Monitor

XIII

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Understanding the Monitor Agent Consoles

The Monitor Agent offers three consoles:

- Section 58.1, "Monitor Agent Server Console," on page 965
- Section 58.2, "Monitor Agent Web Console," on page 965
- Section 58.3, "Monitor Web Console," on page 966

For a comparison of the capabilities of the three consoles, see Chapter 62, "Comparing the Monitor Consoles," on page 1021

For detailed instructions about installing and starting the GroupWise[®] Monitor Agent for the first time, see "Installing GroupWise Monitor" in the *GroupWise 7 Installation Guide*.

58.1 Monitor Agent Server Console

The Monitor Agent server console is available for the Windows Monitor Agent but not for the Linux Monitor Agent.



😪 GroupWise Monitor								<u>_ ×</u>
Configuration View Actions Reports	Log Help							
🖃 🕞 Corporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
- 💼 Gateways	🖌 Normal	0 d 0 h 55 m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
	💅 Normal	0 d 0 h 55 m	Provo1	MTA	5d8h14m	2		NetWare
	🖌 Normal	0 d 0 h 55 m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
Windows Agents [4]	💅 Normal	0 d 0 h 55 m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
	1							
Next Poll: 207 seconds			нтт	P: 8200		Agents: 4		

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

58.2 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
```

Figure 58-2 Monitor Agent Web Console

Corporate Mail	Monitored age	nts for Corpora	te Mail							
Gateways	lip Time: 0 d 2h 14 m		Pol	de Subgrou	p Agents	Problem	Surpend	Reume	Move	Options Threat
NetWare Agents [4]	T Status	Status Duration	Name	Туре	Up Time	Closed	Links	Queued	Platform	Version
Windows Agents [4]	E & Normal	0 d 0 h 14 m	Development Provo	PDA	0 40 h 34 m	N		N/A	NetWate	7.0.1(4/4/2006)
	F & Normal	0 d 0 h 14 m	Manuting Proved	PDA	10 d 21 h 46 n	n Ni		NA	Windows	7.0.1 (2/15/200
Ciante 1	E & normal	0 d 0 h 14 m	Prevet.	MTA	0 60 h 34 m	2		2	NetWate	7.0.1(9492006)
Tenane	E P Normal	040h 14 m	Press1.0WIA	AMO	0 4 0 h 32 m	N	1	N/A	NefWare	7.0.1 (040406)
Move	E ShetLidening	04010m	Presso2	MTA	0 e 19 h 8 m	2		1	Windows	7.0.1 (3/15/200
Delete	E SatListering	04050m	Preve2.0WIA	OWIA	10 d 21 h 41 m	n Ni		N/A	Windows	7.0.1 (03-15-0
	E & Normal	0 d 0 h 14 m	Provo2	MTA	10 d 22 h 13 m	n 0		0	Linex	7.0.1 (03/15/200
	F & Normal	0 d 0 h 14 m	Envol.0MIA	OWIA	18 d 21 h 13 n	n Ni		N/A	Lines	7.0.1 (03/15/200
	E & memal	040558m	Salas.Prova2	POA	18 d 21 h 45 a	n Ni	÷	N/A	Windows	7.0.1 (3/15/200
	E Parmal	0 d 0 h 14 m	WEBACTOA Proval	WEBACC	0 e0 h 35 m	N		N/A	NetWare	7.0.1 (44200
	E & normal	0 d 0 h 14 m	WEBACTOA Prove2	WEBACC	12 d 3 h 30 m	N		NA	Windows	7.0.1 (2/16/2006
	T ONIT Latering	0 d0 h 12 m	WEBACTOA Proved	WEBACO	0 d0 h0 m	N		NIA	7	

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.

The Monitor Agent 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.

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 62, "Comparing the Monitor Consoles," on page 1021.

58.3 Monitor Web Console

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

```
NetWare or
Windows Web
Server:
Linux http://web_server_address/gwmon/gwmonitor
Web Server:
```

GroupWise _® Monitor		St. Sand						
		₹ •	¥ * Q					Novell.
S 🕙 <u>Corporate Mail</u>	Monit	ored agents for "Corporat	e Mail" group					
	Total:	12 Displayed: 1 - 12						
Create	Refres	<u>sh</u>		Proble	em Suspend	Resume M	love Options Thres	holds Help
Move		Name	Status	Status Duration	Up Time	Туре	Version	Platform
Delete		Provo3	Normal	11 d 18 h 48 m	1 d 14 h 20 m	MTA	7.0 (07/21/2005)	Linux
Refresh		Provo3.GWIA	<u>Normal</u>	11 d 18 h 48 m	1 d 14 h 20 m	GWIA	7.0 (07/21/2005)	Linux
нер		Marketing.Provo3	Normal	11 d 18 h 48 m	1 d 14 h 20 m	POA	7.0 (07/21/2005)	Linux
		WEBAC70A.Provo3	<u>Normal</u>	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)	NetWare
		Development.Provo1	<u>Normal</u>	8 d 23 h 5 m	3 d 12 h 16 m	POA	7.0 (7/12/2005)	NetWare
		Provo1.GWIA	Normal	3 d 10 h 19 m	3 d 12 h 12 m	GWIA	7.0 (07-12-05)	NetWare
		WEBAC70A.Provo1	Normal	8 d 21 h 40 m	3 d 12 h 12 m	WEBACC	7.0.0 (7/12/2005)	NetWare
		Provo2	Normal	11 d 18 h 48 m	11 d 20 h 7 m	MTA	7.0 (7/12/2005)	Windows
		Provo2.GWIA	Not Listening	0 d 14 h 46 m	0 d 0 h 0 m	GWIA	7.0 (07-12-05)	Windows
		Sales.Provo2	Not Listening	0 d 14 h 46 m	0 d 0 h 0 m	POA	7.0 (7/12/2005)	Windows
		WEBAC70A.Provo2	<u>Normal</u>	11 d 18 h 48 m	12 d 7 h 31 m	WEBACC	7.0 (7/12/2005)	Windows

Figure 58-3 Monitor Web Console

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 62, "Comparing the Monitor Consoles," on page 1021.

Configuring the Monitor Agent

For detailed instructions about installing and starting the GroupWise[®] Monitor Agent for the first time, see "Installing GroupWise Monitor" in the *GroupWise 7 Installation Guide*.

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.

Figure 59-1 Monitor Agent Server Console on Windows

😪 GroupWise Monitor							- 🗆 ×
Configuration View Actions Reports Log Help							
⊕- 😪 Corporate Mail [0, 12] Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
V Normal	0d0h53m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare .
