.

TAP-IP Advanced Settings



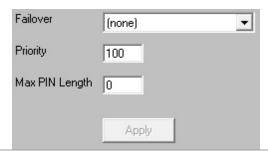
Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, some carriers support multiple TAP terminals. Other carriers support both SNPP and WCTP hosts. If you configure multiple TAP Terminals or hosts for one carrier, you can specify a failover. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Passwo rd	If the receiving TAP system requires authentication credentials, enter them in this field.
Msg Limit	This field determines the number of messages that can be negotiated with the receiving TAP system in one session. Most TAP terminals can receive up to 25 messages in a single transmission but set this value appropriate to what the receiving system supports.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Pulse Dial	If you need to use pulse dialing instead of tone dialing, check this option.
Apply	This button saves any changes made to a carrier's Advanced Settings.

FAX Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, you could configure a Fax carrier and an SMTP/Email carrier. Then you could specify the SMTP/Email carrier as the failover for the Fax carrier and if a Fax can't be delivered, it will instead be delivered as an email. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

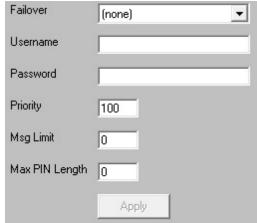
FAXSrv Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, you could configure a Fax carrier and an SMTP/Email carrier. Then you could specify the SMTP/Email carrier as the failover for the Fax carrier and if a Fax can't be delivered, it will instead be delivered as an email. The failover settings at the carrier level is used to

	redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

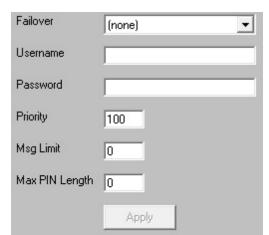
RawSerial Advanced Settings



Setting	Function
	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two serial input lines that you could use with two separate RawSerial carriers. You could configure one as the primary method of delivery, then configure a second carrier for the backup serial line and configure the first carrier to fail over to the second.
Failover	Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate a serial connection but if the serial receiver is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Userna me	If you need to pass a username during the RS232 negotiation, enter it here.

Passwo rd	If you need to pass a password during the RS232 negotiation, enter it here.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Msg Limit	This field determines the number of messages that the receiving serial system can handle in one block. This setting is directly effected by the receiving serial system's requirements and should be set to what the receiving system can accept.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

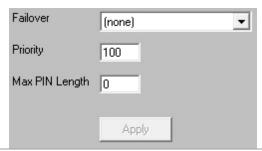
RawTCP Advanced Settings



Setting	Function
	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, let's say that you have two TCP hosts that you could communicate with; one primary and one backup. You could configure each as a RawTCP carrier, then configure the first carrier to fail over to the second.
Failover	Alternatively, you could configure a failover to go to a completely different method of communication. So, the program would initially try to negotiate a TCP session with your host but if receiving host is unreachable, you can have it failover to an SMTP, WCTP, SNPP, TAP or any other delivery method instead. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.

Userna me	If you need to pass a username during the TCP negotiation, enter it here.
Passwo rd	If you need to pass a password during the TCP negotiation, enter it here.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Msg Limit	This field determines the number of messages than the receiving TCP host can handle in one block. This setting is directly effected by the TCP host's requirements and should be set to what the receiving system can accept.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Apply	This button saves any changes made to a carrier's Advanced Settings.

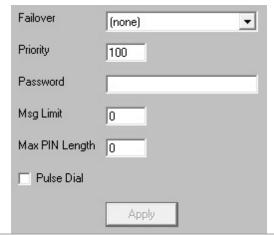
TONE Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, you could configure a TONE carrier and an SMTP/Email carrier. Then you could specify the SMTP/Email carrier as the failover for the TONE carrier and if a TONE message can't be delivered, it will instead be delivered as an email. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Max PIN	This field is used to limit the number of digits accepted from a recipient's
Length	ID/PIN field for this carrier (extra digits are stripped of the beginning).

Apply This button saves any changes made to a carrier's Advanced Settings.

UCP Advanced Settings



Setting	Function
Failover	Failover is the ability of PageGate to send an undeliverable message to an alternate host. For example, some carriers support multiple UCP terminals. Other carriers support both SNPP and WCTP hosts. If you configure multiple UCP Terminals or hosts for one carrier, you can specify a failover. The failover settings at the carrier level is used to redirect all the pending messages to another carrier when the original carrier can't be contacted.
Priority	This field determines this carrier's place within the priority system. By default, all carriers have their priority value set to 100 which puts them all on equal footing. If you leave 100 as your baseline, giving a carrier a priority value lower than 100 will be considered more important with a value of 1 being the most important and a value higher than 100 will be considered less important up to the maximum value of 32000 being the least important.
Passwo rd	If the receiving UCP system requires authentication credentials, enter them in this field.
Msg Limit	This field determines the number of messages that can be negotiated with the receiving UCP system in one session. Most UCP terminals can receive up to 25 messages in a single transmission but set this value appropriate to what the receiving system supports.
Max PIN Length	This field is used to limit the number of digits accepted from a recipient's ID/PIN field for this carrier (extra digits are stripped of the beginning).
Pulse Dial	If you need to use pulse dialing instead of tone dialing, check this option.
Apply	This button saves any changes made to a carrier's Advanced Settings.

Recipients

Right clicking on Recipients will provide a context menu with five options.

Add

Selecting this option allows you to create a new recipient.

Send Messages

Selecting this option will send a message to every recipient in the list.

• Requeue Messages

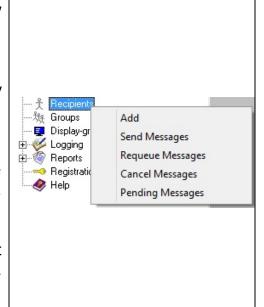
Selecting this option allows you to requeue a range of previously delivered messages to ALL recipients.

Cancel Messages

Selecting this option allows you to cancel all past due, pending and/or repeating messages for ALL recipients.

Pending Messages

Selecting this option will display a list of all messages for all recipients in the pending queue.

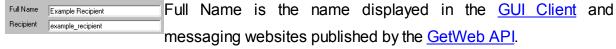


In concept, a <u>carrier</u> tells PageGate how to talk to the outside world with one of the supported protocols, a recipient tells PageGate who to talk to and the <u>connector</u> modules do the talking. Since the <u>carriers</u> tell PageGate how to talk to the outside world, they must be configured before you can create a recipient.

Recipients are, generally speaking, the people, devices and/or locations you want to send messages to.

A recipient's settings can be broken down in to three sections

1) Name



Recipient is the name referenced by the APIs and is the name assigned to this recipient as a database value.

2) Enabled Services



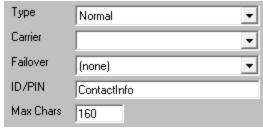
This section displays which of PageGate's APIs are enabled for this recipient.

Services that are grayed out have not been configured and are not enabled. Services not checked are not enabled for this recipient.

For example, GetASCII isn't checked for this recipient, the GetASCII interface will not be able to message them. Similarly, if GUI Client isn't checked for this recipient, its name will not display in the GUI Client's list.

If an Interface is not available and it should be, please make sure that the Interface is enabled both in the Program Settings and in the Interface Settings.

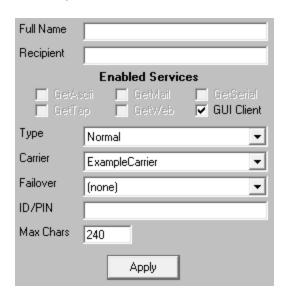
3) Specific configuration



This section is where you'll tell PageGate what type of recipient this is, which delivery method it should use and what contact information to use when messaging them.

For more information, see the <u>'Creating a Recipient'</u> section. Creating a Recipient

When you select the "Add" option from the Recipient context menu, you'll be presented with the dialog to enter a new recipient.



Setting	Function
Full Name	This field is determines the name displayed in the <u>GUI Client</u> and messaging websites published by the <u>GetWeb API</u> .
Recipien	· · · · · · · · · · · · · · · · · · ·
t	value. This name is also what the APIs will reference.
Enabled Services	This section displays which of PageGate's APIs are enabled for this recipient. Services that are grayed out have not been configured and are not enabled. Services not checked are not enabled for this recipient. For example, if the GetASCII module isn't enabled for this recipient, the GetASCII module will not be able to message this recipient. If the GUI Client module isn't enabled for this recipient, this recipient will not display in the GUI Client's list of available recipients to message. If an Interface is not available and it should be, please make sure that the Interface is enabled both in the Program Settings and in the

	For example, let's say you were hosting the sub-domain messaging.something.com and that you have a recipient named 'alerts' that has been configured as a Multi-Page recipient. You could then send an email to alerts@messaging.something.com with a series of 5 recipient names in the subject line and PageGate would send the body of the message to all recipients and groups referenced in the subject.
	This field can only be set to a carrier configured within the PageGate Admin. This field should be set to the carrier this recipient is tied to.
Carrier	For example, if you are trying to contact a Verizon device, you would need to create a Carrier called Verizon, then set this Recipient's carrier to Verizon. For more information about how to configure carriers, see the How PageGate Sends Messages section.
Failover	If a message is not able to be delivered to this recipient, the message will be automatically redirected to whatever recipient you specify here.
ID / PIN	This field determines the phone number, email address or contact information
	for the device or host to which these messages should be delivered.
	For example, if this is an SMS recipient, you would enter the 10 digit cell
	phone number with no spaces or dashes or if this is an Email recipient, you
	would enter the email address.
	The recipient Max Chars field determines the number of characters you want to send to this person.
Max Chars	If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.
Apply	This button saves all changes made to the recipient settings.

Creating an Ad-Hoc Recipient

Note: You must have a 5000 recipient license to unlock PageGate's ad-hoc features.

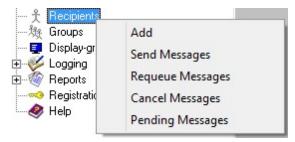
Ad-Hoc recipients function as a pass-through for provided input. Put another way, an adhoc recipient lets you pass in the phone number or contact information you want the message delivered to rather than having that phone number exist as a static entry in the

recipients list. These recipients can be implemented in different ways with each of PageGate's <u>APIs</u> and can also be a key component of creating a <u>two way messaging system</u>.

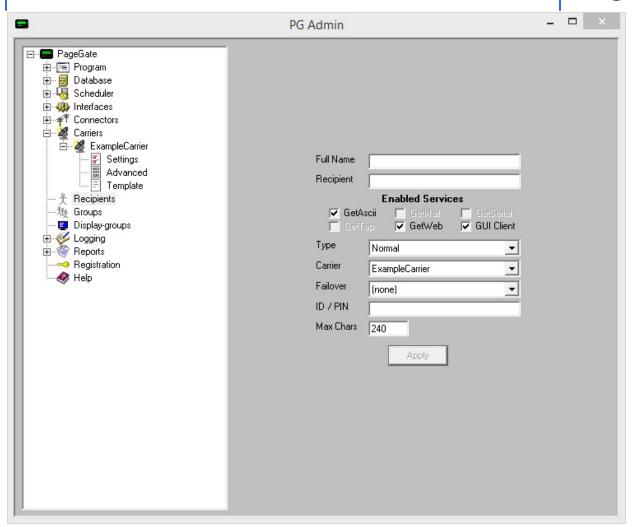
- Ad-Hoc for GetASCII
- Ad-Hoc for GetMail
- Ad-Hoc for GetWeb
- Ad-Hoc for GetSerial
- Ad-Hoc for GetTap

Here's how to create an ad-hoc recipient:

1) Right click on Recipients.



2) Select Add.



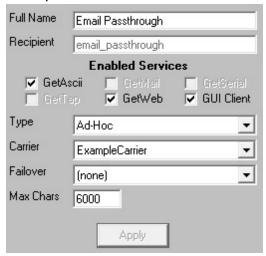
- 3) Enter a name in to the Full Name field.
- 4) Make a note of the name in the Recipient field.

Note: This is incredibly important as this specific name is what the APIs will reference.

- 5) Set the Type to: Ad-Hoc
- 6) In the Max Chars field, enter the maximum number of characters you want the ability to send.

Note: The Carrier Max Chars field determines the number of characters that can be received in a single message. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3, 3/3 to indicate the multi-part nature of the message delivered.

Example:



7) Click Apply.

Ad-Hoc for GetAscii

Ad-Hoc recipients can be referenced by the GetASCII API in one of two ways.

• Command Line reference

When using the sendpage.exe or sendpage32.exe command line executables to pass messaging parameters to PageGate, this is how to call on an ad-hoc recipient: <location of files>\sendpage32.exe ah;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\value>;<\valu

For example, if you have the sendpage32.exe hosted in c:\PageGateData\ASCII\ and you sent the following command:

c:\PageGateData\ASCII\sendpage32.exe ah;7819999998;8290500234 CAD This is a test message

That would send a message to the phone numbers specified from the sender 'CAD' and the message would say 'This is a test message'.

File read

You'll need to format the recipient section of the files being output for GetASCII to reference the ad-hoc recipient as follows:

ah;<value>;<value>

For example, let's say that you're using GetASCII's standard file format and write a test.asc file to the GetASCII polling directory formatted like this:

ah; < value > ; < value > ; < value >

<sender>

<message>

That would send the body of the message in the file to the referenced ID's from the specified sender.

Ad-Hoc for GetSerial

If you have the ability to modify the output of the system feeding data in to PageGate's GetSerial API by RS232/serial line, you can call on an ad-hoc recipient by formatting the recipient declaration contained within the serial string as follows:

<adhoc recipient name>;<value>;<value>;<value>

For example, let's say that your ad-hoc recipient's name is 'ah' and that this the serial input string GetSerial needs to process:

CODE 17 START ah;7818290500;9829999871 Refrigeration Unit 003 Temperature High 84.31 N773 END A9.3178

Assuming that the <u>record</u>, <u>recipient</u>, <u>sender</u> and <u>message</u> sections have been configured appropriately, that would send a message to the two phone numbers specified.

Creating an Email Only Recipient

If you have PageGate's <u>GetMail API</u> configured to host an email domain, this recipient type tells PageGate that this recipient is not a messaging recipient and cannot be messaged by the connectors. Instead, this recipient exists solely as a hosted mailbox that provides an email address that can be checked by POP.

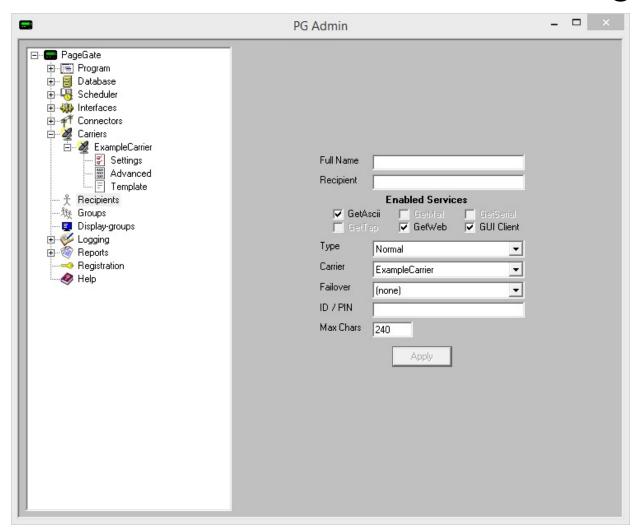
This type has nothing to do with the delivery of SMTP/Email and should **only** be used when this recipient should solely exist as a hosted mailbox.

Here's how to configure an Email Only recipient:

1) Right click on Recipients.



2) Select Add.



- 3) Enter a name in to the Full Name field.
- 4) Make a note of the name in the Recipient field.

Note: This is incredibly important as this specific name is what determines the name of the hosted mailbox.

5) Set the Type to: Email Only.



6) Click Apply.

Creating a Multi-Page Recipient

If you have PageGate's <u>GetMail API</u> configured to receive email traffic, this recipient type tells PageGate that traffic sent to this recipient will contain contact information in the subject line.

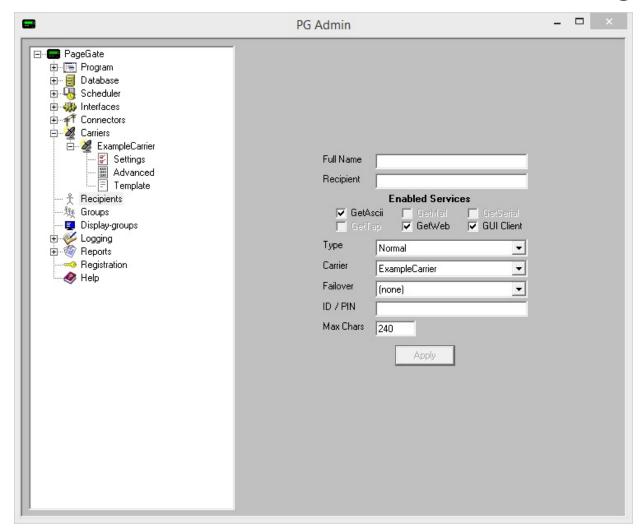
For example, let's say you were hosting the sub-domain messaging.something.com and that you have a recipient named 'alerts' that has been configured as a Multi-Page recipient. You could then send an email to alerts@messaging.something.com with a series of 5 recipient names in the subject line and PageGate would send the body of the message to all recipients and groups referenced in the subject.

Here's how to configure a Multi-Page recipient:

1) Right click on Recipients.



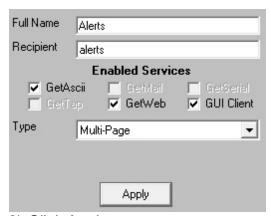
2) Select Add.



- 3) Enter a name in to the Full Name field.
- 4) Make a note of the name in the Recipient field.

Note: This is incredibly important as this specific name is what the APIs will reference.

5) Set the Type to: Multi-Page



6) Click Apply.

Context Menu Options

Right clicking on a specific recipient will provide a context menu with six options.

Send Messages

Selecting this option will send a message to the selected recipient.

• Requeue Messages

Selecting this option allows you to requeue a range of previously delivered messages for the selected recipient.

• Cancel Messages

Selecting this option allows you to cancel all past due, pending and/or repeating messages for the selected recipient.

• Pending Messages

Selecting this option will display a list of all messages in the pending queue for the selected recipient.

Rename

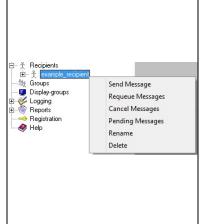
Selecting this option will allow you to provide a new value for the selected recipient's Full Name and Recipient fields.

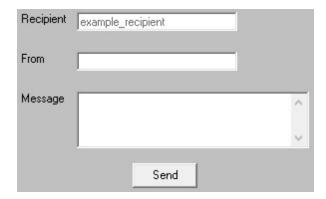
Delete

Selecting this option will remove the selected recipient from the list.

Send Messages

Selecting this option provides the ability to send a message directly from the PageGate Admin. What you right click on will determine who these messages go to. For example, if you right click on the Recipients heading and select this option, this will send a message to every recipient in the list. If you right click on a specific recipient's name, this message will only go to the selected recipient.

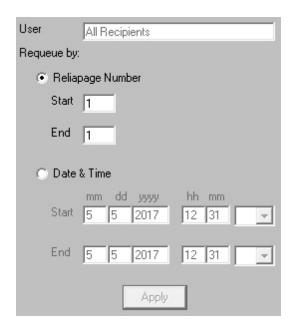




To have a message properly delivered, you must enter a value in to the From field. If you leave the From field blank, there is a chance that the host receiving your message will filter it as potentially untrustworthy.

After entering in a From and Message value, click Send to queue the message(s). Requeue Messages

Selecting this option provides the ability to requeue messages delivered to all recipients or for a specific recipient. What you right click on will determine who these messages go to. For example, if you right click on the Recipients heading and select this option, this will requeue messages to every recipient in the list. If you right click on a specific recipient's name, this will requeue messages for the selected recipient.



There are two options for requeuing messages:

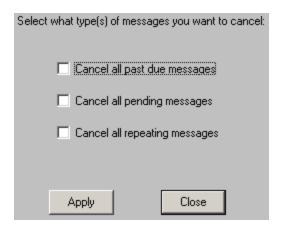
Reliapage

This option allows you to select a range of <u>Reliapage</u> messages to resend. The <u>Reliapage</u> macro must be configured in a recipient, carrier, interface, connector or global template for this to work.

Date and Time

This option allows you to select a date and time range of messages you wish to requeue. Cancel Messages

Selecting this option provides the ability to cancel messages in the pending queue. What you right click on will determine who these messages go to. For example, if you right click on the Recipients heading and select this option, this will cancel messages for all recipients. If you right click on a specific recipient's name, this will only cancel messages for the selected recipient.



• Cancel all past due messages

Enabling this option will cancel past due messages. Past Due messages are Repeating Messages that should have been delivered but haven't, which can possibly interfere with the schedule of messages waiting to be sent.

Cancel all pending messages

Enabling this option will cancel all messages in the pending queue.

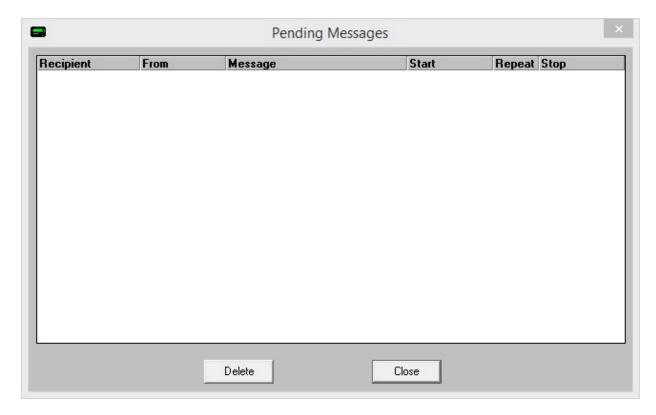
Cancel all repeating messages

Enabling this option will cancel all repeating messages scheduled by the PageGate Client.

For example, if you have a message set to repeat every hour, enabling the "Cancel all repeating messages" option will stop that message from ever happening again where only enabling the "Cancel all past due message" option will only cancel any previous repeating messages that couldn't be delivered out but will not prevent future repeating messages from being sent.

Pending Messages

This section displays a list of all messages currently in the pending queue.



When reviewing pending messages, the "Pending Messages" dialog will display the following information for each Pending Message:

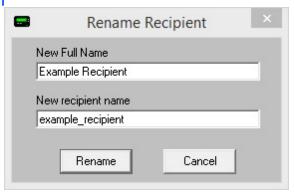
Recipient, sender, content of the message, when the message is to be sent, whether the message will repeat or only send once, and when the message will stop being sent.

Any message displayed in this dialog may be highlighted and deleted via the Delete button.

Rename

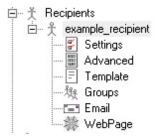
NOTE: Modifications to a recipient's name are not recognized until the PageGate server process is restarted. Any time you make a modification to a recipient's name, be sure to stop and start the PageGate service so the change can propagate through the program.

Selecting this option will provide the ability to rename a recipient.



Recipient Settings

After you've gone through the steps to <u>create a recipient</u>, they'll appear in the Recipients list. Every recipient has six sub-sections:



Settings

This section displays information about the basic configuration of this recipient, including specified carrier, contact address and enabled services. For more information, see the <u>Creating a Recipient</u> section.

Advanced

This section allows you to configure <u>priority</u>, comments and other advanced functions.

Template

This section allows you to apply a custom template to this recipient.

