1 Setting Up GroupWise to Work with POP3 Mailboxes

If you use domain mail forwarding, incoming Internet e-mail for your organization can be handled by a program called the POP Forwarding Agent (PFA). This agent can collect e-mail for an organization from a POP3 mailbox at an ISP and forward it to local GroupWise® user mailboxes at your business.

PFA can also be set up to collect e-mail from individual POP3 mailboxes at an ISP and forward it local GroupWise user mailboxes.

In this section, you can find information to accomplish the following tasks:

- Understand the PFA
- Set up the PFA
- Manage the PFA
- Troubleshoot the PFA

Overview

The PFA can work with POP3-compatible e-mail accounts in the following two ways:

- Perform domain mail forwarding from a common ISP mailbox to local GroupWise mailboxes.
- Perform personal mail forwarding from one or more personal ISP mailboxes to a local GroupWise mailbox.

The following information discusses these PFA features, how they work, and the benefits of each.

Domain Mail Forwarding from a Common ISP Mailbox

Domain mail forwarding lets a business have a common external e-mail account for the entire business and use the Pop Forwarding Agent to download and distribute messages internally to local e-mail accounts.

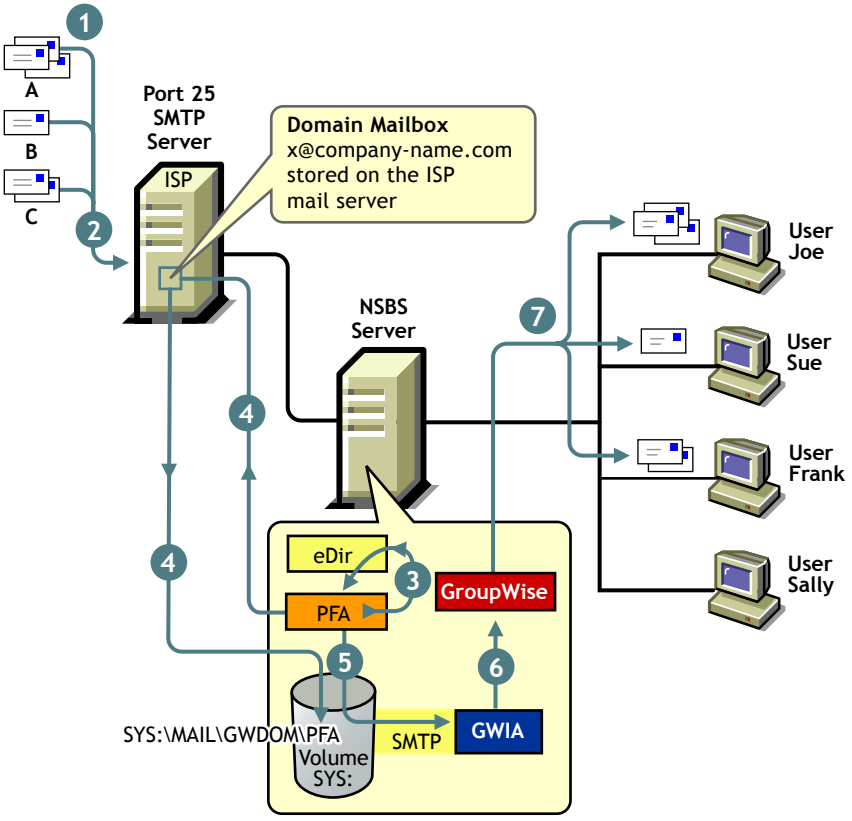
To do this, you need to have your ISP set up an e-mail account with domain mailbox forwarding. This usually involves establishing an MX DNS record and some form of virtual domain hosting so all incoming e-mail for the domain goes to a common mailbox. Any e-mail directed to any user in the domain is put in this common mailbox.

The Pop Forwarding Agent configured in domain forwarding mode downloads the messages periodically from the common mailbox and distributes them to individual user account mailboxes inside the company.

For example, if your company domain is *company_name*.com and you set up domain mailbox forwarding with an ISP, all incoming e-mail regardless of which user it is directed to (frank@*company_name*.com, sue@*company_name*.com, joe@*company_name*.com, etc.) will be sent to the same ISP-hosted e-mail account (for example, user *X* on mail server mail.isp.com).

When configured, PFA periodically (you can specify the schedule) goes to the corporate mailbox (*X* on mail.isp.com), pulls down all the e-mail, examines the To: and Cc: fields inside each message for anything matching the *company_name*.com domain, and transfers the mail messages into their respective local GroupWise account mailboxes. If a mailbox doesn't exist on the local GroupWise mail system, the corresponding message gets sent to the postmaster.

