XIII **Monitor**

60 Starting the Monitor Agent

Detailed instructions for installing and starting the GroupWise® Monitor Agent for the first time are provided in "Installing GroupWise Monitor" in the *"GroupWise 7 Installation Guide"*. This section presents some additional Monitor Agent startup information.

- "Starting the Linux Monitor Agent" on page 941
- "Starting the Windows Monitor Agent" on page 943
- "Understanding the Monitor Agent Consoles" on page 944

Starting the Linux Monitor Agent

- "Starting the Linux Monitor Agent Manually" on page 941
- "Starting the Linux Monitor Agent Automatically" on page 942
- "Stopping the Linux Monitor Agent" on page 942

Starting the Linux Monitor Agent Manually

You do not need to be logged in as root to start the Monitor Agent.

1 Make sure you know the path to a domain directory where a domain database (wpdomain.db) is located, or the IP address of a server where the MTA is running.

2 Change to the GroupWise agent bin directory.

    cd /opt/novell/groupwise/agents/bin

3 Use one of the following commands to start the Monitor Agent:

    ./gwmon --home /domain_directory &
    ./gwmon --ipa IP_address --ipp port_number &

A message indicates that the Monitor Agent is polling the domain you specified. The Monitor Agent does not have a --show switch to provide a user interface.

You can also start the Monitor Agent using its startup script (/etc/initd/grpwise-ma), which can perform the following operations:

/etc/init.d/grpwise start
/etc/init.d/grpwise restart
/etc/init.d/grpwise status

4 View the following URL to verify that the Monitor Agent is running:

http://localhost:8200

Status | Preferences | Link Trace | Link Configuration | Reports | Log | Map

System | Problems

Up Time: 11 d 4 h 1 m   [Poll] [Suspend] [Resume] [Move]

	Status	Status Duration	Name	Type	Up Time	Closed Links	Queued	Platform	Version
☐	✔ Normal	8 d 8 h 18 m	Development.Provo1	POA	3 d 7 h 49 m	N/A	N/A	NetWare	7.0 (7/12/2005)
☐	✔ Normal	11 d 4 h 1 m	Marketing.Provo3	POA	1 d 9 h 52 m	N/A	N/A	Linux	7.0 (07/21/2005)
☐	✔ Normal	8 d 8 h 18 m	Provo1	MTA	3 d 7 h 49 m	2	0	NetWare	7.0 (7/12/2005)
☐	✔ Normal	2 d 19 h 32 m	Provo1.GWIA	GWIA	3 d 7 h 45 m	N/A	N/A	NetWare	7.0 (07-12-05)
☐	✔ Normal	11 d 4 h 1 m	Provo2	MTA	11 d 20 h 7 m	1	0	Windows	7.0 (7/12/2005)
☐	❌ Not Listening	0 d 0 h 0 m	Provo2.GWIA	GWIA	11 d 7 h 31 m	N/A	N/A	Windows	7.0 (07-12-05)
☐	✔ Normal	11 d 4 h 1 m	Provo3	MTA	1 d 9 h 52 m	0	0	Linux	7.0 (07/21/2005)
☐	✔ Normal	11 d 4 h 1 m	Provo3.GWIA	GWIA	1 d 9 h 52 m	N/A	N/A	Linux	7.0 (07/21/2005)
☐	❌ Not Listening	0 d 0 h 0 m	Sales.Provo2	POA	11 d 7 h 32 m	N/A	N/A	Windows	7.0 (7/12/2005)
☐	✔ Normal	8 d 6 h 53 m	WEBAC70A.Provo1	WEBACC	3 d 7 h 44 m	N/A	N/A	NetWare	7.0.0 (7/12/2005)
☐	✔ Normal	11 d 4 h 1 m	WEBAC70A.Provo2	WEBACC	12 d 3 h 3 m	N/A	N/A	Windows	7.0 (7/12/2005)
☐	✔ Normal	11 d 3 h 56 m	WEBAC70A.Provo3	WEBACC	11 d 4 h 1 m	N/A	N/A	Linux	7.0 (7/22/2005)

If the Monitor Agent Web console does not display, see "Monitor Agent Problems" in *GroupWise 7 Troubleshooting 2: Solutions to Common Problems*.

Starting the Linux Monitor Agent Automatically

If you selected Launch Monitor Agent on System Startup in the Monitor Agent Installation program, your system was configured so that the Monitor Agent would start automatically. The Monitor Installation program always creates a grpwise-ma startup script in /etc/init.d for starting the Monitor Agent. To enable automatic startup, the Monitor Installation program creates symbolic links named S99grpwise-ma in the rc3.d and rc5.d directories so that the Monitor Agent can load on startup into runlevel 3 or 5, depending on the configuration of your Linux system.

When the grpwise-ma script runs and starts the Monitor Agent, it reads the Monitor Agent configuration file (monitor.xml) in /opt/novell/groupwise/agents/share to check for configuration information.

Stopping the Linux Monitor Agent

NOTE: If you started the Monitor Agent as root, then you must be logged in as root in order to stop it.

When you start the Monitor Agent with the grpwise-ma startup script, you can also use the script to stop it.

1 Change to the /etc/init.d directory.

2 To stop the Monitor Agent, enter the following command:

`./grpwise-ma stop`

3 To confirm that the Monitor Agent has stopped, enter the following command:

`./grpwise-ma status`

When you start the Monitor Agent manually (without using the grpwise-ma script), use the standard Linux kill command to stop it.

1 Determine the process ID of the Monitor Agent.

`ps -eaf | grep gwmon`

The PIDs for all gwmon processes are listed.

2 Kill the first gwmon process in the list.

```
kill first_process_ID
```

It might take a few seconds for all gwmon processes to terminate.

3 Repeat the ps command to verify that the Monitor Agent stopped.

Starting the Windows Monitor Agent

- ◆ "Starting the Windows Monitor Agent Manually" on page 943
- ◆ "Starting the Windows Monitor Agent Automatically" on page 943
- ◆ "Stopping the Windows Monitor Agent" on page 944

Starting the Windows Monitor Agent Manually

In Windows, click Start > Programs > GroupWise Monitor > GroupWise Monitor. You might also want to create a desktop icon for it.

The Monitor Agent server console appears.

If the Monitor Agent server console does not appear, see "Monitor Agent Problems" in *GroupWise 7 Troubleshooting 2: Solutions to Common Problems*.

Starting the Windows Monitor Agent Automatically

To start the Monitor Agent automatically whenever you start the Windows server, you can add the Monitor Agent program to the Windows Startup group.

For example, in Windows 2000:

1 Click Start > Settings > Taskbar & Start Menu > Advanced > Add.

2 Browse to the directory where you installed the Monitor Agent.

3 Double-click gwmon.exe.

4 Click Next.

5 Select the Startup folder, provide a name for the shortcut, then click Finish.

6 If possible, restart the server to verify that the Monitor Agent starts when you log in.

Stopping the Windows Monitor Agent

At the Monitor Agent server console:

1 Click File > Exit.

or

Close the window where the Monitor Agent is running.

Understanding the Monitor Agent Consoles

The Monitor Agent offers three consoles:

- "Monitor Agent Server Console" on page 944
- "Monitor Agent Web Console" on page 944
- "Monitor Web Console" on page 945

For a comparison of the capabilities of the three consoles, see Chapter 64, "Comparing the Monitor Agent Consoles," on page 997

Monitor Agent Server Console

The Monitor Agent server console is available for the Windows Monitor Agent but not for the Linux Monitor Agent.
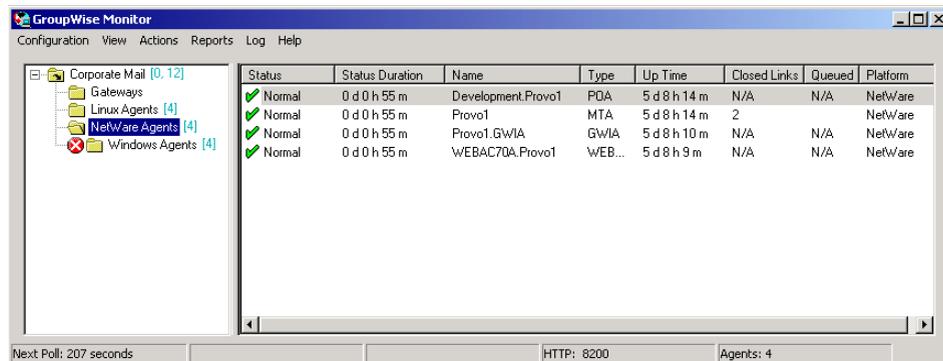
All agent configuration tasks can be performed at the Monitor Agent server console, but some reports are not available.

Monitor Agent Web Console

The Monitor Agent Web console is platform-independent and can be viewed at the following URL:

http://*Web_server_address*:8200

System | Problems

Up Time: 11 d 4 h 1 m

Poll | Suspend | Resume | Move

	Status	Status Duration	Name	Type	Up Time	Closed Links	Queued	Platform	Version
☐	✔ Normal	8 d 8 h 18 m	Development.Provo1	POA	3 d 7 h 49 m	N/A	N/A	NetWare	7.0 (7/12/2005)
☐	✔ Normal	11 d 4 h 1 m	Marketing.Provo3	POA	1 d 9 h 52 m	N/A	N/A	Linux	7.0 (07/21/2005)
☐	✔ Normal	8 d 8 h 18 m	Provo1	MTA	3 d 7 h 49 m	2	0	NetWare	7.0 (7/12/2005)
☐	✔ Normal	2 d 19 h 32 m	Provo1.GWIA	GWIA	3 d 7 h 45 m	N/A	N/A	NetWare	7.0 (07-12-05)
☐	✔ Normal	11 d 4 h 1 m	Provo2	MTA	11 d 20 h 7 m	1	0	Windows	7.0 (7/12/2005)
☐	❌ Not Listening	0 d 0 h 0 m	Provo2.GWIA	GWIA	11 d 7 h 31 m	N/A	N/A	Windows	7.0 (07-12-05)
☐	✔ Normal	11 d 4 h 1 m	Provo3	MTA	1 d 9 h 52 m	0	0	Linux	7.0 (07/21/2005)
☐	✔ Normal	11 d 4 h 1 m	Provo3.GWIA	GWIA	1 d 9 h 52 m	N/A	N/A	Linux	7.0 (07/21/2005)
☐	❌ Not Listening	0 d 0 h 0 m	Sales.Provo2	POA	11 d 7 h 32 m	N/A	N/A	Windows	7.0 (7/12/2005)
☐	✔ Normal	8 d 6 h 53 m	WEBAC70A.Provo1	WEBACC	3 d 7 h 44 m	N/A	N/A	NetWare	7.0.0 (7/12/2005)
☐	✔ Normal	11 d 4 h 1 m	WEBAC70A.Provo2	WEBACC	12 d 3 h 3 m	N/A	N/A	Windows	7.0 (7/12/2005)
☐	✔ Normal	11 d 3 h 56 m	WEBAC70A.Provo3	WEBACC	11 d 4 h 1 m	N/A	N/A	Linux	7.0 (7/22/2005)

To create the Monitor Agent Web console display, your Web server communicates directly with the Monitor Agent to obtain agent status information. You must be behind your firewall to use the Monitor Agent Web console. Because the Linux Monitor Agent does not have a server console, you use the Monitor Agent Web console in its place on Linux.

Several Monitor features are available at the Monitor Agent Web console that are not available at the Monitor Agent server console or the Monitor Web console. These are summarized in Chapter 64, "Comparing the Monitor Agent Consoles," on page 997.

Monitor Web Console

The Monitor Web console is also platform-independent and can be viewed at the following URLs:

NetWare or Windows Web Server:	http://*Web_server_address*/gw/gwmonitor
Linux Web Server:	http://*Web_server_address*/gwmon/gwmonitor

GroupWise® Monitor

Corporate Mail

Create | Rename | Move | Delete | Refresh | Help

Monitored agents for "Corporate Mail" group

Total: 12   Displayed: 1 - 12

Refresh

Problem | Suspend | Resume | Move | Options | Thresholds | He

	Name	Status	Status Duration	Up Time	Type	Version	Platfor
☐	Provo3	Normal	11 d 18 h 48 m	1 d 14 h 20 m	MTA	7.0 (07/21/2005)	Linux
☐	Provo3.GWIA	Normal	11 d 18 h 48 m	1 d 14 h 20 m	GWIA	7.0 (07/21/2005)	Linux
☐	Marketing.Provo3	Normal	11 d 18 h 48 m	1 d 14 h 20 m	POA	7.0 (07/21/2005)	Linux
☐	WEBAC70A.Provo3	Normal	11 d 18 h 43 m	11 d 8 h 29 m	WEBACC	7.0 (7/22/2005)	Linux
☐	Provo1	Normal	8 d 23 h 5 m	3 d 12 h 16 m	MTA	7.0 (7/12/2005)	NetWar
☐	Development.Provo1	Normal	8 d 23 h 5 m	3 d 12 h 16 m	POA	7.0 (7/12/2005)	NetWar
☐	Provo1.GWIA	Normal	3 d 10 h 19 m	3 d 12 h 12 m	GWIA	7.0 (07-12-05)	NetWar
☐	WEBAC70A.Provo1	Normal	8 d 21 h 40 m	3 d 12 h 12 m	WEBACC	7.0.0 (7/12/2005)	NetWar
☐	Provo2	Normal	11 d 18 h 48 m	11 d 20 h 7 m	MTA	7.0 (7/12/2005)	Window
☐	Provo2.GWIA	Not Listening	0 d 14 h 46 m	0 d 0 h 0 m	GWIA	7.0 (07-12-05)	Window
☐	Sales.Provo2	Not Listening	0 d 14 h 46 m	0 d 0 h 0 m	POA	7.0 (7/12/2005)	Window
☐	WEBAC70A.Provo2	Normal	11 d 18 h 48 m	12 d 7 h 31 m	WEBACC	7.0 (7/12/2005)	Window

To create the Monitor Web console display, your Web server communicates with the Monitor Application (a component of your Web server), which then communicates with the Monitor Agent to obtain agent status information. This enables the Monitor Web console to be available outside your firewall, while the Monitor Agent Web console can be used only inside your firewall.

The Monitor Web console is divided into the Agent Groups window on the left and the Agent Status window on the right. Using the Agents Groups window, you can create and manage agent groups the same as you can at the Monitor Agent server console.

The Monitor Web console does not include some features that are available at the Monitor Agent server console and the Monitor Agent Web console. These are summarized in Chapter 64, "Comparing the Monitor Agent Consoles," on page 997.

61 Configuring the Monitor Agent

The default configuration of the GroupWise® Monitor Agent is adequate to begin monitoring existing GroupWise agents (Post Office Agents, Message Transfer Agents, Internet Agents, and WebAccess Agents). You can also customize the configuration to meet your specific monitoring needs.