🖌 Normal	0 d 0 h 53 m	Marketing.Provo3	POA	3d10h17m	N/A	N/A	Linux
🖌 Normal	0 d 0 h 53 m	Provo1	MTA	5d8h14m	2		NetWare
🖌 Normal	0 d 0 h 53 m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
🖌 Normal	0 d 0 h 48 m	Provo2	MTA	0 d 0 h 51 m	1		Windows
🕺 Not Listen	ng OdOhOm	Provo2.GWIA	GWIA	Unknown	N/A	N/A	Windows
🖌 Normal	0 d 0 h 53 m	Provo3	MTA	3d10h17m	0		Linux
🖌 Normal	0 d 0 h 53 m	Provo3.GWIA	GWIA	3d10h17m	N/A	N/A	Linux
🖌 Normal	0 d 0 h 48 m	Sales.Provo2	POA	0 d 0 h 51 m	N/A	N/A	Windows
🖌 Normal	0 d 0 h 53 m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
🕺 Not Listen	ng OdOh53m	WEBAC70A.Provo2	WEB	Unknown	N/A	N/A	?
🖌 Normal	0 d 0 h 53 m	WEBAC70A.Provo3	WEB	13 d 4 h 26 m	N/A	N/A	Linux
Next Poll: 280 seconds		HTTP	: 8200		Agents: 12		

On Linux, similar functionality is available in your Web browser at the Monitor Agent Web console:

http://localhost:8200.

Figure 59-2	Monitor Agent	Web	Console	on .	Linux
-------------	---------------	-----	---------	------	-------

		1							
Preterences Link Trace Link Conti	<u>iguration</u> <u>Reports</u>	Log Map							
<u>Corporate Mail</u>	Monitored age	ents for Corpora	te Mail						
<u>Gateways</u>	Up Time: 8 d 2 h 14 m		Poll Hid	e Subgrou	p Agents Problem	n Suspend	Resume	Move 0	ptions Thresholds
Linux Agents [4]	_								
NetWare Agents [4]	Status	Status Duration	Name	Type	Up Time Clos	<u>ed Links (</u>	<u>Jueued</u> P	<u>'latform</u>	Version
Windows Agents [4]	🗆 🖌 Normal	0 d 0 h 14 m	Development.Provo1	POA	0 d 0 h 34 m	N/A	N/A	NetWare	7.0.1(4/4/2006)
	🗆 🖌 Normal	0 d 0 h 14 m	Marketing.Provo3	POA	18 d 21 h 45 m	N/A	N/A	Windows	7.0.1 (3/15/2006)
Create	🗆 🖌 Normal	0 d 0 h 14 m	Provo1	MTA	0 d 0 h 34 m	2 0		NetWare	7.0.1(4/4/2006)
Rename	□ 🖌 Normal	0 d 0 h 14 m	Provo1.GWIA	GWIA	0 d 0 h 32 m	N/A	N/A	NetWare	7.0.1 (040406)
Move	🗆 🙆 Not Listening	OdOhOm	Provo2	MTA	6 d 19 h 8 m	2 1		Windows	7.0.1 (3/15/2006)
Delete	🗖 🕹 Not Listening	OdOhOm	Provo2.GWIA	GWIA	18 d 21 h 41 m	N/A	N/A	Windows	7.0.1 (03-15-06)
Heitest	🗖 🖌 Normal	0 d 0 h 14 m	Provo3	MTA	18 d 22 h 13 m	0 0		Linux	7.0.1 (03/15/2006)
	□ 𝒴 <u>Normal</u>	0 d 0 h 14 m	Provo3.GWIA	GWIA	18 d 21 h 13 m	N/A	N/A	Linux	7.0.1 (03/15/2006)
	🗖 🖌 Normal	0 d 0 h 14 m	Sales.Provo2	POA	18 d 21 h 45 m	N/A	N/A	Windows	7.0.1 (3/15/2006)
	□ V _{Normal}	0 d 0 h 14 m	WEBAC70A.Provo1	WEBACC	0 d 0 h 35 m	N/A	N/A	NetWare	7.0.1 (4/4/2006)
	🗆 🖌 Normal	0 d 0 h 14 m	WEBAC70A.Provo2	WEBACC	12 d 3 h 38 m	N/A	N/A	Windows	7.0.1 (3/16/2006)
	E SNot Listening	0 d 0 h 12 m	WEBAC70A.Provo3	WEBACC	0 d 0 h 0 m	N/A	N/A	?	

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

- Section 59.1, "Selecting Agents to Monitor," on page 970
- Section 59.2, "Creating and Managing Agent Groups," on page 973
- Section 59.3, "Configuring Monitoring Protocols," on page 975
- Section 59.4, "Configuring Polling of Monitored Agents," on page 978
- Section 59.5, "Configuring E-Mail Notification for Agent Problems," on page 979
- Section 59.6, "Configuring Audible Notification for Agent Problems," on page 983
- Section 59.7, "Configuring SNMP Trap Notification for Agent Problems," on page 984
- Section 59.8, "Configuring Authentication and Intruder Lockout for the Monitor Web Console," on page 985
- Section 59.9, "Configuring Monitor Agent Log Settings," on page 986
- Section 59.10, "Configuring Proxy Service Support for the Monitor Web Console," on page 987
- Section 59.11, "Monitoring Messenger Agents," on page 988
- Section 59.12, "Supporting the GroupWise High Availability Service on Linux," on page 989

59.1 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.

- Section 59.1.1, "Filtering the Agent List," on page 970
- Section 59.1.2, "Adding All Agents on a Server," on page 971
- Section 59.1.3, "Adding All Agents on a Subnet," on page 971
- Section 59.1.4, "Adding an Individual Agent," on page 972
- Section 59.1.5, "Removing Added Agents," on page 972

59.1.1 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*.

Filter Filtered Out External Domain External Post Office.External I		Monitored Development.Provo1 Marketing.Provo3	CKCancel
Finance, Waltham1 Internet Novell Internet Waltham1 Waltham1 GWIA WEBAC70A, Waltham1	>> Add >> Add All << Remove << Remove All	Provol Provol GWIA Provo2 Provo2 GWIA Provo3 Provo3 GWIA Sales Provo2 WEBAC70A Provo2 WEBAC70A Provo2 WEBAC70A Provo3	Agent Types V MTA V POA V WebAccess Getemon
1			

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.

59.1.2 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 Machine*.

or

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

Add Agent	×
Enter the address of the new Agent.	OK
Address	Cancel
Port	Help

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.

59.1.3 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*.

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

Add from Network	<u>></u>
Enter the subnet	ОК
	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.

59.1.4 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.	OK
Address	Cancel
Port	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.

59.1.5 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.

59.2 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.