The following figure illustrates how the POP Forwarding Agent works.



1. Users anywhere outside your company send e-mail to users at your company. The e-mail gets forwarded to the ISP.
2. The ISP gathers all incoming e-mail and stores it in POP3 mailboxes.
3. The PFA scans the eDirectory™ tree for the Organization object with a POP3 domain account. It reads the server name, the mailbox name, and the password of the POP account.
4. After the PFA finds a domain POP account, it connects to the POP3 mail server (ISP), authenticates, downloads any waiting e-mail items, and stores them in a queue on your server at sys:\mail\gwdom\pfa.
5. PFA then reads the stored messages from the queue, opens an SMTP connection to GWIA, reads the To: or CC: fields in the message, and forwards the message from the volume to GWIA with the designated user specified in the message header.

6. GWIA then forwards the message to the local GroupWise users. If GWIA cannot distinguish a local user in the message, it forwards the e-mail to the postmaster (usually user Admin) in your company.
7. Messages from personal POP3 mailboxes are forwarded by GroupWise to the corresponding local users.

HINT: You can also set up domain mail forwarding with more than one domain. For simplicity, the preceding figure and description decribes the process for a single domain only.

Domain Mail Forwarding Benefits

Why would you want to set up domain forwarding? Couldn't the ISP just host all the user accounts, you might ask. Here is a list of benefits:

- Most ISPs are capable of hosting all the e-mail accounts; but, if the ISP hosts only one mailbox for the entire business, the cost is usually less.
- The administration is simpler. Adding an additional user doesn't involve the ISP. You can just create another local account and mailbox.
- This model lends itself to more efficient dial-up ISP access because the e-mail gets pulled down in bulk from a common mailbox when it is needed. Even with direct Internet access, Internal e-mail is more efficient because it gets transferred locally and saves connection costs.
- When you want to send e-mail, you send it through the GroupWise Internet Agent (GWIA). GWIA can be configured to send messages to your ISP e-mail gateway on a schedule that you configure, saving connection costs once again.
- The configuration is more secure because you have only one e-mail presence outside your firewall and that presence is handled by your ISP.
- PFA also allows the download and sorting of common mailboxes containing e-mail from multiple domains. This works as long as these foreign domains are configured in the local GroupWise e-mail system.

Mail Relay Configurations

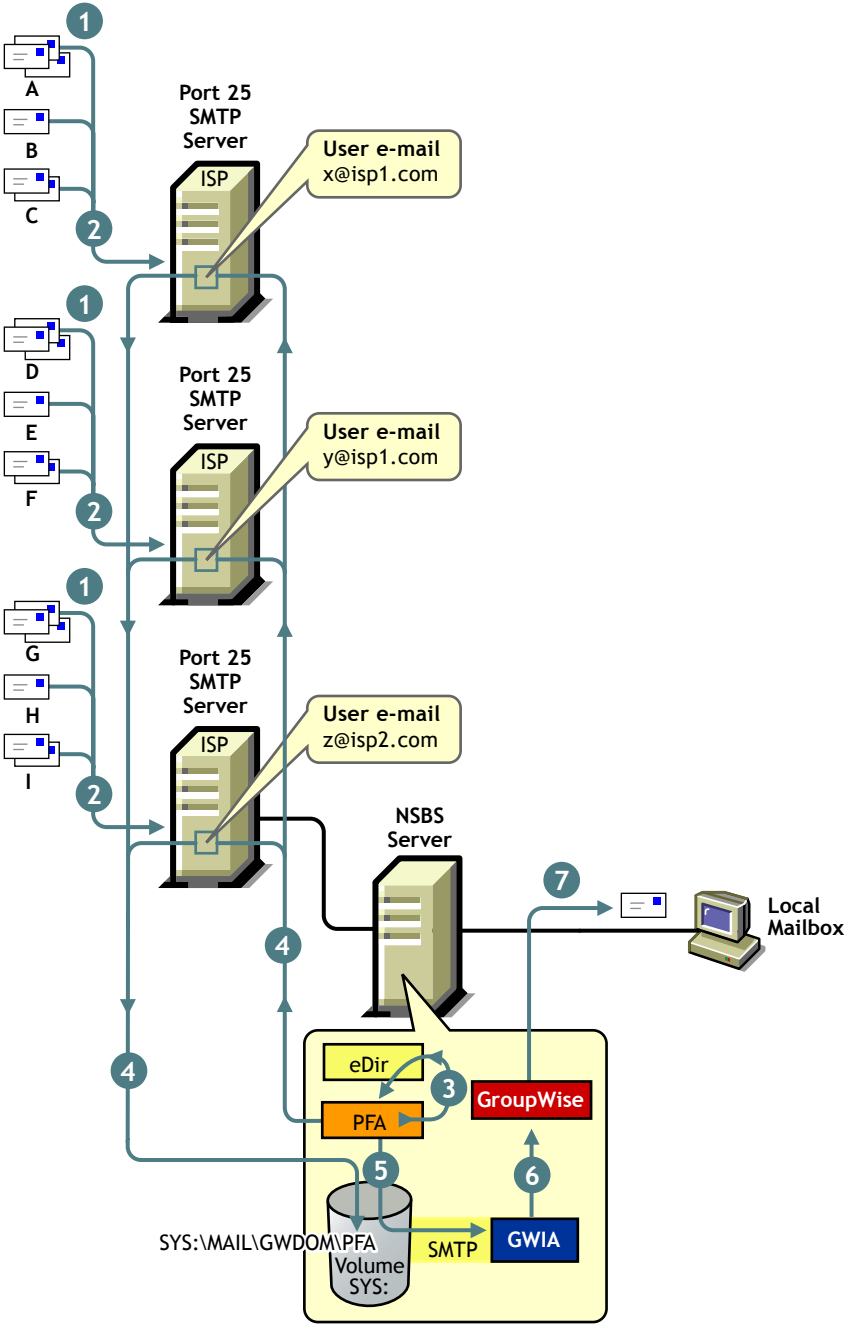
There is another type of domain mail forwarding called *mail relay*. Using mail relay is an alternative to using PFA that has some advantages as well as disadvantages. To use mail relay, you must have a dedicated (static and externally routable) IP address and an e-mail server with a presence outside your firewall. This type of configuration is more difficult to set up and maintain than domain mail forwarding with PFA, but it will handle a much higher volume of e-mail more efficiently. You can set up this kind of configuration directly using an e-mail gateway with GroupWise.