On Windows, you configure the Monitor Agent at the Monitor Agent server console on the Windows server where the Monitor Agent is running.
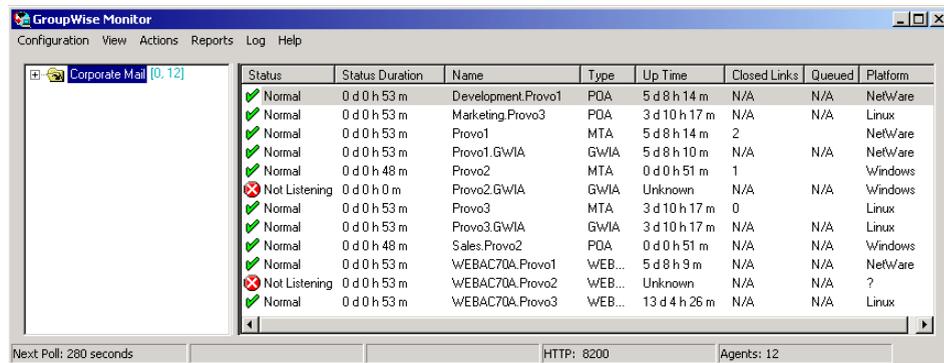
On Linux, similar functionality is available in your Web browser at the Monitor Agent Web console:

http://localhost:8200.

The following topics help you customize the Monitor Agent for your specific needs:

Selecting Agents to Monitor

By default, the Monitor Agent starts monitoring all GroupWise agents (Post Office Agents, Message Transfer Agents, Internet Agents, and WebAccess Agents) in your GroupWise system, based on the information from a domain database (wpdomain.db). You might not want to continue monitoring all agents. And under certain circumstances, you might want to monitor agents that are not part of your local GroupWise system.

Filtering the Agent List

You can configure the Monitor Agent to stop and start monitoring selected agents as needed.

At the Windows Monitor Agent server console:

1 Click Configuration > Filter.

or

On Linux, at the Monitor Agent Web console, click Preferences > Filter.
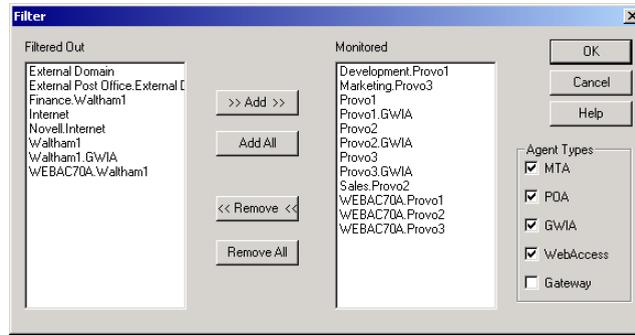
The Filtered Out list displays all agents that are not currently being monitored.

2 Select one or more agents in the Monitored list, then click Remove to move them to the Filtered Out list.

3 Click OK.

Agents in the Filtered Out list are not monitored and do not appear at the Monitor Agent server console or at the Monitor Agent Web console. To start monitoring a filtered-out agent, move it back to the Monitored list.

Adding All Agents on a Server

If you add a new server to your GroupWise system or want to monitor agents in a different GroupWise system, you can easily start monitoring all the agents running on that server.

At the Windows Monitor Agent server console:

1 Click Configuration > Add from Server.

or

On Linux, at the Monitor Agent Web console, click Preferences > Add Agents.
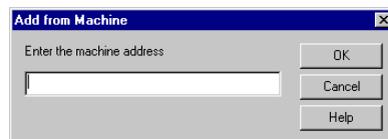
2 Type the IP address of the new server, then click OK.

All GroupWise agents on the new server are added to the list of monitored agents.

If the new server is part of your local GroupWise system, you can simply restart the Monitor Agent and it picks up all new agents in your system.

Adding All Agents on a Subnet

If you add several new servers to your GroupWise system or want to monitor agents in a different GroupWise system, you can easily start monitoring all the agents running on the same subnet.

At the Windows Monitor Agent server console:

1 Click Configuration > Add from Network.

or

On Linux, at the Monitor Agent Web console, click Preferences > Add Agents.

Add from Network

Enter the subnet

[   ]   OK

                        Cancel

                        Help
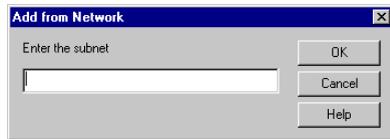
2 Type the subnet portion of the IP addresses of the new servers, then click OK.

All GroupWise agents on the subnet are added to the list of monitored agents.

If the new servers are part of your local GroupWise system, you can simply restart the Monitor Agent and it picks up all new agents in your system.

Adding an Individual Agent

You can start monitoring an individual agent anywhere in your GroupWise system or another GroupWise system.

At the Windows Monitor Agent server console:

1 Click Configuration > Add Agent.

or

On Linux, at the Monitor Agent Web console, click Preferences > Add Agents.

Add Agent

Enter the address of the new Agent.

Address [   ]   OK

Port   [   ]   Cancel

                            Help
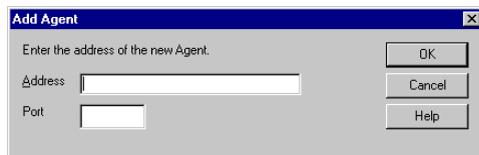
2 Type the IP address of the server where the agent runs.

3 Type the port number the agent listens on.

4 Click OK.

The agent is added to the list of monitored agents.

Removing Added Agents

To stop monitoring agents that you have manually added to the Monitor Agent's configuration:

At the Windows Monitor Agent server console:

1 Click Configuration > Remove Agents.

or

On Linux, at the Monitor Agent Web console, click Preferences > Remove Agents.

2 Select the agents you want to remove, then click Remove.

3 Click OK.

Creating and Managing Agent Groups

You might find it convenient to group related agents together for monitoring purposes. Initially, all agents are in a single group with the same name as your GroupWise system.
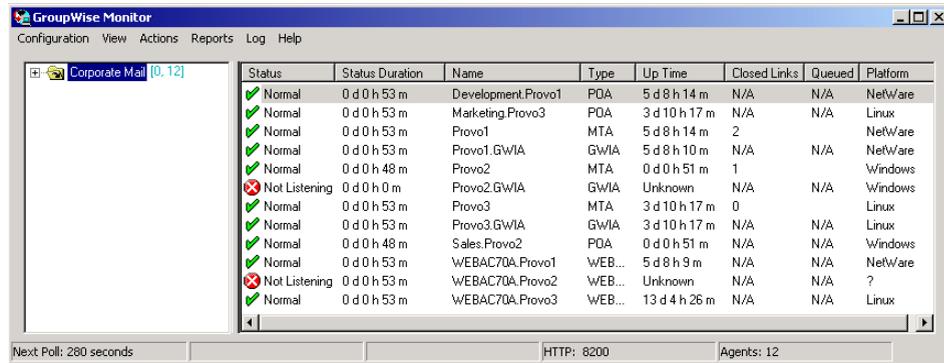
Agent groups are displayed on the left side of the Monitor Agent server console. When you select an agent group, the monitored agents in the group and their status information are listed on the right side of the Monitor Agent server console.
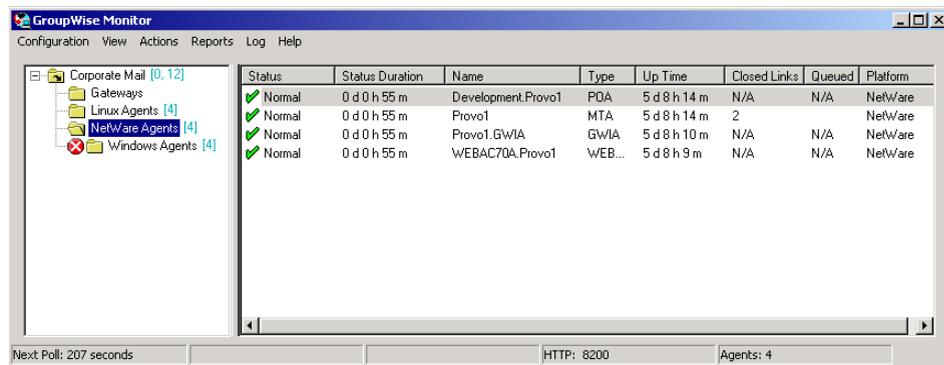
You can create additional groups and subgroups as needed to make monitoring similar agents easier. You might want to create agent groups based on geographical areas, on administrative responsibilities, or on agent configuration similarities. The number of agents in the group is displayed to the right of the group name in the agent groups window.

In addition, by creating agent groups, you can provide configuration settings for monitoring just once for all agents in each group, rather than having to provide them individually for each agent in your GroupWise system.

- ◆ "Creating an Agent Group" on page 952
- ◆ "Managing Agent Groups" on page 952
- ◆ "Viewing Your Agent Group Hierarchy" on page 952
- ◆ "Configuring an Agent Group" on page 953

NOTE: On Linux, your perform these tasks in the Monitor Web console, using steps similar to those provided in this section. You cannot create and manage agent groups at the Monitor Agent Web console.

Creating an Agent Group

At the Windows Monitor Agent server console:

1 Right-click the folder where you want to create the agent group, then click Create.

2 Type a name for the group, then click OK to create a new folder for the agent group.

The group name must be unique within its parent group.

3 Click a folder containing agents that you want to add to the new group.

4 Drag and drop agents into the new group as needed.

5 Click the new group to view its contents.

You can nest groups within groups as needed.

Managing Agent Groups

Managing agent groups is easy at the Monitor Agent server console:

- To rename an agent group, right-click the agent group, click Rename, type the new name, then press Enter.

- To move an agent group, drag and drop it to its new location.

- To delete an agent group, right-click the agent group, then click Delete. A group must be empty before you can delete it.

Viewing Your Agent Group Hierarchy

When you create nested groups, you can choose how much of the hierarchy you want displayed at the Monitor Agent server console:

- You can open and close groups manually by clicking the plus and minus icons beside each folder.

- To expand your entire group hierarchy, click View > Expand Tree.

- To collapse your entire group hierarchy, click View > Collapse Tree.

You can also decide whether you want to view just the agents in the currently selected group or the agents in subgroups as well. By default, only the agents in the selected folder are listed in the agent window. Right-click an agent group, then click Show Subgroup Agents to display the contents of nested groups along with the selected group.

Numbers in brackets beside each group indicate the number of agents in the selected group and the total number displayed

Configuring an Agent Group

Configuration settings for monitoring can be set individually for each monitored agent, for each agent group, or for all monitored agents collectively. You can establish default configuration settings for all agents by setting them on the root agent group that is named the same as your GroupWise system. Those default settings can be inherited by each subgroup that you create thereafter if you select Apply Options to Subgroups. Those default settings can be overridden by establishing different settings for an agent group or for an individual agent if you deselect Use Parent Options.

Configuring Monitoring Protocols

By default, the Monitor Agent uses HTTP to communicate with the agents it monitors. If HTTP is not available, the Monitor Agent changes automatically to SNMP.

GroupWise 7 agents, GroupWise 6.*x* agents and 6.*x*-level gateways, as well as the GroupWise agents provided with the GroupWise 5.5 Enhancement Pack, can be monitored using HTTP. Agents dating from GroupWise 5.5 and earlier, as well as 5.5-level GroupWise gateways, must be monitored using SNMP.

Configuring the Monitor Agent for HTTP

You can customize how the Monitor Agent communicates with your Web browser.

At the Windows Monitor Agent server console:

1 Click Configuration > HTTP.

or

At the Linux Monitor Agent Web console, click Preferences > Setup, then scroll down to the HTTP Settings section.

2 Modify the HTTP settings as needed:

HTTP Refresh: Specify the number of seconds after which the Monitor Agent sends updated information to the Monitor Web console. The default is 300 seconds (5 minutes).

HTTP Port: Specify the port number for the Monitor Agent to listen on for requests for information from the Web console. The default port number is 8200.

Open a New Window When Viewing Agents: Select this option to open a new Web browser window whenever you display an agent Web console. This enables you to view the Monitor Web console and an agent Web console at the same time, or to view two agent Web consoles at the same time for comparison.

3 Click OK to put the new HTTP settings into effect.

At the Windows Monitor Agent server console:

4 Click Configuration > Poll Settings.

or

On Linux, at the Monitor Agent Web console, click Preferences > Setup, then scroll down to the HTTP Settings section.
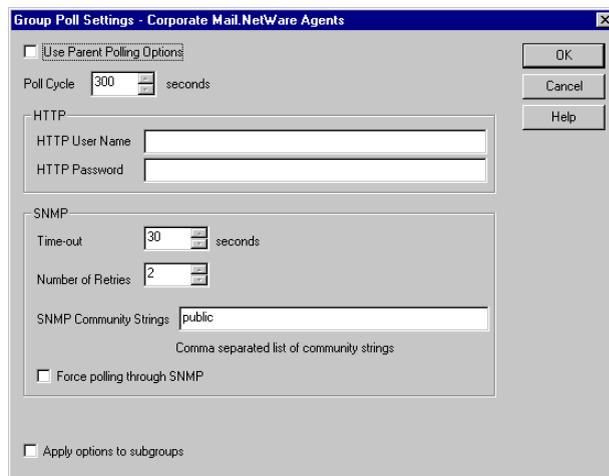
5 Fill in the following fields:

Poll Cycle: Specify the number of seconds after which the Monitor Agent polls all monitored GroupWise agents for updated information.

By default, the Monitor Agent starts 20 threads to poll monitored agents. You can use the /pollthreads startup switch to adjust the number of threads. For more information, see Chapter 65, "Using Monitor Agent Switches," on page 999.

By default, the Monitor Agent communicates with other GroupWise agents by way of XML. However, if XML is unavailable, the Monitor Agent automatically uses SNMP instead. Prior to the GroupWise 5.5 Enhancement Pack, GroupWise agents did not support XML, so the Monitor Agent must use SNMP to monitor these older agents. If you need to monitor older agents, see "Configuring the Monitor Agent for SNMP" on page 955.

If all monitored agents in the group require the same username and password in order to communicate with the Monitor Agent, you can provide that information as part of the Monitor Agent's configuration.

HTTP User Name: Provide the username for the Monitor Agent to use when contacting monitored agents in the group for status information.

HTTP Password: Provide the password, if any, associated with the username specified in the field above.

NOTE: On Linux, at the Monitor Agent Web console, the HTTP User Name and HTTP Password fields are not available. However, you can use the --httpagentuser and --httpagentpassword startup switches when you start the Monitor Agent to achieve the same functionality. For more information, see Chapter 65, "Using Monitor Agent Switches," on page 999.

If the monitored agents use different usernames and passwords, you are prompted to supply them when the Monitor Agent needs to communicate with the monitored agents.

6 Click Apply Options to Subgroups if you want subgroups to inherit these settings.

7 Click OK to put the specified poll cycle into effect.

Configuring the Monitor Agent for SNMP

The Monitor Agent must use SNMP to communicate with GroupWise agents that date from earlier than the GroupWise 5.5 Enhancement Pack. You can customize how the Monitor Agent communicates with such older agents and how it communicates with SNMP monitoring and management programs.

At the Windows Monitor Agent server console:

1 Click Configuration > Polling.

or

On Linux, at the Monitor Agent Web console, click Preferences > Setup, then scroll down to the SNMP Settings section.

2 Specify the number of seconds after which the Monitor Agent polls all monitored GroupWise agents for updated information using SNMP.

3 In the SNMP box, modify the SNMP settings as needed:

Time Out: Specify the number of seconds the Monitor Agent should wait for a response from servers where GroupWise agents run.

Number of Retries: Specify how often the Monitor Agent should try to contact the servers where GroupWise agents run.

SNMP Community Strings: Provide a comma-delimited list of community strings required to access the servers where GroupWise agents run.