🔒 GroupWise Monitor								_ 0
Configuration View Actions Rep	orts Log Help							
⊡ Sorporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
	💅 Normal	0d0h53m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
	💅 Normal	0 d 0 h 53 m	Marketing.Provo3	POA	3d10h17m	N/A	N/A	Linux
	🖌 Normal	0 d 0 h 53 m	Provo1	MTA	5d8h14m	2		NetWare
	🖌 Normal	0 d 0 h 53 m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
	🖌 Normal	0 d 0 h 48 m	Provo2	MTA	0d0h51m	1		Windows
	🔯 Not Listening	OdOhOm	Provo2.GWIA	GWIA	Unknown	N/A	N/A	Windows
	🖌 Normal	0 d 0 h 53 m	Provo3	MTA	3d10h17m	0		Linux
	🖌 Normal	0 d 0 h 53 m	Provo3.GWIA	GWIA	3d10h17m	N/A	N/A	Linux
	🖌 Normal	0 d 0 h 48 m	Sales.Provo2	POA	0d0h51m	N/A	N/A	Windows
	🖌 Normal	0 d 0 h 53 m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
	🕺 Not Listening	0 d 0 h 53 m	WEBAC70A.Provo2	WEB	Unknown	N/A	N/A	?
	🖌 Normal	0 d 0 h 53 m	WEBAC70A.Provo3	WEB	13 d 4 h 26 m	N/A	N/A	Linux
	•							
ext Poll: 280 seconds			HTTP	: 8200		Agents: 12		

Figure 59-3 Monitor Agent Console on Initial Startup

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.



GroupWise Monitor Configuration View Actions Reports	: Log Help							_0
⊡ 🔂 Corporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
	🖌 Normal	0d0h55m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
	V Normal	0 d 0 h 55 m	Provo1	MTA	5d8h14m	2		NetWare
	🖌 Normal	0 d 0 h 55 m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
Windows Agents [4]	🖌 Normal	0 d 0 h 55 m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
	1							
,	<u>р</u>							
Next Poll: 207 seconds			HTTE	P: 8200		Agents: 4		

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.

- Section 59.2.1, "Creating an Agent Group," on page 974
- Section 59.2.2, "Managing Agent Groups," on page 974
- Section 59.2.3, "Viewing Your Agent Group Hierarchy," on page 974
- Section 59.2.4, "Configuring an Agent Group," on page 975

NOTE: On Linux, you perform these tasks at the Monitor Agent Web console or Monitor Web console, using steps similar to those provided in this section

59.2.1 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.

59.2.2 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.

59.2.3 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.

Figure 59-5 Monitor Agent Server Console with Subgroup Agents Displayed

SroupWise Monitor								- O ×
Configuration View Actions Reports	Log Help							
🖃 😪 Corporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
Gateways	💅 Normal	0d0h57m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
Linux Agents [4]	🖌 Normal	0d0h57m	Marketing.Provo3	POA	3d10h17m	N/A	N/A	Linux
NetWare Agents [4]	💅 Normal	0d0h57m	Provo1	MTA	5d8h14m	2		NetWare
	🖌 Normal	0d0h57m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
	🖌 Normal	0 d 0 h 52 m	Provo2	MTA	0d0h51m	1		Windows
	🔞 Not Listening	0d0h4m	Provo2.GWIA	GWIA	Unknown	N/A	N/A	Windows
	🖌 Normal	0d0h57m	Provo3	MTA	3d10h17m	0		Linux
	🖌 🖌 🖌	0d0h57m	Provo3.GWIA	GWIA	3d10h17m	N/A	N/A	Linux
	🖌 Normal	0 d 0 h 52 m	Sales.Provo2	POA	0d0h51m	N/A	N/A	Windows
	🖌 🖌 Normal	0d0h57m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
	😵 Not Listening	0d0h57m	WEBAC70A.Provo2	WEB	Unknown	N/A	N/A	?
	🖌 Normal	0d0h57m	WEBAC70A.Provo3	WEB	13 d 4 h 26 m	N/A	N/A	Linux
	•							•
Next Poll: 51 seconds	<u></u>		HTTP:	8200		Agents: 12		

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

59.2.4 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*.

59.3 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.

- Section 59.3.1, "Configuring the Monitor Agent for HTTP," on page 975
- Section 59.3.2, "Configuring the Monitor Agent for SNMP," on page 977

59.3.1 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.

HTTP Configuration	X
HTTP Status:	ОК
HTTP Refresh	Cancel
HTTP Port 8200	Help
Dpen a new window when viewing agents	
Authentication	
Require authentication to browse GW Monitor	
User name	
Password	
Password Confirm	
Intruder Lockout Count	
Intruder Lockout Period	nutes
Intruder Lockout Status Static	
Clear Lockout	

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.

Group Poll Settings - Corporate Mail	×
Use Parent Polling Options	OK
Poll Cycle SOL · seconds	Cancel
LHITD-	Help
HTTP User Name	
HTTP Password	
SNMP	
Time-out 30 🔹 seconds	
Number of Retries	
SNMP Community Strings public	
Comma separated list of community strings	
Force polling through SNMP	
Apply options to subgroups	

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 63, "Using Monitor Agent Switches," on page 1023.

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 Section 59.3.2, "Configuring the Monitor Agent for SNMP," on page 977.

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 63, "Using Monitor Agent Switches," on page 1023.

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.

59.3.2 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.

Group Poll Settings - Corporate Mail	X
Use Parent Polling Options	OK
Poll Cycle SOI - seconds	Cancel
LHITD-	Help
HTTP User Name	
HTTP Password	
SNMP	
Time-out 30 👱 seconds	
Number of Retries 2 -	
SNMP Community Strings public	
Comma separated list of community strings	
Force polling through SNMP	
Apply options to subgroups	

- **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 Section 37.6.1, "Setting Up SNMP Services for the POA," on page 541 and Section 42.6.1, "Setting Up SNMP Services for the MTA," on page 668. The same instructions can be followed for all GroupWise 5.x, 6.x, and 7 agents.

59.4 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.

Group Poll Settings - Corporate Mail	×
Use Parent Polling Options	ОК
Poll Cycle 🚺 🚊 seconds	Cancel
HTTP	Help
HTTP User Name	
HTTP Password	
_ SNMP	
Time-out 30 🔹 seconds	
Number of Retries	
SNMP Community Strings public	
Comma separated list of community strings	
Force polling through SNMP	
Apply options to subgroups	

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*.

59.5 Configuring E-Mail Notification for Agent Problems

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

- Section 59.5.1, "Configuring E-Mail Notification," on page 979
- Section 59.5.2, "Customizing Notification Thresholds," on page 981

59.5.1 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, then click *Preferences* > *Setup* to display the *Notify* settings.

Group Notification - Corporate Mail	×
Use Parent Notification Options	ОК
Notification List	Cancel
Comma separated list of users to notify	Test Notifiy
Mail Domain Name	Help
Relay Address	
Send SNMP Traps	
Play Sound Sounds	
Notification Events	
Threshold Exceeded Thresholds Minimum threshold level for notification Unknown	
State returns to Normal	
Repeat Notification After 15 👘 minutes	
Periodic Monitor Confirmation	
Confirm 1 🚎 minutes	
Apply options to subgroups	

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 Section 59.5.2, "Customizing Notification Thresholds," on page 981.