If you do not have a dedicated IP address and your mail volume is reasonably low, as is the case with many small companies, PFA is a good solution for you. However, even if you do have a dedicated IP address and your volume is low, there might be situations in which you will find PFA useful.

Personal Mail Forwarding

Personal mail forwarding lets you pull e-mail from various e-mail accounts on one or more external POP servers and put them into a single consolidated e-mail account in your local system. Several e-mail clients such as Outlook* and GroupWise let you to do this as well, but personal mail forwarding with PFA lets you automate this process so that the e-mail messages are downloaded in bulk on a schedule that you specify. Then when you open your local e-mail account, all the messages are there in one mailbox.

The following figure shows how PFA handles personal mail forwarding.


1
A
B
C
2
Port 25
SMTP
Server
ISP
User e-mail
x@isp1.com
1
D
E
F
2
Port 25
SMTP
Server
ISP
User e-mail
y@isp1.com
1
G
H
I
2
Port 25
SMTP
Server
ISP
User e-mail
z@isp2.com
NSBS
Server
7
Local
Mailbox
4
4
eDir
3
GroupWise
PFA
5
6
SYS:\MAIL\GWDOM\PFA
Volume
SYS:
SMTP
GWIA

1. Users anywhere outside your company send e-mail to personal ISP accounts outside your company.
2. The ISPs store the incoming e-mail in POP3 mailboxes for each ISP account.
3. The PFA scans the eDirectory tree for User objects with POP3 accounts. It reads the server name, the mailbox name, and the password for each account.
4. After the PFA finds a POP account, it connects to the POP3 mail server (ISP), authenticates the PFA user, downloads any waiting e-mail items, and stores them in a queue on your server at sys:\mail\gwdom\pfa.
5. PFA then pulls the stored messages from the queue, opens an SMTP connection to GWIA, and forwards the message from the volume to GWIA with the destination user corresponding to the User object in the eDirectory tree.
6. GWIA then forwards the message to the local GroupWise user or to the postmaster in your company if the user does not exist.
7. Messages from personal POP3 mailboxes are forwarded by GroupWise to the corresponding local user.

HINT: You can also set up personal mail forwarding with more than one local account. For simplicity, the preceding figure and description describe the setup for only one account.

Benefits

Personal mail forwarding with PFA lets you automate the pulling of e-mail from various e-mail accounts on one or more external POP servers and put them into a single consolidated e-mail account in your local system. Without PFA, you would have to do all the gathering manually from these POP3 accounts.

Summary

By specifying POP accounts for Organization objects (for domain forwarding) and User objects (personal forwarding) in eDirectory, the PFA is capable of handling both domain forwarding and personal forwarding at the same time.