Force Polling through SNMP: Select this option to use SNMP polling instead of the default of XML polling when contacting servers where agents in the group run.

4 Click Apply Options to Subgroups if you want subgroups to inherit these settings.

5 Click OK to put the new SNMP settings into effect.

6 Make sure the GroupWise agents you want to monitor using SNMP are enabled for SNMP. See "Setting Up SNMP Services for the POA" on page 523 and "Setting Up SNMP Services for the MTA" on page 655. The same instructions can be followed for all GroupWise 5.*x*, 6.*x*, and 7 agents.

Configuring Polling of Monitored Agents

By default, the Monitor Agent polls all monitored agents every five minutes. You can adjust the poll cycle as needed.

At the Windows Monitor Agent server console:

1 Select the root agent group to set the poll cycle default for all monitored agents.

or

Select any agent group to set the poll cycle for the agents in the selected group.

or

Select any agent to set the poll cycle for that individual agent.

2 Click Configuration > Poll Settings.

or

At the Linux Monitor Agent Web console, select one ore more agents, click Preferences > Setup, then scroll down to the HTTP Settings section.
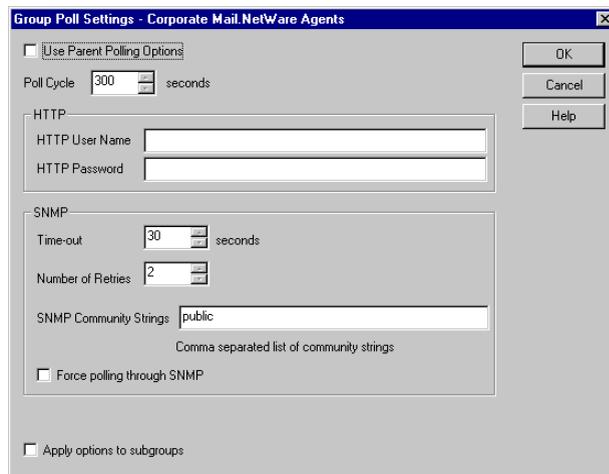
Unless you selected the root agent group, Use Parent Notification Options is selected and all options are dimmed. Deselect Use Parent Notification Options to set up e-mail notification for an agent group.

3 Increase or decrease the poll cycle as needed, then click OK.

Configuring E-Mail Notification for Agent Problems

The Monitor Agent can notify you by e-mail when agent problems arise.

* "Configuring E-Mail Notification" on page 957
* "Customizing Notification Thresholds" on page 958

Configuring E-Mail Notification

You can configure the Monitor Agent to notify one or more users by e-mail if an agent goes down. You can also receive e-mail confirmation messages showing that the Monitor Agent itself is still running normally.

At the Windows Monitor Agent server console:

1 Select the root agent group to set up e-mail notification defaults for all monitored agents.

or

Select any agent group to set up e-mail notification for the agents in the selected group.

or

Select any agent to set up e-mail notification for that individual agent.

2 Click Configuration > Notification.

or

On Linux, at the Monitor Agent Web console, select one or more agents, click Preferences > Setup to display the Notify settings.

Unless you selected the root agent group, Use Parent Notification Options is selected and all options are dimmed. Deselect Use Parent Notification Options to set up e-mail notification for an agent group or an individual agent.

3 Specify one or more e-mail addresses or pager addresses to send notifications to.

4 Specify the Internet domain name of your GroupWise system.

5 If the mail system to which e-mail notification is being sent performs reverse DNS lookups, specify the IP address or hostname of a server to relay the notification messages through.

The Monitor Agent should relay e-mail notifications through a server that has a published DNS address.

6 Click Test Notify to determine if the Monitor Agent can successfully send to the addresses specified in the Notification List field.

A message informs you of the results of the test. If the test is successful, a test message arrives shortly at each address. If the test is unsuccessful, double-check the information you provided in the Notification List, Mail Domain Name, and Relay Address fields.

7 Select the events to trigger e-mail notification messages.

- ◆ Agent down
- ◆ Server down
- ◆ Threshold exceeded
- ◆ State returns to normal

If you want to be notified of more specific states, see "Customizing Notification Thresholds" on page 958.

8 Select the amount of time that you want to elapse before repeat e-mail notifications are sent.

9 To monitor the Monitor Agent and assure it is functioning normally, select Periodic Monitor Confirmation, then select the number of minutes between Monitor Agent e-mail confirmation messages.

10 Click OK to save the e-mail notification settings.

Customizing Notification Thresholds

To refine the types of events that trigger e-mail notification messages, you can create your own thresholds that describe very specific states. Using thresholds, you can configure the Monitor Agent to notify you of problem situations peculiar to your GroupWise system.

1 Make sure that notification has been properly set up as described in "Configuring E-Mail Notification" on page 957.

2 Select one or more agents or agent groups.

At the Windows Monitor Agent server console:

3 Click Thresholds.

or

On Linux, at the Monitor Agent Web console, click Preferences > Thresholds.
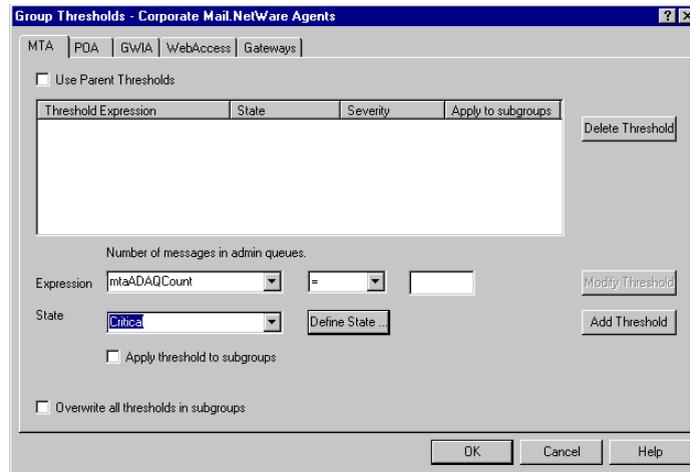
The tabs at the top of the dialog box enable you to create a separate threshold for each type of GroupWise agent.

4 Select the type of agent to create a threshold for.

5 In the Expression field, select a MIB variable.

GroupWise agent MIB files are located in the \agents\snmp directory of your GroupWise software distribution directory or *GroupWise 7 Administrator* CD. The MIB files list the meanings of the MIB variables and what type of values they represent. The meaning of the MIB variable selected in the Expression field is displayed above the field.

6 Select an operator from the drop-down list.

7 Type the value to test for.

8 In the State field, select an existing state.

Icon	State
⑦	Unknown
✔	Normal
❶	Informational
⚠	Marginal
◈	Warning
⚑	Minor
⚑	Major
✖	Critical

or

Create a new state:

8a At the Windows Monitor Agent server console, click Define State

or

On Linux, at the Monitor Agent Web console, click Preferences > States.

8b Type a name for the new state.

8c Select a severity level.

8d Provide instructions about how to handle the new state.

8e Click Close to save the new state.
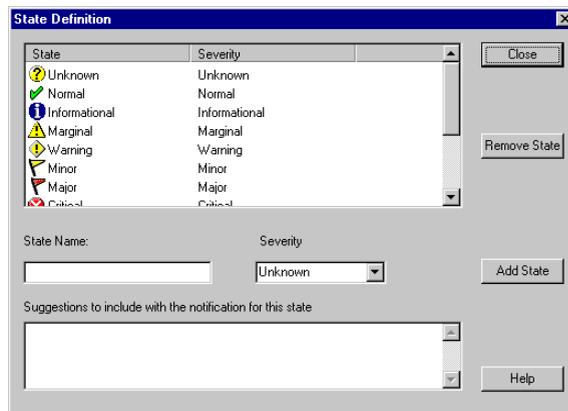
9 Click OK to create the new threshold.

10 Repeat Step 3 through Step 9 for each type of agent that you want to create a customized state for.

11 Make sure Threshold Exceeded is selected in the Notification Events box.

12 Click OK to save the new notification settings.

Configuring Audible Notification for Agent Problems

If the server where the Monitor Agent runs is located where someone can respond immediately to a GroupWise agent problem, you can configure the Monitor Agent to produce a different sound according to the nature of the problem.

NOTE: Audible notification is not available on Linux.

At the Windows Monitor Agent server console:

1 Select the root agent group to set up audible notification defaults for all monitored agents.

or

Select any agent group to set up audible notification for the agents in the selected group.

or

Select any agent to set up audible notification for that individual agent.

2 Click Configuration > Notification.
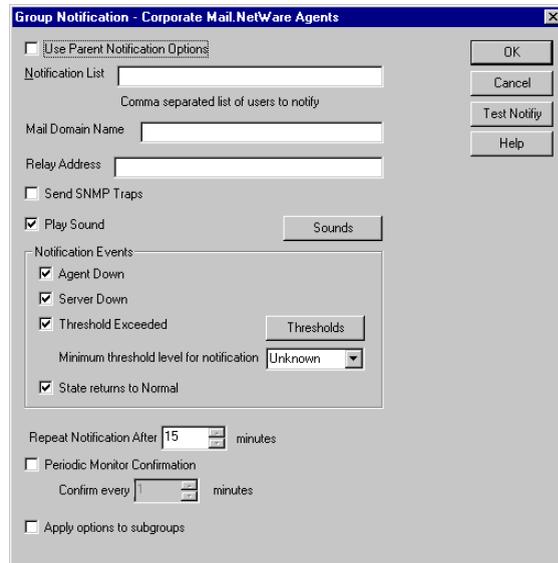
Unless you selected the root agent group, Use Parent Notification Options is selected and all options are dimmed. Deselect Use Parent Notification Options to set up notification for an agent group or individual agent.

3 Select Play Sound, then click Sounds.
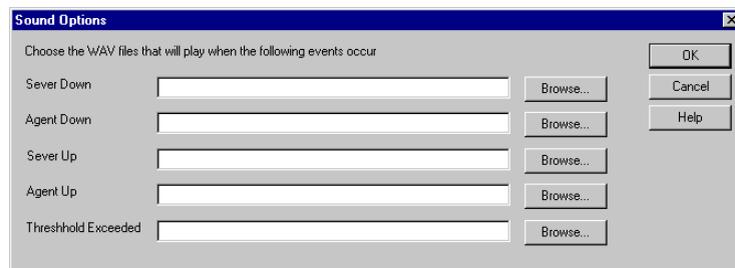
4 For each event, browse to and select a sound file to provide audible notification for each type of event for the selected agent group.

The Monitor Agent launches the default media player for whatever type of sound file you select. Basic sound files are available in the c:\windows\media directory.

5 Click OK to return to the Notification dialog box.

6 Select notification events and other notification settings as described in "Configuring E-Mail Notification for Agent Problems" on page 957.

7 Click OK to save the audible notification settings.

Configuring SNMP Trap Notification for Agent Problems

The Monitor Agent can throw SNMP traps for use by the Management and Monitoring component of Novell® ZENworks® for Servers or any other SNMP management and monitoring program.

At the Windows Monitor Agent server console:

1 Select the root agent group to set up SNMP trap notification defaults for all monitored agents.

or

Select any agent group to set up SNMP trap notification for the agents in the selected group.

or

Select any agent to set up SNMP trap notification for that individual agent.

2 Click Configuration > Notification.

or

On Linux, at the Monitor Agent Web console, select one or more agents, then click Preferences > Setup to display the Notify settings.
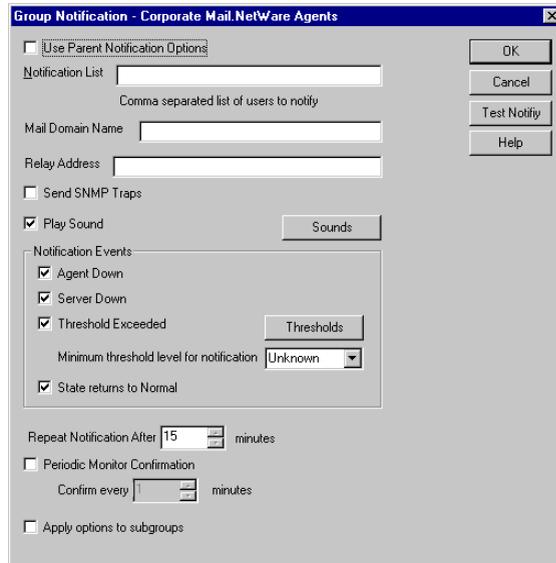
Unless you selected the root agent group, Use Parent Notification Options is selected and all options are dimmed. Deselect Use Parent Notification Options to set up notification for an agent group or individual agent.

3 Select Send SNMP Traps, then click OK.

4 Make sure that the Monitor Agent is properly configured for SNMP, as described in "Configuring the Monitor Agent for SNMP" on page 955.

Configuring Authentication and Intruder Lockout for the Monitor Web Console

Accessing GroupWise agent status information from your Web browser is very convenient. However, you might want to limit access to that information. You can configure the Monitor Agent to request a username and password before allowing users to access the Monitor Web console. In addition, you can configure the Monitor Agent to detect break-in attempts in the form of repeated unsuccessful logins.

NOTE: To limit access on Linux, use the --httpmonuser and --httpmonpassword startup switches when you start the Monitor Agent. For more information, see Chapter 65, "Using Monitor Agent Switches," on page 999 The intruder lockout functionality is not available on Linux.

At the Windows Monitor Agent server console:

1 Click Configuration > HTTP.
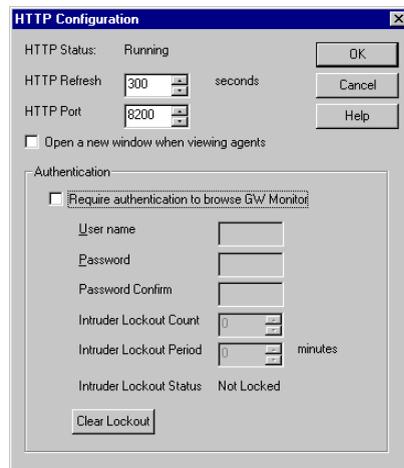
2 In the Authentication box, select Require Authentication to browse GW Monitor.

3 Fill in the fields:

User Name: Provide a username for the Monitor Agent to prompt for when a user attempts to access the Monitor Web console.

Password: Provide a password for the Monitor Agent to prompt for when a user attempts access. Repeat the password in the Password Confirm field.

To provide additional security for the Monitor Web console, use the /httpssl and /httpcertfile startup switches when starting the Monitor Agent. For more information, see Chapter 65, "Using Monitor Agent Switches," on page 999.

Intruder Lockout Count: Specify the number of failed attempts the Monitor Agent should allow before it stops prompting the potentially unauthorized user for a valid username and password.

Intruder Lockout Period: Specify the number of minutes that must elapse before the user can again attempt to access the Monitor Web console.

If a valid user gets locked out of the Monitor Web console, you can use Clear Lockout to grant access before the intruder lockout period has elapsed.

4 Click OK to put the authentication settings into effect.

Configuring Monitor Agent Log Settings

The Monitor Agent writes to two different types of log files.

- ◆ Event log files record error messages, status messages, and other types of event-related messages.
- ◆ History log files record dumps of all MIB values gathered during each poll cycle.

Log files can provide a wealth of information for resolving problems with Monitor Agent functioning or agent monitoring.