Groups

This section displays what groups, if any, this recipient is a member of and allows you to add this recipient as a member to available groups.

Email

This section is used in conjunction with the <u>GetMail API</u>. The <u>GetMail API</u> must be enabled to access this section.

WebPage

This section is used on conjunction with the <u>GetWeb API</u>. The <u>GetWeb API</u> must be enabled to access this section.

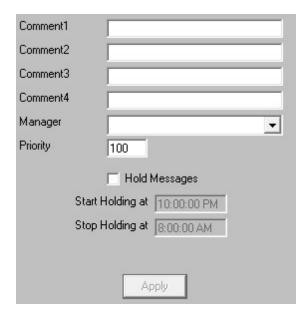
Settings



Setting	Function
Full Name	This field is determines the name displayed in the <u>GUI Client</u> and websites published by the <u>GetWeb API</u> .
Recipien t	This field determines the name assigned to this recipient as a database value. This name is also what the APIs will reference.
Enabled Services	This section displays which of PageGate's APIs are enabled for this recipient. Services that are grayed out have not been configured and are not enabled. Services not checked are not enabled for this recipient. For example, if the GetASCII module isn't enabled for this recipient, the GetASCII module will not be able to message this recipient. If the GUI Client module isn't enabled for this recipient, this recipient will not display in the GUI Client's list of available recipients to message. If an Interface is not available and it should be, please make sure that the Interface is enabled both in the Program Settings and in the Interface Interface Interface
Туре	This field has four options: Normal Ad-Hoc Email Only Multi-Page

	Typically speaking, you'll want to set the type to Normal for all standard recipients; the other types are used for special configurations.
	This field can only be set to a carrier configured within the PageGate Admin. This field should be set to the carrier this recipient is tied to.
Carrier	For example, if you are trying to contact a Verizon device, you would need to create a Carrier called Verizon, then set this Recipient's carrier to Verizon. For more information about how to configure carriers, see the How PageGate Sends Messages section.
Failover	If a message is not able to be delivered to this recipient, the message will be automatically redirected to whatever recipient you specify here.
ID / PIN	This field determines the phone number, email address or contact information for the device or host to which these messages should be delivered.
Max Chars	The recipient Max Chars field determines the number of characters you want to send to this person. If the recipient Max Chars value is set higher than the carrier Max Chars value, PageGate will break up long messages based on the character limitation in the carrier. For example, if you have the carrier configured for 160 Max Chars and you set the recipient Max Chars value to 3000, then send a 400 character message to this recipient, PageGate will break up the 400 character count message in to two 160 character messages and one 80 character message. When the device receives the message, it will be prefixed with part 1/3, 2/3,
Apply	3/3 to indicate the multi-part nature of the message delivered. Apply saves all recently made changes to a recipient's settings.

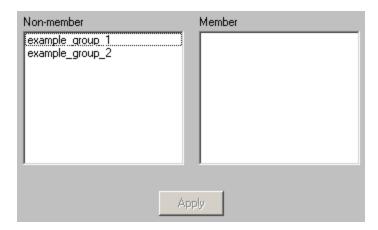
Advanced



Setting	Function
Comment1 - Comment4	These four fields are stored in each recipient. If the GUI Client Interface is used, the information in these fields can be viewed by the GUI Client operators and their displayed recipient lists can be filtered by this information.
Manager	If GUI Client Security has been enabled, this is the user that has administrative control over this recipient.
Priority	This field will set the priority of the Recipient. Priority determines the order in which messages are handled. This value may be set from 1 to 32000, where 1 is the highest priority and 32000 is the lowest priority.
Hold Messages	Enabling this option will configure PageGate to hold messages for this recipient during the time specified in the Start Holding and Stop Holding entries.
Start Holding at	If Hold Messages is enabled, set this to when the program should start holding messages in queue for this recipient.
Stop Holding at	If Hold Messages is enabled, set this to when the program should send all held messages to this recipient.
Apply	This button saves all recent changes made to a recipient's Advanced settings.

Groups

The groups sub-section of the Recipient allows you to specify which groups this recipient is a member of.



To add this recipient to the member list of a group, simply click on the name of the group under the "Non-member" category.

To remove this recipient from the member list of a group, simply click on the name of the group under the "Member" category.

Email

NOTE: To access the Email sub-section of a Recipient, the <u>GetMail API</u> must be configured and enabled.

This section controls mailbox hosting and email forwarding for this recipient.

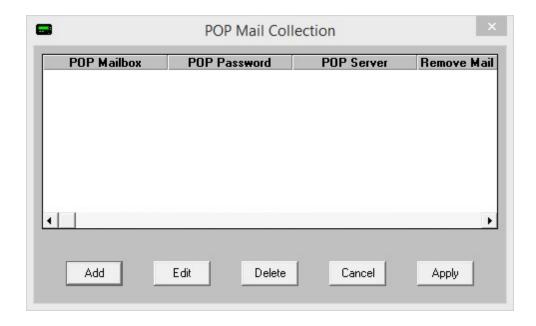


Setting	Function
Mailbox Name	This field determines the hosted mailbox name of this recipient. This is the value that is used when sending an email in to PageGate for processing. For example, let's say that we have the GetMail API hosting a sub-domain of messaging.something.com. The mailbox name would be the part before the @ofany email that you wanted to send in. For

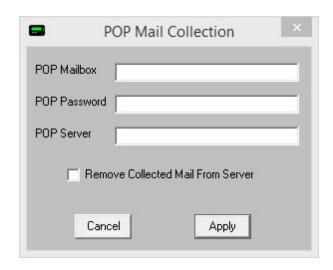
	instance, you would use example_recipient@messaging.something.com with the example recipient shown above.
Forward Copy To	If an email address is entered in to this field, any message queued for this recipient will also be forwarded to the specified email address.
Enable POP Access to Messages	This option enables POP access to this recipient's hosted mailbox. This allows email client programs access to email hosted by the PageGate server for this mailbox.
POP Password	This option is only available when "Enable POP Access to Messages" is enabled. This field sets the password for the hosted mailbox for this recipient.
POP Mail Collection	This section allows you to tie this recipient to an externally hosted POP mailbox.
Email Aliases	This option is only available when "Enable POP Access to Messages" is enabled. Click the <u>Email Aliases</u> button to add, edit, or remove an Email Alias.
Apply	This button saves any recent changes to the Email section of the Recipient.

POP Mail Collection

This function configures PageGate to check an externally hosted, POP accessible mailbox. Any mail found in the box will be read in and delivered to the recipient this POP Mail Collection rule exists for.



Option	Function
Add	Adds a new POP Mail Collection rule. See below.
Edit	Edits an existing POP Mail Collection rule
Delete	Removes an existing POP Mail Collection rule.
Cancel	Cancels all recent changes.
Apply	Applies new changes and rules.



Setting	Function
POP Mailbox	Enter the mailbox name as required by the POP server. Some POP servers require the fully qualified email address, others will only require the mailbox name while others may require a domain declaration prefixed to the mailbox name. Please follow the specification of your POP server.
POP Password	Enter the password required to check the email address.
POP Server	Enter the POP3 server address for the POP3 server hosting the mailbox.
Remove Collected Mail From Server	Enabling this option will remove collected mail from the mailbox. If this option is not enabled, the mail will be marked as read but it will not be removed from the mailbox.
Cancel	Discards all recent changes to this POP Mail Collection rule.
Apply	Saves all recent changes to this POP Mail Collection rule.

Email Aliases

Each PageGate recipient can accept messages from more than one local email address and these additional names are called 'aliases'.

For example, let's say we're working with a recipient named 'station14'. Technically, that mailbox can only receive traffic addressed to station14@yourdomain.com. However, aliases allow you to tell PageGate that it should accept other names as if they were this mailbox. If you wanted a PageGate recipient to receive all messages addressed to WestPalmAlerts@yourdomain.com, you would create an alias for WestPalmAlerts.

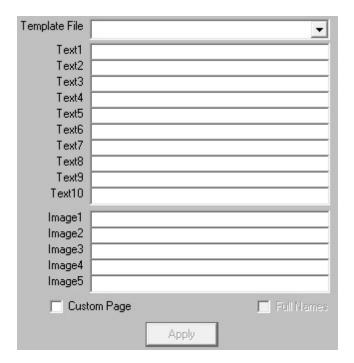


Button	Function
Add	This adds a new entry in to the Aliases table.
Delete	Highlight an existing alias and click on Delete to remove that alias.
Cancel	Clicking this button will remove all recent changes to the Email aliases.
Apply	Clicking this button will save all recent changes to the Email aliases.

Web Page

NOTE: To access the WebPage sub-section of a Recipient, the <u>GetWeb API</u> must be configured and enabled.

This section allows you to build a messaging website based on this recipient. Typically speaking, this is only done with <u>Ad-Hoc recipients</u> that need to be tied to the <u>GetWeb API's Ad-Hoc webpaging</u> function.



Setting	Function
Template File	The GetWeb API comes with a range of templates that can be used 'out of the box' or you can modify them any way you please as long as you retain the appropriate CGI submission variables and statements. This option allows you to select which web messaging template should be applied to this recipient.
	These files associated with the templates are located in the 'templates' directory beneath the Web Pages Path directory configured in the GetWeb API .
Text1 -	When implementing a messaging website, you can use ~~~Text1~~~ through ~~~Text10~~~ as variables in the HTML code of the template tied to this recipient. These fields represent the static values that will be inserted in to these variables as PageGate comes across them when building the content for the web server to host.
Text10	For example, if you have a statement like this in your code: Welcome to the messaging website for ~~~Text1~~~.
	and you use 'District 1' in the Text1 field, PageGate will create a webpage that says: Welcome to the messaging website for District 1.

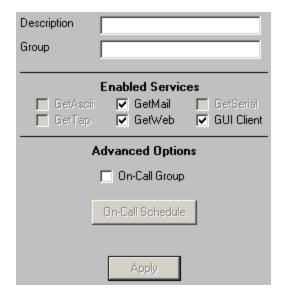
	Note : Image files should be placed in the 'images' directory beneath the Web Pages Path directory configured in the GetWeb API.
lmage1 - lmage5	When implementing a messaging website, you can use ~~~lmage1~~~ through ~~~lmage5~~~ as variables in the HTML code of the template tied to this recipient. These fields represent the static values that will be inserted in to these variables as PageGate comes across them when building the content for the web server to host.
	For example, if you have a statement like this in your code:
	and you use 'customimage.jpg' in the Image1 field, PageGate will create a webpage that references the specified graphic.
Custom Page	Enable this option if you aren't using one of our templates or have modified one of our templates and have saved it under a different name.
Full Names	Enable this option if you want any referenced recipients' full names to appear on the webpage.
Apply	This button saves any recent changes to the WebPage section of the Recipient.

Groups

Groups are collections of <u>recipients</u> in the PageGate Admin.

Right clicking on Recipients will provide a context menu with four options. Add Selecting this option allows you to create a new group. Send Messages Selecting this option will send a message to every group in --- Display Add ± Ø Loggin ⊕ Ø Report: the list. Send Messages Requeue Messages 🤏 Registr ◆ Help Cancel Messages • Requeue Messages Selecting this option allows you to requeue a range of previously delivered messages to ALL groups. Cancel Messages Selecting this option allows you to cancel all past due, pending and/or repeating messages for ALL groups.

Creating a Group



Setting	Function
Descriptio n	This field is determines the name displayed in the <u>GUI Client</u> and messaging websites published by the <u>GetWeb API</u> .
Group	This field determines the name assigned to this recipient as a database value. This name is also specifically what the APIs will reference.
Enabled Services	This section displays which of PageGate's APIs are enabled for this recipient. Services that are grayed out have not been configured and are not enabled. Services not checked are not enabled for this recipient. For example, if the GetASCII module isn't enabled for this recipient, the GetASCII module will not be able to message this recipient. If the GUI Client module isn't enabled for this recipient, this recipient will not display in the GUI Client's list of available recipients to message. If an Interface is not available and it should be, please make sure that the Interface is enabled both in the Program Settings and in the <a href="Interface Interface Interface</td></tr><tr><td>On-Call
Group</td><td>Enabling this options allows you to configure an on-call schedule for members of this group. This option should be enabled if the members of this group should only be paged during certain times and/or on certain days of the week. Please refer to the On-Call Settings for more information.
On-Call Schedule	When On-Call group is checked, this button allows you to configure the on-call schedule. Please refer to the On-Call Settings for more information.
Apply	Apply saves all recently made changes to a Group's settings.

Context Menu Options

Right clicking on a specific group will provide a context menu with five options.

Send Messages

Selecting this option will send a message to every recipient in the list.

Requeue Messages

Selecting this option allows you to requeue a range of previously delivered messages to the selected group.

Cancel Messages

Selecting this option allows you to cancel all past due, pending and/or repeating messages for the selected group.

• Rename

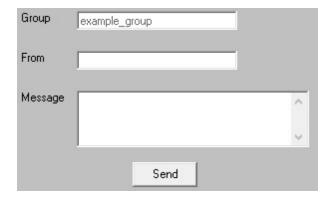
Selecting this option will allow you to provide a new value for the selected group's Description and Group fields.

Delete

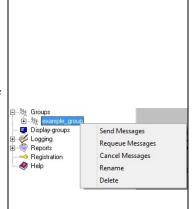
Selecting this option will remove the selected group from the list.

Send Messages

Selecting this option provides the ability to send a message directly from the PageGate Admin. What you right click on will determine who these messages go to. For example, if you right click on the Groups heading and select this option, this will send a message to every group in the list. If you right click on a specific group's name, this message will only go to the selected group.

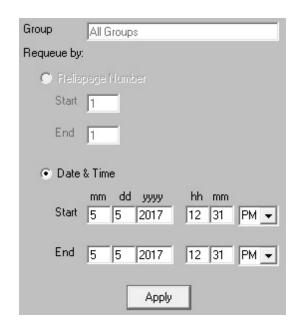


To have a message properly delivered, you must enter a value in to the From field. If you leave the From field blank, there is a chance that the host receiving your message will filter it as potentially untrustworthy.



After entering in a From and Message value, click Send to queue the message(s). Requeue Messages

Selecting this option provides the ability to requeue messages delivered to all groups or for a specific group. What you right click on will determine who these messages go to. For example, if you right click on the Groups heading and select this option, this will requeue messages to every group in the list. If you right click on a specific group's name, this will requeue messages for the selected group.



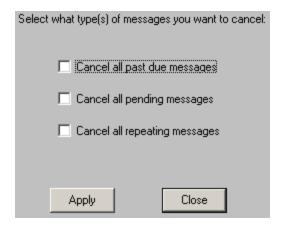
Date and Time

This option allows you to select a date and time range of messages you wish to requeue.

Note: Reliapage requeuing is not available for groups.

Cancel Messages

Selecting this option provides the ability to cancel messages in the pending queue. What you right click on will determine who these messages go to. For example, if you right click on the Groups heading and select this option, this will cancel messages for all groups. If you right click on a specific group's name, this will only cancel messages for the selected group.



• Cancel all past due messages

Enabling this option will cancel past due messages. Past Due messages are Repeating Messages that should have been delivered but haven't, which can possibly interfere with the schedule of messages waiting to be sent.

Cancel all pending messages

Enabling this option will cancel all messages in the pending queue for the selected object.

Cancel all repeating messages

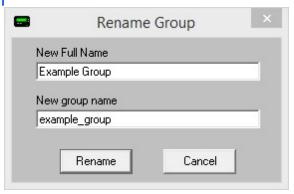
Enabling this option will cancel all repeating messages scheduled by the PageGate Client.

For example, if you have a message set to repeat every hour, enabling the "Cancel all repeating messages" option will stop that message from ever happening again where only enabling the "Cancel all past due message" option will only cancel any previous repeating messages that couldn't be delivered out but will not prevent future repeating messages from being sent.

Rename

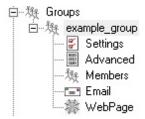
NOTE: Modifications to a group's name are not recognized until the PageGate server process is restarted. Any time you make a modification to a recipient's name, be sure to stop and start the PageGate service so the change can propagate through the program.

Selecting this option will provide the ability to rename a group.



Group Settings

After you've gone through the steps to <u>create a group</u>, they'll appear in the Groups list. Every recipient has five sub-sections:



Settings

This section displays information about the basic configuration of this recipient, including specified carrier, contact address and enabled services. For more information, see the <u>Creating a Recipient</u> section.

Advanced

This section allows you to configure comments, security manager and message holds.

Members

This section allows you to apply a custom template to this recipient.

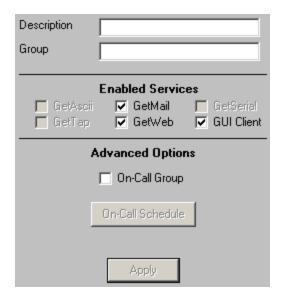
Email

This section is used in conjunction with the <u>GetMail API</u>. The <u>GetMail API</u> must be enabled to access this section.

WebPage

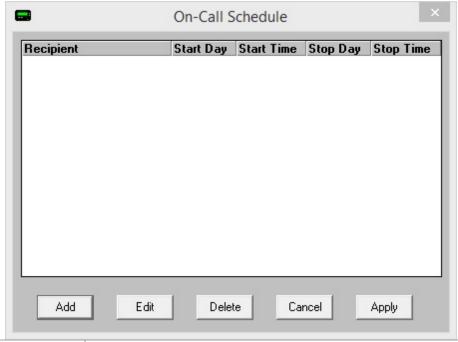
This section is used on conjunction with the <u>GetWeb API</u>. The <u>GetWeb API</u> must be enabled to access this section.

Settings

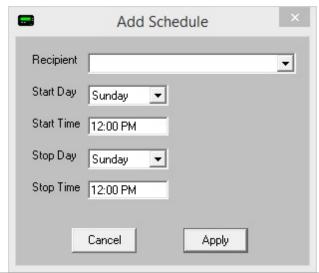


Setting	Function
Descriptio n	This field is determines the name displayed in the <u>GUI Client</u> and messaging websites published by the <u>GetWeb API</u> .
Group	This field determines the name assigned to this recipient as a database value. This name is also specifically what the APIs will reference.
Enabled Services	This section displays which of PageGate's APIs are enabled for this recipient. Services that are grayed out have not been configured and are not enabled. Services not checked are not enabled for this recipient. For example, if the GetASCII module isn't enabled for this recipient, the GetASCII module will not be able to message this recipient. If the GUI Client module isn't enabled for this recipient, this recipient will not display in the GUI Client's list of available recipients to message. If an Interface is not available and it should be, please make sure that the Interface is enabled both in the Program Settings and in the <a href="Interface Interface Interface</td></tr><tr><td>On-Call
Group</td><td>Enabling this options allows you to configure an on-call schedule for members of this group. This option should be enabled if the members of this group should only be paged during certain times and/or on certain days of the week. Please refer to the On-Call Settings for more information.
On-Call Schedule	When On-Call group is checked, this button allows you to configure the on-call schedule. Please refer to the On-Call Settings for more information.
Apply	Apply saves all recently made changes to a Group's settings.

On-Call Schedule



Option	Function
Add	Adds a new rule to the on-call schedule. See below.
Edit	Edits an on-call schedule rule
Delete	Removes an existing on-call schedule rule.
Cancel	Cancels all recent changes.
Apply	Applies new changes and rules.



Option Function

Recipient	This field specifies which recipient this on-call schedule rule applies to.
Start Day	This field determines what day of the week this on-call rule begins.
Start Time	This field determines what time of the day this on-call rule begins.
Stop Day	This field determines what day of week this on-call rule ends.
Stop Time	This field determines what time of the day this on-call rule ends.

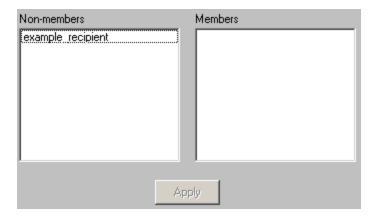
Advanced



Setting	Function
Comment1	These four fields are stored in each recipient. If the GUI Client Interface is used, the information in these fields can be viewed by the GUI Client
- Comment4	operators and their displayed recipient lists can be filtered by this information.
Manager	If GUI Client Security has been enabled, this is the user that has administrative control over this recipient.
Hold Messages	Enabling this option will configure PageGate to hold messages for this recipient during the time specified in the Start Holding and Stop Holding entries.
Start	If Hold Messages is enabled, set this to when the program should start
Holding at	holding messages in queue for this recipient.
Stop	If Hold Messages is enabled, set this to when the program should send all
Holding at	held messages to this recipient.
Apply	This button saves all recent changes made to a recipient's Advanced settings.

Members

The Members sub-section of a Group allows you to specify which recipients and groups are a member of the selected group.



To add an entry to the Members list, click on the name of the recipient or group under the "Non-members" category.

To remove an entry from Members the list, click on the name of the recipient or group under the "Members" category.

Email

NOTE: To access the Email sub-section of a Group, the <u>GetMail API</u> **must** be configured and enabled.

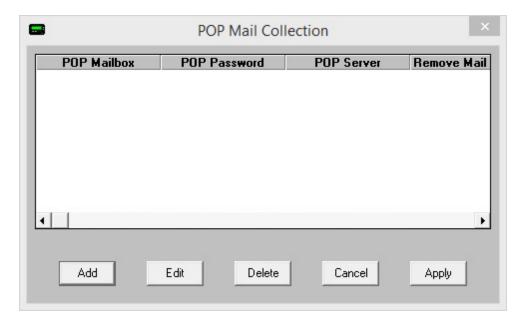
This section controls mailbox hosting and email forwarding for this group.



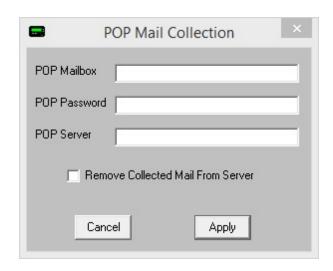
Mailbox Name	This field determines the hosted mailbox name of this group. This is the value that is used when sending an email in to PageGate for processing. For example, let's say that we have the GetMail API hosting a subdomain of messaging.something.com. The mailbox name would be the part before the @ of any email that you wanted to send in. For instance, you would use example_group@messaging.something.com with the example recipient shown above.
Forward Copy To	If an email address is entered in to this field, any message queued for this group will also be forwarded to the specified email address.
Enable POP Access to Messages	This option enables POP access to this group's hosted mailbox. This allows email client programs access to email hosted by the PageGate server for this mailbox.
POP Password	This option is only available when "Enable POP Access to Messages" is enabled. This field sets the password for the hosted mailbox for this group.
POP Mail Collection	This section allows you to tie this group to an externally hosted POP mailbox.
Email Aliases	This option is only available when "Enable POP Access to Messages" is enabled. Click the Email Aliases button to add, edit, or remove an Email Alias.
Apply	This button saves any recent changes to the Email section of the Recipient.

POP Mail Collection

This function configures PageGate to check an externally hosted, POP accessible mailbox. Any mail found in the box will be read in and delivered to the members of the group this POP Mail Collection rule exists for.



Option	Function
Add	Adds a new POP Mail Collection rule. See below.
Edit	Edits an existing POP Mail Collection rule
Delete	Removes an existing POP Mail Collection rule.
Cancel	Cancels all recent changes.
Apply	Applies new changes and rules.