The functionality of the PFA is similar with both domain and personal forwarding configurations. Both download from one or more accounts in your ISP system and both send the messages to users in your local system. They differ in who they send the messages to. Domain forwarding dynamically distributes the messages according to the To: and CC: fields, whereas personal forwarding statically redirects the messages to a specific user account regardless of the To: and CC: fields.

With either type, you benefit from using PFA if the

- Amount of e-mail your company or users receive is relatively small
- Download intervals are infrequent
- Size of the e-mail is within resonable limits

What's Next

Now that you have an understanding of what the PFA is and how it works, you can use the procedures in the next section "Setting Up the POP Forwarding Agent (PFA)" on page 8 to set up domain or personal mail forwarding with an ISP and Small Business server.

Setting Up the POP Forwarding Agent (PFA)

Setting up the PFA requires you to complete the following tasks:

1. "Setting Up Services with an ISP" on page 9
2. "Setting Up a Small Business Server" on page 9
3. (Conditional) "Configuring Multiple POP Accounts per eDirectory Object" on page 14

Setting Up Services with an ISP

What you set up with an ISP depends on the type of mail forwarding that you want to accomplish. For a description of the different types and their benefits, see “Overview” on page 1.

Domain Mail Forwarding

1. Register a domain name with an ISP, or obtain a subdomain name from your ISP.
2. Request domain mail forwarding from your ISP with a common POP3 mailbox. This is also known as *virtual domain hosting*. Usually, the ISP must create an MX record associated with your domain name and create scripts to forward all e-mail from the domain to a common mailbox.
3. Obtain the ISP’s mail server name and mailbox ID (user ID) and password.

Personal Mail Forwarding

Obtain the ISP’s mail server name and the personal POP3 Internet mailbox ID (user ID) and password for each user.

Setting Up a Small Business Server

After obtaining the required services and information from your ISP, complete the following steps on your Small Business server:

1. Install any hardware required for Internet access.
2. Configure your hardware to connect to the Internet.

   For procedures, see "Setting Up Internet Access" in the *Novell Small Business Suite 6 Installation and Administration Guide* (http://www.novell.com/documentation/lg/nsbs60/insadenu/data/hxfj1fr0.html).

   If your Internet connection is set up correctly, then your server will be able to get to the Internet and resolve names.

3 Make sure that GroupWise is set up and running on the server and client workstations.

   For setup procedures, see "Setting Up E-Mail" in the *Novell Small Business Suite 6 Installation and Administration Guide* (http://www.novell.com/documentation/lg/nsbs60/insadenu/data/actg8tt.html).

   During the GroupWise installation, install ConsoleOne® on the workstation to ensure that you have a version that is compatible with the version of GroupWise that you are running.

4 Make sure that the GroupWise Internet Agent (GWIA) is set up and running.

   For Setup procedures, see "Setting Up E-Mail" in the *Novell Small Business Suite 6 Installation and Administration Guide* (http://www.novell.com/documentation/lg/nsbs60/insadenu/data/actg8tt.html).

   If you can send outgoing mail, then the GWIA is set up properly.

5 Download and install PFA files and extend the schema.

   5a Unzip the files in nsbs.zip to sys:\pfa on your server.

   5b At the System Console prompt, enter **`nwconfig`**.

   5c In NWCONFIG, select Product Options > Install a Product Not Listed, then press F3.

   5d Enter the location where you unzipped the files to (sys:\pfa) and press F10.

   5e Press Esc.

   5f From the Configuration Options menu of NWCONFIG, select Directory Options and press Enter.

   5g Select Extend Schema and press Enter.

   5h Type the full distinguished username (for example, admin.nsbs_tree) and password of user Admin and press Enter > F3.

   5i Type sys:\system\schema\pfa.sch and press Enter.

   5j Exit NWCONFIG.

6 Create the PFA user, assign it a password, then assign it as a trustee to the eDirectory tree with the Read rights to the POP Account and CN attributes.

6a Copy the psnap.jar file from the server where the PFA was installed (sys:public\mgmt\consoleone\1.2\snapins\psnap.jar) to the directory on the local workstation where GroupWise and the ConsoleOne snap-ins were installed. For example: c:\novell\consoleone\1.2\snapins.

6b Start ConsoleOne at the workstation.

6c In whatever context you like, create a user with the name PFA.

We recommend creating the PFA user in the same container where you installed GroupWise. For example: pfa.groupwise.

Assign the PFA user a surname and a password.

IMPORTANT: This password is shown in clear text and is not encrypted. Failure to make the password for the PFA user different from the password that you use for the user that supervises your network can cause a security risk to your network and data.