At the Windows Monitor Agent server console:

1 Click Log > Log Settings.

or

On Linux, at the Monitor Agent Web console, click Log.
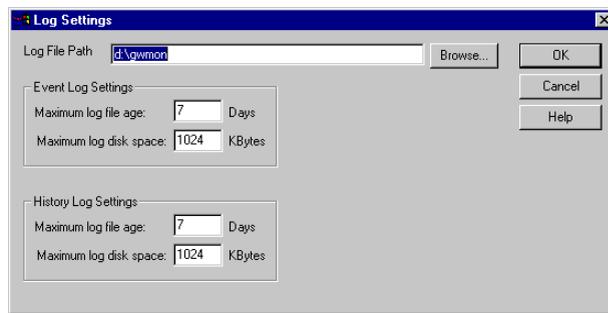
2 Fill in the fields:

Log File Path: Specify the full path of the directory where the Monitor Agent writes its log files.

The default log file location varies by platform.

Linux: /var/log/novell/groupwise/gwmon

Windows: c:\gwmon

Maximum Event Log File Age: Specify the number of days you want Monitor Agent event log files to remain on disk before being automatically deleted. The default event log file age is 7 days.

Maximum Event Log Disk Space: Specify the maximum amount of disk space for all Monitor event log files. When the specified disk space is used, the Monitor Agent overwrites existing Monitor Agent event log files, starting with the oldest. The default is 1024 KB of disk space for all Monitor Agent event log files.

Maximum History Log File Age: Specify the number of days you want Monitor Agent history log files to remain on disk before being automatically deleted. The default history log file age is 7 days.

Maximum History Log Disk Space: Specify the maximum amount of disk space for all Monitor history log files. When the specified disk space is used, the Monitor Agent overwrites existing Monitor Agent history log files, starting with the oldest. The default is 1024 KB of disk space for all Monitor Agent history log files.

3 Click OK to put the new log settings into effect.

4 To view existing event logs, click View > View Log Files.

5 To view existing history log files, click Log > View History Files.

Configuring Proxy Service Support for the Monitor Web Console

The Monitor Web console provides links to the agent Web consoles. Although you can access the Monitor Web console from outside your firewall, by default you cannot access the agent Web consoles from outside your firewall. To enable the Monitor Web console to display the agent Web consoles from outside your firewall, you need to enable the Monitor Agent to support proxy service.

1 In a text editor, open the Monitor Application configuration file (gwmonitor.cfg)

The default location of this file varies by platform.

Linux: /opt/novell/groupwise/agents/gwmonitor

Windows: c:\novell\gwmonitor

2 Locate the following line:

```
Provider.GWMP.Agent.Http.level=basic
```

3 Change it to:

```
Provider.GWMP.Agent.Http.level=full
```

The basic setting restricts use of the Monitor Web console to within a firewall, while the full setting allows use of the Web console both inside and outside a firewall. A third setting, none, disables use of the Web console.

4 Save and exit the Monitor Application configuration file.

5 Start the Monitor Agent with the /proxy startup switch.

For information about startup switches, see Chapter 65, "Using Monitor Agent Switches," on page 999.

Without proxy service support enabled, the Monitor Web console, after it gets a GroupWise agent's address from the Monitor Agent, communicates directly with the GroupWise agent. This process, however, does not work when communicating through a firewall.

With proxy service support enabled, all communication is routed through the Monitor Agent and Monitor Application (on the Web server). As long as the Web server can be accessed through the firewall, the Monitor Web console can receive information about all GroupWise agents that the Monitor Agent knows about.

Monitoring Messenger Agents

Monitor can be used to monitor Messenger agents as well as GroupWise agents. In fact, Monitor can be used independently to monitor Messenger Agents. If you start Monitor with no access to GroupWise system, you are prompted for the information Monitor needs in order to start monitoring Messenger agents.
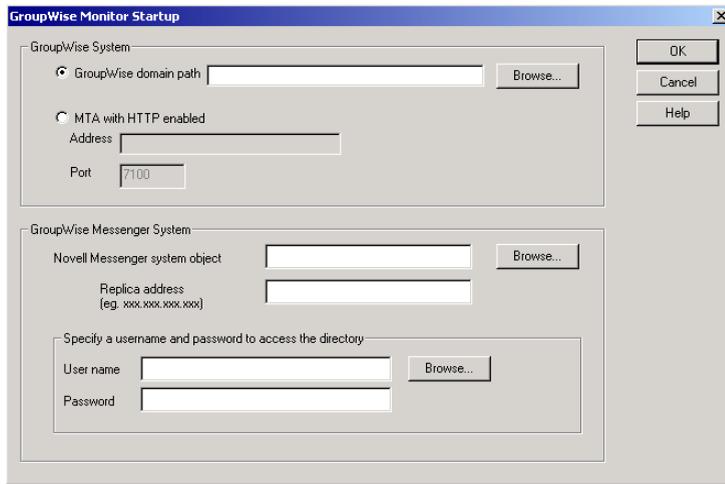
If Monitor is already monitoring GroupWise agents, then it is easy to add Messenger agents.

At the Windows Monitor Agent server console:

1 Click Configuration > Add Novell Messenger System.
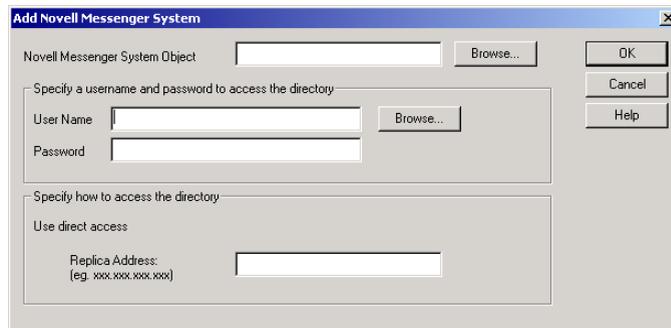
2 Fill in the following fields in the GroupWise Monitor Startup dialog box or the Add Novell Messenger System dialog box:

Novell Messenger System Object: Browse to and select the eDirectory™ container where you created the Messenger system.

User Name: Browse to and select a User object that has sufficient rights to enable the Monitor Agent to access Messenger object properties in eDirectory.

Password: Specify the network password associated with the User object.

Replica Address: Specify the IP address of a server where an eDirectory replica is available.

3 Click OK to add the Messenger Agent and the Archive Agent to the list of monitored agents.

NOTE: On Linux, use the Preferences > Add Agents at the Monitor Agent Web console to add the individual Messenger agents to the list of monitored agents. For more information, see "Adding an Individual Agent" on page 950.

Supporting the GroupWise High Availability Service on Linux

The GroupWise High Availability service, described in "Enabling the High Availability Service for the Linux Agents" in "Installing GroupWise Agents" in the *"GroupWise 7 Installation Guide"*, relies on the Monitor Agent to know when an agent has stopped and needs to be restarted. To enable communication between the Monitor Agent and the High Availability service, start the Monitor Agent with the --hauser and --hapassword startup switches, set to the username and password of the Linux user you set up to represent the High Availability service on your Linux server. You can also use the --hapoll startup switch to control how often the Monitor Agent contacts the High Availability service with agent status information. The default is every 2 minutes.

62 Configuring the Monitor Application

During installation, the GroupWise® Monitor Application is set up with a default configuration. However, you can use the information in the following sections to optimize the Monitor Application configuration:

- "Modifying Monitor Application Environment Settings" on page 969
- "Modifying Monitor Application Log Settings" on page 970
- "Adding or Removing Service Providers" on page 972
- "Modifying Monitor Application Template Settings" on page 973

Modifying Monitor Application Environment Settings

Using ConsoleOne®, you can modify the Monitor Application's environment settings. The environment settings determine such things as the location where ConsoleOne stores the Monitor Application's configuration file and how long the Monitor Application maintains an open session with an inactive user.

1 In ConsoleOne, use the Console View to browse to the Monitor Application object (named GroupWiseMonitor).
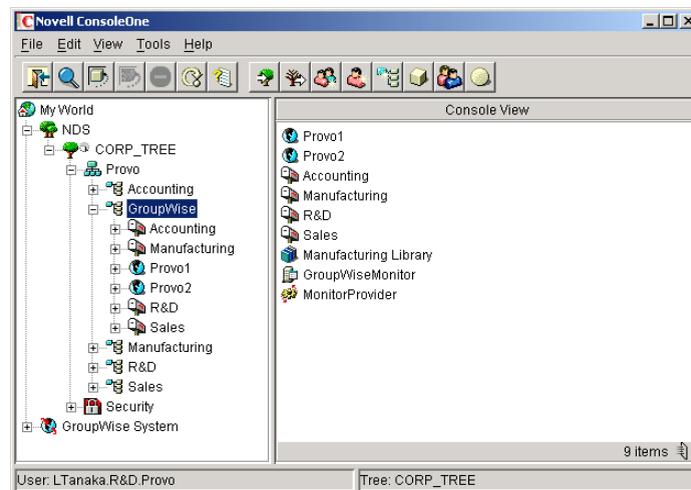
The Monitor Application object is not available in the GroupWise View.

2 Right-click the Monitor Application object, then click Properties to display the Environment page.
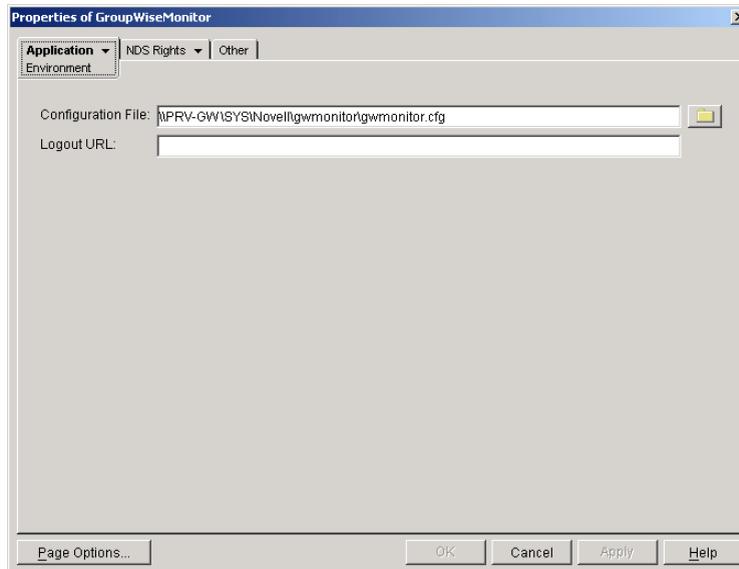
3 Modify the fields as needed:

Configuration File: The Monitor Application does not have access to Novell® eDirectory® or the GroupWise domain database (wpdomain.db). Therefore, ConsoleOne writes the application's configuration information to the file specified in this field. By default, this is the gwmonitor.cfg file located in the Monitor Application's home directory. The location of this home directory varies by platform.

Linux:	/opt/novell/groupwise/gwmonitor
Windows:	novell\gwmonitor at the root of the Web server

In general, you should avoid changing the location of the file.

IMPORTANT: On Linux, do not change the location of the gwmonitor.cfg file.

Logout URL: By default, if users are required to log in to the Monitor Web console, they are returned to the login page when they log out. If desired, you can enter the URL for a different page.

4 Click OK to save the changes.

Modifying Monitor Application Log Settings

The Monitor Application logs information to log files on disk. You can control the following logging features:

- The type of information to log
- How long to retain log files
- The maximum amount of disk space to use for log files
- Where to store log files

The Monitor Application creates a new log file each day and each time it is restarted (as part of the Web server startup). The log file is named *mmdd*mon.*nnn*, where *mm* is the month, *dd* is the year,

and *nnn* is a sequenced log file number (001 for the first log file of the day, 002 for the second, and so forth).

To modify the log settings:

1 In ConsoleOne, browse to and right-click the Monitor Application object (named GroupWiseMonitor), then click Properties.

2 Click Application > Log Settings.
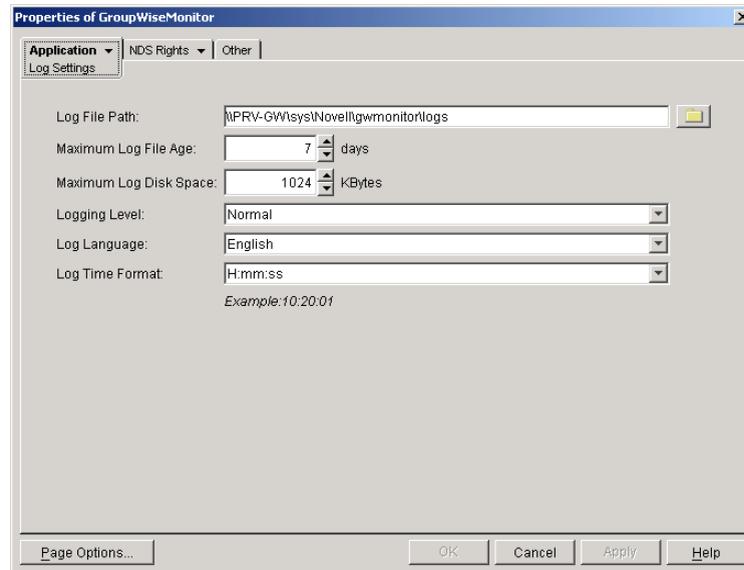
3 Modify the log settings as needed:

Log File Path: Specify the path to the directory where you want to store the log files. The default log file directory varies by platform.

Linux:	/var/log/novell/groupwise/gwmon
Windows:	novell\gwmonitor\logs directory at the root of the Web server

Maximum Log File Age: Specify the number of days you want to retain the log files. The Monitor Application retains the log file for the specified number of days unless the maximum disk space for the log files is exceeded. The default age is 7 days.

Maximum Log Disk Space: Specify the maximum amount of disk space you want to use for the log files. If the disk space limit is exceeded, the Monitor Application deletes log files, beginning with the oldest file, until the limit is no longer exceeded. The default disk space is 1024 KB.

Logging Level: There are four logging levels: None, Normal, Verbose, and Diagnostic. None turns logging off; Normal displays warnings and errors; Verbose displays Normal logging plus information messages and user requests; and Diagnostic displays all possible information. The default is Normal logging. Use Diagnostic only if you are troubleshooting a problem with Monitor.

The verbose and diagnostic logging levels do not degrade Monitor Agent performance, but log files saved to disk consume more disk space when verbose or diagnostic logging is in use.

Log Language: Select the language in which you want information written to the log files. The list contains many languages, some of which the Monitor Application might not support. If you select an unsupported language, the information is written in English.

Log Time Format: Choose from the following formats to use when the Monitor Application records dates and times in the log files: *HH:mm:ss:SS*, *MM/dd: H:mm:ss.SS*, or *dd/MM: H:mm:ss.SS*. *H* and *HH* represent hours, *mm* represents minutes, *ss* and *SS* represent seconds, *MM* represents months, and *dd* represents days.

4 Click OK to save the log settings.

Adding or Removing Service Providers

The Monitor Application receives requests from Monitor Web console users and then passes the requests to the appropriate service provider. The service provider fills the requests and returns the required information to the Monitor Application. The Monitor Application merges the information into the appropriate template and displays it to the user.

To function properly, the Monitor Application must know which service providers are available. The Monitor service provider communicates with the Monitor Agent to fill Monitor Web console requests. The Monitor service provider is installed and configured at the same time as the Monitor Application.

