



Secure Instant Messaging for Business

Introduction	2
Configuration	3
Configure SMTP	4
Configure POP3	5
Configure Hosted Addresses	6
SMS/Pager carrier email addresses	7



Introduction

The Email and SMSPager Gateway Application Servers are both based on the same technology and are configured in the same manner. For the remainder of this document unless otherwise specified, the discussion will apply to both the Email and the SMSPager GAS servers.

An EBS GAS (Gateway Application Server) is a server side plug-in for the IMiN system that facilitates access by IMiN applications to non EBS specific transports through the EBS network system. For example, a GAS may allow the IMiN application Communicator to send messages to a Fax recipient, an Email recipient or even a public IM recipient (such as AIM or ICQ). The GAS plugs into the EBS layer and takes care of the mechanics of translating EBS data to and from the format supported by the external transport.

The EBS Email GAS facilitates full roundtrip communication from any IMiN application to any person or device that is capable of sending or receiving email. That is, a message can originate from Communicator, be sent to an email destination and if the destination replies, that reply email will 'roundtrip' and be delivered back to the originating Communicator client.

The EBS SMSPager GAS is able to leverage the EBS Email GAS technology because most US wireless carriers facilitate the delivery of GSM SMS messages and Pages to their devices by sending an email to a specific email address hosted by the carrier. A full list of all supported carriers and the email address format required can be found in the appendices. The SMSPager GAS comes preconfigured to minimize the amount of data added to an outbound email. This is in an attempt to facilitate the character limitations inherent to SMS and Pager devices (which can be as low as 160 characters).

Due to limitations in some phones and Pagers, emails that are sent through the SMSPager GAS may not always be capable of being round-tripped back into the EBS system. This is because the SMSPager GAS embeds some information in the outbound email subject which needs to be included in the reply email to facilitate round tripping. Some phones and pagers do not include any part of the original message in the reply, and hence the SMSPager GAS will be unable to deliver the reply email back to the original IMiN sender. In this situation the SMSPager will send an error email to the device that sent the deficient email.



Configuration

The Email GAS uses the standard SMTP and POP3 internet protocols to send and receive emails through any standard Email server. You must have access to an email server that supports SMTP and POP3 to use the Email GAS. You will also need to create a user account and mailbox on the SMTP/POP3 server specifically for both the Email and the SMSPager servers.

Adding a user account to an email server is heavily dependent on the email server your company is using. Please refer to your email server documentation to find out how to add a user. You will need to add two users (one for the Email GAS and one for the SMSPager GAS). The username doesn't matter, but for the remainder of this document they will be referred to as EBSEmail and EBSSMSPager respectively.

The following instructions detail how to set up the Email GAS. Once the Email GAS is configured, repeat the instructions for the SMSPager GAS.

GAS configuration is split into two parts. The first part is configuring the GAS server so it can find the SMTP and POP3 servers. The second part is configuring all the email addresses that the GAS will host.



Configure SMTP

You will need to configure an SMTP server if you intend to use the Email GAS to allow IMiN applications to send emails.

- 1) Open the EBS Admin (<http://localhost/ebadmin/Default.aspx>) and select the Email tab along the top row.
- 2) In the left hand column, select SMTP Servers and click Add New.
- 3) Enter the IP or DNS name of the SMTP server and the username and password of the new user account you previously set up on the server. Finally, select the authentication method. This will most often be Base64, but your server may require a different setting.
- 4) Save the server settings by clicking the Save Settings button on the left of the row.
- 5) In the left hand column, select User Reply Addresses.
- 6) The entry for “Default User” determines the email address from which all outbound emails will appear to be sent from. You must edit this entry and set it to the email address associated with the user account you are using to log onto the SMTP and POP3 servers (usually EBSEmail@yourdomain.com).



Configure POP3

You will only need to configure a POP3 server if you intend to use the Email GAS to allow emails to be received and delivered to IMiN applications. For example, in a situation where you are setting up the SMSPager GAS for 1 way pagers, then you may not need to configure a POP3 server.

- 1) Open the EBS Admin (<http://localhost/ebadmin/Default.aspx>) and select the Email tab along the top row.
- 2) In the left hand column, select POP3 Servers and click Add New.
- 3) Enter the IP or DNS name of the POP3 server and the username and password of the new user account you previously set up on the server. It is essential that the account whose username is supplied here corresponds to the User Reply Address email address set up in step 6 of SMTP configuration.