6d Add the PFA user as a trustee to the eDirectory tree, and then assign it the Compare and Read rights to the POP Account and CN attributes and make them inheritable.

- Select the eDirectory Tree object.
- Right-click the eDirectory object, then click Properties.
- Click the NDS Rights tab.
- Click Add Trustee.
- Browse to the PFA User object and click OK.
- Select All Attribute Rights, then click Delete Property > Yes.
- Click Add Property > Show All Properties > POP Account > OK.
- Make sure the Compare and Read attributes and Inheritable check boxes are checked.
- Click Add Property > Show All Properties > CN > OK.
- Make sure the Compare, Read, and Inheritable check boxes are checked and click OK > OK.

6e Using Edit or another text file editor, open the sys:\system\pfa.ncf file and make sure the username PFA user matches the PFA username, context, and password that you assigned in Step 6c on page 11.

The contents of sys:system\pfa.ncf file might look something like the following:

```
java ... com.novell.popford.pfa .pfa.groupwise pfa
```

The last two arguments in this command correspond to the username (.pfa.groupwise) and the password (pfa).

(Conditional) You can choose to remove the pfa password (last argument) from the command in the pfa.ncf file. If you do so, PFA will prompt for the password every time it is loaded. The advantage of putting the password in the pfa.ncf file is that if for some reason your server reboots and no one is present to enter the password, the PFA agent will load and continue to function automatically. The disadvantage of putting the password in this file is that it is less secure.

7 Set up PFA to start automatically whenever the server is started by adding the pfa command to the autoexec.ncf file.

8 (Conditional) Configure any Organization objects to use PFA for domain forwarding accounts.

If you are configuring multiple domains, use the procedures in "Configuring Multiple POP Accounts per eDirectory Object" on page 14 and "Configuring Domain Mail Forwarding from Multiple Domains" on page 15.

If you are configuring personal mail forwarding only, skip to Step 9 on page 13.

8a From a workstation, log in to the network as a user with the Supervisor right to the Server object.

8b Start ConsoleOne.

8c In the Directory view (left window), right-click and an Organization object, and then click Properties.

8d Click the POP Account tab and enter the POP account information for the organization.

- **POP Host:** The name of the mail server at your ISP (for example, mail.myisp.com).
- **POP User Name:** The common mailbox name at your ISP (f or example, X).
- **Password**: The password for your company's or organization's mailbox at your ISP.

8e Click OK to save the settings.

8f If you plan to use personal mail forwarding, continue with Step 9; otherwise, you are finished setting up the PFA.

9 Configure each User object to use PFA for personal mail forwarding accounts.

If you are configuring multiple POP accounts per User object, use the procedures in "Configuring Multiple POP Accounts per eDirectory Object" on page 14.

9a If you are not already logged in, log in to the network as a user with the Supervisor right to the Server object from a workstation.

9b If you are not already running ConsoleOne, start it from the workstation.

9c In the Directory view (left window) of ConsoleOne, select the container object for your users.

9d In the Object view (right window), right-click a user object, then click Properties.

9e Make sure the user has a GroupWise account.

Click the GroupWise tab, then click the Account tab to display the account page.

If a post office is specified, then the user has a GroupWise account. If not, do the following to assign the user an account:

- In the Post Office field, click the browse icon, then browse to the Post Office container that you want to assign the user to and select it.
- Click OK > Apply.

9f Specify the POP Account information for the user.

Click the POP Account tab and enter the following information:

- **POP Host:** The name of the mail server at your ISP (for example, mail.myisp.com).
- **POP User Name:** The username for the individual mailbox at the ISP (for example, jdoe).
- **Password:** The password for the individual mailbox at the ISP.

9g Click OK to save the settings.

9h Repeat Step 9d on page 13 through Step 9g on page 14 for each user.

Configuring Multiple POP Accounts per eDirectory Object

To configure the Organization (domain mail forwarding) or User object (personal mail forwarding) using ConsoleOne, complete the following steps:

1. If you are not already running ConsoleOne, start it from the workstation.
2. Browse to and right-click the appropriate Organization object (domain forwarding) or User object (personal forwarding) in the eDirectory tree.
3. Click Properties.
4. Specify information for the first POP account

   Click the POP Account tab and entering the following information:

   - **POP Host:** The name of the mail server at your ISP (for example pop3.myrealbox.com). This name is usually different from the Host for your organization.
   - **POP User Name:** For domain mail forwarding, this is the common mailbox name at your ISP such as X. For personal mail forwarding, this is the username for the individual mailbox at the ISP (for example, jdoe).
   - **Password**: For domain mail forwarding, this is the POP password for your company's or organization's mailbox at your ISP (for example, companyone. For personal mail forwarding, this is the password for the individual mailbox at the ISP (for example, thunder).
5. Click OK.