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.

59.5.2 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 Section 59.5.1, "Configuring E-Mail Notification," on page 979.
- 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.

Group Threshold	ls - Corporate Mail				<u>? ×</u>
MTA POA	GWIA WebAccess	DVA Gateway			
🔲 Use Parent	Thresholds				
Expression		State	Severity	Apply to subgroups	Delete Threshold
Ni Expression m State C	umber of messages in ntaADAQCount Critical	admin queues.	▼ e State	_	Modify Threshold Add Threshold
Cverwrite al	Apply threshold to su	ıbgroups ıps		ок С	ancel Help

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.

For example, you might want to test the mtaOldestQMsg variable for a specific number of seconds that you consider to be too long for a message to be in the queue.

8 In the *State* field, select an existing state.

lcon	State	
?	Unknown	
6	Normal	
0	Informational	
Δ	Marginal	
()	Warning	
7	Minor	
7	Major	
8	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.

State	Severity	Used		Close
Onknown	Unknown	No		
🖌 Normal	Normal	No		
1 Informational	Informational	No		
🔥 Marginal	Marginal	No		
Warning	Warning	No		Remove State
Č Minor	Minor	No		
Maior	Major	No	_	
💑 Critical	Critical	Ma	•	
itate Name:	Severity			
	Unknown	-		Add State
	I of itel of itel			
juggestions to include w	th the notification for this 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.

59.6 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*.

Group Sound Options - Corporate Mail		X
Choose the WAV files that will play when the following events occur		OK
Server Down	Browse	Cancel
Agent Down	Browse	Help
Server Up	Browse	
Agent Up	Browse	
Threshold Exceeded	Browse	

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 Section 59.5, "Configuring E-Mail Notification for Agent Problems," on page 979.
- 7 Click *OK* to save the audible notification settings.

59.7 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.

Group Notification - Corporate Mail	×
🗖 Use Parent Notification Options	OK
Notification List	Cancel
Comma separated list of users to notify	Test Notifiy
Mail Domain Name	Help
Relay Address	
Send SNMP Traps	
✓ Play Sound Sounds	
Notification Events ✓ Agent Down ✓ Server Down ✓ Threshold Exceeded Minimum threshold level for notification Unknown ✓ State returns to Normal Repeat Notification After 15 Periodic Monitor Confirmation Confirm 1	
Apply options to subgroups	

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 Section 59.3.2, "Configuring the Monitor Agent for SNMP," on page 977.

59.8 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 63, "Using Monitor Agent Switches," on page 1023 The intruder lockout functionality is not available on Linux.

At the Windows Monitor Agent server console:

1 Click *Configuration* > *HTTP*.

HTTP Configuration		X
HTTP Status:	OK	
HTTP Refresh 🚺 📩 se	conds Cance	el
HTTP Port 8200	Help	
🔲 Open a new window when viewing	agents	
Authentication		
Require authentication to brow	vse GW Monitor	
User name		
Password		
Password Confirm		
Intruder Lockout Count		
Intruder Lockout Period	minutes	
Intruder Lockout Status S	tatic	
Clear Lockout		

- 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.

For optimum security for the Monitor Web console, use the /httpssl and /httpcertfile startup switches, along with a certificate file, when starting the Monitor Agent. For more information, see Chapter 63, "Using Monitor Agent Switches," on page 1023.

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.

59.9 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.

📲 Log Settings			×
Log File Path		Browse	OK
Event Log Settings Maximum log file age: Maximum log disk space:	7 Days 5120 KBytes		Cancel Help
History Log Settings Maximum log file age: Maximum log disk space:	7 Days 5120 KBytes		
Maximum log file age: Maximum log disk space:	7 Days 5120 KBytes		

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*.

59.10 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/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 63, "Using Monitor Agent Switches," on page 1023.

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.

59.11 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.

Figure 59-6 GroupWise Monitor Setup Dialog Box

oupwise system				10
GroupWise domain path			Browse	Can
C MTA with HTTP enabled				He
Address Park				
Polt				
oupWise Messenger System				
Novell Messenger system object			Browse	
Replica address				
(69. 000.000.000.000)				
Specify a username and password	to access the directory			
User name		Browse		
Password				

To make this information a permanent part of your independent Messenger system, follow the instructions in "Using GroupWise Monitor" in "Managing the Messaging Agent" in the *Novell Messenger Administration Guide*.

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.

Add Novell Messenger System	2
Novell Messenger System Object Browse	OK
Specify a username and password to access the directory	Cancel
User Name Browse	Help
Password	
Specify how to access the directory Use direct access Reafine Address	
(eg. xxx.xxx.xxx)	

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 Section 59.1.4, "Adding an Individual Agent," on page 972.

59.12 Supporting the GroupWise High Availability Service on Linux

The GroupWise High Availability service, described in "Enabling the High Availability Service for the Linux GroupWise 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.

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:

- Section 60.1, "Modifying Monitor Application Environment Settings," on page 991
- Section 60.2, "Modifying Monitor Application Log Settings," on page 992
- Section 60.3, "Adding or Removing Service Providers," on page 994
- Section 60.4, "Modifying Monitor Application Template Settings," on page 995

60.1 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.

Properties of Grou	upWiseMonitor	×
Application - NO	DS Rights 👻 Other	
Environment		
Configuration File:	WBD-NMAsvsWovell/awmonitor/awmonitor.cfd	
Logout URL:	,	
Ĩ	1	
Page Options	OK Cancel Apply	Help

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.

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

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.

60.2 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 *mmddmon.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*.

Properties of GroupWiseM	onitor 🛛 🛛 🔀
Application - NDS Rights Log Settings	▼ Other
Log File Path: Maximum Log File Age: Maximum Log Disk Space:	NJBD-NMAsysNivoelligwmonitorilogs
Logging Level: Log Language: Log Time Format:	Normal English H.mm: ss
	Example:10:20:01
Page Options	OK Cancel Apply Help

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.

60.3 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.

Properties of GroupWiseMonitor	×
Application NDS Rights Other	1
Provider List:	
MonttorProvider Provo2.GroupWilse	
Add Edit Delete	
Page Options OK Cancel Apply Help	

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.

60.4 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 *Application > Templates* to display the Templates page.

Properties of GroupWiseMonitor	
Application VDS Rights V Other	
Templates	
Locations	
Template Path: NJBD-MM/sys\Tomcat/4\webapps\gwweb-inf\classes\com\novell\gwmonitor\templates	
Java Package: com.novell.gwmonitor.templates	
Images URL: /gw/com/hovell/gwmonitor/Images	
Applets URL:	
Help URL: /gw/com/novell/gwmonitor/help	
Caching	
☑ Enable template caching	
Cache Size: 1024 🛨 KBytes	
User Interface	
Default Language: English	
Define User Interfaces	
Page Options OK Cancel Ar	ply Help

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\webinf\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.