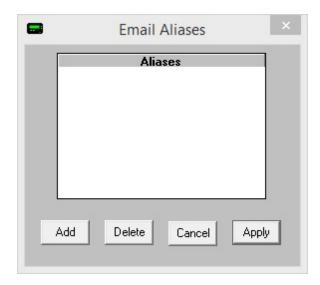


Setting	Function
POP Mailbox	Enter the mailbox name as required by the POP server. Some POP servers require the fully qualified email address, others will only require the mailbox name while others may require a domain declaration prefixed to the mailbox name. Please follow the specification of your POP server.
POP Password	Enter the password required to check the email address.
POP Server	Enter the POP3 server address for the POP3 server hosting the mailbox.
Remove Collected Mail From Server	Enabling this option will remove collected mail from the mailbox. If this option is not enabled, the mail will be marked as read but it will not be removed from the mailbox.
Cancel	Discards all recent changes to this POP Mail Collection rule.
Apply	Saves all recent changes to this POP Mail Collection rule.

Email Aliases

Each group can accept messages from more than one local email address and these additional names are called 'aliases'.

For example, let's say we're working with a group named 'station14'. Technically, that mailbox can only receive traffic addressed to station14@yourdomain.com. However, aliases allow you to tell PageGate that it should accept other names as if they were this mailbox. If you wanted a PageGate recipient to receive all messages addressed to EastNewtonDispatch@yourdomain.com, you would create an alias for EastNewtonDispatch.



Button	Function
Add	This adds a new entry in to the Aliases table.
Delete	Highlight an existing alias and click on Delete to remove that alias.
Cancel	Clicking this button will remove all recent changes to the Email aliases.
Apply	Clicking this button will save all recent changes to the Email aliases.

WebPage

NOTE: To access the WebPage sub-section of a Recipient, the <u>GetWeb API</u> must be configured and enabled.

This section allows you to build a messaging website based on this group's member list. To do so, you'll need to through the <u>GetWeb API's GUI List Template</u> configuration.



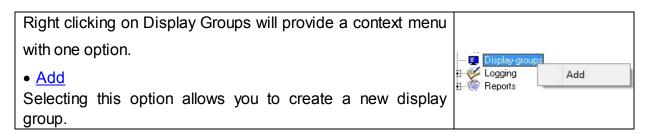
Setting	Function
Template File	The GetWeb API comes with a range of templates that can be used 'out of the box' or you can modify them any way you please as long as you retain the appropriate CGI submission variables and statements. This option allows you to select which web messaging template should be applied to this group.
	These files associated with the templates are located in the 'templates' directory beneath the Web Pages Path directory configured in the GetWeb API .
Text1 - Text10	When implementing a messaging website, you can use ~~~Text1~~~ through ~~~Text10~~~ as variables in the HTML code of the template tied to this group. These fields represent the static values that will be inserted in to these variables as PageGate comes across them when building the content for the web server to host.
	For example, if you have a statement like this in your code: Welcome to the messaging website for ~~~Text1~~~.
	and you use 'District 1' in the Text1 field, PageGate will create a webpage that says: Welcome to the messaging website for District 1.

	Note : Image files should be placed in the 'images' directory beneath the Web Pages Path directory configured in the GetWeb API.
lmage1 - lmage5	When implementing a messaging website, you can use ~~~lmage1~~~ through ~~~lmage5~~~ as variables in the HTML code of the template tied to this group. These fields represent the static values that will be inserted in to these variables as PageGate comes across them when building the content for the web server to host.
	For example, if you have a statement like this in your code:
	and you use 'customimage.jpg' in the Image1 field, PageGate will create a webpage that references the specified graphic.
Custom Page	Enable this option if you aren't using one of our templates or have modified one of our templates and have saved it under a different name.
Group List	This option should be checked for any group tied to the list.htm and guilist.htm templates or any derivative thereof.
Full Names	Enable this option if you want any referenced recipients' full names to appear on the webpage.
Apply	This button saves any recent changes to the WebPage section of the group.

Display Groups

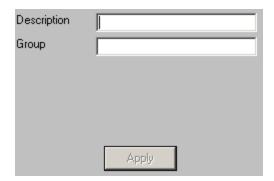
The Display Groups function is only used in conjunction with the GUI Client API.

Display Groups have nothing to do with normal messaging groups. Instead, these groups allow administrators to control which recipients and groups the workstations are allowed to see. For example, let's say that you have 20 workstations that have the GUI client installed. Let's also say that 10 of them are for dispatching fire calls and that 10 of them are for dispatching police calls. In this instance, you would want to create two display groups, one named 'fire' and the other named 'police' and populate them with the appropriate recipients. Once that's done, you can then tie each of the workstations to their appropriate display group.



After creating a display group, you'll need to populate it with <u>members</u>. Any recipient or group that is a member of the display group will display on any GUI Clients tied to that display group. Any recipient or group that is not a member will not display.

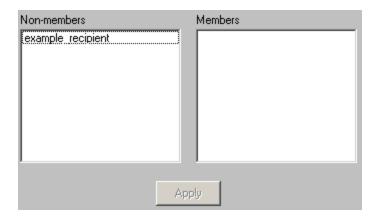
Creating a Display Group



Setting	Function
Description	This field should describe the display group.
Group	This field is what will display as an option when selecting a display group in the GUI Client.
Apply	This adds the display group in to the list.

Members

The Members sub-section of a display group allows you to specify which recipients and groups are a member of the selected display group.

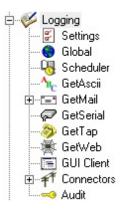


To add an entry to the Members list, click on the name of the recipient or group under the "Non-members" category.

To remove an entry from the Members list, click on the name of the recipient or group under the "Members" category.

Logging

This section contains all information logged by PageGate and controls how much information PageGate should log, whether the program should archive its logs and other settings.



Settings

This section configures whether PageGate should log information, whether it should archive the logs, what type of information to keep in the logs. This section also administrates the PG Monitor.

Global

This section displays a summary of the events generated by PageGate, including all messages scheduled and sent.

Scheduler

This section displays a summary of the events generated by the PageGate Scheduler.

GetASCII

This section displays a record of information and traffic processed by the GetASCII API.

GetMail

This section displays a record of information and traffic processed by the GetMail API.

GetSerial

This section displays a record of information and traffic processed by the GetSerial API.

GetTap

This section displays a record of information and traffic processed by the GetTap API.

GetWeb

This section displays a record of information and traffic processed by the GetWeb API.

GUI Client

This section displays a record of information and traffic processed by the GUI Client API.

Connectors

This section displays a record of all information and traffic processed by the Connectors.

Audit

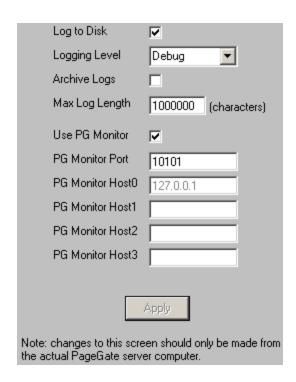
This is a record of every administrative function performed by any PageGate Admin.

Right clicking on Logging will provide a context menu with two option.

• Purge All
Selecting this option will delete all current log files.

• Zip
This option creates a zip file of your PageGate database and places it in the database directory.

Settings

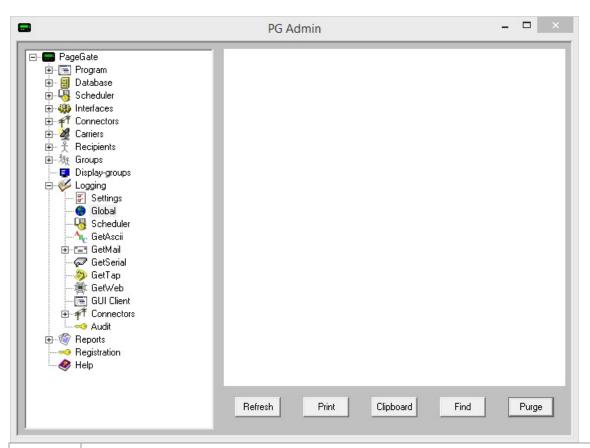


Setting	Function
	When this option is checked, all events are written to the log files. Unchecking this option disables PageGate's logging.

Logging Level	 Summary Selecting this tells PageGate to only keep track of the date, time, sender, recipient and message information in the logs. The program will not record protocol negotiation sequences. Detail Detail will write the specific commands sent and received but will not include a full breakdown of all characters sent and received in the protocol negotiation sequences. Debug (Recommended)
	Selecting this will keep track of every command and response issued from and received to PageGate.
Archive Logs	Enabling this option will allow the day's logs to be archived. When the midnight cleanup routine on the database runs, instead of purging the log files, PageGate moves them to a sub-directory of the Logging Directory named the day's date.
Max Log Length	This field specifies how large the individual log files can become before old information is purged.
Use PG Monitor	This option specifies whether information is sent to the PageGate Monitor or not. If this option is not enabled, the PageGate Monitor will not display any information.
PG Monitor Port	This field specifies the TCP port the PageGate server broadcasts its monitoring information on. This field should match the PG Monitor port setting in the PageGate Monitor .
PG Monitor Host1 - Host3	These fields allow you to specify what additional systems can use the PageGate Monitor. Enter the LAN IP address or machine name of the systems you want PageGate to broadcast monitoring information to.
Apply	This saves all changes made.

Global

This log shows a summary of the events generated by PageGate, including all messages scheduled and sent.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

Scheduler

Clipboard

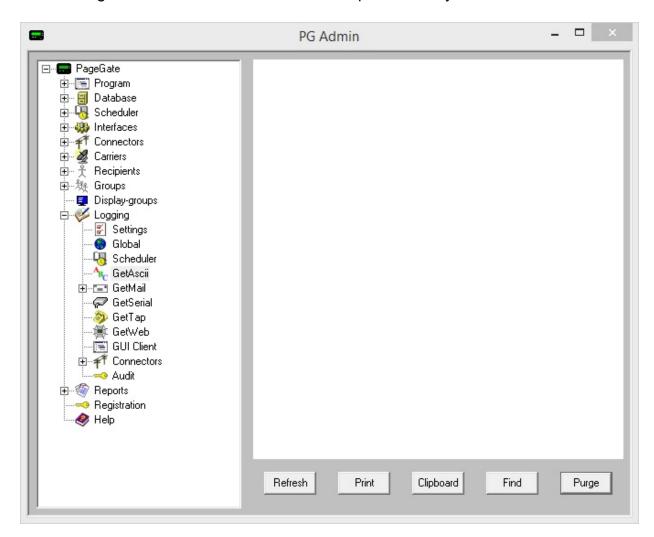
This log shows a summary of the events generated by the PageGate Scheduler.



pasted into another application.

GetAscii

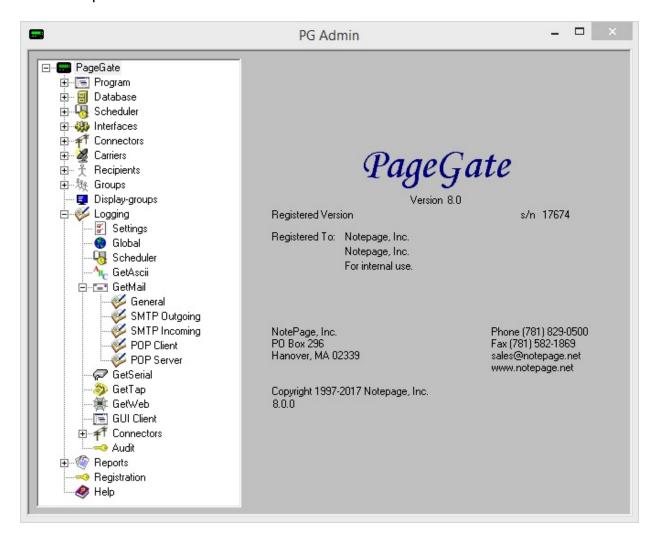
This log is a record of information and traffic processed by the GetASCII module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GetMail

This section contains a record of all functions performed by GetMail and the PageGate Mail Server service. As the GetMail module has many functions, it has five separate logs that correspond to it.



General

This log is a record of information and traffic processed by the GetMail module.

SMTP Outgoing

This log is a record of all outgoing SMTP transactions negotiated by the PageGate Mail Server.

SMTP Incoming

This log is a record of all incoming SMTP transactions negotiated by the PageGate Mail Server.

POP Client

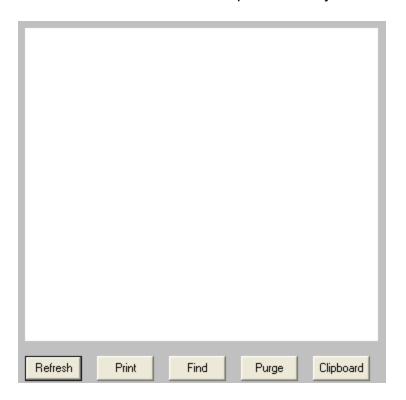
This log is a record of all POP mail collection sessions negotiated by the PageGate Mail Server.

POP Server

This log is a record of all incoming POP mail collection requests negotiated by the PageGate Mail Server.

General

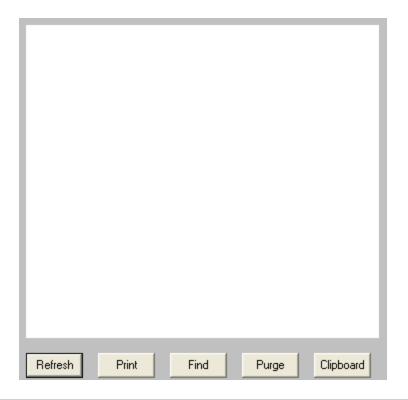
This log is a record of information and traffic processed by the GetMail module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

SMTP Outgoing

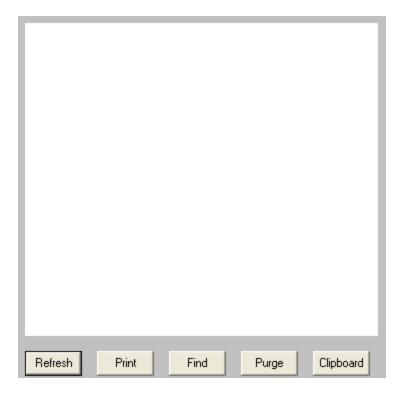
This log is a record of all outgoing SMTP transactions negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

SMTP Incoming

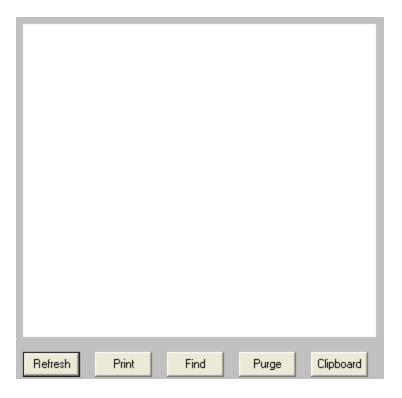
This log is a record of all incoming SMTP transactions negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

POP Client

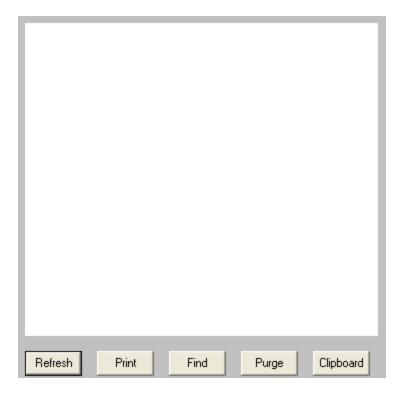
This log is a record of all POP mail collection sessions negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

POP Server

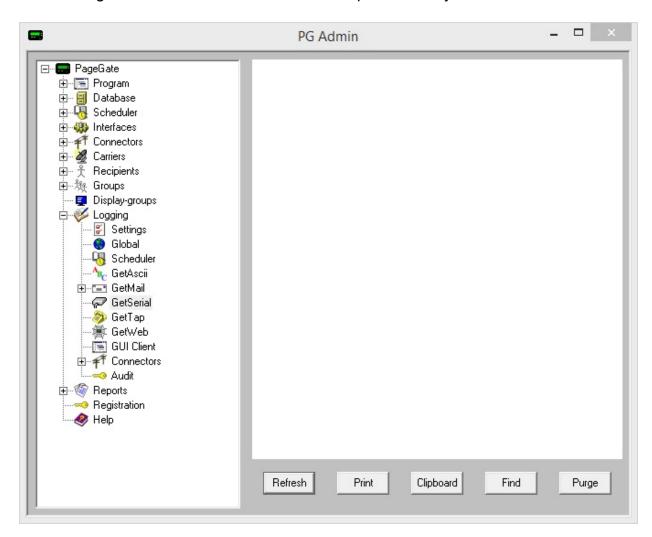
This log is a record of all incoming POP mail collection requests negotiated by the PageGate Mail Server.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GetSerial

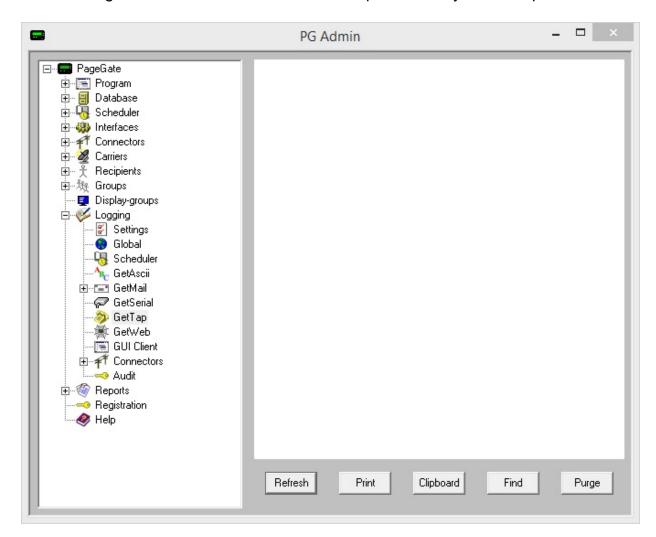
This log is a record of information and traffic processed by the GetSerial module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GetTap

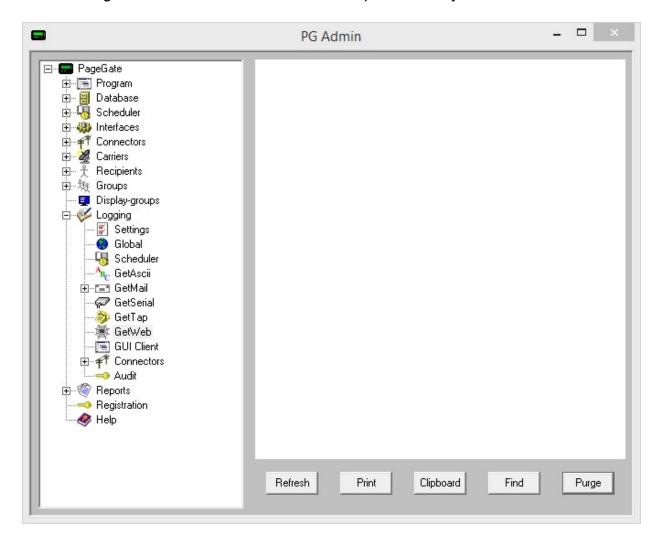
This log is a record of information and traffic processed by the GetTap module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GetWeb

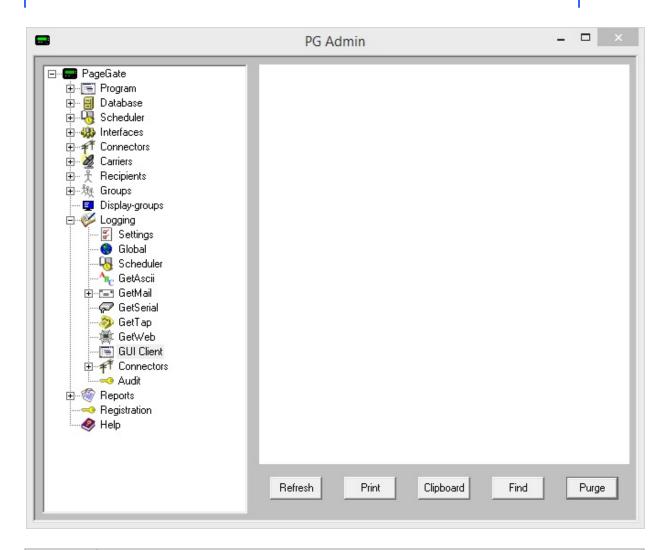
This log is a record of information and traffic processed by the GetWeb module.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

GUI Client

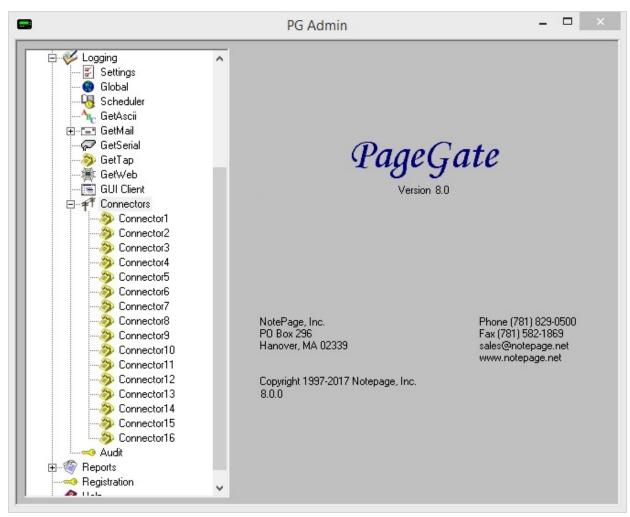
This log is a record of information and traffic submitted by workstations using the GUI Client.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

Connectors

The connector logs are a record of all protocol negotiations handled by the selected connector.



Button	Function
Refresh	Displays the most current entries in the log.
Print	Sends a copy of everything listed in the log to a printer.
Find	Allows you to search for something within the log.
Purge	Deletes the entirety of this log.
Clipboard	Copies the contents of this log to the Windows Clipboard, allowing it to be pasted into another application.

Audit

This is a record of every administrative function performed by any PageGate Admin.



The audit log exists to provide a record of what users on what systems performed what actions in the PageGate Admin. This log shows the date and time that an action took place, what object was interacted with, how the object was modified, what machine name the PG Admin was running on, what Windows user the machine was logged in with and what PG Admin credentials were being used.

Reports

This section allows you to run reports on sent and pending messages, statistical analysis of server performance and general lists of carrier, recipient or group information.



Sent Messages



This section allows you to run reports on messages sent from PageGate by carrier, connector, interface, recipient, sender or GUI Client station ID or on all messages.

Pending Messages

This section allows you to run reports on messages in the pending queue by carrier, interface, recipient, sender or GUI Client station ID or on all messages.

Statistics

These reports allow you to see a statistical analysis of traffic processed by carrier, connector, interface, recipient, sender or GUI Client station ID.

Carrier List

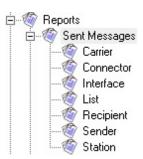
This report displays information about the configured carriers.

Recipient List

This report displays information about configured recipients.

Group List

This report displays information about configured groups. Sent Messages



Carrier

This report will show what (and how many) messages have been sent through a selected carrier (or all carriers, if you select the All option).

Connector

This report will show what (and how many) messages have been sent through a selected Connector (or all Connectors, if you select the All option).

Interface

This report will show what (and how many) messages have been sent through a selected Interface (or all Interfaces, if you select the All option).

• List

This report will show all messages sent within a specified date and time range.

• Recipient

This report will show what (and how many) messages have been sent to a specific Recipient or Group.