You can disable the Monitor service by removing the Monitor service provider. If you've created new service providers to expose additional services through GroupWise Monitor, you must define those service providers so that the Monitor Application knows about them.

To define service providers:

1 In ConsoleOne, right-click the Monitor Application object (named GroupWiseMonitor), then click Properties.

2 Click Application > Services.

The Provider List displays all service providers that the Monitor Application is configured to use.
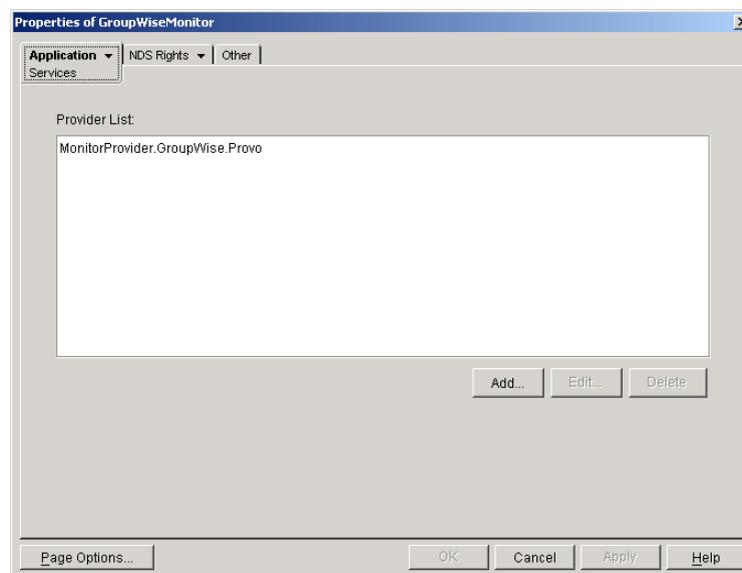
3 Choose from the following options:

Add: To add a service provider to the list, click Add, browse to and select the service provider's object, then click OK.

Edit: To edit a service provider's information, select the provider in the list, then click Edit.

Delete: To remove a service provider from the list, select the provider, then click Delete.

4 Click OK to save the changes.

Modifying Monitor Application Template Settings

When the Monitor Application receives information from a service provider, it merges the information into the appropriate Monitor template before displaying the information to the Monitor Web console user. Using ConsoleOne, you can modify the Monitor Application's template settings. The template settings determine such things as the location of the templates, the maximum amount of server memory to use for caching the templates, and the default template language.

1 In ConsoleOne, browse to and right-click the Monitor Application object (named GroupWiseMonitor), then click Properties.

2 Click Applications > Templates to display the Templates page.
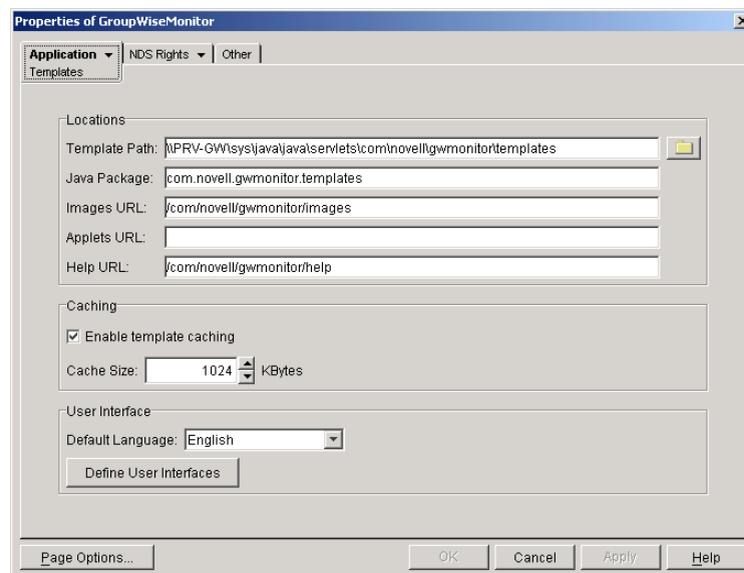
3 Modify the fields as needed:

Template Path: Select the location of the template base directory. The template base directory contains the subdirectories (simple, frames, hdml, and wml) for each of the templates provided with GroupWise Monitor. If you create your own templates, you need to place the templates in a new subdirectory in the template base directory. The default installation directory varies by platform.

Linux:	/var/opt/novell/tomcat/webapps/gw/WEB-INF/classes/com/novell/gwmonitor/templates
Windows:	tomcat_dir\webapps\ROOT\web-inf\classes\com\novell\gwmonitor\templates

Java Package: Specify the Java package that contains the template resources used by the Monitor Application. The default package is com.novell.gwmonitor.templates.

Images URL: Specify the URL for the GroupWise Monitor image files. These images are merged into the templates along with the GroupWise information. This URL must be relative to the Web server's document root directory.The default relative URL varies by platform.

Linux:	/gw/com/novell/gwmonitor/images
Windows:	com\novell\gwmonitor\images

Applets URL: The Monitor Application does not currently use applets.

Help URL: Specify the URL for the GroupWise Monitor Help files. The default installation directory is the com\novell\gwmonitor\help directory under the Web server's document root directory.

Enable Template Caching: To speed up access to the template files, the Monitor Application can cache the files in memory. Select this option to turn on template caching.

Cache Size: Select the maximum amount of memory, in kilobytes, you want to use when caching the templates. The default cache size, 1024 KB, is sufficient to cache all templates shipped with GroupWise Monitor. If you modify or add templates, you can turn on Verbose logging on the Monitor Application object Log Settings page to view the size of the template files. Using this information, you can then change the cache size appropriately.

Default Language: Select the language to use when displaying the initial Monitor Web console page.

Define User Interfaces: GroupWise Monitor supports Web browsers on many different devices (for example, computers and wireless telephones). Each device supports specific content types such as HTML, HDML, and WML. When returning information to a device's Web browser, the Monitor Application must merge the information into a set of templates to create an interface that supports the content type required by the Web browser.

GroupWise Monitor ships with several predefined user interfaces. These interfaces support Web browsers that require HTML, HDML, and WML content types. Click the User Interface button to view, add, modify, or delete user interfaces.

4 Click OK to save the new template settings.

63 Using the Monitor Agent Consoles

For a review of the three Monitor Agent consoles, see "Understanding the Monitor Agent Consoles" on page 944. This section focuses on using the Windows Monitor Agent server console and the Monitor Agent Web console, although many of these tasks can be performed at the Monitor Web console as well.

The GroupWise® Windows Monitor Agent server console displays GroupWise agent status on the server where the Monitor Agent runs. On Linux, similar information can be displayed at the Monitor Agent Web console.

- "Monitoring Agents at the Windows Monitor Agent Server Console" on page 975
- "Generating Reports" on page 980
- "Measuring Agent Performance" on page 988
- "Assigning Responsibility for Specific Agents" on page 994
- "Searching for Agents" on page 995

Monitoring Agents at the Windows Monitor Agent Server Console

Initially, the Windows Monitor Agent server console lists all monitored GroupWise agents, along with their statuses.

NOTE: On Windows, agents and agent groups are displayed at the Monitor Agent server console. On Linux, agent groups are displayed only at the Monitor Web console.

After you create agent groups, as described in "Creating and Managing Agent Groups" on page 951, the agents in each group are displayed when you select a group.
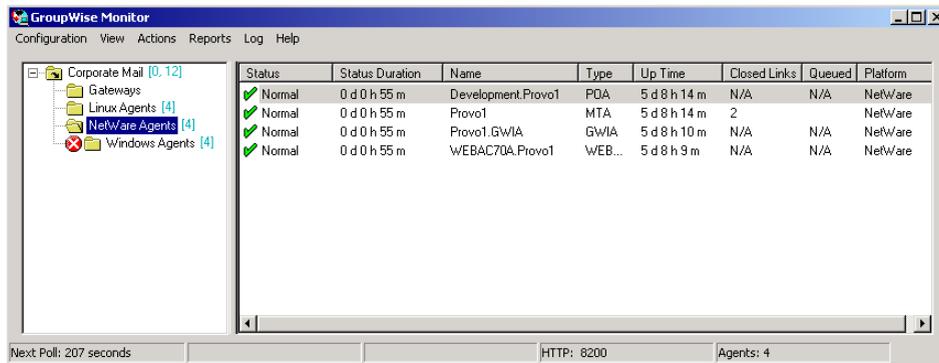
You can display many types of monitoring information at the Windows Monitor Agent server console.

- "Viewing All Agents" on page 976
- "Viewing Problem Agents" on page 976
- "Viewing an Agent Server Console" on page 977
- "Viewing an Agent Web Console" on page 977
- "Polling the Agents for Updated Status Information" on page 978

Viewing All Agents

After you have separated your agents into groups, you can still view all agents in your GroupWise system in a single list.

At the Windows Monitor Agent server console:

1 Right-click the root agent group, then click Show Agent Subgroups.
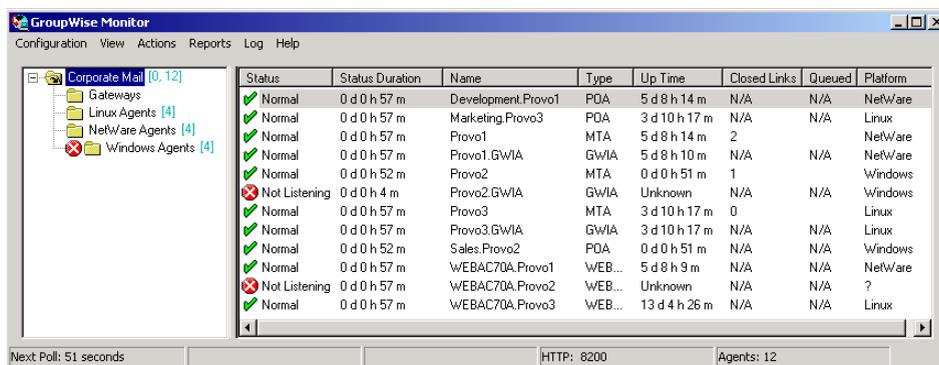
You can use the Show Agent Subgroups feature on any group that contains nested subgroups.

Viewing Problem Agents

In a single agent group or in a group with subgroups shown, you can filter the list to show only those agents whose status is not Normal.

At the Windows Monitor Agent server console:

1 Click View > Problem Agents.

or

On Linux, at the Monitor Agent Web console, click Problems.
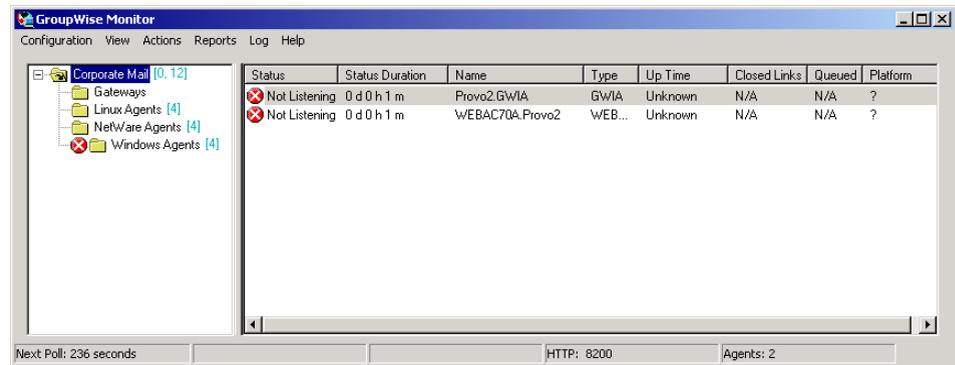
Only problem agents are now displayed. If you leave the Monitor Agent with only problem agents displayed, many groups might appear empty because all agents have a status of Normal.

2 To view all monitored agents again, click View > All Agents.

or

On Linux, at the Monitor Agent Web console, click System.

Viewing an Agent Server Console

An active agent server console displays on each server where a GroupWise agent is running. You can display a similar agent server console from the Windows Monitor Agent server console.

NOTE: This feature is not available on Linux.

1 Right-click an agent, then click Agent Console.
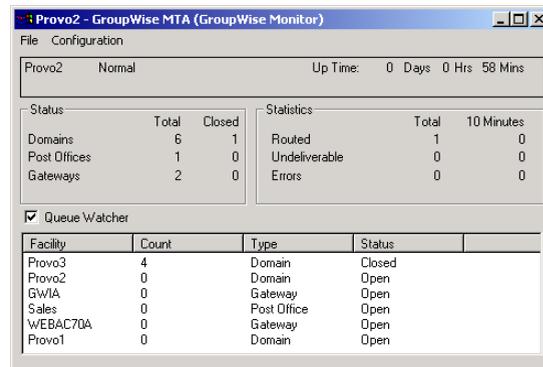
You cannot control the agent from the Monitor Agent like you can at the actual agent server console, but you can gather status information about the monitored agent.

Viewing an Agent Web Console

An agent Web console can be displayed anywhere you have access to a Web browser and the Internet. You can launch an agent Web console from the Windows Monitor Agent server console.

1 Right-click an agent, then click Agent Web Console.

or

On Linux, at the Monitor Agent Web console, click the domain or post office link.

```
GroupWise 7.0 POA - Development.Provo1
Status | Configuration | Environment | Log Files | Scheduled Events | MTP Status | Help
GroupWise Post Office Agent

Up Time: 3 Days 8 Hours 0 Minutes
                                          Total
C/S Users                                 1
Application Connections                   1
Physical Connections                      0
IMAP Sessions                             0
CAP Sessions                              0
SOAP Sessions                             0
Priority Queues                           0
Normal Queues                             0
GWCheck Auto Queues                       0
GWCheck Scheduled Queues                  0

Thread Status
                                  Total         Busy
C/S Handler Threads               6             0
Message Worker Threads            6             0
GWCheck Worker Threads            4             0
IMAP Threads                      2             0
CAP Threads                       1             0
SOAP Threads                      1             0
Message Transfer Status           Open

Statistics
                                  Total
C/S Requests                      111
C/S Requests Pending              0
```

For information about the agent Web consoles, see the GroupWise agent documentation:

- "Using the POA Web Console" on page 514
- "Using the MTA Web Console" on page 645
- "Using the Internet Agent Web Console" on page 768
- "Using the WebAccess Agent Web Console" on page 905

Polling the Agents for Updated Status Information

By default, the Monitor Agent polls the monitored agents every five minutes. You can change the default poll cycle, as described in "Configuring Polling of Monitored Agents" on page 956. The time remaining until the next poll cycle is displayed in the lower-left corner of the Monitor Agent server console.

You can also manually poll monitored agents:

- To poll all agents, click Action > Poll All Agents.
- To poll a specific agent, right-click the agent, then click Poll Agent.
- To stop polling a specific agent (for example, because the server it runs on is awaiting repairs), right-click the agent, then click Suspend Polling. You can specify a time interval for the agent to be suspended, after which polling resumes automatically. By suspending polling, you prevent repeat notifications for a problem that is already being addressed.

  The suspended agent's status is listed as Suspended, accompanied by the same icon used for the Unknown status ❓.

- To restart regular polling of an agent for which polling was suspended, right-click the agent, then click Resume Polling.