Using GroupWise Monitor

For a review of the three Monitor Agent consoles, see Section 58, "Understanding the Monitor Agent Consoles," on page 965. 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.

- Section 61.1, "Using the Monitor Agent Server Console," on page 997
- Section 61.2, "Using the Monitor Web Console," on page 1001
- Section 61.3, "Generating Reports," on page 1002
- Section 61.4, "Measuring Agent Performance," on page 1012
- Section 61.5, "Collecting Gateway Accounting Data," on page 1015
- Section 61.6, "Assigning Responsibility for Specific Agents," on page 1018
- Section 61.7, "Searching for Agents," on page 1019

61.1 Using the 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.

- 😪 Corporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
	💅 Normal	0d0h53m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
	🖌 Normal	0 d 0 h 53 m	Marketing.Provo3	POA	3d10h17m	N/A	N/A	Linux
	💅 Normal	0d0h53m	Provo1	MTA	5d8h14m	2		NetWare
	💅 Normal	0 d 0 h 53 m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
	🖌 Normal	0 d 0 h 48 m	Provo2	MTA	0d0h51m	1		Windows
	🕺 Not Listening	OdOhOm	Provo2.GWIA	GWIA	Unknown	N/A	N/A	Windows
	🖌 Normal	0d0h53m	Provo3	MTA	3d10h17m	0		Linux
	🖌 Normal	0d0h53m	Provo3.GWIA	GWIA	3d10h17m	N/A	N/A	Linux
	🖌 Normal	0 d 0 h 48 m	Sales.Provo2	POA	0d0h51m	N/A	N/A	Windows
	🖌 Normal	0d0h53m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
	🕺 Not Listening	0d0h53m	WEBAC70A.Provo2	WEB	Unknown	N/A	N/A	?
	Normal	0 d 0 h 53 m	WEBAC70A.Provo3	WEB	13 d 4 h 26 m	N/A	N/A	Linux

Figure 61-1 Windows Monitor Agent Console with the Monitored GroupWise Agents Displayed

After you create agent groups, as described in Section 59.2, "Creating and Managing Agent Groups," on page 973, the agents in each group are displayed when you select a group.

Figure 61-2 Windows Monitor Agent Console

Configuration View Actions Reports	Log Help							<u>-0×</u>
⊡- 🕞 Corporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
Gateways	🖌 Normal	0d0h55m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
Linux Agents [4]	V Normal	0 d 0 h 55 m	Provo1	MTA	5d8h14m	2		NetWare
	🖌 Normal	0 d 0 h 55 m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
	🖌 Normal	0 d 0 h 55 m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare
	•							
Next Poll: 207 seconds			HTT	P: 8200		Agents: 4		

You can display many types of monitoring information at the Windows Monitor Agent server console.

- Section 61.1.1, "Viewing All Agents," on page 998
- Section 61.1.2, "Viewing Problem Agents," on page 998
- Section 61.1.3, "Viewing an Agent Server Console," on page 999
- Section 61.1.4, "Viewing an Agent Web Console," on page 1000
- Section 61.1.5, "Polling the Agents for Updated Status Information," on page 1000

61.1.1 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*.

- Corporate Mail [0, 12]	Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
	💅 Normal	0d0h57m	Development.Provo1	POA	5d8h14m	N/A	N/A	NetWare
- Einux Agents [4]	🖌 Normal	0d0h57m	Marketing.Provo3	POA	3d10h17m	N/A	N/A	Linux
NetWare Agents [4]	🖌 Normal	0d0h57m	Provo1	MTA	5d8h14m	2		NetWare
	🖌 Normal	0d0h57m	Provo1.GWIA	GWIA	5d8h10m	N/A	N/A	NetWare
	🖌 🖌 Normal	0 d 0 h 52 m	Provo2	MTA	0d0h51m	1		Windows
	🛛 🔯 Not Listening	0d0h4m	Provo2.GWIA	GWIA	Unknown	N/A	N/A	Windows
	🖌 Normal	0d0h57m	Provo3	MTA	3d10h17m	0		Linux
	🖌 Normal	0d0h57m	Provo3.GWIA	GWIA	3d10h17m	N/A	N/A	Linux
	🖌 🖌 Normal	0 d 0 h 52 m	Sales.Provo2	POA	0d0h51m	N/A	N/A	Windows
	🖌 Normal	0d0h57m	WEBAC70A.Provo1	WEB	5d8h9m	N/A	N/A	NetWare .
	🛛 🔯 Not Listening	0d0h57m	WEBAC70A.Provo2	WEB	Unknown	N/A	N/A	?
	Normal	0 d 0 h 57 m	WEBAC70A.Provo3	WEB	13 d 4 h 26 m	N/A	N/A	Linux

You can use the Show Agent Subgroups feature on any group that contains nested subgroups.

61.1.2 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.

🙀 GroupWise Monitor							<u>- 🗆 ×</u>
Configuration View Actions Reports Log Help							
E-Sa Corporate Mail [0, 12] Status	Status Duration	Name	Туре	Up Time	Closed Links	Queued	Platform
Gateways 🚫 Not Listening	OdOh1m	Provo2.GWIA	GWIA	Unknown	N/A	N/A	?
Linux Agents [4] SNot Listening	0d0h1m	WEBAC70A.Provo2	WEB	Unknown	N/A	N/A	?
Netwate Agents [4]							
Next Poll: 236 seconds		нтт	'P: 8200		Agents: 2		

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.

61.1.3 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.

Provo2 - GroupWise MTA (GroupWise Monitor) Image: Second								
Provo2 Normal Up Time: 0 Days 0 Hrs 58 Mins								
Status Total Closed Statistics Domains 6 1 Routed 1 0 Post Offices 1 0 Undeliverable 0 0 Gateways 2 0 Errors 0 0								
Queue W	V Queue Watcher							
Provo3 Provo2 GWIA Sales WEBAC70A Provo1	4 0 0 0 0 0		Domain Domain Gateway Post Office Gateway Domain	Closed Open Open Open Open Open				

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.

61.1.4 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 Schedule	d Events MTP S	tatus Help
GroupWise Post Office Agent		
Up Time: 3 Davs 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	U
IMAP Infeads	2	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:

- Section 37.2, "Using the POA Web Console," on page 530
- Section 42.2, "Using the MTA Web Console," on page 657
- Section 49.2, "Using the Internet Agent Web Console," on page 787
- Section 56.1.2, "Using the WebAccess Agent Web Console," on page 929

61.1.5 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 Section 59.4, "Configuring Polling of Monitored Agents," on page 978. 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*.