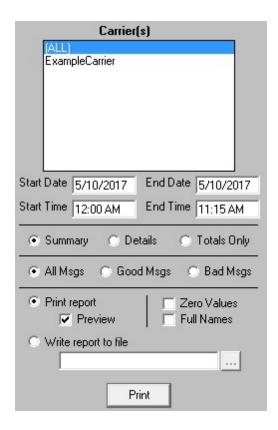
Sender

This report will show what (and how many) messages were sent by a specific user.

• Station

This report will show what (and how many) messages were sent by a specific GUI Client Station.

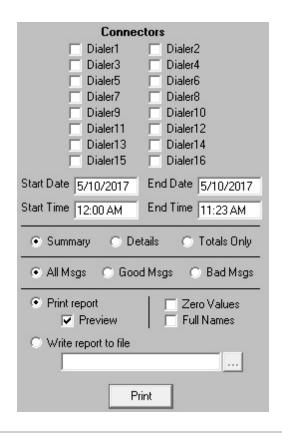
Carrier



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.

	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only
	Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
	• <u>All Msgs</u>
	Selecting this option will run the report on all messages, good or bad.
All Msgs,	Good Msgs
Good Msgs, Bad Msgs	Selecting this option will only report on messages that were delivered.
	Bad Msgs
	Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

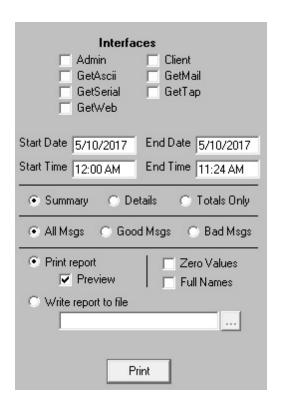
Connector



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.

	All Msgs Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	• Bad Msgs
	Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
	When this option is enabled, the report is written to a file of your
file	specification and name instead of queued to the printer.

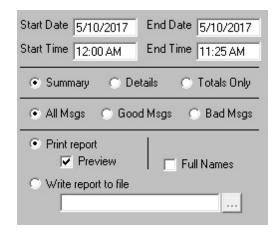
Interface



Setting	Function
Start Date	The beginning date of the date range the report should show.

End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
	All Msgs Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
Daa mege	Bad Msgs Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

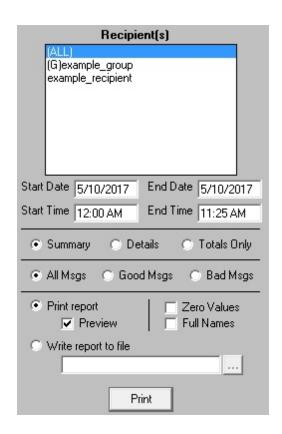
List



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.
	<u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
	<u>All Msgs</u> Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	Bad Msgs Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.

Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to	When this option is enabled, the report is written to a file of your
file	specification and name instead of queued to the printer.

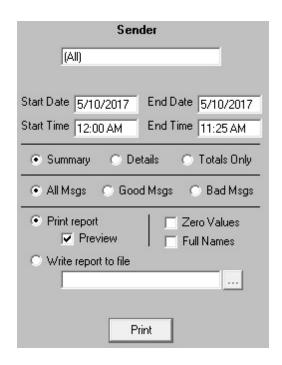
Recipient



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.

	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only
	Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
	• <u>All Msgs</u>
	Selecting this option will run the report on all messages, good or bad.
All Msgs,	Good Msgs
Good Msgs, Bad Msgs	Selecting this option will only report on messages that were delivered.
	Bad Msgs
	Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

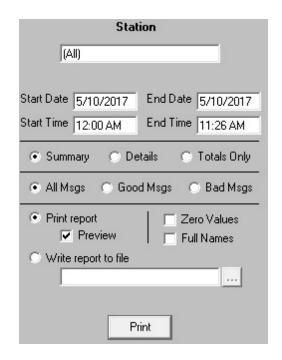
Sender



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.

All Msgs, Good Msgs, Bad Msgs	All Msgs Selecting this option will run the report on all messages, good or bad.
	Good Msgs Selecting this option will only report on messages that were delivered.
	• Bad Msgs
	Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
	When this option is enabled, the report is written to a file of your
file	specification and name instead of queued to the printer.

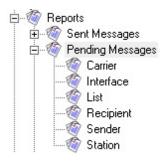
Station



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.

Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	• Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
All Mege	 All Msgs Selecting this option will run the report on all messages, good or bad. Good Msgs
All Msgs, Good Msgs, Bad Msgs	Selecting this option will only report on messages that were delivered.
	 <u>Bad Msgs</u> Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

Pending Messages



Carrier

This report will show what (and how many) messages are in the pending message queue for a selected carrier (or all carriers, if you select the All option).

Interface

This report will show what (and how many) messages are in the pending message queue for a selected interface (or all interfaces, if you select the All option).

• List

This report will show all messages in the pending message queue for a specified date and time range.

Recipient

This report will show what (and how many) messages are in the pending message queue for a specific recipient or group.

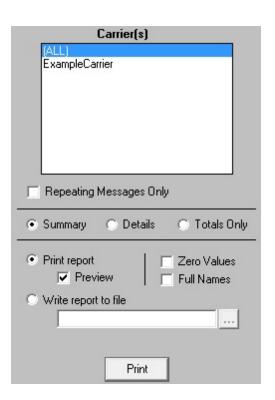
• <u>Sender</u>

This report will show what (and how many) messages in the pending message queue were sent by a specific user.

Station

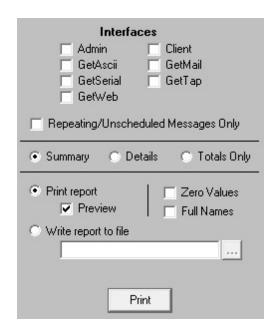
This report will show what (and how many) messages in the pending message queue were sent by a specific GUI Client Station.

Carrier



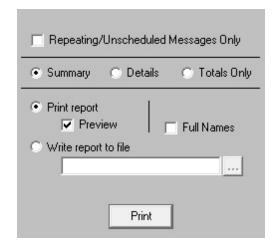
Setting	Function
Repeating Messages Only	Enabling this option will only report on repeating messages scheduled by a GUI Client workstation.
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

Interface



Function
Enabling this option will only report on repeating messages scheduled by a GUI Client workstation.
• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Details Selecting this option will include all possible information requested.
Totals Only
Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
This option allows you to print the report to a selected printer.
When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Enabling this option will include results that have a value of 0. This option is disabled by default.
When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

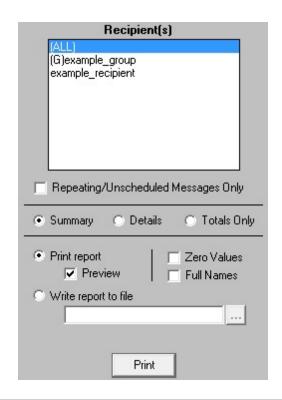
List



Setting	Function
Repeating Messages Only	Enabling this option will only report on repeating messages scheduled by a GUI Client workstation.

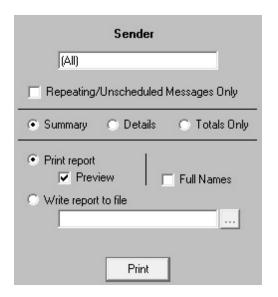
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only
	Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the
	Recipient field in the reports.
Write report to	When this option is enabled, the report is written to a file of your
file	specification and name instead of queued to the printer.
Paciniant	1 1

Recipient



Repeating Messages Only	Enabling this option will only report on repeating messages scheduled by a GUI Client workstation.
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

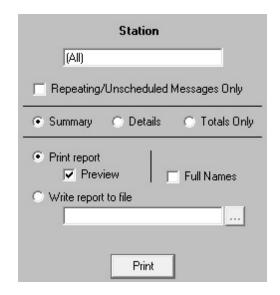
Sender



Setting	Function
	Enabling this option will only report on repeating messages scheduled by a GUI Client workstation.

Only	
	Summary Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only
	Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

Station



Setting	Function
Repeating Messages Only	Enabling this option will only report on repeating messages scheduled by a GUI Client workstation.

	• <u>Summary</u> Selecting this option will give a brief overview of the information requested
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.
	Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.
Full Names	When this option is enabled, the Full Name field is used in lieu of the Recipient field in the reports.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

Statistics

These reports measure rate volume of throughput, rate of delivery and total delivery results.



Carrier

This report will show the statistical information for selected carrier (or all carriers, if you select the All option).

Connector

This report will show the statistical information for a selected connector (or all connectors, if you select the All option).

• Interface

This report will show the statistical information for a selected interface (or all interfaces, if you select the All option).

• Recipient

This report will show the statistical information for a selected recipient or group (or all recipients and groups, if you select the All option).

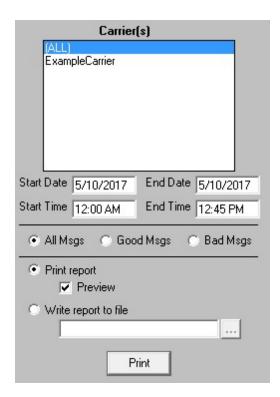
• Sender

This report will show the statistical information for messages sent by a specific user.

Station

This report will show the statistical information for messages sent by a specific GUI Client Station ID.

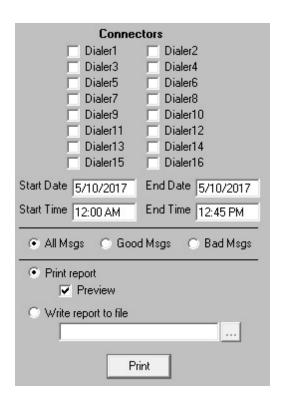
Carrier



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.

	<u>All Msgs</u> Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	• <u>Bad Msgs</u> Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

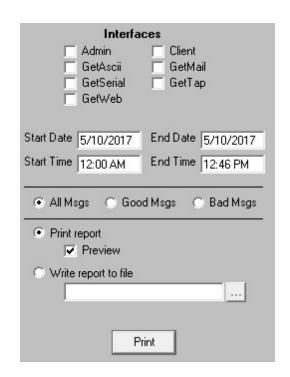
Connector



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.

End Time	The beginning time of the time range the report should show.
	All Msgs Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	 <u>Bad Msgs</u> Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

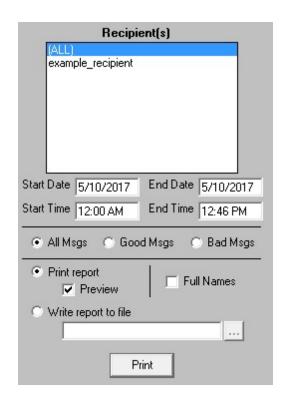
Interface



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.

End Time	The beginning time of the time range the report should show.
	<u>All Msgs</u> Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	Bad Msgs Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

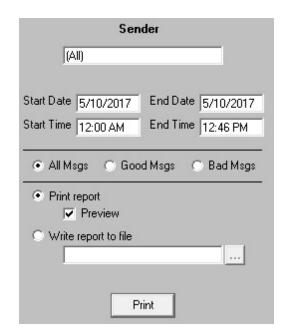
Recipient



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.

Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.
	All Msgs Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
bau ivisys	Bad Msgs Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

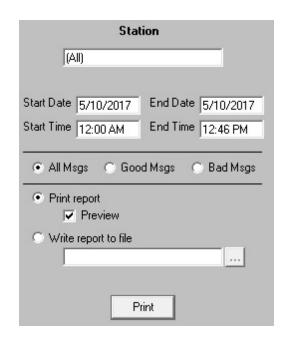
Sender



Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.

End Time	The beginning time of the time range the report should show.
	<u>All Msgs</u> Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	Bad Msgs Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

Station

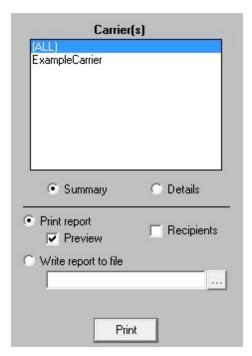


Setting	Function
Start Date	The beginning date of the date range the report should show.
End Date	The ending date of the date range the report should show.
Start Time	The beginning time of the time range the report should show.
End Time	The beginning time of the time range the report should show.

	<u>All Msgs</u> Selecting this option will run the report on all messages, good or bad.
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered.
	Bad Msgs Selecting this option will only report on messages that could not be delivered.
Print Report	This option allows you to print the report to a selected printer.
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.

Carrier List

This report displays information about the configured carriers. To run a report on all carriers, select the (ALL) option. To run a report on individual carriers, select the carrier in the list.

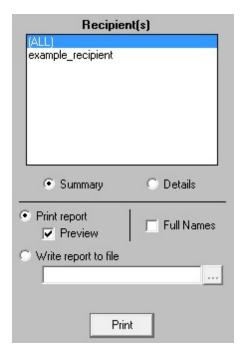


Setting	Function					
Summary	Selecting this option will report the basic information (protocol and					
	configured communication parameters) for the selected carrier(s).					

Details	Selecting this option will report the all information (protocol, configured communication parameters, message limit, character limit, etc) for the selected carrier(s).					
Print Report	This option allows you to print the report to a selected printer.					
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.					
Recipient	Enabling this option will tell the report to include a list of all recipients tied to the selected carrier(s).					
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.					

Recipient List

This report displays information about the configured recipients. To run a report on all recipients, select the (ALL) option. To run a report on individual recipients, select them in the list.

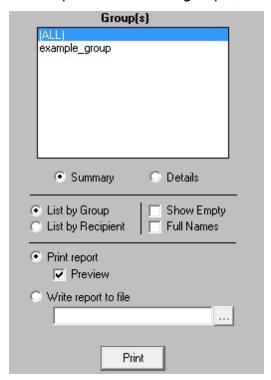


Setting	Function				
Summary	Selecting this option will report the basic information (short name, full name, carrier, ID/PIN, failover, type and forwarding information) for the selected recipient(s).				
Details	Selecting this option will report the all information (short name, full name, carrier, ID/PIN, failover, type, forwarding information, enabled services and content of comment fields) for the selected recipient(s).				
Print Report	This option allows you to print the report to a selected printer.				

Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.					
Full Names	Enabling this option will tell the report to include the recipients' full names when outputting the report.					
Write report to	When this option is enabled, the report is written to a file of your					
file	specification and name instead of queued to the printer.					

Group List

This report displays information about the configured groups. To run a report on all groups, select the (ALL) option. To run a report on individual groups, select them in the list.



Setting	Function				
Summary	Selecting this option will report the basic information (protocol and configured communication parameters) for the selected carrier(s).				
Details	Selecting this option will report the all information (protocol, configured communication parameters, message limit, character limit, etc) for the selected carrier(s).				
List by Group	Selecting this option will sort the output of the report based on group name.				
List by Recipient	Selecting this option will sort the output of the report based on recipient name.				
Show Empty	Enabling this option allows the report to display groups with no members.				

Full Names	Enabling this option tells the report to output the reported groups' full names.					
Print Report	This option allows you to print the report to a selected printer.					
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.					
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.					

Advanced Server Settings

There are several settings in PageGate that are not contained within the Administrative GUI Interface. These settings are not commonly used but are available for knowledgeable Administrators to control certain advanced functions within the Server. All of these Advanced functions are controlled through Registry entries, so you <u>MUST</u> be logged in to Windows with an Administrative Account to configure them.

These registry settings are for modifying the default behavior of the program. Unless they are needed, these registry entries **SHOULD NOT EXIST**.

These registry entries must be created in the HKEY_LOCAL_MACHINE - Software - Wow6432Node - NotePage - PageGate section of the registry.

Name	Туре	Value	Function
GetAscii_Unhi de	String	True False	By default, GetAscii cannot see hidden files. To enable it to see hidden files, set this registry value to True.
Zip_Archive_L ogs	Dwor d	0 for disabled 1 for enabled	By default, PageGate will zip each day's archived logs. To disable this behavior and have the program keep the uncompressed dated folder and files in the logging directory, set this to 0.
NPP_Sender	String	AlphaNum eric	If you have the NotePager Pro Alerts configured in the PageGate Monitor, this value specifies what the Monitor should use for the Sender's Information when the alert system is engaged.
SMTP_Force _Auth	String	0 for False 1 for True	If set to true, this value forces all outbound SMTP traffic to exclusively use Auth Plain and Login authentication.
SMTP_Force _STARTTLS	Dwor d	0 for False 1 for True	If set to true, this value forces all outbound SMTP traffic to exclusively use STARTTLS for authentication.
Relay_Auth	String	type username password	Type can have the following values: none, plain, login Example: login yourusername yourpasssword

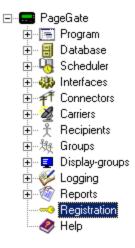
Proxy_Host	String	AlphaNum eric	If PageGate needs to route through a Proxy Server, enter the Proxy Server's host address here.	
Proxy_Port	Dwor d	Numeric	This entry must be set to a numerical value. This field specifies the port on which to connect to the Proxy Host.	j
GetTapldExtra s	String	ASCII Code(s)	This entry allows you to specify additional characters be passed after the ID= in the TAP response. Values must be prefaced with a backslash and entered in ASCII decimal. For example, carriage return followed by a line feed would be \013\010	S
POP_IP	String	IP Address	If the PageGate is installed on a server that is multi- homed (uses multiple network interface cards), by default, the PageGate Mail Server will listen for incoming POP connections on all NIC's and IP addresses. This setting forces the PageGate Mail Server process to only listen on the IP specified.	
POP_Port	Dwor d	Numeric	This entry specifies the Port on which PageGate's Poserver should respond to POP connection requests. default, PageGate monitors port 110 for incoming Poserver connections. If you need to specify a different port, do so with this entry.	By OP
POP_Collecti on_Port	Dwor d	Numeric	This entry specifies the Port that PageGate's POP server should to use to retrieve POP messages from another server. By default, PageGate uses port 110 to POP collection sessions. If you need to specify a different port, do so with this entry.	
SMTP_IP	String	IP Address	If the PageGate is installed on a server that is multi- homed (uses multiple network interface cards), by default, the PageGate Mail Server will listen for incoming SMTP connections on all NIC's and IP addresses. This setting forces the PageGate Mail Server process to only listen on the IP specified.	
SMTP_Port	Dwor d	Numeric	This entry specifies the Port on which PageGate's SMTP server should respond to SMTP connection requests. By default, PageGate monitors port 25 for incoming SMTP connections. If you need to specify a different port, do so with this entry.	
SMTP_Deliver y_Port	Dwor d	Numeric	This entry specifies the Port that PageGate's SMTP server should to use to deliver SMTP messages. By default, PageGate uses port 25 for outgoing SMTP connections. If you need to specify a different port, do so with this entry.	

			This value determines when authentication is required for inbound SMTP connections.
			<u>Value</u> <u>Setting</u>
			No Authentication Required.
			NOTE: Unless required, do not use this value.
SMTP_Auth	Dwor d	See Function	1 No authentication is required if the recipient in the Rcpt To command is addressed to a domain configured in the GetMail Module and its Aliases file. Traffic addressed to any other domain must authenticate for messages to be accepted.
			 All inbound SMTP connections must use authentication.
DNS_Spam_ List	String	See Function	This value is a comma separated list of DNS Servers that are used to check for blacklisted domains. For more detailed information, reference the DNSBL.
Drop_Msgs_w ith_Exes	Dwor d	0 for False 1 for True	If enabled, PageGate's GetMail module will not process inbound email messages that have an executable attached to them.
Max_POP_Co llection_Threa ds	Dwor d	0 - 50	This value sets the maximum number of concurrent outbound POP Collection threads. It is recommended that this value never be set higher than 50. Standard values for this setting are between 20 and 30.
Max_POP_Lis tener_Threads		0 - 50	This value sets the maximum number of concurrent inbound POP Listener threads. It is recommended that this value never be set higher than 50. Standard values for this setting are between 20 and 30.
Max_SMTP_ Delivery_Thre ads	Dwor d	0 - 50	This value sets the maximum number of concurrent outbound SMTP Delivery threads. It is recommended that this value never be set higher than 50. Standard values for this setting are between 20 and 30.
Max_SMTP_L istener_Threa ds	Dwor d	0 - 50	This value sets the maximum number of concurrent inbound SMTP Listener threads. It is recommended that this value never be set higher than 50. Standard values for this setting are between 20 and 30.
GetMail_Alt_P arser	String	True or False	If this value is set to 'True', GetMail to examine the attachments of messages it receives IF the body of the message is completely blank. If the attachment is in an ASCII format (HTML, XML, etc), the program will use the contents of the file as the body of the message.

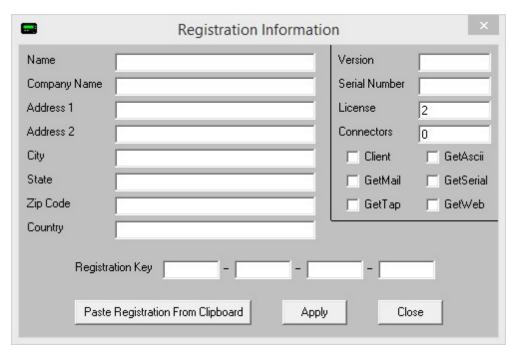
GetMail_AP_		True or	If this value is set to 'True', GetMail will remove formatting tags from the data parsed from attached files.
	Strina		
Strip_Tags	ounig	False	This entry's function is contingent on the
			GetMail_Alt_Parser registry entry existing and being
			set to 'True'.

Registration

This section allows you to enter your PageGate registration key.



Clicking on Registration will provide this dialog:



After entering your PageGate version 9 registration key, click Apply then close the Registration screen.

Reliability in messaging is incredibly important, so PageGate has two different styles of failover and a synchronization system that can be configured.

Carrier level failover

This Carrier level failover allows PageGate to automatically and seamlessly transition between communication methods in the event that it has trouble delivering a message.

As an example, let's say you're using a cellular modem to deliver your messages. You would probably also want to configure an internet based carrier that the cellular modem could fail over to in the event of hardware failure. So, let's say that you're using a cellular modem and that you're also registered for Verizon's Enterprise Messaging Access Gateway (EMAG) SNPP and WCTP APIs. You could have the cellular modem fail over to Verizon's EMAG WCTP host and then if the program encountered trouble, you could even have fail over to their SNPP host.

Click here for steps to configure a Carrier level failover.

Recipient level failover

The Recipient level failover allows PageGate to automatically deliver a message to an alternate address, location or person in the event that the primary contact couldn't be messaged.

For example, let's say that we have John Smith's Cel and John Smith's Email as recipients in PageGate. We could have John Smith's Cel fail over to John Smith's Email or we could configure the reverse. By doing so, we're telling PageGate that if a message can't be delivered to John Smith's cell phone, that message should be delivered to his email instead or vice versa.

As another example, let's say we have a recipient called Failure Notification that's tied to a network administrator's email address. If we specify Failure Notification as the failover for every recipient configured, if any message fails, that message will instead be delivered to the network administrator in our example. With PageGate's templating system, we could also prefix the text delivered to the administrator to say "The following message could not be delivered for %OriginalRecipient%".

<u>Click here</u> for steps to configure a Recipient level failover.

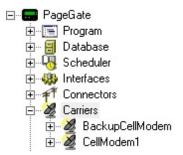
Just to note, PageGate doesn't limit the number of failovers you can configure and will allow you to fail over as many times as your environment and infrastructure support.

To configure multiple PageGate servers to synchronize their data, <u>please reference the Synchronization</u> section of the documentation.