Monitoring Agents at the Monitor Web Console

The Monitor Web console lists all GroupWise agents that the Monitor agent is polling for status information. Use the following URLs to access the Monitor Web console:

Linux: http://*network_address*/gwmon/gwmonitor
Windows: https://*network_address*/gw/gwmonitor

where *network_address* represents the IP address or hostname of the server where the Monitor Agent is running.

Features of the Monitor Web console are available on buttons at the top of the Monitor page.

Button	Feature
	Problems
	Link Trace
	Link Configuration
	Global Options
	States
	Search

Click an agent group in the left panel to display all monitored agents in the group. Click the Problem button to display only those agents whose status is other than Normal in the agent group. Click the Problems icon to display all agents in your GroupWise system whose status is other than Normal.

Click the status of an agent in the Status column to display agent status details.

Click an agent in the Name column to open its agent Web console. For information about the agent Web consoles, see "Viewing an Agent Web Console" on page 977.

Click Refresh to update the agent status information. To modify the default poll cycle, see "Configuring Polling of Monitored Agents" on page 956.

To see what specific tasks can be performed at the Monitor Web console, see Chapter 64, "Comparing the Monitor Agent Consoles," on page 997.

Generating Reports

You can generate reports on demand at the Monitor Agent consoles to help you manage message flow throughout your GroupWise system.

- "Link Trace Report" on page 980
- "Link Configuration Report" on page 981
- "Image Map Report" on page 982
- "Environment Report" on page 985
- "User Traffic Report" on page 986
- "Link Traffic Report" on page 986
- "Message Tracking Report" on page 987
- "Performance Tracking Report" on page 987
- "Connected User Report" on page 987
- "Gateway Accounting Report" on page 988
- "Trends Report" on page 988
- "Down Time Report" on page 988

Link Trace Report

A link trace report enables you to follow the path a message would take between two GroupWise domains. A link trace report includes a list of all the domains through which a message would need to pass, along with their current status, link type, address, and number of messages currently queued in each domain. If any domain along the link path is closed, an error message is displayed.

If a message fails to arrive at its destination, this report can help you pinpoint its current location, so you can resolve the problem and get messages flowing smoothly again.

At the Windows Monitor Agent server console:

1 Click Reports > Link Trace.

   or

   On Linux, at the Monitor Agent Web console, click Link Trace.

2 Select a starting domain and a target domain.

3 If you want to trace the path back, which is the route status messages will take, select Trace Return Path.

4 Click Trace.
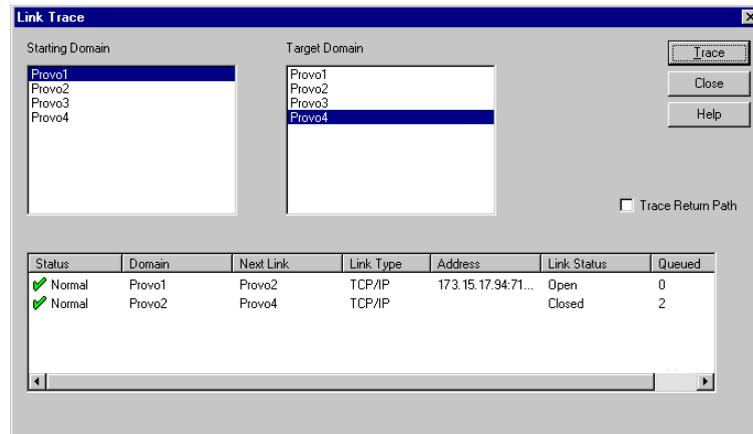
If any domain in the path is closed, an error message displays so you know where the problem is occurring.

5 When you are finished tracing links, click Close.

Link Configuration Report

A link configuration report enables you to list the links from one or more GroupWise domains to all other domains in your GroupWise system. This helps you identify inefficient link paths, loops, and unreachable domains. All domains must be open to obtain an accurate link map of your GroupWise system.

1 Make sure all domains in your GroupWise system are open.

You cannot obtain an accurate link map of your GroupWise system if any domains are closed. For assistance with closed domains, see "Message Transfer Agent Problems" in *GroupWise 7 Troubleshooting 2: Solutions to Common Problems*.

At the Windows Monitor Agent server console:

2 Click Reports > Link Configuration

or

On Linux, at the Monitor Agent Web console, click Link Configuration

3 Select All Agents

or

Select a specific agent from the drop-down list.

4 Click Run
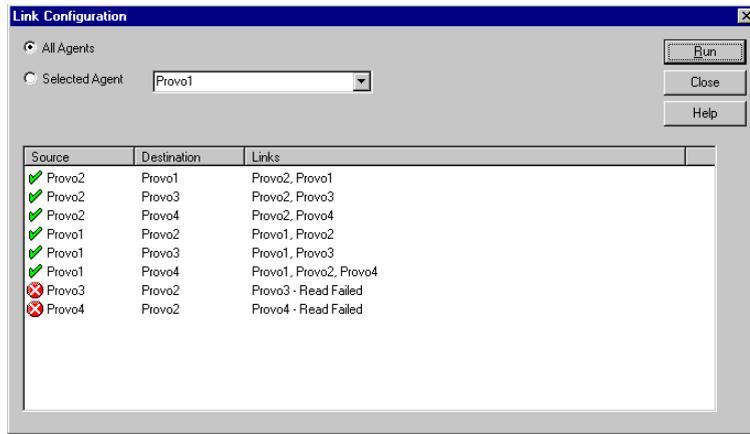
The list shows what domains a message would pass through to travel from the domain in the Source column to the domain in the Destination column. If a domain displays as closed, it means that the Monitor Agent could not contact the MTA for the domain or that a loop was detected in the link configuration.

5 When you are finished checking links, click Close.

Image Map Report

An image map enables you to create a visual picture of your GroupWise system, whether it resides in a single office building or spans the globe. You provide the maps; Monitor provides the up-to-the-minute status information at a glance.

To set up an image map:

1 Obtain useful maps from the Internet or other location.

You can use maps that vary in detail. For example, you could have one map the focuses on a particular corporate office building, another that shows offices throughout your country, and another that shows offices throughout the world. You can select from images in .png and .jpg format.

2 Copy the maps you want to use into the maps subdirectory of the monwork directory.

The default location of the monwork directory varies by platform.

Linux:	/tmp/gwmon/monwork
Windows:	c:\gwmon\monwork

You can change the location using the /monwork startup switch. For more information, see Chapter 65, "Using Monitor Agent Switches," on page 999

3 In the Monitor Agent Web console, click Map > New.

Status | Preferences | Link Trace | Link Configuration | Reports | Log | Map

Select map to use in image map

euoutl.png   earthtruecolor_nasa_big.jpg
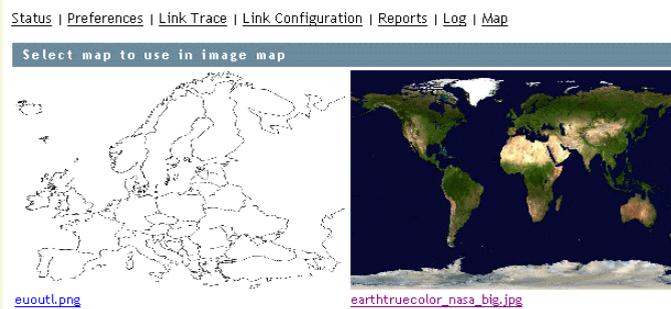
NOTE: The image map report cannot be generated at the Windows Monitor Agent server console.

4 Click the map that you want to set up, specify a name for the map, then click Create.

Select an agent or map   Provo3   Remove   Done
Click on the map to place the agent   Line color: Red

5 Select an agent in the drop-down list, then click the place on the map where that agent is located.

The agent name appears in a blue box.

6 Select additional agents and locations as needed.

Select an agent or map
Click on the map to place the agent
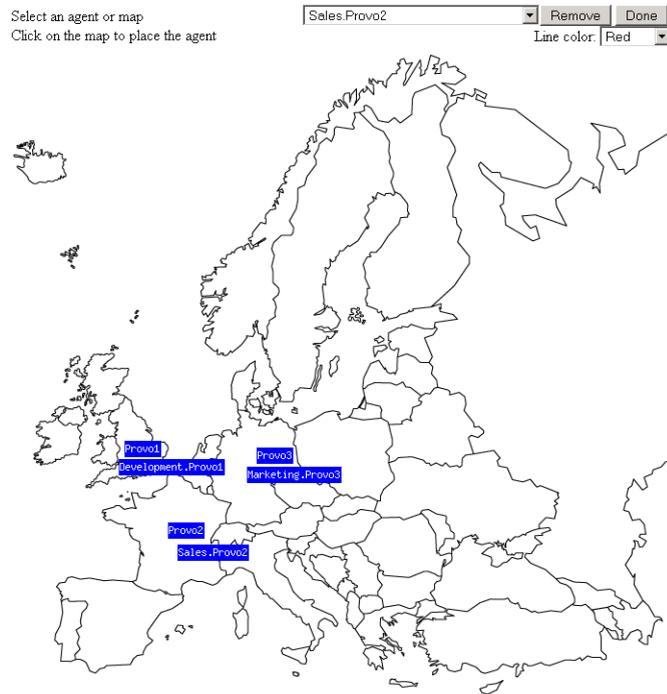
7 In the Line Color drop-down list, select the color to use to show links between locations.

Make sure you select a color that shows up well on the particular map.

8 Click Done when the map includes all the needed GroupWIse agents in their respective locations.

To use an image map:

1 In the Monitor Agent Web console, click Map > View.

2 Click a map to view agent status.

At this point, the Monitor Agent checks the status of each agent on the map. Any agent that is down or that has a status of Major or Critical displays in red on the map. Agents with statuses of Warning or lower do not display on the map. If a link between agents is down, a line displays between the agents.

Environment Report

An environment report lists all monitored agents, along with each agent's location, version, IP address, port number, and operating system information. For NetWare® agents, the server name, CLIB version, TCP/IP version, Novell eDirectory™ version, and the number of packet receive buffers are also listed.

At the Windows Monitor Agent server console or the Monitor Agent Web console:

1 Click Reports > Environment.

2 Scroll through the displayed information for your own use.

or

Click Send, type your e-mail address, type one or more e-mail addresses to send the environment report to, then click Send.

3 Click OK to close the Environment Report dialog box.

User Traffic Report

A user traffic report enables you to determine how many messages a user has sent outside his or her post office. The user traffic report lists all messages sent by a specified user during a specified date/time range, along with date, time, and size information for each message. You can also generate a user traffic report for all users whose messages pass through a selected domain.

In order for the information to be available to generate a user traffic report, you must configure the MTA to perform message logging. See "Enabling MTA Message Logging" on page 631.

At the Windows Monitor Agent server console or the Monitor Agent Web console:

1 Click Reports > User Traffic.

2 Select the user's domain or the domain you want to generate a user traffic report for.

3 Type the GroupWise user ID that you want to create a report for.

or

Leave the field blank to create a report for all users whose messages pass through the selected domain.

4 If you want to restrict the report to a particular time interval, specify start and end dates and times.

5 Click Run.

6 After the results are displayed, click Save, provide a filename for the report, select the format for the report, then click OK.

Reports can be saved in comma-separated or tab-separated format to meet the needs of the program you plan to use to display and print the report. For example, you could bring the data into a spreadsheet program. If needed, you can include column headings to create an initial line in the output file that labels the contents of each column.

7 When you are finished generating user traffic reports, click Close.

Link Traffic Report

A link traffic report enables you to determine how many messages are passing from a selected GroupWise domain across a specified link. The link traffic report lists the total number and total size of all messages passing through the link during each hour or half hour of operation.

In order for the information to be available to generate a link traffic report, you must configure the MTA to perform message logging. See "Enabling MTA Message Logging" on page 631.

At the Windows Monitor Agent server console or Monitor Agent Web console:

1 Click Reports > Link Traffic.

2 Select the source domain of the link.

The list includes all domains that the Monitor Agent uses XML to communicate with. If the Monitor Agent must use SNMP to communicate with a domain, that domain is not included in the list.

3 Select the other end of the link, which could be another domain, a post office, or a gateway.

4 If you want to restrict the report to a particular time interval, specify start and end dates and times.

5 Click Run.

6 After the results are displayed, click Save, provide a filename for the report, select the format for the report, then click OK.

Reports can be saved in comma-separated or tab-separated format to meet the needs of the program you plan to use to display and print the report. For example, you could bring the data into a spreadsheet program. If needed, you can include column headings to create an initial line in the output file that labels the contents of each column.

7 When you are finished generating link traffic reports, click Close.

Message Tracking Report

A message tracking report enables you to track an individual message through your GroupWise system. The message tracking report provides information about when a message was sent, what queues the message has passed through, and how long it spent in each message queue. If the message has not been delivered, the message tracking report shows where it is.

In order for the information to be available to generate a message tracking report, you must configure the MTAs in your GroupWise system to perform message logging. See "Enabling MTA Message Logging" on page 631.

In addition, you need to determine the message ID of the message. Have the sender check the Sent Item Properties of the message in the GroupWise client. The Mail Envelope Properties field displays the message ID of the message; for example, 3AD5EDEB.31D : 3 : 12763.

At the Windows Monitor Agent server console or Monitor Agent Web console:

1 Click Reports > Message Tracking.

2 Type the message ID of the message to track.

You can obtain the message file ID in the GroupWise client. Open the Sent Items folder, right-click the message, click Properties, then check the Mail Envelope Properties field for the message file ID; for example, 3A75BAB9.FF1 : 8 : 31642.

3 Select the domain where you want to start tracking.

4 Click Track.

5 When you are finished generating message tracking reports, click Close.

Performance Tracking Report

Before you can run a performance tracking report, you must configure the Monitor Agent for performance tracking. See "Measuring Agent Performance" on page 988.

Connected User Report

The Connected Users report lists all users that are currently connected to POAs throughout your GroupWise system. It lists username; client version, date, and platform; login time; and the IP address of the client user.

At the Monitor Agent Web console:

1 Click Reports > Connected Users.

NOTE: The Connected Users report cannot be generated at the Windows Monitor Agent server console or the Monitor Web console.

Gateway Accounting Report

Before you can run a gateway accounting report, you must configure the Monitor Agent to collect gateway accounting data. See "Collecting Gateway Accounting Data" on page 992.

Trends Report

The Trends report presents graphs of agent MIB variables as sampled over time.

In the Monitor Agent Web console:

1 Click Reports > Trends.

NOTE: The Trends report cannot be generated at the Windows Monitor Agent server console.

2 Click the type of agent for which you want to set up a Trend report.

3 Specify a unique name for the Trend report.

4 Select the MIB variables that you want to collect values for over time, then click Add Trend.

The Trend report appears in the Agent Trends list.

5 Click the Trend report to view the graphs.

Down Time Report

The Down Time report graphically illustrates how much time each GroupWise agent has been down during the day.

In the Monitor Agent Web console:

1 Click Reports > Down Time.

NOTE: The Down Time report cannot be generated at the Windows Monitor Agent server console.

Measuring Agent Performance

To test the performance of the agents in your GroupWise system, you can send performance test messages from a specially configured Monitor domain to target domains anywhere in your GroupWise system. The Monitor Agent measures the amount of time it takes for replies to return from the target domains, which lets you ascertain the speed at which messages flow through your GroupWise system.