6 Right-click the same object, click properties, then specify the required information for each additional domain or personal POP account.

6a Click the Other tab.

6b Select the POP Account attribute and click Add.

6c Enter the following information for the ISP:

- POP Host
- POP User Name
- Password

Use a colon (:) to separate the fields. Do not use quote or space characters in the Other fields.

For example:

```
pop3.myrealbox.com:jdoe:thunder
```

6d Click Apply to save the changes.

7 Repeat Step 6b through Step 6d for each additional POP account.

8 When you are done, click Close.

Configuring Domain Mail Forwarding from Multiple Domains

Normally, domain forwarding is only done with a single Internet domain. The GWIA Foreign ID field should match the domain name. This means that there should be only one Organization object with only one POP account value specified.

However, if your ISP has set up mailboxes for multiple domains or if you have multiple ISPs with more than one domain, you might want to have a single Organization object with multiple POP account values each corresponding to a different domain. In this case, you also need to do the following to ensure that the PFA recognizes multiple domains.

1 Edit the GWIA Foreign ID field and add multiple domains separated by a single space.

The GWIA Foreign ID field in ConsoleOne is described in the GroupWise 6 online documentation (http://www.novell.com/documentation/lg/gw6/gw6_install/data/aabetx7.html).

2 Edit the sys:system\pfa.ncf file. Just before the "-classpath" on the command line, add **-Ddomain="*domain list separated by commas*"** as shown in the following example:

```
java ... -Ddomain="x.com,y.com" -classpath ...
```

This forces the PFA to accept all messages directed to users in either one of these domains.

If you don't add this domain to the command line switch, the PFA prompts the GWIA for the domain. However, the GWIA can only return a single domain, and messages for all other domains will be sent to the Postmaster. Therefore, the command-line switch is necessary.

Managing the PFA

After the PFA is configured and started, you can manage the it by using the PFA Text Console screen at the server console or by using the PFA Web console.

This section includes information for completing the following tasks:

Manually Starting the PFA

After setting up the PFA, start it manually by entering **pfa** at the System Console prompt. If the PFA is ever stopped while the server is running, you can also start the PFA manually.

Accessing the PFA Text Console Screen on the Server Console

The PFA text console screen on the server console is available for executing commands quickly from the server console or remote server console.

If the PFA is running, you will see the text console screen listed as `Java Interpreter` *`number`*`: com.novell.popforward` in the Current Screens list (Ctrl+Esc) on the server console. You can access the PFA text console screen by entering the applicable screen number or by toggling to it using Alt+Esc on the server keyboard.

You can distinguish the PFA Text Console screen from the System Console screen by the "PFA$" prompt.

Accessing the PFA Web Console Screen

The PFA Web console can use any browser that supports UTF-8 character encoding, such as Netscape* Navigator* version 4 or later or Microsoft* Internet Explorer version 4 or later.

To access the PFA Web console, enter the following URL in your browser: http://192.168.0.1:8110.

If you changed your server's IP address from the default, replace 192.168.0.1 in the above URL with your server's IP address.

Entering this URL will take you to the main PFA Web console Status screen.

Using the PFA Management Console Commands

You can run the following commands by entering them at the PFA Text Console screen or by clicking the command on the PFA Web console.

The following table lists the command names, the tasks you can perform, and the availability or location in the consoles listed.

Command or Button	Description	PFA Text Console Screen	PFA Web Console and Link Name

Status	Displays the status of the PFA.
	
	The status information includes the log level, PFA state, information on the PFA domain and SMTP relay (GWIA), and current PFA authentication.
	
	Example:
	
	`PFA Status: Running (or Hold or other error state)`
	
	`Log level is medium`
	
	`Domain: (mycompany.com)`
	
	`SMTP relay (localhost)`
	
	`PFA is authenticated as .pfa groupwise (or PFA is not authenticated)`
	
	NOTE: The SMTP and Domain information will not display if GWIA is not running.
		Available	Status

Reset	Resets the PFA. Resetting the PFA includes reauthenticating (if necessary), checking whether GWIA is running, reloading the clock, and forwarding any downloaded messages.	Available	Status
Suspend	Stops mail downloads until the Resume command is entered.	Available	Status
Resume	Resumes mail downloads after they have been stopped with the Suspend command. Downloads will resume according to the current schedule.	Available	Status