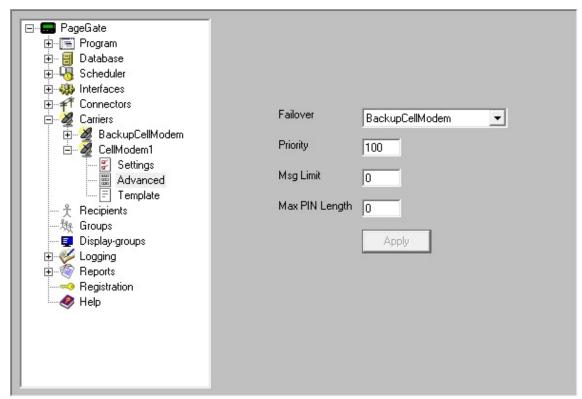
Failover Scenarios

Carrier Level Failover

- 1) Open the PageGate Admin.
- 2) Configure your primary and failover carriers.



3) Open the Advanced sub-section of your primary carrier.



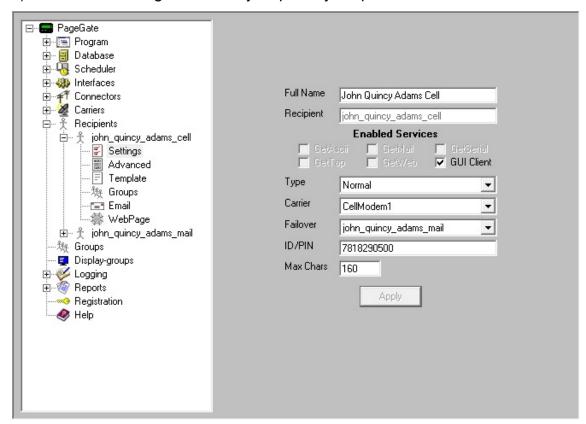
- 4) In the Failover field, select your failover carrier.
- 5) Click Apply.

Recipient Level Failover

- 1) Open the PageGate Admin.
- 2) Configure your primary and failover recipients.



3) Go in to the Settings section of your primary recipient.



- 4) In the Failover field, select your failover recipient.
- 5) Click Apply.

It is entirely possible to receive responses to the messages you send in some configurations. How you deliver your traffic will play a large part in determining whether or not you can receive replies.

Note: At minimum, these methods require the <u>GetASCII</u> interface to process the received data but you may also need or want the <u>filter pack</u> for more specific control of the responses and replies.

Currently, PageGate accepts reply messages in the following ways:

Cellular Hardware

When using <u>cellular hardware</u> to deliver text messages, the people who receive those SMS have the option to reply to them. When they reply, their message is delivered back to the sending cellular device, where it waits in memory. PageGate can be configured to check the cellular hardware for reply messages received by these devices and process them in a number of ways.

In the most basic configuration, all reply messages are sent to a <u>specific recipient or group</u>. However, reply messages can be fed through the <u>GetASCII API for basic processing</u>, which allows you to conditionally modify what is done with the replies in some circumstances.

Using a <u>Filter Pack in conjunction with the SMS replies</u> and the GetASCII API allows you to modify any part of the replies being processed, from what the message should say to whom the message should be delivered. It also allows you to implement conditional modifications. For example, if a certain word or keyphrase appears in the body of the message, you could have the filter pack completely change who that message is intended to go to.

HTTP response by API or Protocol

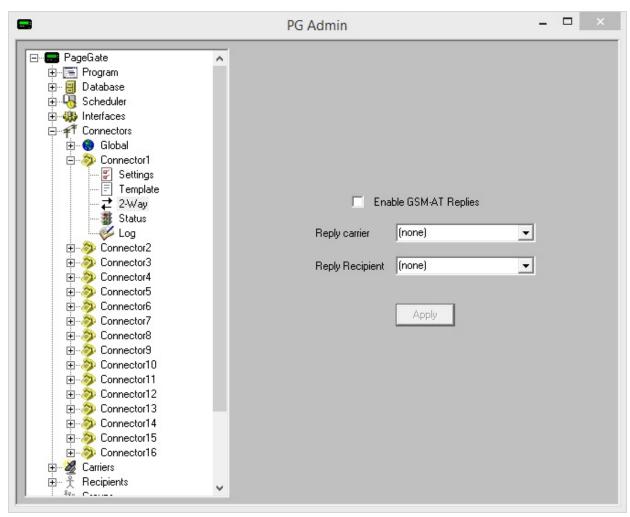
PageGate has an HTTP data receiver (webdata.exe) that can receive input from nearly any API or protocol that offers an HTTP return like HTTP GET, HTTP POST and WCTP.

APIs and protocols that have the ability to send replies require that you provide a URL for the responses to go to. This means that, typically speaking, you will need to host PageGate's webdata.exe on an outward facing web server. Otherwise, the hosts won't be able to route the replies and responses to you.

Click here for more information and configuration steps.

Replies with Cellular Hardware

When using cellular hardware to deliver text messages, the people who receive those SMS have the option to reply to them. When they reply, their reply message is actually delivered back to the sending cellular device, where it waits in memory. PageGate can be configured to check the cellular hardware for reply messages received by these devices.



Before you can configure reply processing, you'll first need to go in to the <u>2-Way subsection</u> of a connector configured to use cellular hardware and enable the 'GSM-AT Replies' function. Once you do, you'll need to specify a 'Reply Recipient' that should be used to process the replies. This allows you to implement reply processing in a few ways.

Static Recipient or Group

This is the most basic form of reply processing. All replies will be delivered to the specified recipient or group.

Reply processing with the GetASCII API

If you own the GetASCII API, you can feed the reply information through that system for advanced processing. This allows you to modify message content and who the replies should go to but does not allow for conditional modification or conditional sending. For example, you couldn't have the program scan the body of the message for a keyphrase, then completely change who the message is intended to go to based on it. That would require the PageGate Filter Pack.

Two Way Messaging and Replies

Reply processing with the GetASCII API and the PageGate Filter Pack

Reply messages can be fed through PageGate's <u>Filter Pack</u> to allow for conditional sending. For instance, with the PageGate's filter pack, you can tell PageGate to conditionally change who receives the message based on what the text in the reply is. As an example, you could configure a filter system so that any time the word lunch shows up in a reply message, that reply is sent to the cafeteria group instead of the general replies group.

You could configure a system where replies from a certain phone number will always be copied to certain recipients or groups.

You could configure a system where certain keywords or phrases are replaced with other keywords or phrases. For example, you could translate a code like PD4N in to 4th Precinct.

You could configure a system to describe every element I've just described all at once.

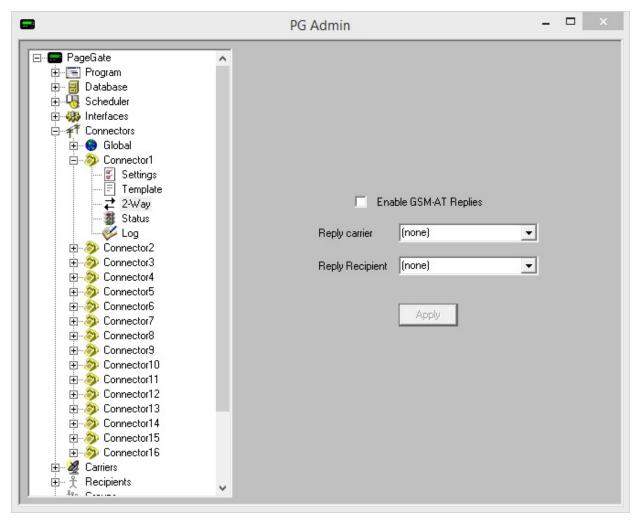
However, you must own and implement the <u>Filter Pack</u> to have the functionality necessary to do conditional sending as described.

Static Recipient or Group

These are the steps on how to configure PageGate to deliver SMS replies to a static recipient or group.

1) In the PageGate Admin, go to Connectors - Connector X - 2-Way.

Note: This only applies to replies to messages sent from the <u>cellular hardware</u> this connector is configured to use.



- 2) Check 'Enable GSM-AT Replies'.
- 3) In the 'Reply Recipient' field, select the recipient or group the SMS replies should go to.
- 4) Click Apply.

Processing replies with GetAscii

This is an example of how reply messages can be processed with the GetASCII API.

1) In Windows, create a new directory for PageGate's message processing to reference. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called Replies as a sub-directory of PageGate's database directory (By default, c:\PageGateData\Replies\).

Two Way Messaging and Replies

8

- 2) <u>Create a File protocol</u> carrier and set its file path to the folder you created in step 1. Leave the extension at .txt and set Max Chars to 6000.
- 3) <u>Create a recipient</u> and tie it to the File protocol carrier. Set its Full Name field to Replies and set its Recipient field to replies.
- 4) Go in to the Template sub-section of your new recipient.
- 5) Copy and paste the following in the Text section:

sms_replies_group %Sender%

This message was received by the Cellular SMS Modem. It was generated either from a customer cellular phone or from the cellular network and may be a reply.

FROM: %Sender%

ON: %Date% AT: %Time% Message: %Message%

- 6) <u>Create a new group</u>. Set its Description field to SMS Replies Group and its Group field to sms_replies_group
- 7) Populate the group with members that should receive reply messages.
- 8) Go to Connectors Connector X 2-Way.
- 9) Check "Enabled GSM-AT replies"
- 10) Set the Reply Recipient to: replies
- 11) Create a new folder on the local hard drive for the GetASCII module's basic polling directory. We recommend creating: C:\PageGateData\ASCII\

Note: If you have already configured a basic polling directory, you do not need to do steps 9, 10 or 11.

- 12) Go to Interfaces GetASCII Settings
- 13) Set the Polling Directory to: c:\PageGateData\ASCI\
- 14) If unchecked, check Enabled, then click on Apply.
- 15) Go to Interfaces GetASCII Settings Advanced Polling Files
- 16) Add a new entry with the following settings:

Recipient: *

From:

File(s): *.txt

Path: Specify the folder you created in step 1, recommended c:\PageGateData\Replies\

File Type: Standard

17) Click Apply.

By configuring this example of a 2-way system, all replies will be read in and delivered to the replies recipient, which will output a file formatted to the template's specifications. The GetASCII API will then read in the re-formatted reply and send it to the recipients that are members of the group named sms_replies_group.

Processing replies with a Filter Pack

Note: PageGate's <u>filter pack</u> supports <u>RegEx expressions</u>, which can allow you to implement an incredibly intricate system.

To say that there are many things you can do with a properly coded <u>filter pack</u> would be an understatement. The <u>Filter Pack</u> allows you to modify and conditionally modify any part of what it interacts with. It can reassign who a message is delivered to based on words or phrases in a reply, it can modify the body of the message, it can modify the subject line, it can insert pre-determined text and many other things.

For instance, with the filter pack, you can tell PageGate to conditionally change who receives the message based on what the text in the reply is. As an example, you could configure a filter system so that any time the word lunch shows up in a reply message, that reply is sent to the cafeteria group instead of the general replies group.

You could configure a system where replies from a certain phone number will always be copied to certain recipients or groups.

You could configure a system where certain keywords or phrases are replaced with other keywords or phrases. For example, you could translate a code like PD4N in to 4th Precinct.

You could configure a system to describe every element I've just described all at once, it's just a matter of coding your <u>filter pack</u> to perform the actions you want.

This section is designed to give you an idea of what a <u>filter pack</u> is capable of providing but does not represent its total capabilities.

Example 1

In this example, we'll configure a reply system to that any time someone replies to a message with 'unsubscribe' or 'subscribe', those replies are sent to an 'unsubscribe' or 'subscribe' or 'unsubscribe' aren't found, the reply is sent to a general replies recipient or group.

Example 2

In this example, we'll configure a reply system to that any time someone replies to a message with 'unsubscribe' or 'subscribe', those replies are sent to a recipient named 'unsubscribe' or 'subscribe' that executes a batch file or script. If 'subscribe' or 'unsubscribe' aren't found, the reply is sent to a general replies recipient or group. This can be especially useful if you're using an SQL environment and have PageGate's database linked to it with ODBC expressions. In theory, you could code a script to be executed that would automatically remove a responding phone number from the users table of the database any time the 'unsubscribe' script was executed.

Example 1

Step 1: Configure PageGate to send SMS with cellular hardware

Step 2: Configure PageGate to send Email

In this particular configuration, we're going to have PageGate check replies for the words 'subscribe' or 'unsubscribe'. If it finds 'subscribe', PageGate is going to email that reply to the 'subscribe' recipient or group. If it finds 'unsubscribe', PageGate is going to email that reply to the 'unsubscribe' recipient or group.

Step 3: Create a File carrier to pass the replies to PageGate's GetASCII API and Filter Pack for processing

- In Windows, create a new directory for PageGate's message processing to reference. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called Replies as a sub-directory of PageGate's database directory (By default, c:\PageGateData\Replies\).
- Right click Carriers, left click Add.
- Specify the following:

Carrier: reply-processing

Protocol: File

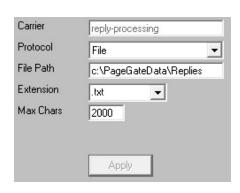
File Path: Specify the directory you created in step 1.

By default, c:\PageGateData\Replies\

Extension: .txt

Max Chars: 2000

- 4) Click Apply.
- 5) Go to Carriers reply-processing Template.



6) In the Text section of the template, specify the following:

GeneralReplies

%Sender%

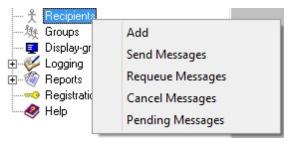
Message: %Message%



7) Click Apply.

Step 4: Create a recipient tied to the File carrier

1) Right click Recipients, left click Add.



2) Specify the following:

Full Name: message-replies

Recipient: message-replies

Type: Normal

Carrier: reply-processing

Failover: (none)

ID/PIN: 123

Max Chars: 2000



Click Apply

Step 5: Create a Recipient or Group named GeneralReplies

If the words 'subscribe' or 'unsubscribe' do not appear in a reply message, the reply will be sent to a recipient or group named GeneralReplies. For example, you could configure a series of 5 recipients tied to 5 separate email addresses, then add each recipient as a member of a group called GeneralReplies. When a reply needs to go to GeneralReplies, PageGate would then send that as an email to the 5 email recipients in the group.

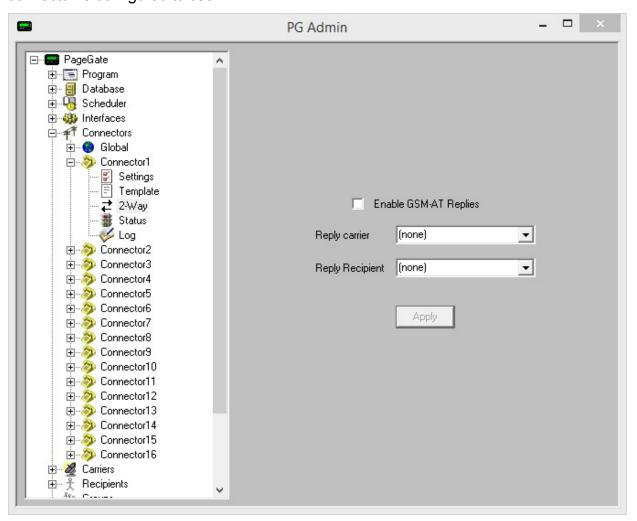


Alternatively, if GeneralReplies exists as a recipient, PageGate will send those messages to the email address or device configured for that recipient.

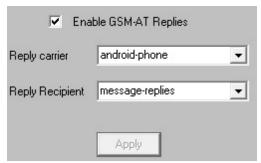
Step 6: Set the message-replies recipient as the Reply Recipient

1) Go to Connectors - Connector X - 2-way

Note: This only applies to replies to messages sent from the <u>cellular hardware</u> this connector is configured to use.



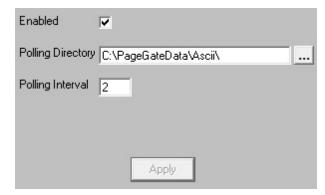
- 2) Check 'Enable GSM-AT Replies'
- 3) In the Reply Recipient field, select: message-replies.



4) Click Apply.

Step 7: Configure and enable the GetASCII API

- 1) In Windows, create a new directory for the GetASCII API's basic processing. We recommend creating a directory called ASCII as a sub-directory of PageGate's database directory (By default, c:\PageGateData\ASCII\).
- 2) In the PageGate Admin, go to Interfaces GetASCII Settings.
- 3) Set the 'Polling Directory' to the directory you created in step 1. By default, c: \PageGateData\ASCIN
- 4) Check Enabled.



- 5) Click Apply.
- 6) Say yes, you do want this to be enabled for everyone.
- 7) Go to Interfaces GetASCII Settings Advanced Polling Files.
- 8) Click Add and specify the following:

-

...

₹

Apply

Edit Polling Entry

C:\PageGateData\Replies\

Cancel

Recipient -

File Type Standard

From

File(s)

Path

Recipient: *

From:

File(s): *.txt

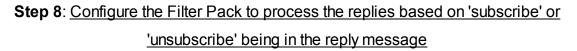
Path: Specify the folder the reply messages will be

written to.

By default, C:\PageGateData\Replies\

File Type: Standard

- 9) Click Apply.
- 10) Click Apply again.
- 11) Go to Program Settings.
- 12) In the 'Run on this server' section, check GetASCII.
- 13) Click Apply.
- 14) If prompted for credentials, leave them blank and click Apply again.



- 1) Copy pgfilter.exe, pgfilter.xml and preproc.bat in to the directory you created for the reply-processing File carrier. By default, c:\PageGateData\Replies\
- 2) Click here for the necessary pgfilter.xml script configuration.

Once you finish this configuration, any time someone sends a reply to a message delivered by your <u>cellular hardware</u>, PageGate will scan the body of the reply for 'subscribe' or 'unsubscribe'. If it finds 'subscribe', it will send the reply to a specified recipient or group for delivery. If it finds 'unsubscribe', it will send the reply to a separate specified recipient or group for delivery.

Example 2

Step 1: Configure PageGate to send SMS with cellular hardware

Step 2: Create a File carrier to pass the replies to PageGate's GetASCII API and Filter Pack for processing

1) In Windows, create a new directory for PageGate's message processing to reference. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We

recommend creating a directory called Replies as a sub-directory of PageGate's database directory (By default, c:\PageGateData\Replies\).

Carrier

Protocol

File Path

Extension

Max Chars

reply-processing

.txt

2000

Apply

c:\PageGateData\Replies

- 2) Right click Carriers, left click Add.
- 3) Specify the following:

Carrier: reply-processing

Protocol: File

File Path: Specify the directory you created in step

1.

By default, c:\PageGateData\Replies\

Extension: .txt

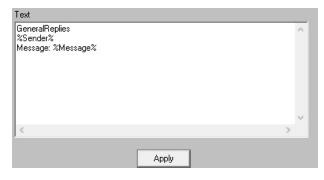
Max Chars: 2000

- 4) Click Apply.
- 5) Go to Carriers reply-processing Template.
- 6) In the Text section of the template, specify the following:

GeneralReplies

%Sender%

Message: %Message%



7) Click Apply.

Step 3: Create a recipient tied to the File carrier

1) Right click Recipients, left click Add.



2) Specify the following:

Full Name: message-replies

Recipient: message-replies

Type: Normal

Carrier: reply-processing

Failover: (none)

ID/PIN: 123

Max Chars: 2000



3) Click Apply

Step 5: Create a Recipient or Group named GeneralReplies

If the words 'subscribe' or 'unsubscribe' do not appear in a reply message, the reply will be sent to a recipient or group named GeneralReplies.

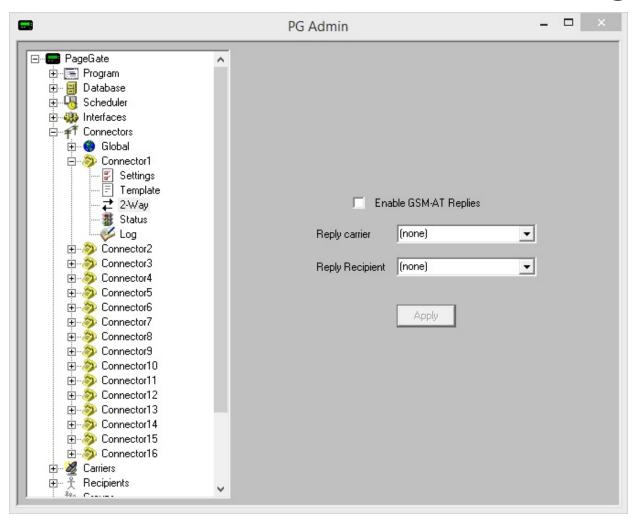
For example, you could configure a series of 5 recipients tied to 5 separate email addresses, then add each recipient as a member of a group called GeneralReplies. When a reply needs to go to GeneralReplies, PageGate would then send that as an email to the 5 email recipients in the group. Alternatively, if GeneralReplies exists as a recipient, PageGate will send those messages to the email address or device configured for that recipient.

Step 4: Set the message-replies recipient as the Reply Recipient

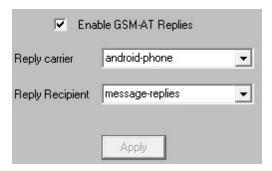
1) Go to Connectors - Connector X - 2-way

Note: This only applies to replies to messages sent from the <u>cellular hardware</u> this connector is configured to use.

Two Way Messaging and Replies



- 2) Check 'Enable GSM-AT Replies'
- 3) In the Reply Recipient field, select: message-replies.



4) Click Apply.

Step 5: Configure a File carrier and recipient for the 'subscribe' action to execute a script or program

- 1) In Windows, create a new directory for PageGate's message processing to reference. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called subscribe-action as a sub-directory of PageGate's database directory (By default, c:\PageGateData\subscribe-action\).
- 2) Right click Carriers, left click Add.



3) Specify the following:

Carrier: subscribe-action

Protocol: File

File Path: Specify the directory you created in step 1.

By default, c:\PageGateData\subscribe-action\

Extension: .txt

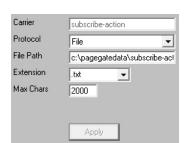
Max Chars: 2000

4) Click Apply.

5) Right click Recipients, left click Add.



6) Specify the following:



Two Way Messaging and Replies



Full Name: subscribe-recipient **Recipient**: subscribe-recipient

Type: Normal

Carrier: subscribe-action

Failover: (none)

ID/PIN: Leave Blank
Max Chars: 2000

7) Click Apply.



Step 6: Configure a File carrier and recipient for the 'unsubscribe' action to execute a

script or program

- 1) In Windows, create a new directory for PageGate's message processing to reference. This can be any folder accessible to PageGate, whether on the local hard drive or by UNC path to a network resource. However, if PageGate will need to reference a network resource, the services relevant to these processes will need permission to access it. For more information, see the services section of the documentation. We recommend creating a directory called unsubscribe-action as a sub-directory of PageGate's database directory (By default, c:\PageGateData\unsubscribe-action\).
- 2) Right click Carriers, left click Add.



3) Specify the following:

Carrier: unsubscribe-action

Protocol: File

File Path: Specify the directory you created in step 1.

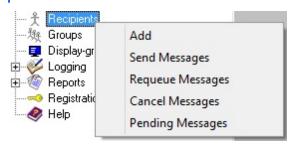
By default, c:\PageGateData\unsubscribe-action\

Extension: .txt
Max Chars: 2000

4) Click Apply.

5) Right click Recipients, left click Add.