Perform the following steps to set up agent performance testing:

- "Setting Up an External Monitor Domain" on page 989
- "Selecting an MTA to Communicate with the Monitor Agent" on page 989
- "Configuring the Monitor Agent for Agent Performance Testing" on page 990
- "Viewing Agent Performance Data" on page 991

- "Viewing an Agent Performance Report" on page 991
- "Receiving Notification of Agent Performance Problems" on page 991

Setting Up an External Monitor Domain

Before you can use the GroupWise Performance Testing dialog box to configure and enable GroupWise performance testing, you must create a specially configured Monitor domain and select an MTA to receive performance test messages from the Monitor Agent. The Monitor Agent uses an external GroupWise domain as part of measuring performance.

In ConsoleOne:

1 Create an external GroupWise domain.

For information about external GroupWise domains, see "Creating an External Domain" in "Connecting to GroupWise 5.x, 6.x, and 7 Systems" in the *GroupWise 7 Multi-System Administration Guide*. By creating an external domain, you enable the Monitor Agent to approximate the round-trip time for e-mail messages to travel to recipients and for status messages to travel back to senders. If you are going to set up gateway accounting reports, as described in "Collecting Gateway Accounting Data" on page 992, you can use this same external domain for collecting accounting data.
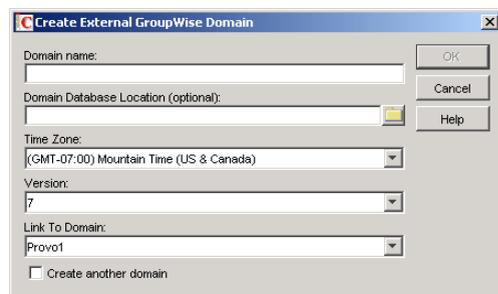
2 Name the external domain to reflect its role in your GroupWise system.

For example, you could name it ExternalMonitorDomain. It does not matter which domain you link the external domain to.

3 Continue with "Selecting an MTA to Communicate with the Monitor Agent" on page 989.

Selecting an MTA to Communicate with the Monitor Agent

The Monitor Agent needs to send its performance testing messages to a specific MTA in your GroupWise system. It does not matter which MTA you decide to use. It could be the MTA for the domain to which the external Monitor domain is linked.

In the Link Configuration Tool in ConsoleOne (Tools > GroupWise Utilities > Link Configuration):

1 Configure the outbound link from the selected MTA to the external Monitor domain to be a TCP/IP link.
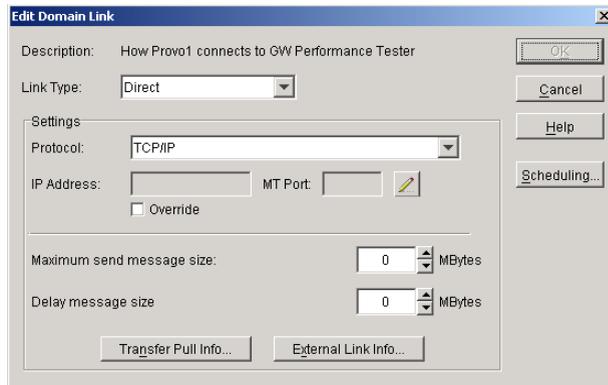
2 Click the pencil icon to provide the IP address of the server where the Monitor Agent runs.

3 Specify a unique port number for the MTA to use to communicate with the Monitor Agent.

Click OK twice to finish modifying the link.

4 Exit the Link Configuration Tool to save the new link configuration information.

5 Continue with "Configuring the Monitor Agent for Agent Performance Testing" on page 990.

Configuring the Monitor Agent for Agent Performance Testing

After you have created an external Monitor domain and configured a link from it to an MTA, you are ready to configure the Monitor Agent for performance testing.

At the Windows Monitor Agent server console:

1 Click Configuration > Performance Testing.

or

On Linux, at the Monitor Agent Web console, click Preferences > Setup, then scroll down to the Performance Testing section.
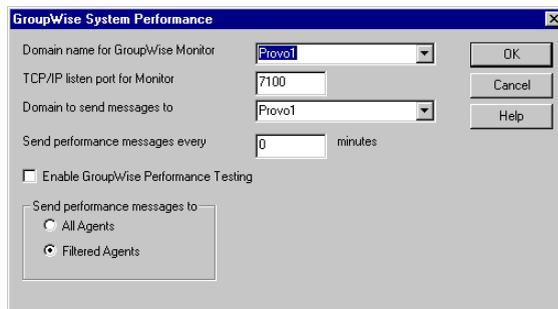
2 Fill in the fields:

Domain Name for GroupWise Monitor: Select the external Monitor domain that you configured for system performance testing.

You might need to restart the Monitor Agent in order to see the new Monitor domain in the drop-down list.

TCP/IP Listen Port for Monitor: Specify the port number where you configured the MTA to communicate with the Monitor Agent.

Domain to Send Messages To: Select the domain where the specially configured MTA is running.

The Monitor Agent directs all performance test messages to the selected domain. From there, the MTA transfers the performance test messages to the agents whose performance is being measured.

Send Performance Messages Every: Specify in minutes the time interval for the Monitor Agent to send performance test messages.

Enable GroupWise Performance Testing: Select this option to turn on performance testing. Deselect this option when you have finished your performance testing.

Send Performance Messages To: Select All Agents to send performance test messages to all domains in your GroupWise system. Select Filtered Agents to send performance test messages only to the agents currently listed at the Monitor Agent console.

3 Click OK to put the performance testing settings into effect.

4 Continue with .

or

Continue with .

Viewing Agent Performance Data

The information gathered by the Monitor Agent through performance test messages is recorded in the Monitor history log.

At the Windows Monitor Agent server console or Monitor Agent Web console:

1 Click Log > View History Files.

2 Select a history log file > click View.

Viewing an Agent Performance Report

A performance testing report enables you to measure how long it takes messages to travel through your GroupWise system. The performance testing report lists each domain that a performance test message was sent to, when it was sent by the Monitor Agent, and the number of seconds between when it was sent and when the Monitor Agent received a response from the tested agent.

At the Windows Monitor Agent server console or Monitor Agent Web console:

1 Click Reports > Performance Testing.

2 Select All Domains to generate a performance testing report for all domains in your GroupWise system.

or

Select one domain to generate a performance testing report for it.

3 Click Run to generate the performance testing report.

Receiving Notification of Agent Performance Problems

If you want the Monitor Agent to notify you if system performance drops to an unacceptable level, you can create a threshold to check the mtaLastResponseTime and mtaAvgResponseTime MIB variables. The average response time is a daily average that is reset at midnight. See "Customizing Notification Thresholds" on page 958 for setup instructions.

Collecting Gateway Accounting Data

To gather gateway accounting data for a gateway, you set up a specially configured Monitor domain. The Monitor Agent then measures the traffic that passes through the gateway.

Perform the following steps to set up gateway accounting:

- "Setting Up an External Monitor Domain" on page 989
- "Selecting an MTA to Communicate with the Monitor Agent" on page 989
- "Setting Up an External Post Office and External User for Monitor" on page 993
- "Receiving the Accounting Files" on page 994
- "Viewing the Gateway Accounting Report" on page 994

Setting Up an External Monitor Domain

Before you can run a gateway accounting report, you must create a specially configured Monitor domain and select an MTA to transfer accounting data to and from the Monitor Agent. The Monitor Agent uses an external GroupWise domain as part of this process.

In ConsoleOne®:

1 Create an external GroupWise domain.

For information about external GroupWise domains, see "Creating an External Domain" in "Connecting to GroupWise 5.x, 6.x, and 7 Systems" in the *GroupWise 7 Multi-System Administration Guide*. If you are going to set up agent performance reports, as described in "Measuring Agent Performance" on page 988, you can use this same external domain for collecting agent performance data.
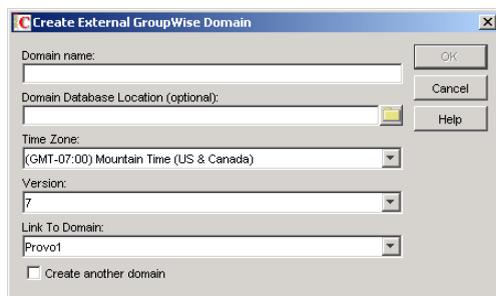
2 Name the external domain to reflect its role in your GroupWise system.

For example, you could name it ExternalMonitorDomain. It does not matter which domain you link the external domain to.

3 Continue with "Selecting an MTA to Communicate with the Monitor Agent" on page 989.

Selecting an MTA to Communicate with the Monitor Agent

The Monitor Agent needs to receive its gateway accounting messages from a specific MTA in your GroupWise system. It does not matter which MTA you decide to use. It could be the MTA for the domain to which the external Monitor domain is linked.

In the Link Configuration Tool in ConsoleOne (Tools > GroupWise Utilities > Link Configuration):

1 Configure the outbound link from the selected MTA to the external Monitor domain to be a TCP/IP link.
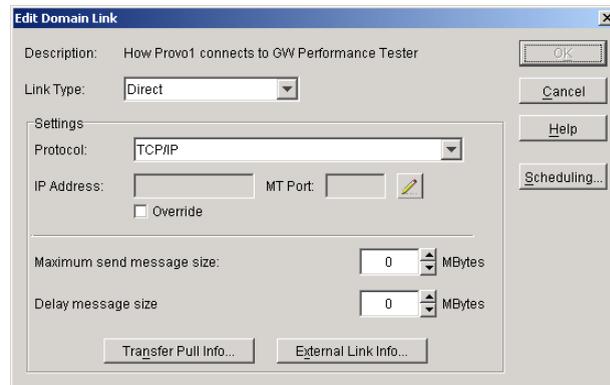
2 Click the pencil icon to provide the IP address of the server where the Monitor Agent runs.

3 Specify a unique port number for the MTA to use to communicate with the Monitor Agent.

   Click OK twice to finish modifying the link.

4 Exit the Link Configuration Tool to save the new link configuration information.

5 Continue with Setting Up an External Post Office and External User for Monitor.

Setting Up an External Post Office and External User for Monitor

The setup for gateway accounting requires an external post office and an external user in the external domain.

1 Create an external GroupWise post office.

   1a Right-click the External Domain object, then click New External Post Office.

   1b Name the external post office to reflect its role, such as ExternalMonitorPO.

   1c Click OK.

2 Create an external user.

   2a Right-click the External Post Office object, then click New > External User.

2b Name the external user to reflect its role, such as ExternalMonitorUser.

2c Click OK.

2d Continue with Receiving the Accounting Files

Receiving the Accounting Files

1 Make sure that you are set up to receive gateway accounting files.

For example, if you want to set up a gateway accounting report for activity to and from the Internet through the Internet Agent, you would add yourself as an Accountant on the Gateway Administrators page of the Internet Agent object, as described in "Tracking Internet Traffic with Accounting Data" on page 747. The Exchange Gateway and the Notes Gateway have comparable property pages.

2 In the GroupWise client, create a rule to forward all gateway accounting messages (that is, those messages with an attached acct file) to the Monitor user in the external gateway accounting post office.

3 In order to establish the link, restart the Monitor Agent and the MTA selected in "Selecting an MTA to Communicate with the Monitor Agent" on page 992.

4 To see that the logs are being received by the Monitor Agent:

4a At the Monitor Agent Web console, click Log > Gateway Accounting Logs.

4b Select the Internet Agent or gateway, then click View Accounting Logs.

If logs are listed, then data is successfully arriving to the Monitor Agent. It uses this data to generate gateway accounting reports.

Viewing the Gateway Accounting Report

After gateway accounting files are being successfully sent to the Monitor Agent for processing, you can view the Gateway Accounting report in your Web browser. The Gateway Accounting report organizes information gathered in gateway accounting files into a format that is visually easy to read.

1 At the Monitor Agent Web console, click Reports > Gateway Accounting.

NOTE: The Gateway Accounting report cannot be generated at the Windows Monitor Agent server console.

2 Select the Internet Agent (GWIA) or gateway for which you want to view accounting reports, then click View Accounting Reports.

You can view the report by domains or by users. You can sort the report on any column.

Assigning Responsibility for Specific Agents

If multiple GroupWise administrators manage the agents throughout your GroupWise system, you can assign a contact for each agent. Or, in a helpdesk environment, a person can be assigned to an agent when a problem occurs. The person assigned to the agent can record notes about the functioning of the agent, which are then available to other administrators.

At the Windows Monitor Agent server console:

1 Right-click an agent in the agent status window, then click Agent Details.

or

On Linux, at the Monitor Agent Web console, click the agent status link.
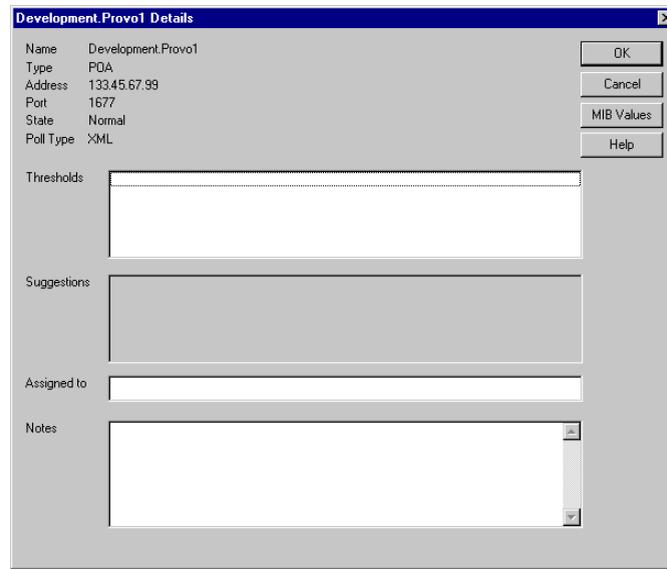
2 In the Assign To field, type the name of the GroupWise administrator who is responsible for this agent.

The name is displayed to the right of the agent status in the status window of the Monitor Agent console and the Monitor Web console.

3 In the Notes box, type any comments you might have about the agent.

If a problem with the agent occurs, the Thresholds box and the Suggestions box displays helpful information about the problem if you have set up customized thresholds, as described in "Customizing Notification Thresholds" on page 958.

4 Click OK to save the information about who is assigned to the agent.

Searching for Agents

If you monitor a large number of agents, the list displayed in the Monitor Web console can become very long. You can easily search for an individual agent or for a group of related agents.

At the Monitor Web console:

1 Click the Search icon.
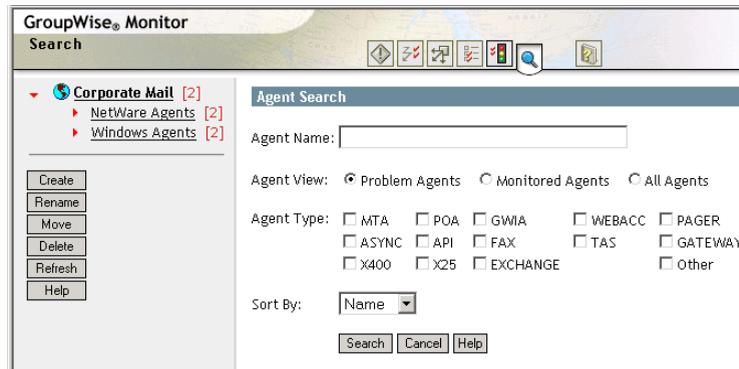
NOTE: The Search feature is not available in the Windows Monitor Agent server console or the Monitor Agent Web console.