WARNING: All emails in the account associated with this username and password will be completely controlled by the Email GAS. All emails in this account will be read from the server by the Email GAS and then *deleted* from the server. Only specify the details of the account you explicitly created for the Email GAS to use. *Do not* specify the username and password of an existing account that is actively being used by any user.

- 4) You can optionally tweak the other settings in this new row. One of the more important settings is the Poll Interval. This determines how often the Email GAS checks for new emails for translation and delivery to IMiN applications. If this is too low, then the Email GAS may put too much load on the POP3 server. If this is too high, then it may take an unacceptable amount of time for 'instant' messages sent as emails to arrive at the destination IMiN application.

Finally, you must restart the Email GAS service so it will read the new configuration settings from the database and start monitoring the new accounts. If the POP3 server settings are not valid, then the service will exit as soon as the Director connects to it (this should occur within 2 minutes of starting the service. Instead of waiting for this, you can restart the Director service. As the Director starts up it will connect to the Email service, which will prompt the Email service to validate its settings and exit if there is a problem).

The SMTP settings are not actually used until the Email GAS attempts to send an email. As such, if these settings are incorrect, then you will not know until you try to send an email from Communicator to a hosted Email GAS endpoint.



Configure Hosted Addresses

The final essential step for setting up the Email GAS is specifying which email addresses the GAS will host.

Any IMiN application can send to a hosted address, and incoming emails are only parsed and sent over EBS if they are sent from a hosted address. This last point is very important as it prevents the possibility of spam from unauthorized external email addresses being sent across EBS as an instant message.

A hosted address can only be added to an existing EBS location. As such, you are only able to add hosted addresses to users and locations that have already been set up in the EBS world. With this in mind, it is recommended that you add hosted addresses to the Email GAS after all EBS users have logged on at least once. This ensures that every user and location that will exist in the world is available to have an Email GAS hosted address added to it.

To add a hosted address:

- 1) Open the EBS Admin (<http://localhost/ebadmin/Default.aspx>) and select the Email tab along the top row.
- 2) In the left hand column, select Hosted Addresses and click Add...
- 3) Select the User\Location which you wish to add a hosted address to and click Ok.
- 4) Enter the Email Address that will be associated with this hosted address. If you are adding a hosted address for a Pager or a GSM SMS destination, then refer to the "SMS/Pager carrier email addresses" section to find out the format of the email address to use.
- 5) Click the Save Changes button.
- 6) Within 10 seconds the new hosted address should appear in the client tree of all logged on users.

A note about step 4 above: To facilitate round tripping, the email address of the Hosted Address must be the *exact* same email address as the reply address in emails sent by the user. For example, I want to add a hosted address for Bob\Desk. Bob has two company email addresses Bob@company.com and Bob.Marshall@company.com. Both email addresses will reach Bob, but when Bob sends an email, which email address appears as the "From" part of his outbound emails? If it is Bob@company.com, then use that email address as the Hosted Address for Bob\Desk. Otherwise use the other address. If you choose the wrong email address, then Bob will still receive messages sent from EBS, but when he replies, the Email GAS will reject the incoming email because it will not appear to be from a valid Hosted Address.



SMS/Pager carrier email addresses

Wireless Carrier	Device Email Address
AllTel	10digitphonenumber@message.alltel.com
Ameritech/SBC Paging	1way = 10digitphonenumber@paging.acswireless.com 2way = 10digitphonenumber@airmessage.net
Arch	1way = 10digitphonenumber@archwireless.com 2way = 7 or 10digitPIN@archwireless.net
AT&T Wireless/Cingular	Blackberry or SMS = username@mmode.com or 11digitphonenumber@mmode.com
Cingular Wireless	Blackberry or SMS = 10digitnumber@mobile.mycingular.net
Metrocall	1way = 10digitphonenumber@page.metrocall.com or 7digitPIN@pagemart.net 1.5way/2way = 10digitphonenumber@My2Way.com or 10digitphonenumber@airmessage.net
Motient	2way = username@2way.net
Nextel	10digitphonenumber@messaging.nextel.com
Qwest	10digitphonenumber@qwestmp.com
SkyTel	7digitPIN@skytel.com
Sprint PCS	10digitphonenumber@messaging.sprintpcs.com
TMobile	10digitphonenumber@tmomail.net
Verizon Wireless Cellular	10digitphonenumber@vtext.com
Verizon Wireless Messaging	1way = 10digitphonenumber@pager.myairmail.com 2 way = 10digitphonenumber@myairmail.com

Table courtesy of <http://www.pagemart.com/customerservice/how2send/#2way2word>.