6) Specify the following:

Full Name: unsubscribe-recipient

Recipient: unsubscribe-recipient

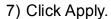
Type: Normal

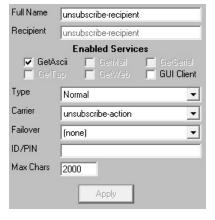
Carrier: unsubscribe-action

Failover: (none)

ID/PIN: Leave Blank

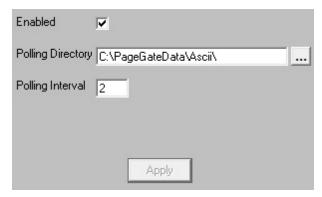
Max Chars: 2000





Step 7: Configure and enable the GetASCII API

- In Windows, create a new directory for the GetASCII API's basic processing. We recommend creating a directory called ASCII as a sub-directory of <u>PageGate's</u> <u>database directory</u> (By default, c:\PageGateData\ASCII\).
- 2) In the PageGate Admin, go to Interfaces GetASCII Settings.
- 3) Set the 'Polling Directory' to the directory you created in step 1. By default, c: \PageGateData\ASCIN
- Check Enabled.



- 5) Click Apply.
- 6) Say yes, you do want this to be enabled for everyone.

Two Way Messaging and Replies



- 7) Go to Interfaces GetASCII Settings Advanced Polling Files.
- 8) Click Add and specify the following:

Recipient: *

From:

File(s): *.txt

Path: Specify the folder the reply messages will be written

to.

By default, C:\PageGateData\Replies\

File Type: Standard

- 9) Click Apply.
- 10) Click Add and specify the following:

Recipient: *

From:

File(s): *.txt

Path: Specify the folder for the subscribe action.

By default, C:\PageGateData\subscribe-action\

File Type: Standard

- 11) Click Apply.
- 12) Click Add and specify the following:

Recipient: *

From:

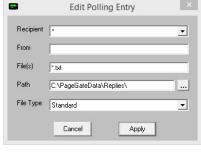
File(s): *.txt

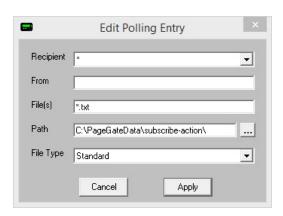
Path: Specify the folder the unsubscribe action.

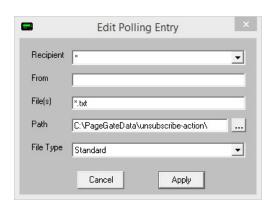
By default, C:\PageGateData\unsubscribe-action\

File Type: Standard

- 13) Click Apply.
- 14) Click Apply again.
- 15) Go to Program Settings.
- 16) In the 'Run on this server' section, check GetASCII.
- 17) Click Apply.







Two Way Messaging and Replies

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18) If prompted for credentials, leave them blank and click Apply again.

Step 8: Configure the Filter Pack in the Replies, subscribe-action and unsubscribe-action folders

- 1) Copy pgfilter.exe, pgfilter.xml and preproc.bat in to the directory you created for the reply-processing File carrier. By default, c:\PageGateData\Replies\
- 2) Click here for the necessary pgfilter.xml script configuration.
- 3) Copy preproc.bat in to the subscribe-action folder. By default, c: \PageGateData\subscribe-action.
- 4) Edit preproc.bat to execute whatever script and/or executable is appropriate for the function you want to perform.
- 5) Copy preproc.bat in to the unsubscribe-action folder. By default, c: \PageGateData\unsubscribe-action.
- 6) Edit preproc.bat to execute whatever script and/or executable is appropriate for the function you want to perform.

Once you finish this configuration, any time someone sends a reply to a message delivered by your <u>cellular hardware</u>, PageGate will scan the body of the reply for 'subscribe' or 'unsubscribe'. If it finds 'subscribe', it will trigger whatever script has been configured in the preproc.bat file contained within the subscribe-action folder. If it finds 'unsubscribe', it will trigger whatever script has been configured in the preproc.bat contained within the unsubscribe-action folder.

Replies with APIs and Protocols

PageGate has an HTTP data receiver (webdata.exe) that can receive input from nearly any API or protocol that offers an HTTP return like HTTP GET, HTTP POST and WCTP.

This allows you to receive JSON, XML, HTML, WCTP and similar data submissions via HTTP/S request. Received data doesn't need to conform to a single standard as it is fully processed with the <u>GetASCII interface</u> and, optionally depending on what you want to do with the received data, <u>Filter Pack</u>. If you want to receive multiple data formats, the <u>Filter Pack</u> isn't optional and you will need to implement a <u>filtering system</u> to tell PageGate what to do with each format received.

APIs and protocols that have the ability to send replies require that you provide a URL for the responses to go to. This means that, typically speaking, you will need to host PageGate's webdata.exe on an outward facing web server. Otherwise, the hosts won't be able to route the replies and responses to you.

webdata.exe is located in the PageGate program directory and MUST be copied to the webserver. If PageGate is not running on the web server hosting webdata.exe, you'll also need to share the directory on the webserver where webdata.exe is hosted to allow the GetASCII interface to monitor replies sent to the receiver.

Before you begin, you'll need to determine what you want to do with the replies.

Do you want to auto-respond to the person who sent the message to let them know that they shouldn't reply?

Do you want to scan the reply for keywords and keyphrases to determine what to do?

What you want to do will determine which parts of the received data need to be keyed on. Since each API has its own potentially unique structure, you'll need to know which flags, tags and fields are relevant.

Reply messages can also be fed through PageGate's <u>Filter Pack</u> to allow for conditional sending. For instance, with the PageGate's filter pack, you can tell PageGate to conditionally change who receives the message based on what the text in the reply is. As an example, you could configure a filter system so that any time the word lunch shows up in a reply message, that reply is sent to the cafeteria group instead of the general replies group.

You could configure a system where replies from a certain phone number will always be copied to certain recipients or groups.

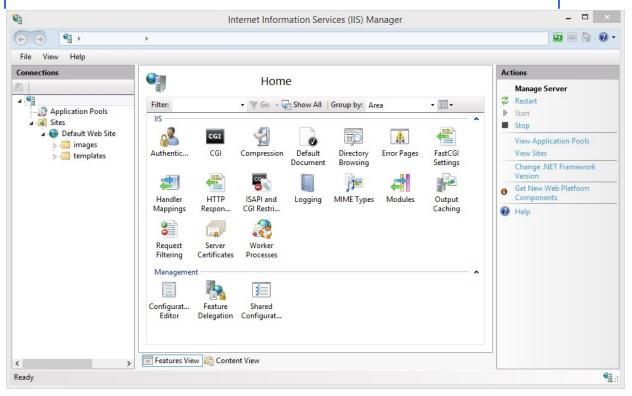
You could configure a system where certain keywords or phrases are replaced with other keywords or phrases. For example, you could translate a code like PD4N in to 4th Precinct.

You could configure a system to describe every element I've just described all at once.

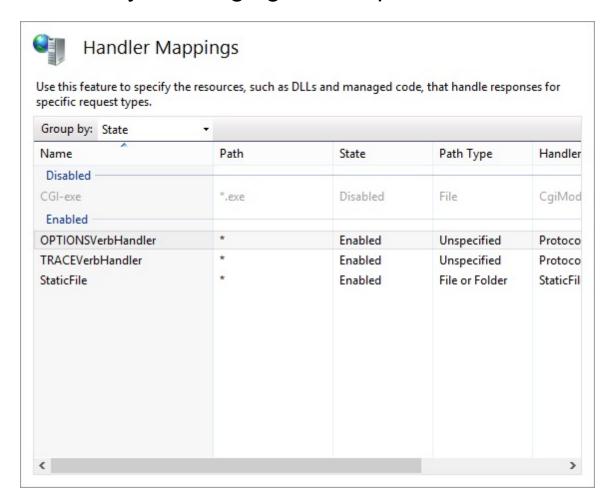
Step 1: Host webdata.exe on your web server

The first thing you'll need to do is host webdata.exe on your web server to provide the return URL for your API or WCTP host. The following steps are for IIS but this can be done with any web server suite.

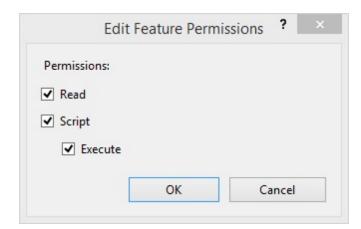
- Copy webdata.exe from the PageGate program directory to your server's scripting directory.
- 2) Open the IIS Admin and select the server object.



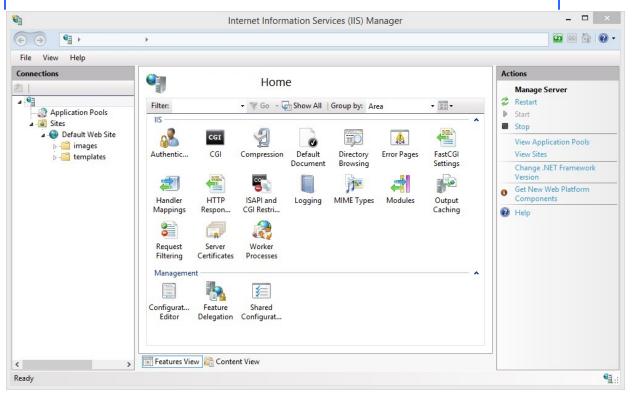
3) Open Handler Mappings.



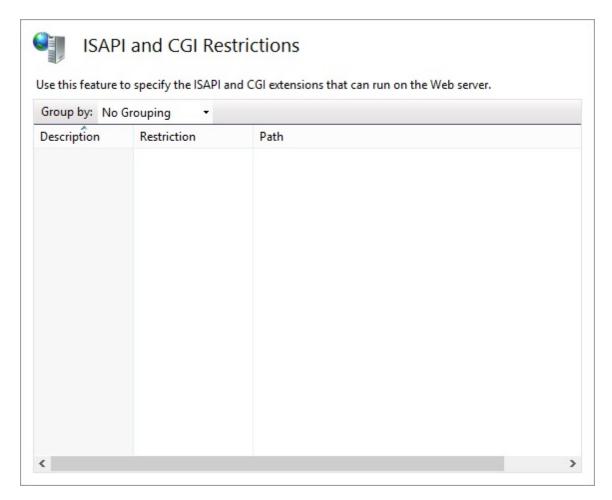
- 4) Right click CGI-exe, left click Edit Feature Permissions
- 5) Check Execute.



- 6) Click OK.
- 7) Select the Server object again.



8) Open ISAPI and CGI Restrictions.



- 9) Right click in the box and select Add.
- 10) Specify the following and click OK:

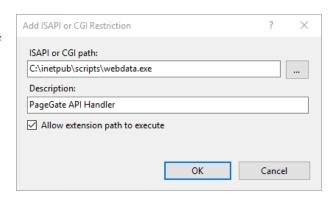
ISAPI or CGI path: Specify the location of

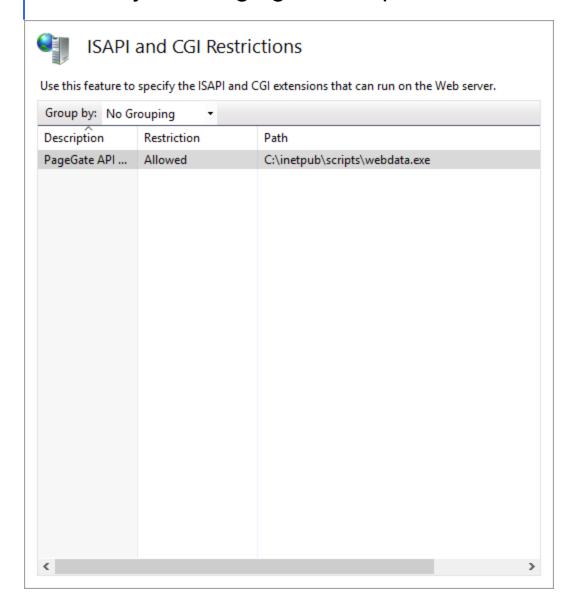
webdata.exe

Description: PageGate API Handler

Check 'Allow extension path to execute'

Example:





Step 1a: Share the folder webdata.exe is hosted in

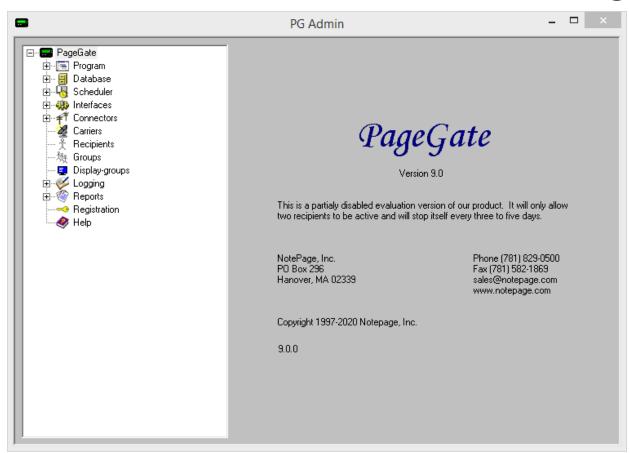
If PageGate is not running on the server hosting webdata.exe, you will need to share the directory where webdata.exe is hosted to allow the GetASCII interface to parse replies sent to the receiver.

Step 2: Configure GetASCII to process the received data

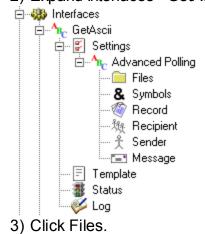
Each API and protocol will have a unique structure to the data returned to your server and you'll need to tell PageGate how to interpret the data and what to do with it in general.

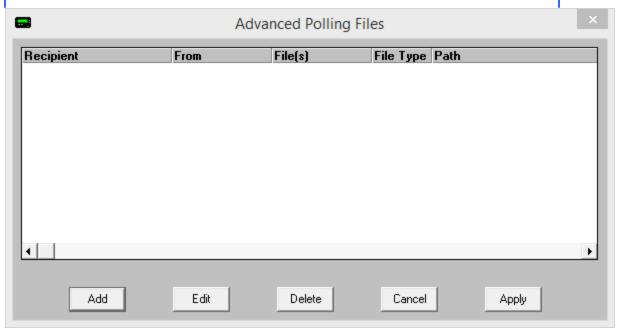
To do that, you'll want to configure an 'Advanced Polling' rule:

1) Open PG Admin.



2) Expand Interfaces - GetAscii - Settings - Advanced Polling





- 4) Click Add.
- 5) Specify the following and click Apply:

Recipient: *

From: Leave Blank

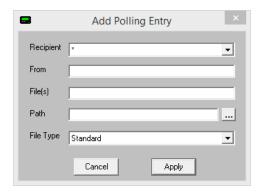
File(s): *.asc

Path: The path to the folder webdata.exe is stored in

on the web server.

Example: \\WebServer01\pgscripts\

File Type: Custom



<u>NOTE</u>: If you will be implementing a <u>filtering system</u>, you will do so at this point. For more information, please see <u>PageGate's Filter Script documentation</u>.

- 6) Go to Interfaces GetAscii Settings Advanced Polling Record
- 7) Specify the following and click Apply:

Start Pattern: *
Start Offset 0

End Pattern: ~

End Offset: 0

End Offset 0

Apply

- 8) Go to Interfaces GetAscii Settings Advanced Polling Recipient. This section tells PageGate where in the data to look for the recipient or group this reply should go to.
- 9) Select 'Dynamic Recipient' and configure the parameters.

For example, let's say you're working with the WCTP protocol and want to auto-respond to the person who sent the message. In WCTP, you can key off of senderID="Value". As another example, let's say you're receiving an XML form and one of the tags will determine who needs to receive the reply. You would key off of <XML Tag>Value</XML Tag>.

Start Pattern: This value determines the first character in the recipient block.

For example, if you're working with WCTP and want to key off of senderID="Value". You would use senderID=" as the Start Pattern.

As another example, if you're working with XML and want to key off of

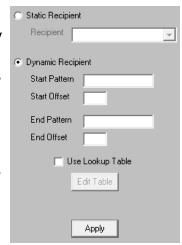
<XML Tag>Value</XML Tag>. You would use <XML Tag> as the Start Pattern.

Start Offset: The number of characters in the start pattern.

End Pattern: This value determines the last character in the recipient block.

For example, if you're working with WCTP and are using senderID=" as the Start Pattern, you would use " as the End Pattern.

As another example, if you're working with XML are using <XML Tag> as the Start Pattern, you would use </XML Tag> as the End Pattern.



End Offset: The negative value of the number of characters in

the End Pattern. Examples: -1, -10, etc

10) Go to Interfaces - GetAscii - Settings - Advanced Polling - Sender. This section tells PageGate where in the data to look for the sender value.

11) For most implementations, you can select 'Static Sender' and specify a sender value. However, if the sender's name will be contained in the data read, you can select 'Dynamic Sender' and parameters are configured similarly to the recipient section.

Start Pattern: This value determines the first character in the sender block.

For example, if you're working with WCTP and want to use the value in senderID="Value". You would use senderID=" as the Start Pattern.

As another example, if you're working with XML and want to key off of

<XML Tag>Value</XML Tag>. You would use <XML Tag> as the Start Pattern.

Start Offset: The number of characters in the start pattern.

End Pattern: This value determines the last character in the sender block.

For example, if you're working with WCTP and are using senderID=" as the Start Pattern, you would use " as the End Pattern.

As another example, if you're working with XML are using <XML Tag> as the Start Pattern, you would use </XML Tag> as the End Pattern.

End Offset: The negative value of the number of characters in the End Pattern.

Examples: -1, -10, etc



- 12) Go to Interfaces GetAscii Settings Advanced Polling Message. This section tells PageGate what in the data should be considered the message and also allows for basic reformatting of messages.
- 13) Select 'Dynamic Message' and configure the parameters. If you want everything in the received data to be considered the message, you would use a Start Pattern of * and an End Pattern of ~.

Start Pattern: This value determines the first character in the message block.

For example, if you're working with WCTP and want to use the value in the

<wctp-Alphanumeric> tag, you would use <wctp-Alphanumeric>
as the Start Pattern.

As another example, if you're working with XML and want to key off of

<XML Tag>Value</XML Tag>. You would use <XML Tag> as the Start Pattern.

Start Offset: The number of characters in the start pattern.

End Pattern: This value determines the last character in the sender block.

For example, if you're working with WCTP and are using <wctp-Alphanumeric> as the Start Pattern, you would use </wctp-Alphanumeric> as the End Pattern.

As another example, if you're working with XML are using <XML Tag> as the Start Pattern, you would use </XML Tag> as the End Pattern.

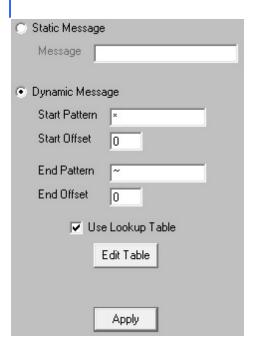
End Offset: The negative value of the number of characters in the End Pattern.

Examples: -1, -10, etc

The <u>lookup table</u> enables PageGate to perform basic search and replace commands. This allows you to interchange or translate values as needed.

To enable this feature, check Use Lookup Table and click Edit Table.



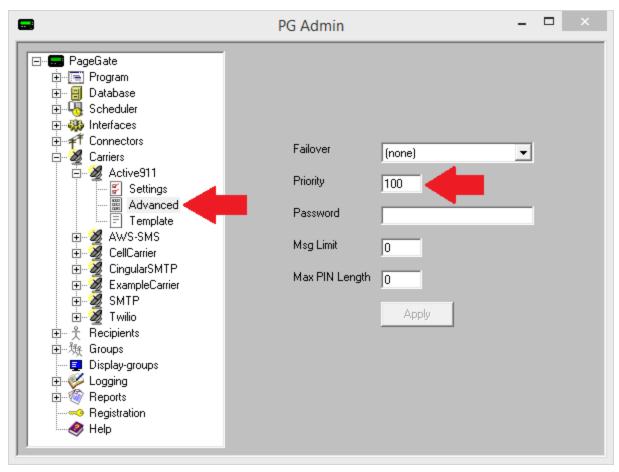


For more information, please see the <u>lookup table</u> section of the documentation. PageGate allows you to prioritize your traffic by setting a priority value at both a carrier and recipient level and the 'Priority' field can be found in the Advanced sub-section of every carrier and recipient.

The scale of priority is 1 (the most important) to 32000 (the least important). By default, all carriers and recipients start with a priority value of 100.

Entries that share a priority value are treated equally. Entries with lower values are treated as more important, entries with higher values are treated as less important.

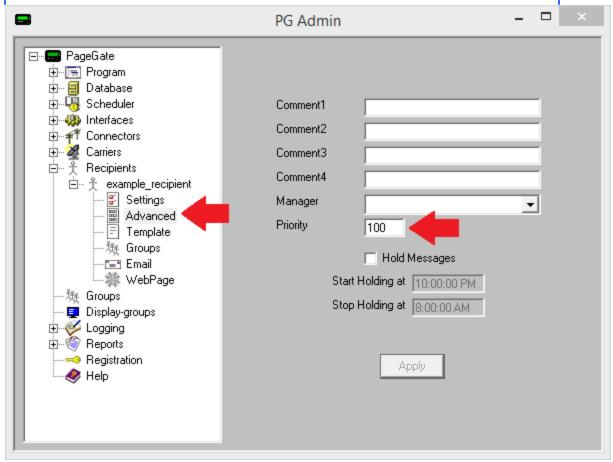
<u>Carrier level priority</u> determines the order in which carriers should have their messages queued.



For example, let's say that you use I Am Responding and Active911's message aggregation service and that you also deliver regular email, SMS and pages through PageGate. If you set the priority value for I Am Responding and Active911 to something lower than the priority value for the other carriers, PageGate will always schedule the I Am Responding and Active911 messages to go out before anything else.

Carrier priority values are determined in a carrier's <u>Advanced sub-section</u>.

<u>Recipient level priority</u> determines the order in which recipients should receive their messages.



For example, let's say that you had a list of 100 recipients and that we had 10 recipients who needed to receive their traffic before anyone else. If you set the priority value for those recipients to something lower than the priority value for the other recipients, PageGate will always schedule their messages first. To give a slightly more practical example, let's say that you have a dispatch supervisor or fire marshal or IT director that needed to be notified before anyone else in the system. You could edit the value of that recipient's Priority field to be lower than the other recipients and that would ensure that they always received their messages first.

Recipient priority values are determined in a recipient's Advanced sub-section.

The PageGate GUI Client is a Windows based program that can be installed both on the PageGate server and on workstations that have network access to the PageGate server's database. Recipients and groups configured in the PageGate Admin display in the recipient list, which allows a user to select them to send a message immediately or schedule a message to go out at a later time.

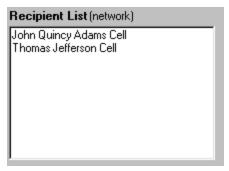
It is also possible to have a GUI Client reference multiple PageGate servers.



This API offers a few unique features, such as the ability to create a scheduled message to go out and to create a scheduled message to go out at a repeating interval. The PageGate server application must be installed and configured before the PageGate GUI Client can be used. Please refer to the PageGate Server's help file for more information on the installation, configuration, and operation of the PageGate Server.

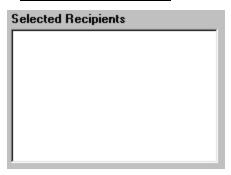
The first step in using the GUI Client is understanding its interface. There three sections of the main interface are:

Recipient List



This section displays all recipients and groups available to message from this installation of the GUI Client. This list can be controlled by <u>display groups</u>, which allow administrators to limit which recipients and groups are available for this workstation to message, as well as modified by <u>filtering the list</u> or creating a <u>local recipient list</u>.