Command or Button	Description	PFA Text Console Screen	PFA Web Console and Link Name
Schedule	Displays or modifies the PFA schedule. This command uses the server's graphical interface. The schedule applet shows the weekly schedule for the PFA. Light green cells in the schedule indicate the hours when the PFA is active. Dark green cells indicate inactive hours. The default PFA schedule is 6:00 am to 6:59 pm (6:00 to 18:59) every 30 minutes. To change the schedule, see "Viewing or Changing the PFA Schedule" on page 21.	Available	Not available
Rush	Checks for mail for all mail accounts at the ISP immediately. This command ignores (or overrides) the current schedule. Rush *organization_name*: Check for mail for domain only. Rush *username*: Check for mail for user specified only.	Available	List POP Accounts
Threads	Lists the PFA worker threads. You should not see any tasks unless all the threads are busy. The threads are idle most of the time. **NOTE:** You can use the Rush command to generate threads.	Available	PFA Diagnostics
Tasks	Lists the PFA tasks that are waiting to be run. You should not see any tasks unless all the threads are busy.	Available	PFA Diagnostics
Loglevel In the Web Console (Set Log Level)	Adjusts the log level to None, Low, Medium, or High. Low, Medium, or High are subcommands that you can enter after entering **`loglevel`**. Example: **`loglevel high`** This command does not display the current log level. You can view the current log level on the PFA text screen at the server console using the Status command. For more information about the log levels, see "Viewing the PFA Log" on page 22.	Available	Status

Command or Button	Description	PFA Text Console Screen	PFA Web Console and Link Name
List POP Accounts	Displays information about all POP accounts. Check mail immediately using Rush.	Not available	Status
Alias	Displays a list of shortcuts for commands or reassigns command names for the PFA text screen. Syntax Alias *new_alias old_command_name* Example: **`alias quit shutdown`**	Available	Not available
Shutdown	Shuts down the PFA. (You can restart the PFA manually by entering **`pfa`** at the System Console prompt.)	Available	Not available
Help	Displays and gives a brief description of all available PFA commands.	Available	Not available

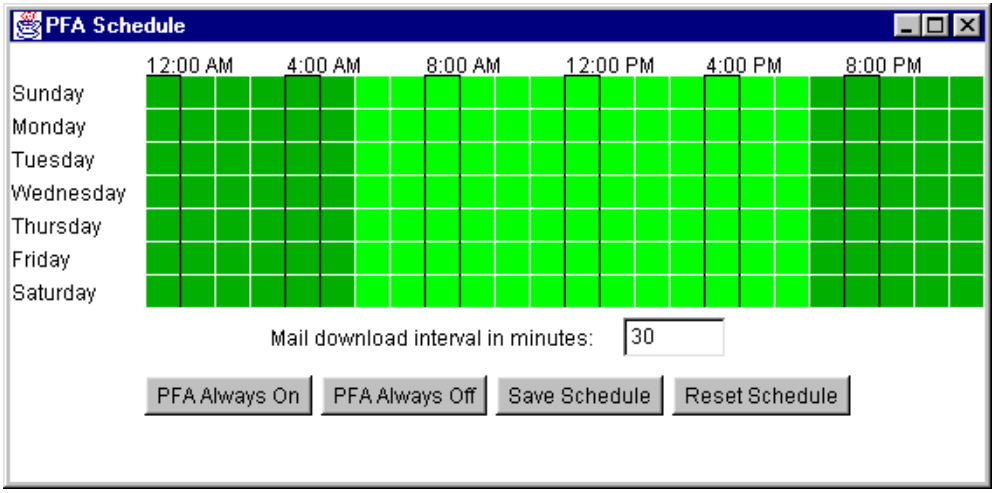
Viewing or Changing the PFA Schedule

Using the default schedule, the PFA checks for mail at the ISP every 30 minutes from 6:00 a.m. to 6:59 p.m. each day. You can adjust the PFA schedule to meet your specific needs.

You can view or adjust the PFA schedule using the PFA Text Screen Console. For information about accessing the schedule from the this console, see "Schedule" on page 19.

To change the schedule from the default:

1. Access the schedule.
2. Click a block of cells to turn the PFA on or off for the hours and days indicated by the block.
3. Enter a value in the Mail Download Interval in Minutes field.
4. Click Save Schedule.



The following table explains the functions of the color, field, and buttons on the PFA schedule interface.

Color/Field/Button	Function
Light green color	Indicates PFA is on.
Dark green color	Indicates PFA is off.
Mail Download Interval in Minutes field	Indicates how often within the hour the PFA will check to download mail from the ISP.
PFA Always On button	Turns all cells light green (on).
PFA Always Off button	Turns all cells dark green (off).
Reset Schedule button	Resets schedule to the last schedule that was saved.
Save Schedule button	Saves the current schedule displayed on the screen.