61.2 Using 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.

Figure 61-3 GroupWise Monitor Web Console

GroupWise _® Monitor	-	Mar Marine						
			چ 📲					Novell.
S 💿 <u>Corporate Mail</u>	Monito	red agents for "Corporat	te Mail" group					
	Total:	12 Displayed: 1 - 12						
Create	<u>Refres</u>	<u>h</u>		Proble	em Suspend	Resume M	fove Options Three	sholds Help
Move		Name	Status	Status Duration	Up Time	Туре	Version	Platform
Delete		Provo3	<u>Normal</u>	11 d 18 h 48 m	1 d 14 h 20 m	MTA	7.0 (07/21/2005)	Linux
Refresh		Provo3.GWIA	<u>Normal</u>	11 d 18 h 48 m	1 d 14 h 20 m	GWIA	7.0 (07/21/2005)	Linux
пер		Marketing.Provo3	<u>Normal</u>	11 d 18 h 48 m	1 d 14 h 20 m	POA	7.0 (07/21/2005)	Linux
		WEBAC70A.Provo3	<u>Normal</u>	11 d 18 h 43 m	11 d 8 h 29 m	WEBACC	7.0 (7/22/2005)	Linux
		Provo1	<u>Normal</u>	8 d 23 h 5 m	3 d 12 h 16 m	MTA	7.0 (7/12/2005)	NetWare
		Development.Provo1	Normal	8 d 23 h 5 m	3 d 12 h 16 m	POA	7.0 (7/12/2005)	NetWare
		Provo1.GWIA	Normal	3 d 10 h 19 m	3 d 12 h 12 m	GWIA	7.0 (07-12-05)	NetWare
		WEBAC70A.Provo1	Normal	8 d 21 h 40 m	3 d 12 h 12 m	WEBACC	7.0.0 (7/12/2005)	NetWare
		Provo2	Normal	11 d 18 h 48 m	11 d 20 h 7 m	MTA	7.0 (7/12/2005)	Windows
		Provo2.GWIA	Not Listening	0 d 14 h 46 m	0 d 0 h 0 m	GWIA	7.0 (07-12-05)	Windows
		Sales.Provo2	Not Listening	0 d 14 h 46 m	0 d 0 h 0 m	POA	7.0 (7/12/2005)	Windows
		WEBAC70A.Provo2	<u>Normal</u>	11 d 18 h 48 m	12 d 7 h 31 m	WEBACC	7.0 (7/12/2005)	Windows

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

Button	Feature
$\langle \! \rangle$	Problems
2 5	Link Trace
\$₽	Link Configuration
*	Global Options
¥ 🚺	States
Q	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 Section 61.1.4, "Viewing an Agent Web Console," on page 1000.

Click Refresh to update the agent status information. To modify the default poll cycle, see Section 59.4, "Configuring Polling of Monitored Agents," on page 978.

To see what specific tasks can be performed at the Monitor Web console, see Chapter 62, "Comparing the Monitor Consoles," on page 1021.

61.3 Generating Reports

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

- Section 61.3.1, "Link Trace Report," on page 1002
- Section 61.3.2, "Link Configuration Report," on page 1003
- Section 61.3.3, "Image Map Report," on page 1004
- Section 61.3.4, "Environment Report," on page 1009
- Section 61.3.5, "User Traffic Report," on page 1009
- Section 61.3.6, "Link Traffic Report," on page 1010
- Section 61.3.7, "Message Tracking Report," on page 1010
- Section 61.3.8, "Performance Tracking Report," on page 1011
- Section 61.3.9, "Connected User Report," on page 1011
- Section 61.3.10, "Gateway Accounting Report," on page 1011
- Section 61.3.11, "Trends Report," on page 1011
- Section 61.3.12, "Down Time Report," on page 1012

61.3.1 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.

Link Trace						×
Starting Domain		Target Do	omain			Trace
Provo1 Provo2 Provo3 Provo4		Provo1 Provo2 Provo3 Provo4				Close Help
						írace Return Path
Status	Domain	Next Link	Link Type	Address	Link Status	Queued
V Normal	Provo1	Provo2	TCP/IP	jboogaard-win	Open	0
🖌 Normal	Provo2	Provo4	Mapped	∖\jboogaard-nw	Open	0
•						

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*.

61.3.2 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

k Configurati	on		
All Agents			<u>[</u> un
Selected Age	ent Provo1	•	Close
	,	_	Help
Source	Destination	Links	
🖌 Provo2	Provo1	Provo2, Provo1	
Provo2	Provo3	Provo2, Provo3	
🖌 Provo2	Provo4	Provo2, Provo4	
🖌 Provo1	Provo2	Provo1, Provo2	
🖌 Provo1	Provo3	Provo1, Provo3	
Provo1	Provo4	Provo1, Provo2, Provo4	
🔀 Provo3	Provo2	Provo3 - Read Failed	
Provo4	Provo2	Provo4 - Read Failed	

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*.

61.3.3 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-theminute status information at a glance.

- "Making Maps Available in Monitor" on page 1004
- "Setting Up Maps" on page 1005
- "Setting Up Regions" on page 1006
- "Adding Agents to a Map" on page 1007
- "Using an Image Map to Monitor Agents" on page 1008

NOTE: The image map report cannot be generated at the Windows Monitor Agent server console. You must use the Monitor Agent Web console.

Making Maps Available in Monitor

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\maps
Windows:	c:\gwmon\monwork\maps

You can change the location using the /monwork startup switch. For more information, see Chapter 63, "Using Monitor Agent Switches," on page 1023

3 Continue with Setting Up Maps.

Setting Up Maps

1 In the Monitor Agent Web console, click Map.

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



Initially, no maps are available in Monitor.

2 Click *New* to display all the maps that are available in the maps directory.

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



The filename of each map is displayed below it.

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



This makes the map available for use in Monitor.

- **4** To set up additional maps for use in Monitor, click *Done* to return to the Image Map Selection menu, then repeat Step 2 and Step 3 for each map that is available in the maps directory to make it available in Monitor.
- **5** If you want to make one or more smaller-scale maps available from a large-scale map, continue with "Setting Up Regions" on page 1006.

or

If your maps are all independent from each other, skip to "Adding Agents to a Map" on page 1007.

Setting Up Regions

If some of your maps are subsets of other maps, you can set up a large-scale map so that it links to one or more smaller-scale maps. For example, a map of the world could have a region for each continent or country, or a map of a city or country could have a region for each office where GroupWise domains or post offices are located.

- 1 Set up at least two maps in Monitor, as described in "Making Maps Available in Monitor" on page 1004.
- 2 In the Monitor Agent Web console, click *Map* to display the maps that are available in Monitor.



The custom name of each map is displayed below it.

- **3** Click *Edit*, then click a large-scale map.