• Selected Recipients



This section displays all recipients and groups selected. To select a recipient or group to message, left click on their name in the 'Recipient List'.

Message Text



This section is where you'll type the message you want to deliver.

Buttons

Along the bottom of the interface, you'll see these buttons:



These buttons allow you to configure <u>preset messages</u>, which configure pre-determined messages to potentially save your operators a lot of typing.

Along the right hand side, you'll see these buttons:



Clear

Clicking this button next to the 'Selected Recipients' section will clear all selections from the list. Clicking on this button next to the 'Message Text' section will clear anything typed in that section.

Options

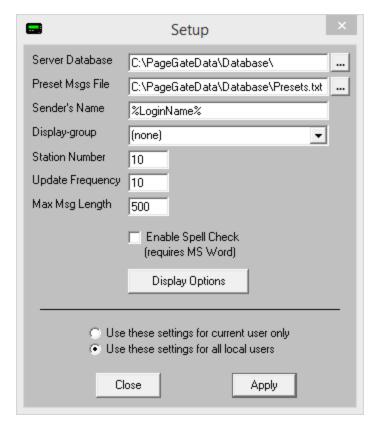
This button is used to configure <u>scheduled and repeating messages</u>.

Send

Clicking this button will send the text in the 'Message Text' to the recipients in the 'Selected Recipients' list.

Configuring the PageGate Client

After <u>installing the PageGate Client</u>, the very first time you run the program, you will be prompted for some basic information.



Setting	Function
Server Database	This should be the path to the PageGate Server's Database. This can be either a local path (if you're running the GUI Client on the same system as the PageGate Server) or a network path.
Preset Msgs File	The PageGate Client's <u>preset messages</u> are stored in the text file specified in this path. Workstations that point to the same file will share presets. Workstations that point to their own file will have their own presets.

This field determines the sender's name attached to any messages sent from
this GUI Client.
By default, this field is set to %LoginName%, which is a value that uses the
Windows username of whoever is currently logged in to the operating system.
This field can also be set to a static value such as Tech, Sales, Jeremy,
Lamar, etc.
This option cannot be configured on initial setup.
This field provides an identifying number that all traffic sent from this system will have associated with it. Workstations that share a station number will be able to see and report on each others' messages. Workstations that do not share a station number will only be able to report on their own messages.
This field determines how often (in seconds) the GUI Client posts data to the PageGate Database.
This field determines how many characters can be typed in the Message field of the GUI Client.
By enabling this option, the GUI Client will automatically spellcheck any messages typed. This option requires MS Word to be installed.
These options cannot be configured on initial setup.
Set this option if each Windows User on this workstation needs to have their own copy of the GUI Client configured.
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Set this option if you all Windows Users who log in to this workstation should share a common configuration.

Using the GUI Client

The PageGate GUI Client is used for scheduling and sending messages to the PageGate Server's list of Recipients and Groups. It shows a list of available Recipients and Groups and is highly customizable. The PageGate Client can be run from the PageGate server or on any workstation that has network access to the PageGate server's Database.



Recipients can be moved to the Selected Recipients column simply by clicking on their name. The Message Text field is where you type the message you want to send. Along the bottom, you'll notice the Prog 1 through Prog 5 and More buttons, those are <u>preset messages</u> and can be configured many ways. <u>Click here</u> for information on what the preset messages are and how to configure them.

• File

This section provides access to the PageGate Client's configuration and settings.

Tools

This section provides methods of filtering the recipient list and provides a spell-check function.

View

This section provides the ability to view and review traffic in the pending queue or sent from this workstation.

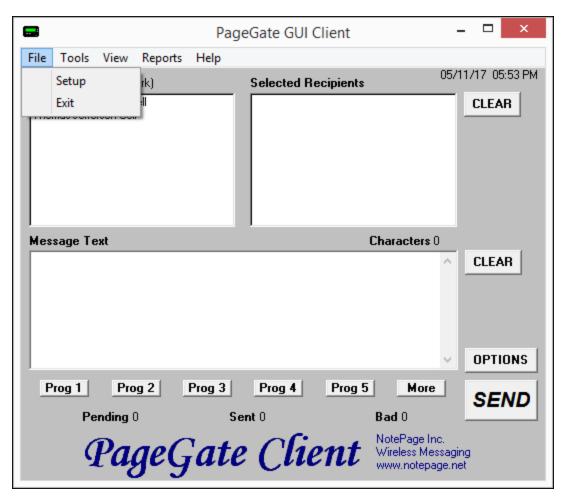
Reports

PageGate GUI Client

This section allows you to run reports on messages sent from any GUI Client that shares a station number with this Client.

Help

This section provides basic help and assistance for using the PageGate Client. File



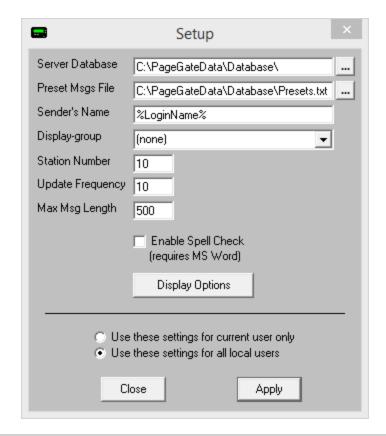
Setup

This option allows you to configure the PageGate Client's settings, including specifying a display group to limit what recipients and groups this workstation is allowed to display.

Exit

This option closes the PageGate Client.

Setup

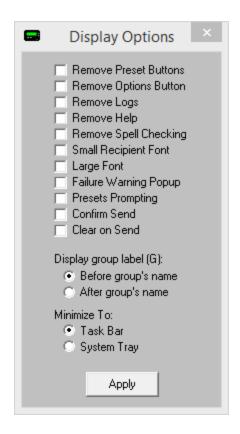


Setting	Function
Server Database	This should be the path to the PageGate Server's Database. Typically speaking, this will be a mapped drive or UNC path to the PageGate server's network shared database directory.
Preset Msgs File	The PageGate Client's <u>preset messages</u> are stored in the text file specified in this path. Workstations that point to the same file will share presets. Workstations that point to their own file will have their own presets.
Sender's Name	This field determines the sender's name attached to any messages sent from this GUI Client. By default, this field is set to %LoginName%, which is a value that uses the Windows username of whoever is currently logged in to the operating system. This field can also be set to a static value such as Tech, Sales, Lamar, etc.
Display- group	This option will lock this installation of the PageGate Client to the selected display group. This will only allow the client to display recipients and groups an administrator has added to the display group. To use this option, you must first create and populate a display group in the PageGate Admin.
Station Number	This field provides an identifying number that all traffic sent from this system will have associated with it. Workstations that share a station number will be

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	able to see and report on each others' messages. Workstations that do not share a station number will only be able to report on their own messages.
Update Frequenc y	This field determines how often (in seconds) the GUI Client posts data to the PageGate Database.
Max Msg Length	This field determines how many characters can be typed in the Message field of the GUI Client.
Enable Spell Check	By enabling this option, the GUI Client will automatically spell check any messages typed. This option requires MS Word to be installed.
<u>Display</u> <u>Options</u>	This button allows you to modify basic display settings for the PageGate Client.
Use these settings for current user only	Set this option if each Windows User needs to have their own copy of the GUI Client configured.
Use these settings for all local users	Set this option if you want these settings to be saved for all Windows Users who log in to this workstation.

Display Options



Setting	Function
Remove Preset Buttons	Enabling this will remove the Prog1, Prog2, Prog3, Prog4, Prog5, and More buttons. This removes this workstation's ability to use <u>preset messages</u> .
Remove Options Button	Enabling this will remove the Options button. This removes this workstation's ability to schedule messages .
Remove Logs	Enabling this will remove the ability of this GUI Client to view any log files. This removes this workstation's ability to <u>run reports</u> .
Remove Help	Enabling this will remove the Help menu.
Remove Spell Checking	Enabling this will remove the Spell Checking function of this GUI Client.
Small Recipient Font	Enabling this will display the recipient and selected recipient lists in a smaller font.
Large Font	Enabling this will display the recipient and selected recipient lists in a larger font.
Failure Warning Popup	When this is enabled, every time a message fails, you will be notified by a popup window.
Presets	For this setting to function properly, you must first configure a set of preset messages in the PageFate client. Next, set up one of the first nine presets with a recipient but no message.
Prompting	If that has been done and this option is enabled, if you click on the visible preset button, a pop-up will list all of the possible preset messages for that recipient. This allows a user to click a preset for a recipient and choose a commonly used message for them.
Confirm Send	When this is enabled, every time the Send button is clicked, you will be prompted to confirm the delivery of the message.
Clear on Send	When this option is enabled, the Message and Selected Recipient portions of this GUI Client are cleared after the Send button is clicked.
Display group label (G)	You can choose to have the (G) for Group label appear before or after your groups' names. If the (G) appears before, the groups will automatically be sorted to the top of the Recipient list. If the (G) appears after, the groups will be sorted by the first letter in the group name.
Minimize To	You can choose to have the GUI Client minimize to the Task Bar or the System Tray. If the GUI Client is set to minimize to the Task Bar, you will see it to the right of the Start Menu when the program is minimized. When the

PageGate GUI Client

program is set to minimize to the System Tray, it will appear as an icon of a pager next to the clock in the lower right hand corner of the screen.

Tools



Filter Recipients

This section allows you to filter what recipients are currently displayed in the recipient list. This is a useful way for quickly finding recipients and groups.

Presets

This section allows you to modify the preset messages.

Local Recipients

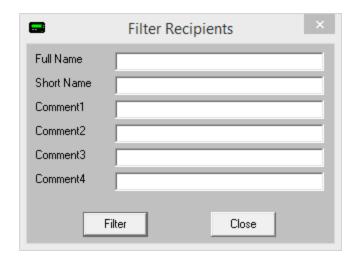
This option allows you to configure a list of recipients that you want this workstation to default to.

Check Spelling

Selecting this option will check spelling and grammar in the Message Text section.

Filter Recipients

This function allows you to filter the list of recipients shown in the 'Recipient List' of the GUI interface. You can filter recipients by full name (the name that is displayed in the 'Recipient List'), by short name (the name used by the PageGate Admin), or by any of for other user definable fields (these are also configured within the PageGate Admin).



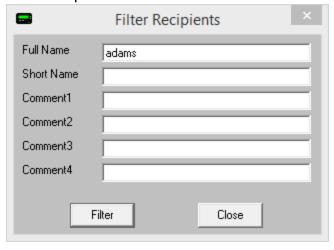
Setting	Function
Full Name	This field requires the Full Name field of a recipient in the PageGate Admin to match the pattern you enter here. For example, to have only those recipients whose Full Name field begins with Tech show in the recipient list, you would enter Tech here.
Short Name	This field requires the Recipient field of a recipient in the PageGate Admin to match the pattern you enter here. For example, to have only those recipients whose Recipient field begins with oncall show in the recipient list, you would enter oncall here.
Comment1 - Comment4	When creating a recipient in the PageGate Admin, you can specify certain comment fields. This field requires the Comment Field in the Recipient's Settings to match whatever you enter here.
Filter	Clicking on this button will Filter the Recipient list with your criteria.
Close	This will close this option dialog without filtering your Recipient view.

As an example, let's say that this is our recipient list:

PageGate GUI Client



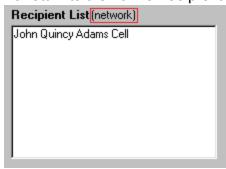
If we set up a filter like this:



That will make the recipient list display only those recipients and groups with 'adams' in the Full Name field of their record in the PageGate server's database.

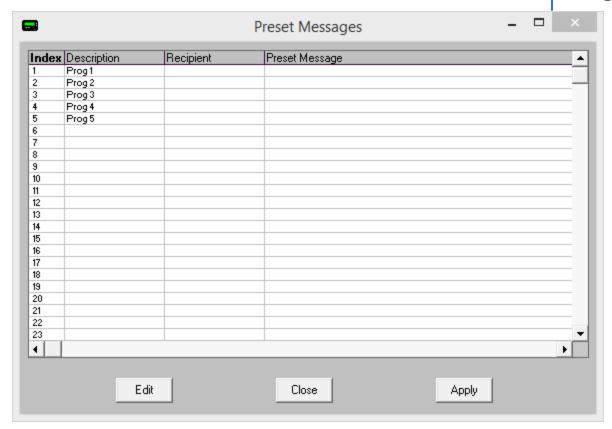


To return to the normal recipient list view, click on the word (network) next to Recipient List.

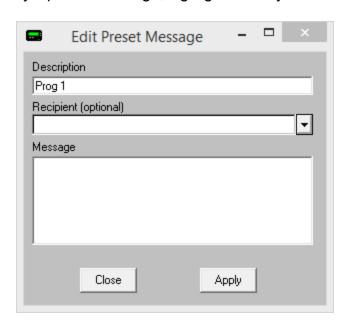


Presets

The Presets function allows you to customize and create preset messages that will go to a recipient, group, or list of recipients and groups. This is useful if you need 'canned' messages and don't want to have to type the same message over and over and over.



To modify a preset message, highlight an entry and click Edit.



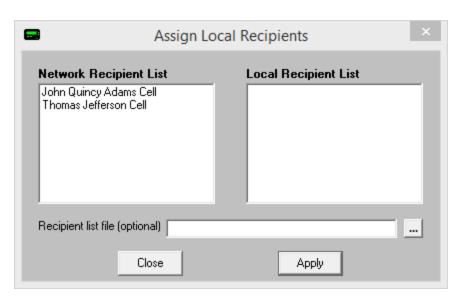
Setting	Function
Description	This field represents a description of this preset message. This field also represents the text displayed in the GUI Client for the first five preset message buttons (Prog 1 through Prog 5, by default).

Recipient (optional)	This field allows you to specify a specific recipient or group this preset message should go to. This saves time by pre-selecting the necessary recipient or group.
Message	This field allows you to specify the body of the message that should be inserted when this preset message is referenced.
Close	This button will close the 'Edit Preset Message' dialog without saving any recently made changes.
Apply	This button will close the 'Edit Preset Message' dialog and will save any recently made changes.

Local Recipients

NOTE: If you have a local recipient list configured, it will be the default list displayed each time you start the GUI Client.

This section allows you a user to customize the list of recipients and groups displayed in the Recipients list, allowing a user to easily switch back and forth between their custom defined list and the master list of recipients and groups they're allowed to see.



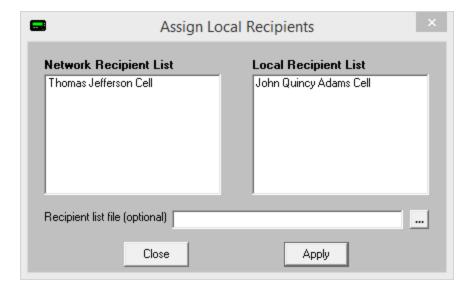
Section	Function
Network	This section displays all recipients and groups available to this GUI Client. To
Recipient	move a recipient or group to the 'Local Recipient List' section, click on their
List	name.
Local	This section displays the recipients and groups selected for the local recipient
Recipient	, , , , , , , , , , , , , , , , , , ,
List	on their name.
Recipient list file	By default, each GUI Client has its own, unique local recipient list. If workstations should share a local recipient list, specify the file path and file name in this field.
	For example, let's say that we have a shared network location of \ \PageGateServer\Database\

You could then specify \PageGateServer\Database\localrecipients.txt in this field for all GUI Client you want to share a local recipient list.

As an example, let's say that this is our recipient list:



If we set up a local recipients list like this:

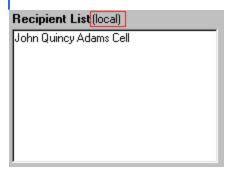


That will make the recipient list display as follows:

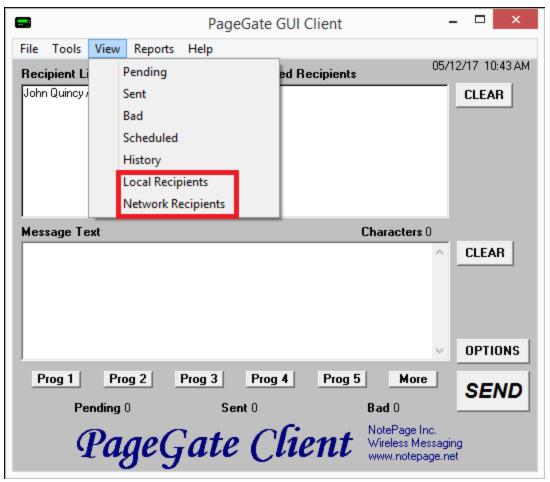


To return to the normal recipient list view, click on the word (local) next to Recipient List.

PageGate GUI Client



There are also options in the <u>View menu</u> to switch between the local and network recipients lists.



View

This section provides the ability to review messages sent from this workstation and also provides another option for switching between a <u>local recipients list</u> and the network recipients list.



Pending

This option will display all messages sent from this Client's <u>station number</u> that are in the pending message queue.

Sent

This option will display all messages sent from this Client's <u>station number</u> that were successfully delivered.

Bad

This option will display all messages sent from this Client's <u>station number</u> that could not be delivered.

Scheduled

This option will display all scheduled messages created by this Client's station number.

History

This option will display the entire history of messages, good or bad, for this Client's <u>station</u> number.

Local Recipients

Selecting this option will display any configured local recipient list.

• Network Recipients

Selecting this option will display the full list of recipients and groups available to this Client. **Pending**

This option will display all messages sent from this Client's <u>station number</u> that are in the pending message queue.



Section	Function
Requeste d	This column displays the Date and Time at which the pending message was scheduled.
Sent To	This column displays to whom the message was intended.
Message	This column displays the message intended for the recipient or group.
Refresh	Clicking this button will refresh the list of Pending Messages.
Delete	Highlighting a pending message and clicking this button will delete the message from the queue, allowing you to cancel any pending message.
Сору	By highlighting a Pending message and clicking this button, you will be taken back to the main GUI Client interface, the message will be inserted into the Message section and the Selected Recipients will be moved.
Close	This button closes the Pending Messages view.

Sent

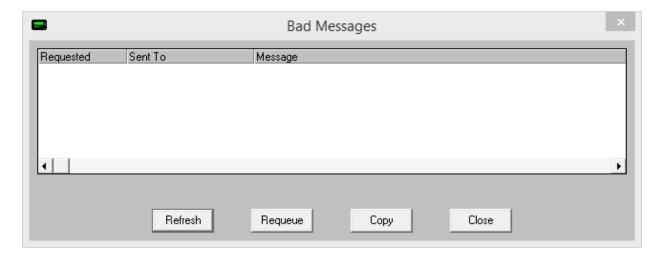
This option will display all messages sent from this Client's <u>station number</u> that were successfully delivered.



Section	Function
Sent	This column displays the Date and Time at which the message was sent.
Sent To	This column displays to whom the message was intended.
Message	This column displays the message sent to the recipient or group.
Refresh	Clicking this button will refresh the list of Sent Messages.
Requeue	Highlighting a failed message and clicking this button will queue this message to the originally specified recipients and groups for immediate delivery.
Сору	By highlighting a Sent message and clicking this button, you will be taken back to the main GUI Client interface, the message will be inserted into the Message section and the Selected Recipients will be moved.
Close	This button closes the Sent Messages view.

Bad

This option will display all messages sent from this Client's <u>station number</u> that could not be delivered.

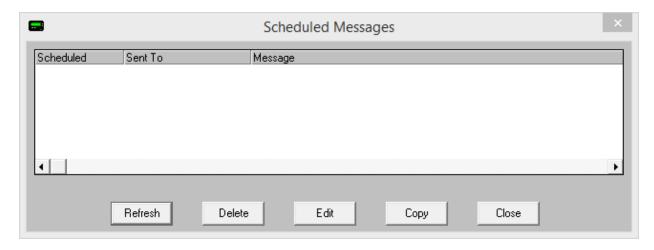


PageGate GUI Client

Section	Function
Requeste d	This column displays the Date and Time at which the message failed.
Sent To	This column displays to whom the message was intended.
Message	This column displays the message sent to the recipient or group.
Refresh	Clicking this button will refresh the list of Sent Messages.
Requeue	Highlighting a failed message and clicking this button will queue this message to the originally specified recipients and groups for immediate delivery.
Сору	By highlighting a failed message and clicking this button, you will be taken back to the main GUI Client interface, the message will be inserted into the Message section and the Selected Recipients will be moved.
Close	This button closes the Bad Messages view.

Scheduled

This option will display all scheduled messages created by this Client's station number.

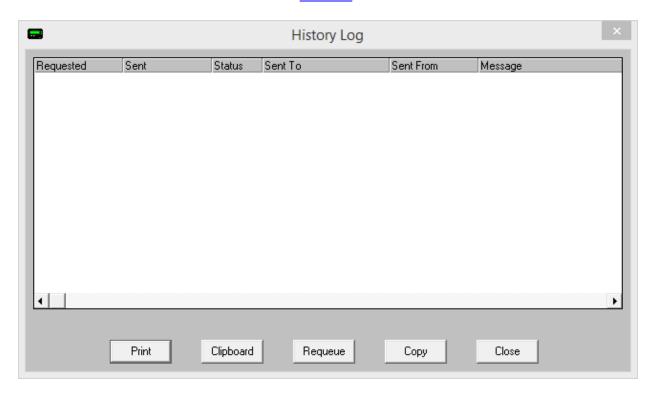


Section	Function
Schedule d	This column displays the Date and Time at which the message was scheduled.
Sent To	This column displays to whom the message was intended.
Message	This column displays the message intended for the recipient or group.
Refresh	Clicking this button will refresh the list of Scheduled Messages.
Delete	Highlighting a scheduled message and clicking this button will delete the selected message.

Сору	By highlighting a scheduled message and clicking this button, you will be take back to the main GUI Client interface, the message will be inserted into the Message section and the Selected Recipients will be moved.	
Close	This button closes the Scheduled Messages view.	

History

This option will display the entire history of messages, good or bad, for this Client's <u>station</u> <u>number</u>.

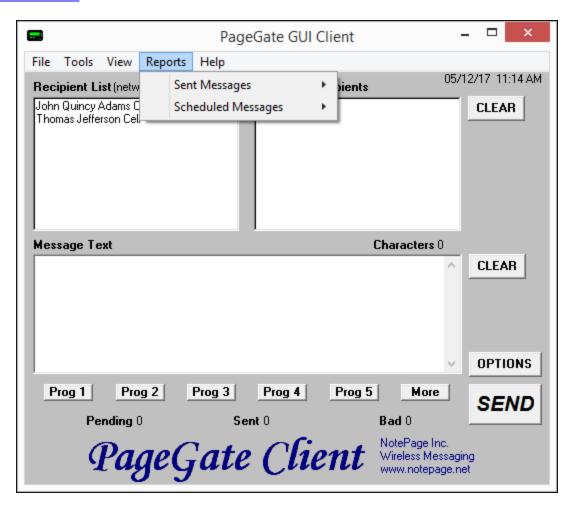


Secti	Function	
on		
Reque sted	This column displays the Date and Time at which the message was scheduled.	
Sent	This column displays the Date and Time at which the process to deliver the message was completed.	
Status	This column displays whether the process to deliver the message was successful or if the message could not be delivered.	
Sent To	This column displays to whom the message was intended.	
Sent From	This column displays the Sender that queued the message.	
Messa ge	This column displays the message intended for the recipient.	
Print	Clicking this button will send the Message History Log to the printer.	