Viewing the PFA Log

The PFA log on the PFA text console screen shows the activity of the PFA. The amount of activity sent to the screen is determined by the log level.

This information is also saved to the sys:\mail\gwdom\pfa\pfa.log file.

When the log file reaches the maximum size of 64 KB, it is copied to paf.bak. Any existing paf.bak file will be overwritten.

The following table indicates what you can expect from each log level and usage recommendations.

PFA Log Level	Results	Usage
None	Only critical errors reported	Normal
Low	Minimal operational information displayed	Normal
Medium	◆ Some POP dialogue messages displayed ◆ Forwarding of mail recorded ◆ Web connections noted but not identified ◆ PFA Heartbeat enabled	Normal/Default
High	◆ POP accounts recorded as processed ◆ Complete POP dialog messages displayed ◆ Forwarding of mail recorded ◆ Web connections noted and identified ◆ PFA Heartbeat enabled	Debug only—slows down PFA operation. Use only to make sure that the PFA is working.

Troubleshooting the PFA

The following sections describe how to solve some of the common problems you might encounter when setting up or using the PFA.

- "The PFA does not start" on page 23.
- "The PFA is sending all the e-mail to the postmaster or the PFA status screen is listing the wrong domain" on page 24
- "The PFA is not delivering mail" on page 25.
- "The PFA is not finding the POP accounts that are set up" on page 25.
- "The PFA Web console won't come up in the Web browser" on page 25.

The PFA does not start

Problem: When you tried to start PFA at the System Console prompt, an error message stated

```
PFA login was unsuccessful. Check the username and password
  in the PFA.NCF. PFA is unable to locate GroupWise. Install
  GroupWise before running the PFA.
```

Possible Cause: GroupWise and GWIA are not installed.

Action: Complete the following steps:

1. Install GroupWise and GWIA at the server.
2. At the server console prompt, enter **`pfa`**.

Possible Cause: PFA could not communicate with GWIA.

Action: Make sure GWIA is running.

Possible Cause: The PFA user does not exist.

Action: Create the pfa.groupwise user and make sure that it has the necessary rights. See Step 6 on page 11.

Problem: When the PFA was started at the console prompt, an error message stated

```
PFA login was unsuccessful. Check the username and password
  in the PFA.NCF.
```

Possible Cause: The password for the PFA User object in eDirectory does not match the password in the pfa.ncf file.

Action: Change the password in the sys:\system\pfa.ncf file.

The PFA is sending all the e-mail to the postmaster or the PFA status screen is listing the wrong domain

Possible Cause: GroupWise Internet Agent (GWIA) is not set up correctly.

Action: Change the GWIA foreign ID:

1. From a workstation, log in to ConsoleOne as a user with the Supervisor right to the Server object.
2. In the eDirectory tree, browse to and expand the Organization object that you installed GroupWise in.
3. Expand the Domain object.
4. Right-click the GWIA object, then click Properties.
5. Click the GroupWise tab and then the Identification page.
6. In the Foreign ID field, enter the Internet domain name that your server is set up to receive incoming mail from.
7. In the Foreign ID field, specify the Internet data requested from the ISP. For example:

   company_name.com

   You can enter multiple Internet domain names separated by a single space in the Foreign ID field.

After changing the ID, restart the PFA.

The PFA is not delivering mail

Problem: Mail is downloaded to the server but it is not delivered to the organization or personal mailboxes.

Possible Cause: GroupWise Internet Agent (GWIA) is not running.

Action: At the system console, enter **`gwia`** to run the gwia.ncf file. This file loads the Internet Agent.

Possible Cause: GWIA is not set up correctly.

Action: If the SMTP relay line on the text console does not show your domain name, check the foreign ID on your GWIA.

The PFA gets the local domain name from the GWIA when it starts. If you need to change the GWIA foreign ID, you must restart the PFA after changing the ID.

The PFA is not finding the POP accounts that are set up

Possible Cause: The PFA User object does not exist.

Action: Create the PFA User object and give it the necessary rights. See Step 6 on page 11.

Possible Cause: The PFA User object does not have the necessary rights.

Action: Make sure the PFA User object has the rights it needs. See Step 6 on page 11.

The PFA Web console won't come up in the Web browser

Possible Cause: You are using Internet Explorer (IE) as your Web browser and entered only 192.168.0.1:8110 rather than the full URL. IE interprets this entry as a protocol rather than a URL.

Action: Enter the complete URL http://192.168.0.1:8110 into your browser. (If you change the server's default IP address, use your new address instead of the 192.168.0.1 address in the URL.)