- **4** In the drop-down list, scroll down through the agents, click the smaller-scale map that you want to define as a region, then click on the large-scale map to refresh the view.
- **5** Click points on the map to surround the region.



6 Click *Done* to define the region.

NOTE: With a very wide map, you need to scroll horizontally to display the Done button.

The region appears labeled on the large-scale map.



7 To define more regions on the large-scale map, click *Done* to return to the available maps, then repeat Step 3 through Step 6 for each region.

or

To place agents on a map, continue with Adding Agents to a Map.

Adding Agents to a Map

1 In the Monitor Agent Web console, click *Map* to display the maps that are available in Monitor.

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



The custom name of each map is displayed below it.

- 2 Click *Edit*, then click the map where you want to add agents.
- **3** 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.

4 Select additional agents and locations as needed.



5 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. Lines display on the

map only when links between locations are down.

- 6 Click *Done* when the map includes all the needed GroupWise agents in their respective locations.
- 7 Continue with Using an Image Map to Monitor Agents

Using an Image Map to Monitor Agents

- **1** In the Monitor Agent Web console, click *Map* > *View*.
- **2** Click a map to view agent status.

or

If the map has regions, click a region to display the map that has agent status for that region.



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*, *Critical*, or *Warning* displays in red on the map. Agents with a lower status do not display on the map. If a link between agents is down, a line displays between the agents.

61.3.4 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*.

Agent Name	Agent Type	Agent Version	Agent Address	Agent Port	Server Name	OS Version	Close
Development.Pro	POA	7.0 (7/12/2007)	173, 15, 4, 13	1677	PRV-GW	Novell NetWare	
Marketing.Provo3	POA	7.0 (07/21/2007)	173, 15, 4, 15	1677		Linux	Send
Provo1	MTA	7.0 (7/12/2007)	173.15.4.13	7100	PRV-GW	Novell NetWare	
Provo1.GWIA	GWIA	7.0 (07-12-07)	173.15.4.13	9850	PRV-GW	Novell NetWare	Save
Provo2	MTA	7.0 (7/27/2007)	173.15.4.16	7100		Windows NT (T	
Provo2.GWIA	GWIA		173.15.4.16	9850			Help
Provo3	MTA	7.0 (07/21/2007)	173.15.4.15	7100		Linux	
Provo3.GWIA	GWIA	7.0 (07/21/2007)	173.15.4.15	9850		Linux Release 2	
Sales.Provo2	POA	7.0 (7/27/2007)	173.15.4.16	1677		Windows NT (T	
WEBAC70A.Prov	WEBACC	7.0.0 (7/12/2007)	173, 15, 4, 13	7211		Novell NetWare	
WEBAC70A.Prov	WEBACC		173.15.4.16	7211			
WEBAC70A.Prov	WEBACC	7.0 (7/22/2007)	173.15.4.15	7211		Linux Release 2	

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.

61.3.5 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 Section 41.4.2, "Enabling MTA Message Logging," on page 643.

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*.

61.3.6 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 Section 41.4.2, "Enabling MTA Message Logging," on page 643.

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*.

61.3.7 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 Section 41.4.2, "Enabling MTA Message Logging," on page 643.

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, rightclick 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*.

61.3.8 Performance Tracking Report

Before you can run a performance tracking report, you must configure the Monitor Agent for performance tracking. See Section 61.4, "Measuring Agent Performance," on page 1012.

61.3.9 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.

61.3.10 Gateway Accounting Report

Before you can run a gateway accounting report, you must configure the Monitor Agent to collect gateway accounting data. See Section 61.5, "Collecting Gateway Accounting Data," on page 1015.

61.3.11 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.

61.3.12 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.

61.4 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:

- Section 61.4.1, "Setting Up an External Monitor Domain," on page 1012
- Section 61.4.2, "Selecting an MTA to Communicate with the Monitor Agent," on page 1013
- Section 61.4.3, "Configuring the Monitor Agent for Agent Performance Testing," on page 1014
- Section 61.4.4, "Viewing Agent Performance Data," on page 1014
- Section 61.4.5, "Viewing an Agent Performance Report," on page 1015
- Section 61.4.6, "Receiving Notification of Agent Performance Problems," on page 1015

61.4.1 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.x 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 Section 61.5, "Collecting Gateway Accounting Data," on page 1015, you can use this same external domain for collecting accounting data.

C Create External GroupWise Domain	X
Domain name:	OK
J Domain Database Location (optional):	Cancel
Time Zone:	Help
(GMT-07:00) Mountain Time (US & Canada)	
Version:	
Link To Domain:	
Provo1	
Create another domain	

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 Section 61.4.2, "Selecting an MTA to Communicate with the Monitor Agent," on page 1013.

61.4.2 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.

C Edit Domain Link	X
Description: How Provol connects to GW/Performance Tester Link Type: Direct v Settings Protocot: TCP/P v IP Address:	OK Cancel Help Scheduling
In Override Maximum send message size: 0	

- **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.
- 4 Click *OK* twice to finish modifying the link.
- **5** Exit the Link Configuration Tool to save the new link configuration information.
- **6** Continue with Section 61.4.3, "Configuring the Monitor Agent for Agent Performance Testing," on page 1014.

61.4.3 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.

GroupWise Performance Testing		×
Domain to send messages to	•	OK
Send performance messages every	5 minutes	Cancel
Enable GroupWise Performance T	esting	Help
Send performance messages to		
C All Agents		
Monitored Agents		

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.

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 Section 61.4.4, "Viewing Agent Performance Data," on page 1014.

or

Continue with Section 61.4.6, "Receiving Notification of Agent Performance Problems," on page 1015.

61.4.4 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*.

61.4.5 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.

61.4.6 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 Section 59.5.2, "Customizing Notification Thresholds," on page 981 for setup instructions.

61.5 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:

- Section 61.5.1, "Setting Up an External Monitor Domain," on page 1015
- Section 61.5.2, "Selecting an MTA to Communicate with the Monitor Agent," on page 1016
- Section 61.5.3, "Setting Up an External Post Office and External User for Monitor," on page 1017
- Section 61.5.4, "Receiving the Accounting Files," on page 1017
- Section 61.5.5, "Viewing the Gateway Accounting Report," on page 1018

61.5.1 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.x Systems" in the *GroupWise 7 Multi-System Administration Guide*. If you are going to set up agent performance reports, as described in Section 61.4, "Measuring Agent Performance," on page 1012, you can use this same external domain for collecting agent performance data.

Create External GroupWise Domain	
Domain name:	OK
Domain Database Location (optional):	Cancel
Time Zone:	Help
(GMT-07:00) Mountain Time (US & Canada)	
7	
Link To Domain: Provo1	
Create another domain	

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 Section 61.4.2, "Selecting an MTA to Communicate with the Monitor Agent," on page 1013.