Clipbo	This button will copy the entire Message History Log to the clipboard and will allow		
ard	you to paste the message into a text editor or email.		
Reque	Highlighting any message and clicking this button will queue this message to the		
ue	originally specified recipients and groups for immediate delivery.		
Сору	By highlighting any message and clicking this button, you will be taken back to the main GUI Client interface, the message will be inserted into the Message section and the Selected Recipients will be moved.		
Close	This button closes the History Log view.		

Reports

This section allows you to run reports on messages sent from any GUI Client that shares a station number with this Client.



Sent Messages

This section allows you to run reports on messages sent from any GUI Client that shares a station number with this Client.

• <u>Scheduled Messages</u>

This section allows you to run reports on scheduled messages created by any GUI Client that shares a <u>station number</u> with this Client.

Sent Messages

This section allows you to run reports on messages sent from any GUI Client that shares a station number with this Client.



Sent Messages by Recipient

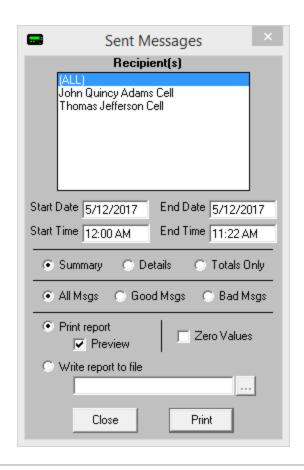
This section allows you to run reports based on the recipient or group.

Sent Messages by Date/Time

This section allows you to run reports on messages in a date and time range.

PageGate GUI Client

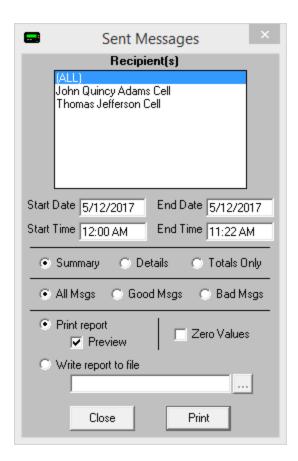
By Recipient



Setting	Function		
Recipient(s)	You can select a single recipient or group or leave the (ALL) option highlighted to run a report on all recipients and groups. To select multiple recipients and groups, Ctrl+left click on each item you want to select.		
Start Date	The beginning date of the date range the report should show.		
End Date	The ending date of the date range the report should show.		
Start Time	The beginning time of the time range the report should show.		
End Time	The beginning time of the time range the report should show.		
Summary,	<u>Summary</u> Selecting this option will give a brief overview of the information requested		
Details, Totals Only	Details Selecting this option will include all possible information requested.		
	Totals Only		

	Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.		
	All Msgs Selecting this option will run the report on all messages, good or bad.		
All Msgs, ● Good Msgs			
Good Msgs, Selecting this option will only report on messages that were delivered bad Msgs			
	• Bad Msgs		
	Selecting this option will only report on messages that could not be delivered.		
Print Report	This option allows you to print the report to a selected printer.		
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.		
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.		
Write report	, , , , , , , , , , , , , , , , , , , ,		
to file	specification and name instead of queued to the printer.		

By Date/Time



2 441			
Setting	Function		
Recipient(s)	You can select a single recipient or group or leave the (ALL) option highlighted to run a report on all recipients and groups. To select multiple recipients and groups, Ctrl+left click on each item you want to select.		
Start Date	The beginning date of the date range the report should show.		
End Date	The ending date of the date range the report should show.		
Start Time	The beginning time of the time range the report should show.		
End Time	The beginning time of the time range the report should show.		
	• <u>Summary</u> Selecting this option will give a brief overview of the information requested		
Summary, Details, Totals Only	Details Selecting this option will include all possible information requested.		
	• Totals Only Selecting this option will only output the number of messages reported on without giving any information about the messages themselves.		
	<u>All Msgs</u> Selecting this option will run the report on all messages, good or bad.		
All Msgs, Good Msgs, Bad Msgs	Good Msgs Selecting this option will only report on messages that were delivered. Ped Msgs		
	 <u>Bad Msgs</u> Selecting this option will only report on messages that could not be delivered. 		
Print Report	This option allows you to print the report to a selected printer.		
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.		
Zero Values	Enabling this option will include results that have a value of 0. This option is disabled by default.		
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.		

Scheduled Messages

This section allows you to run reports on scheduled messages created by any GUI Client that shares a <u>station number</u> with this Client.



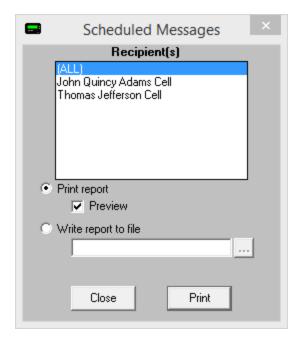
Scheduled Messages by Recipient

This section allows you to run reports based on the recipient or group.

Scheduled Messages by Date/Time

This section allows you to run a report of all scheduled messages created by any GUI Client that shares a <u>station number</u> with this Client.

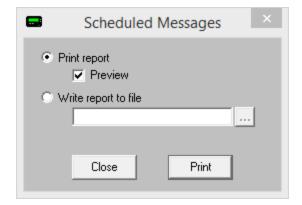
This section allows you to run reports based on the recipient or group.



Setting	Function		
Recipient(s)	You can select a single recipient or group or leave the (ALL) option highlighted to run a report on all recipients and groups. To select multiple recipients and groups, Ctrl+left click on each item you want to select.		
Print Report	This option allows you to print the report to a selected printer.		
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview, in which case nothing is printed, or print the report.		
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.		

By Date/Time

This section allows you to run a report of all scheduled messages created by any GUI Client that shares a <u>station number</u> with this Client.

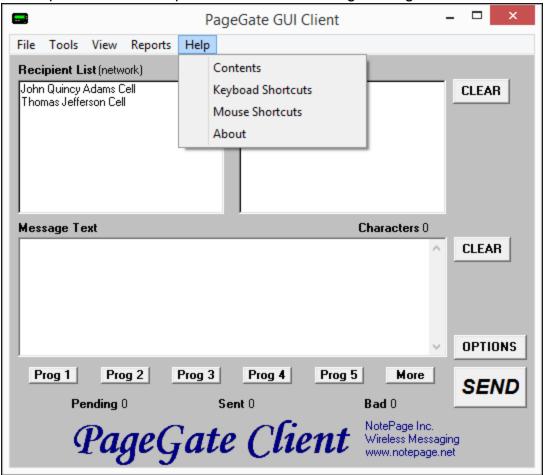


Setting	Function		
Print Report	This option allows you to print the report to a selected printer.		
Preview	When this option is enabled, before the report is actually printed, you are shown the details of the report and can choose to either close the preview in which case nothing is printed, or print the report.		
Write report to file	When this option is enabled, the report is written to a file of your specification and name instead of queued to the printer.		

PageGate GUI Client

Help

This section provides basic help and assistance for using the PageGate Client.



Contents

This section will open the help file.

Keyboard Shortcuts

This section will display all keyboard shortcuts that can be used with the PageGate Client.

Mouse Shortcuts

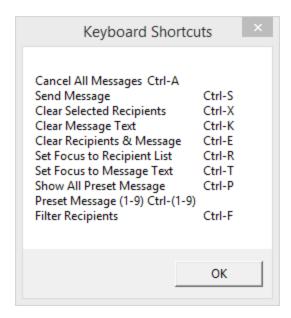
This section will display all mouse shortcuts that can be used with the PageGate Client.

About

This section displays version and registration information for this installation of the PageGate Client.

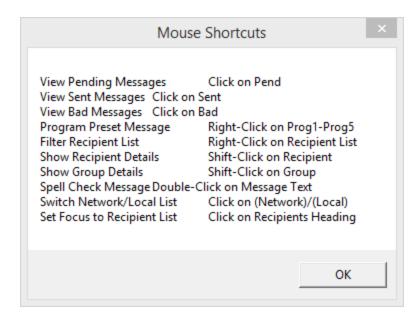
Keyboard Shortcuts

This section displays all keyboard shortcuts that can be used with the PageGate Client.



Mouse Shortcuts

This section displays all mouse shortcuts that can be used with the PageGate Client.



PageGate GUI Client

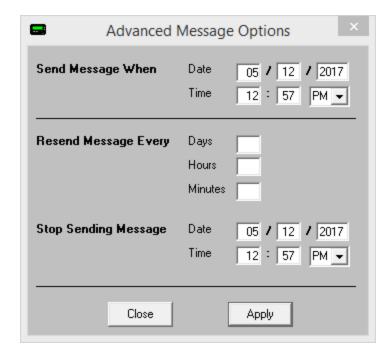
About

This section displays version and registration information.



Scheduling Messages

This section allows you to configure scheduled and repeating messages. Before clicking on the 'Options' button, select a recipient (or group) and type the message you want scheduled in the 'Message Text' box. Before you click the Send button, click the Options button to configure your schedule. When you've finished, click Apply, then click the Send button.



With this prompt, you can schedule messages to automatically be sent at some point in the future. You can also determine if that message will repeat or not.

To schedule a page to be sent at a future date and time, fill in the 'Send Message When' fields.

To have the scheduled message repeat, set the "Resend Messages Every" fields to the interval at which the message should be delivered.

Last, fill in the 'Stop Sending Message' fields to set the date and time for the message to stop being sent.

For example, let's say that you had a message that, starting tomorrow, needed to be sent out once a day for one month.

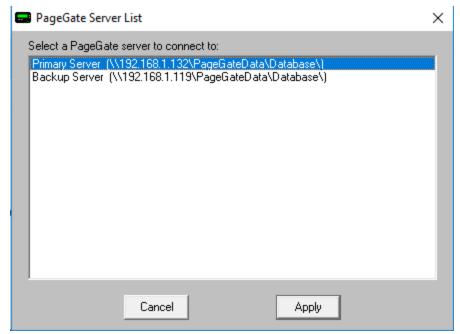
You would set the "Send Message When" date to tomorrow's date, set the time for whatever time the message needs to be delivered. You would then set the "Resend message every" to 1 day OR 24 hours OR 1440 minutes.

The final step would be to set the "Stop Sending Message" date and time to exactly one month from the "Send Message When" Date.

Click Apply, then click on the Send button. The message is now scheduled!

PageGate GUI Client

Using a Single GUI Client with Multiple Servers



It is possible for the PageGate Client reference more than one PageGate server, though not simultaneously. If you provide the appropriate list of paths, the GUI Client will prompt the user for which server to connect to.

- 1) Run Notepad or your preferred text editor.
- On each line of the file, specify the following:
 ServerName, UNC or Mapped Drive path to a PageGate server's database.

Examples:

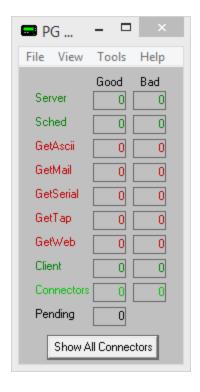
Primary Server,\\192.168.1.132\PageGateData\Database\ Secondary Server,\\192.168.1.119\PageGateData\Database\

3) Save the file in the PageGate Client program directory and name it 'serverlist'. You may want to verify that your text editor is saving the file with a .txt extension as the full file name needs to be 'serverlist.txt'.

If the file is present and formatted correctly, you'll receive a prompt for the server to connect to when the GUI Client is launched.

The PageGate Monitor (PG Monitor) is used for monitoring all aspects of the PageGate Server. It shows a set of real time log windows that display what each module of the program has done and is currently doing. The PageGate Monitor can

also be configured to pass special alerts to NotePager Pro to notify someone when the PageGate server encounters an issue.



PG Monitor can be run from the PageGate server or on an administrator's workstation. Items shown in green are currently running. Items shown in red are stopped.

The Good and Bad Columns show how many messages each module has successfully or unsuccessfully processed.

The Pending category shows the number of messages currently waiting to be delivered.

File

This section allows you to configure the basic settings of the PageGate Monitor as well as configure the NotePager Pro alerts function.

View

This section allows you to select which logging windows will display.

Tools

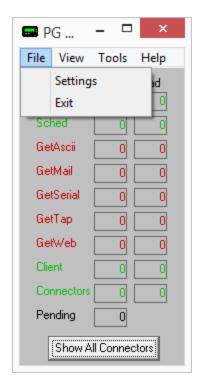
This section allows you to reset the counters or clear the visible logs from this instance of the PageGate Monitor.

Help

This section provides basic help and tools for using the PageGate Monitor.

File

This section allows you to configure the basic settings of the PageGate Monitor as well as configure the NotePager Pro alerts function.



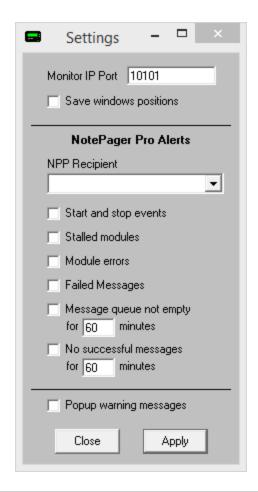
• <u>Settings</u>

This section allows you to configure the basic settings of the PageGate Monitor as well as configure the NotePager Pro alerts function.

• Exit

Selecting this option will close the PG Monitor.

Settings



Setting	Function		
Monitor IP Port	This TCP/IP port on which the PageGate Monitor receives its data. This setting must match the port specified in the Logging Settings of the PageGate Admin.		
Save windows positions	If you move or modify the position, shape, or size of the log windows displayed by the PageGate Monitor and don't have this option checked, the log windows will revert to their original state each time you close the Monitor.		

NotePager Pro Alerts

Note: Everything under this heading requires NotePager Pro to be installed and configured. For more information, please refer to our website:

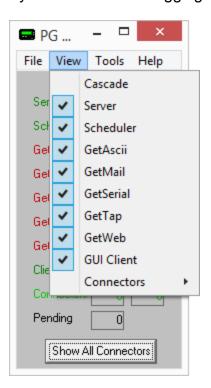
https://www.notepage.net/notepagerpro.htm

NPP Recipient	Use this field to specify a recipient or group you've configured within NotePager Pro. All alerts sent from the PageGate Monitor will go to this NotePager Pro Recipient.
Start and stop events	When this option is enabled, all instances of a PageGate Module Starting or Stopping will be messaged to the specified NotePager Pro Recipient or Group.

Stalled modules	When this option is enabled, if a module has stalled or is unresponsive in Windows, the specified NotePager Pro Recipient or Group will be messaged.			
Module errors	When this option is enabled, if a module produces an error message, that error message will be sent to the specified NotePager Pro Recipient or Group.			
Failed Messages	When this option is enabled, if a message fails, the specified NotePager Pro Recipient or Group will be notified.			
Message queue not empty for X minutes	When this option is enabled, if the number of pending messages never reaches zero for a specified amount of time, the specified NotePager Pro Recipient or Group will be notified.			
No successful messages for X minutes	When this option is enabled, if no message is successfully sent for X num of minutes, the specified NotePager Pro Recipient or Group will be notified			
Close	This button will close the Settings of the PageGate Monitor. If you haven' Applied your changes, they will be lost.			
Apply	This button will save all modifications you've recently made to the Settings of the PageGate Monitor.			

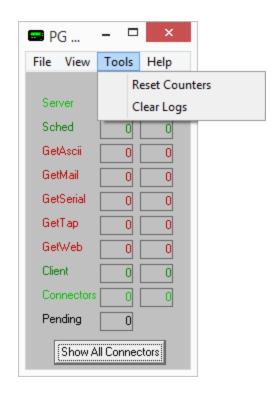
View

This section allows you to select which logging windows will display.



The View menu allows you to specify which log windows are shown. Generally, you should always run the Server, Scheduler, and Connector1 log windows; the rest are optional. You can specify whether a log window is shown by checking or unchecking each option under the View menu.

Tools



Reset Counters

Selecting this option will reset the good and bad counters for this instance of the PG Monitor to 0.

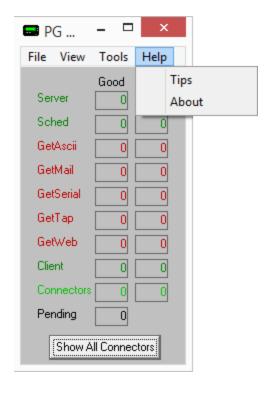
• Clear Logs

Selecting this option will clear the visible log windows for this instance of the PG Monitor.

PageGate Monitor

Help

This section provides basic help and tools for using the PageGate Monitor.

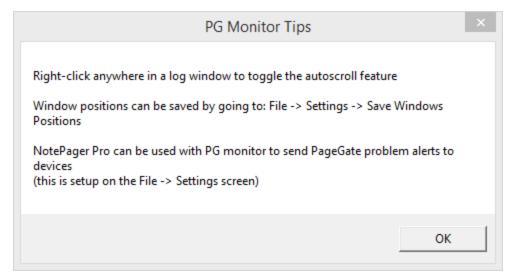


• <u>Tips</u>

This section will display a list of useful tips for using the PageGate Monitor.

About

This section will display version information about this instance of the PageGate Monitor. Tips



About

This section displays version information about this instance of the PageGate Monitor.



PageGate has a few key features that allow the program to monitor itself and potentially alert recipients and groups that there is an issue.

• PageGate Monitor

The PageGate Monitor (PG Monitor) is used for monitoring all aspects of the PageGate Server. It shows a set of real time log windows that display what each module of the program has done and is currently doing.

NotePager Pro alerts via PageGate Monitor

Naturally, if PageGate is experiencing an issue, it may not be able to use its own messaging engine to notify you of the problem. The PageGate Monitor can be configured to send alerts through NotePager Pro's messaging engine in the event that certain alert criteria are met.

PageGate Log Monitoring

PageGate's log monitor feature allows it to scan through its own log files and trigger certain behaviors, like executing a script and/or writing a file to a directory, based on your search criteria.

PageGate Log Monitor Feature

PageGate's log monitor feature allows the program to scan through its own log files and trigger certain behaviors based on what you're looking for.

Step 1: Create the LogMonitorInfo.txt file in the PageGate Database folder.

Keeping an eye on PageGate

- 1) In Windows, browse in to your PageGate Database folder.
- 1a) To determine its location, open PG Admin and go to Program Settings
- 2) Create a new Text Document and name the file: LogMonitorInfo.txt
- 2a) This file's name and location are very important and the file must be precisely named LogMonitorInfo.txt make sure your text editor doesn't try to use a custom extension.
- 3) Open the file for editing.

Step 2: Determine what keywords and key phrases to scan for

Step 3: Determine which PageGate log(s) you need to scan

Step 4: Write the necessary lines in LogMonitorInfo.txt

This file is written in a Comma Separated Values format, which means each new line is a record and also that each object in each record will need to be separated by commas.

Each line of the file will reference 4 things and in this order:

Module, Match, Command, Continue

Module

This will need to reference one of PageGate's executable names, without the extension.

For example, if you want to scan the global log, you would use pagegate. If you want to scan the scheduler log, you would use pgsched.

Again, this field needs to reference the file name of one of PageGate's executables, without the extension, and determines which log is being scanned.

PGDialX can be used as a module name to apply to all Connector modules.

Match

This field is case sensitive and determines what text to search for in the scanned log.

Quotes, commas and blackslashes in search terms will need to be expressed as their ASCII value, prefixed by a backslash (\).

Character	ASCII Value	Expression
\	092	\092
"	034	\034
,	044	\044

Command

This determines what command should be executed if a match is found and can reference anything that can be called on from a command line. You could run cmd and echo a text file to a specific location as easily as you could execute a powershell script or run a batch file.

The following macros are available for use in the Command value:

- %DateTime% date and time of log message
- %Module% the PG module name
- %Message% the message being logged

Continue

This value can be set to True or False.

If set to to True, successive lines in the file will be used.

If set to False, this line will be treated as the last relevant line in the file.

Step 5: Cycle the PageGate service to implement new settings

Changes to LogMonitorInfo.txt are not recognized in real time and require a service restart of PageGate's connectors. The easiest way to do this is:

- 1) Open PG Admin on the PageGate server. This cannot be done from a workstation Admin.
- 2) Right click Connectors and select 'Stop All'.
- 3) Right click Connectors and select 'Start All'.

Examples

This is an example that would scan the Connector 1 log file for any failed messages and echo all failed message log lines to c:\temp\failures.txt:

"PGDial1","FAILED", "cmd /c @echo %DateTime% %Module% %Message% >> c: \092temp\092failures.txt", "True"

This is an example that would scan all Connector for any instance of traffic being put through PageGate's failover system and execute a batch file that could, among other things, call on a Powershell script:

"PGDialX", "Carrier retry limit reached. Redirecting messages", "c:

\PageGateData\Scripts\YourBatchFile.bat", "True"

PG Monitor Alerts through NotePager Pro

This should not be done on the PageGate server.

Naturally, if PageGate is experiencing an issue, it may not be able to use its own messaging engine to notify you of the problem. The PageGate Monitor can be configured

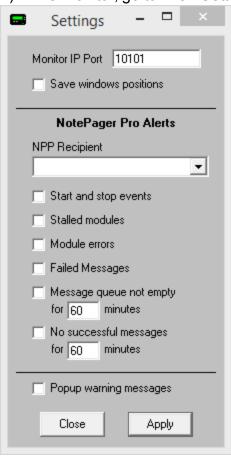
to send alerts through NotePager Pro's messaging engine in the event that certain alert criteria are met.

Step 1: Install the workstation PG Monitor and NotePager Pro on a workstation

- 1) Install the workstation PG Monitor
- 2) Install NotePager Pro
- 3) Configure at least one recipient and/or group in NotePager Pro. This will be the person or group of people who will receive any alerts.

Step 2: Configure the PG Monitor alerts

1) In PG Monitor, go to File - Settings



- 2) In the 'NPP Recipient' dropdown, select the recipient or group that should receive the alerts
- 3) Select the events that should trigger an alert:

Start and stop events When this option is enabled, all instances of a PageGate Module Starting or Stopping will be messaged to the specified NotePager Pro Recipient or Group.

Stalled modules	When this option is enabled, if a module has stalled or is unresponsive in Windows, the specified NotePager Pro Recipient or Group will be messaged.
Module errors	When this option is enabled, if a module produces an error message, that error message will be sent to the specified NotePager Pro Recipient or Group.
Failed	When this option is enabled, if a message fails, the specified NotePager
Messages	Pro Recipient or Group will be notified.
Message queue not empty for X minutes	When this option is enabled, if the number of pending messages never reaches zero for a specified amount of time, the specified NotePager Pro Recipient or Group will be notified.
No successful messages for X minutes	When this option is enabled, if no message is successfully sent for X number of minutes, the specified NotePager Pro Recipient or Group will be notified.

4) Click Apply.

There are several places to find help on the operation of PageGate. This Help file is one of the best resource for most questions; it can be accessed from the PageGate program group in your Start Menu, or by clicking Help in the PageGate Admin.

NotePage Support is available Monday through Friday from 9:00 AM to 5:00 PM Eastern Time and can be reached by phone at 781-829-0500 x 2 or by email at support@notepage.com

Support can also be reached through the NotePage Forum at https://www.notepage.net/forum/

For more information, please visit the support section of our website: https://www.notepage.net/support.htm

If contacting NotePage's Technical Support Department, please obtain the relevant PageGate Log files and database. For more information on how to do that, please review the <u>Database</u> and <u>Logging</u> sections of the documentation.

All of PageGate's manuals are also available on in the support section of NotePage's website in HTML, PDF and Rich Text format. (found under the 'Support' section): https://www.notepage.net/support.htm

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POP Collect Port 869



Security Alias 440 Security Manager 800, 814