2 Type the name of an agent.

or

Select Problems to list all agents whose status is other than Normal.

or

Select one or more types of agent to list.

3 Select the number of instances you want listed at one time.

4 Click Search.

The results display on the Search page with the same functionality as is available on the regular Monitor Web console pages.

64 Comparing the Monitor Agent Consoles

Many aspects of agent monitoring are available in one or more of the Monitor Agent consoles. The table below summarizes agent monitoring features and where they are available.

Task	Windows Monitor Agent Server Console	Monitor Agent Web Console	Monitor Web Console
Selecting Agents to Monitor	Yes	Yes	No
Creating and Managing Agent Groups	Yes	No	Yes
Viewing All Agents	Yes	Yes	Yes if not in groups
Viewing Problem Agents	Yes	Yes	Yes
Viewing an Agent Server Console	Yes	No	No
Viewing an Agent Web Console	Yes	Yes	Yes
Searching for Agents	No	No	Yes
Assigning Responsibility for Specific Agents	Yes	Yes	Yes
Configuring the Monitor Agent for HTTP	Yes	Yes	Yes
Configuring the Monitor Agent for SNMP	Yes	Yes	Yes
Configuring Polling of Monitored Agents	Yes	Yes	Yes
Configuring E-Mail Notification for Agent Problems	Yes	Yes	Yes
Configuring Audible Notification for Agent Problems	Yes	No	No
Configuring SNMP Trap Notification for Agent Problems	Yes	Yes	Yes
Configuring Authentication and Intruder Lockout for the Monitor Web Console	Yes	Authentication: Yes Intruder Lockout: No	No
Configuring Monitor Agent Log Settings	Yes	Yes	Yes
Monitoring Messenger Agents	Yes	Yes	Yes
Generating Reports	Yes	Yes	Yes
Link Trace Report	Yes	Yes	Yes

Link Configuration Report	Yes	Yes	Yes
Image Map Report	No	Yes	No
Environment Report	Yes	Yes	No
User Traffic Report	Yes	Yes	No
Link Traffic Report	Yes	Yes	No
Message Tracking Report	Yes	Yes	No
Performance Tracking Report	Yes	Yes	No
Connected User Report	No	Yes	No
Gateway Accounting Report	No	Yes	No
Trends Report	No	Yes	No
Down Time Report	No	Yes	No

65 Using Monitor Agent Switches

GroupWise® Monitor Agent startup switches must be used on the command line when you start the Monitor Agent, or in a script or batch file created to start the Monitor Agent. The Monitor Agent does not have a startup file for switches.

Linux:	If you start the Monitor Agent by running the gwmon executable, you can create a script like the following: /opt/novell/groupwise/agents/bin/gwmon --home /domain_directory *--other_switches* & If you start the Monitor Agent by running the grpwise-ma script, you can edit the MA_OPTIONS variable to include any switches you want to set.
Windows:	You can create a batch file like the following: c:\gwmon\gwmon.exe /*startup_switch* /*startup_switch* ... You can create a desktop icon for your batch file, or you can add startup switches to the Monitor Agent desktop icon that is created when you install the Monitor Agent.

The following Monitor Agent switches are available:

Linux Monitor Agent	Windows Monitor Agent	Windows Monitor Agent Server Console
--hapassword	/hapassword	N/A
--hapoll	/hapoll	N/A
--hauser	/hauser	N/A
--help	/help	N/A
--home	/home	N/A
--httpagentpassword	/httpagentpassword	Configuration > Poll Settings > HTTP Password
--httpagentuser	/httpagentuser	Configuration > Poll Settings HTTP User
--httpcertfile	/httpcertfile	N/A
--httpmonpassword	/httpmonpassword	Configuration > HTTP > HTTP Password
--httpmonuser	/httpmonuser	Configuration > HTTP > HTTP User
--httpport	/httpport	Configuration > HTTP > HTTP Port
--httpssl	/httpssl	N/A
--ipa	/ipa	N/A

Linux Monitor Agent	Windows Monitor Agent	Windows Monitor Agent Server Console
--ipp	/ipp	N/A
--lang	/lang	N/A
--log	/log	Log > Log Settings > Log File Path
--monwork	/monwork	N/A
--nmaddress	/nmaddress	Configuration > Add Novell Messenger System > Replica Address
--nmhome	/nmhome	Configuration > Add Novell Messenger System > Novell Messenger System Object
--nmpassword	/nmpassword	Configuration > Add Novell Messenger System > Password
--nmuser	/nmuser	Configuration > Add Novell Messenger System > User Name
--nosnmp	/nosnmp	N/A
--pollthreads	/pollthreads	N/A
--proxy	/proxy	N/A
--tcpwaitconnect	/tcpwaitconnect	N/A

NOTE: The Monitor Agent Web console does not include any settings comparable to the Monitor Agent startup switches.

/hapassword

Specifies the password for the Linux username that the Monitor Agent uses to log in to the Linux server where the GroupWise High Availability service is running. See "Supporting the GroupWise High Availability Service on Linux" on page 967.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--hapassword *password*	/hapassword-*password*
Example:	--hapassword high	/hapassword-high

See also /hauser and /hapoll.

/hapoll

Specifies in seconds the poll cycle on which the Monitor Agent contacts the GroupWise High Availability service to provide agent status information. The default is 120. See "Supporting the GroupWise High Availability Service on Linux" on page 967.

	Linux Monitor Agent	**Windows Monitor Agent**
Syntax:	--hapoll *seconds*	/hapoll-*seconds*
Example:	--hapoll 240	/hapoll-60

See also /hauser and /hapassword.

/hauser

Specifies the Linux username that the Monitor Agent can use to log in to the Linux server where the GroupWise High Availability service is running. See "Supporting the GroupWise High Availability Service on Linux" on page 967.

	Linux Monitor Agent	**Windows Monitor Agent**
Syntax:	--hauser *username*	/hauser-*username*
Example:	--hauser GWHA	/hauser-GWHA

See also /hapassword and /hapoll.

/help

Displays the Monitor Agent startup switch Help information. When this switch is used, the Monitor Agent does not start.

	Linux Monitor Agent	**Windows Monitor Agent**
Syntax:	--help	/help

/home

Specifies a domain directory, where the Monitor Agent can access a domain database (wpdomain.db). From the domain database, the Monitor Agent can determine which agents to monitor, what usernames and passwords are necessary to access them, and so on.

	Linux Monitor Agent	**Windows Monitor Agent**
Syntax:	--home /*directory*	/home-[*svr*][*vol*:]*dir* /home-*svr\vol\dir* /home-[*drive*:]*dir* /home-*svr\sharename\dir*

	Linux Monitor Agent	Windows Monitor Agent
Example:	--home /gwsystem/provo2	/home-\provo2
		/home-mail:\provo2
		/home-server2\mail:\provo2
		/home-\\server2\mail\provo2
		/home-\provo2
		/home-m:\provo2
		/home-\\server2\c\mail\provo2

See also /ipa and /ipp.

/httpagentpassword

Specifies the password for the Monitor Agent to prompt for when contacting monitored agents for status information. Providing a password is optional. See "Configuring the Monitor Agent for HTTP" on page 953.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpagentpassword *unique_password*	/httpagentpassword-*unique_password*
Example:	--httpagentpassword WatchIt	/httpagentpassword-WatchIt

See also /httpagentuser.

/httpagentuser

Specifies the username for the Monitor Agent to use when contacting monitored agents for status information. Providing a username is optional. See "Configuring the Monitor Agent for HTTP" on page 953.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpagentuser *unique_username*	/httpagentuser-*unique_username*
Example:	--httpagentuser AgentWatcher	/httpagentuser-AgentWatcher

See also /httpagentpassword.

/httpcertfile

Specifies the full path to the public certificate file used to provide secure SSL communication between the Monitor Agent and the Monitor Web console displayed in your Web browser. See "Configuring Authentication and Intruder Lockout for the Monitor Web Console" on page 962.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpcertfile /*dir*/*file*	/httpcertfile-[*drive*:]*dir**file* /httpcertfile-*svr**sharename**dir**file*
Example:	--httpcertfile /certs/gw.crt	/httpcertfile-\ssl\gw.crt /httpcertfile-m:\ssl\gw.crt /httpcertfile-\\server2\c\ssl\gw.crt

See also /httpssl.

/httpmonpassword

Specifies the password for the Monitor Web console to prompt for before allowing a user to display the Monitor Web console. Do not use an existing Novell® eDirectory™ password because the information passes over the non-secure connection between your Web browser and the Monitor Agent. See "Configuring Authentication and Intruder Lockout for the Monitor Web Console" on page 962.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpmonpassword *unique_password*	/httpmonpassword-*unique_password*
Example:	--httpmonpassword WatchIt	/httpmonpassword-WatchIt

See also /httpmonuser.

/httpmonuser

Specifies the username for the Monitor Web console to prompt for before allowing a user to display the Monitor Web console. Providing a username is optional. Do not use an existing eDirectory username because the information passes over the non-secure connection between your Web browser and the Monitor Agent. See "Configuring Authentication and Intruder Lockout for the Monitor Web Console" on page 962.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpmonuser *unique_username*	/httpmonuser-*unique_username*
Example:	--httpmonuser MonAdmin	/httpmonuser-MonAdmin

See also /httpmonpassword.

/httpport

Sets the HTTP port number used for the Monitor Agent to communicate with your Web browser. The default is 8200; the setting must be unique. See "Configuring the Monitor Agent for HTTP" on page 953.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpport *port_number*	/httpport-*port_number*
Example:	--httpport 8201	/httpport-9200

/httpssl

Sets the availability of secure SSL communication between the Monitor Agent and the Monitor Web console displayed in your Web browser. Valid values are enabled and disabled. See "Configuring Authentication and Intruder Lockout for the Monitor Web Console" on page 962.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--httpssl *setting*	/httpssl-*setting*
Example:	--httpssl enabled	/httpssl-enabled

See also /httpcertfile.

/ipa

Specifies the network address (IP address or DNS hostname) of a server where an MTA is running. The Monitor Agent can communicate with the MTA to obtain information about agents to monitor.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--ipa *network_address*	/ipa-*network_address*
Example:	--ipa 172.16.5.19 --ipa server2	/ipa-172.16.5.20 /ipa-server3

See also /ipp.

/ipp

Specifies the TCP port number associated with the network address of an MTA with which the Monitor Agent can communicate to obtain information about agents to monitor. Typically, the MTA listens for service requests on port 7100.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--ipp *port_number*	/ipp-*port_number*
Example:	--ipp 7110	/ipp-7111

See also /ipa.

/lang

Specifies the language to run the Monitor Agent in, using a two-letter language code as listed below. You must install the Monitor Agent in the selected language in order for the Monitor Agent to display in the selected language.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--lang *code*	/lang-*code*
Example:	--lang de	/lang-fr

The table below lists the valid language codes. Contact your local Novell sales office for information about language availability.

Language	Language Code	Language	Language Code
Arabic	AR	Hungarian	MA
Czechoslovakian	CS	Italian	IT
Chinese-Simplified	CS	Japanese	NI
Chinese-Traditional	CT	Korean	KR
Danish	DK	Norwegian	NO
Dutch	NL	Polish	PL
English-United States	US	Portuguese-Brazil	BR
Finnish	SU	Russian	RU
French-France	FR	Spanish	ES
German-Germany	DE	Swedish	SV
Hebrew	HE	Turkish	TR

/log

Specifies the full path of the directory where the Monitor Agent writes its log files. On Linux, the default directory is /var/log/novell/groupwise/gwmon. On Windows, the default is the GroupWise

Monitor installation directory (typically c:\gwmon). See "Configuring Monitor Agent Log Settings" on page 963.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--log /*dir*/*file*	/log-[*drive*:]*dir**file* /log-*svr**sharename**dir**file*
Example:	--log /opt/novell/groupwise/agents/logs	/log-\gw\logs /log-m:\gw\logs /log-\\server2\c\gw\logs

/monwork

Specifies the location where the Monitor Agent creates it working directory. The default location varies by platform.

Linux:	/tmp/gwmon
Windows:	c:\gwmon

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--monwork /*directory*	/monwork-[*svr*\][*vol*:]*dir* /monwork-*svr**vol**dir* /monwork-[*drive*:]*dir* /monwork-*svr**sharename**dir*
Example:	--monwork /tmp	/monwork-\temp /monwork-mail:\temp /monwork-server2\mail:temp /monwork-\\server2\mail\temp /monwork-\temp /monwork-m:\temp /monwork-\\server2\c\mail\temp

/nmaddress

Specifies the IP address where an eDirectory replica is available, from which the Monitor Agent can obtain the information it needs to monitor Messenger Agents. See "Monitoring Messenger Agents" on page 965.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--nmaddress *IP_address*	/nmaddress-*IP_address*
Example:	--nmaddress 172.16.5.18	/nmaddress-172.16.5.19

See also /nmuser, /nmpassword, and /nmhome.

/nmhome

Specifies the context of the eDirectory container object where a Novell Messenger system is located. See "Monitoring Messenger Agents" on page 965.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--nmhome *eDirectory_context*	/nmhome-*eDirectory_context*
Example:	--nmhome OU=MessengerService,O=Messenger	/nmhome-OU=MessengerService,OU=Provo,O=Novell

See also /nmuser, /nmpassword, and /nmaddress.

/nmpassword

Specifies the password for the eDirectory user that the Monitor Agent uses to log into eDirectory to obtain Messenger information. See "Monitoring Messenger Agents" on page 965

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--nmpassword *password*	/nmpassword-*password*
Example:	--nmpassword december	/nmpassword-sailboat

See also /nmuser, /nmhome, and /nmaddress.

/nmuser

Specifies a user that the Monitor Agent can use to log in to eDirectory to obtain information about the Messenger system from the various Messenger objects. See "Monitoring Messenger Agents" on page 965

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--nmuser *eDirectory_context*	/nmuser-*eDirectory_context*
Example:	--nmuser CN=Admin,OU=Users,O=Novell	/nmuser-CN=Admin,OU=Provo,O=Novell

See also /nmpassword, /nmhome, and /nmaddress.

/nosnmp

Disables SNMP for the Monitor Agent. The default is to have SNMP enabled. See "Configuring the Monitor Agent for SNMP" on page 955.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--nosnmp	/nosnmp

/pollthreads

Specifies the number of threads that the Monitor Agent uses for polling the agents for status information. Valid values range from 1 to 32. The default is 20. See "Configuring Polling of Monitored Agents" on page 956.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--pollthreads *number*	/pollthreads-*number*
Example:	--pollthreads 10	/pollthreads-32

/proxy

Routes all communication through the Monitor Agent and the Monitor Application (on the Web server). As long as the Web server can be accessed through the firewall, the Monitor Web console can receive information about all GroupWise agents that the Monitor Agent knows about. Without /proxy, the Monitor Web console cannot communicate with the GroupWise agents through a firewall. See "Configuring Proxy Service Support for the Monitor Web Console" on page 964.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--proxy	/proxy

/tcpwaitconnect

Sets the maximum number of seconds the Monitor Agent waits for a connection to a monitored agent. The default is 5.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	--tcpwaitconnect *seconds*	/tcpwaitconnect-*seconds*
Example:	--tcpwaitconnect 10	/tcpwaitconnect-15