61.5.2 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.

C Edit Domain Link	×
Description: How Provo1 connects to GW Performance Tester	ок
Link Type: Direct 💌	Cancel
Settings Protocol TCP/IP	Help
IP Address:	Scheduling
☐ Override	
Maximum send message size: 0 🖨 🖨	
Delay message size: 0 🚖 MBytes	
Transfer Pull Info External Link Info	

- 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.
- 4 Click *OK* twice to finish modifying the link.
- **5** Exit the Link Configuration Tool to save the new link configuration information.

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

61.5.3 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.

C Create External GroupWise Post Office		
Post office name:	OK	
J Time Zone:	Cancel	
(GMT-07:00) Mountain Time (US & Canada)	Help	
Create another 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*.

Create GroupWise External User	X
User Name:	ОК
」 ☐ Create another external user	Cancel
	Help

- **2b** Name the external user to reflect its role, such as ExternalMonitorUser.
- 2c Click OK.
- **2d** Continue with Receiving the Accounting Files

61.5.4 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 Section 47.3, "Tracking Internet Traffic with Accounting Data," on page 764. 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 Section 61.5.2, "Selecting an MTA to Communicate with the Monitor Agent," on page 1016.
- **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. The Monitor Agent uses this data to generate gateway accounting reports.

The accounting log files on stored on the server where the Monitor Agent is running. The default location varies by platform.

Linux: /var/log/novell/groupwise/gwmon/acct Windows: c:\gwmon\acct

61.5.5 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.

61.6 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 help desk 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.

Developme	ent.Provo1 Details	X
Name	Development.Provo1	OK
Address	jbd-nw.provo.novell.com	Cancel
Port	1677 Namal	MIB Values
Poll Type	XML	Help
Thresholds		
Suggestion	1\$	_
Assigned to		-
Notes]

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 Section 59.5.2, "Customizing Notification Thresholds," on page 981.

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

61.7 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.

GroupWise _® Monitor	A CALLER AND LAND
Search	
 Scorporate Mail [2] NetWare Agents [2] 	Agent Search
Windows Agents [2]	Agent Name:
Create	Agent View: Problem Agents C Monitored Agents C All Agents
Move Delete Refresh	Agent Type: MTA POA GWIA WEBACC PAGER ASYNC API FAX TAS GATEWAY X400 X25 EXCHANGE Other
Help	Sort By: Name 💌
	Search Cancel Help

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.

Comparing the Monitor Consoles

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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	Yes	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

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:		
	<pre>/opt/novell/groupwise/agents/bin/gwmonhome /domain_directory other_switches &</pre>		
	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 table below summarizes Monitor Agent startup switches for all platforms and how they correspond to configuration settings in the Windows Monitor Agent Server Console.

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
ipp	/ipp	N/A
lang	/lang	N/A

Switch starts with: a b c d e f g h i j k l m n o p q r s t u v w x y z

Linux Monitor Agent	Windows Monitor Agent	Windows Monitor Agent Server Console
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.

63.1 /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 Section 59.12, "Supporting the GroupWise High Availability Service on Linux," on page 989.

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

See also /hauser and /hapoll.

63.2 /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. The actual duration of the poll cycle can vary from the specified number of seconds because the actual duration includes the time during which the Monitor Agent is checking agent status and restarting agents as needed. Then the specified poll cycle begins again and continues for the specified number of seconds. See Section 59.12, "Supporting the GroupWise High Availability Service on Linux," on page 989.

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

See also /hauser and /hapassword.

63.3 /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 Section 59.12, "Supporting the GroupWise High Availability Service on Linux," on page 989.

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

See also /hapassword and /hapoll.

63.4 /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

63.5 /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-[<i>svr</i> \][<i>vol</i> :]\dir	
		/home-\\svr\vol\dir	
		/home-[<i>drive</i> :]\ <i>dir</i>	
		/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\provo	

See also /ipa and /ipp.

63.6 /httpagentpassword

Specifies the password for the Monitor Agent to prompt for when contacting monitored agents for status information. Providing a password is optional. See Section 59.3.1, "Configuring the Monitor Agent for HTTP," on page 975.

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

See also /httpagentuser.

63.7 /httpagentuser

Specifies the username for the Monitor Agent to use when contacting monitored agents for status information. Providing a username is optional. See Section 59.3.1, "Configuring the Monitor Agent for HTTP," on page 975.

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

See also /httpagentpassword.

63.8 /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 Section 59.8, "Configuring Authentication and Intruder Lockout for the Monitor Web Console," on page 985.

	Linux Monitor Agent	Windows Monitor Agent	
Syntax:	httpcertfile /dir/file	/httpcertfile-[<i>drive</i> :]\ <i>dir\file</i> /httpcertfile-\\ <i>svr</i> \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.

63.9 /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 Section 59.8, "Configuring Authentication and Intruder Lockout for the Monitor Web Console," on page 985.

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

See also /httpmonuser.

63.10 /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 Section 59.8, "Configuring Authentication and Intruder Lockout for the Monitor Web Console," on page 985.

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

See also /httpmonpassword.

63.11 /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 Section 59.3.1, "Configuring the Monitor Agent for HTTP," on page 975.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	httpport <i>port_number</i>	/httpport-port_number
Example:	httpport 8201	/httpport-9200

63.12 /httpssl

Enables secure SSL communication between the Monitor Agent and the Monitor Web console displayed in your Web browser. See Section 59.8, "Configuring Authentication and Intruder Lockout for the Monitor Web Console," on page 985.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	httpssl	/httpssl

See also /httpcertfile.

63.13 /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.

63.14 /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 <i>port_number</i>	/ipp-port_number	
Example:	ipp 7110	/ipp-7111	

See also /ipa.

63.15 /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 <i>code</i>	/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	СТ	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		

Table 63-1 Language Codes

63.16 /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 Section 59.9, "Configuring Monitor Agent Log Settings," on page 986.

	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

63.17 /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-[<i>svr</i> \][vol:]\dir
		/monwork-\\svr\vo\dir
		/monwork-[<i>drive</i> :]\ <i>dir</i>
		/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

63.18 /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 Section 59.11, "Monitoring Messenger Agents," on page 988.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	nmaddress <i>IP_address</i>	/nmaddress-IP_address
Example:	nmaddress 172.16.5.18	/nmaddress-172.16.5.19

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

63.19 /nmhome

Specifies the context of the eDirectory container object where a Novell Messenger system is located. See Section 59.11, "Monitoring Messenger Agents," on page 988.

	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.

63.20 /nmpassword

Specifies the password for the eDirectory user that the Monitor Agent uses to log into eDirectory to obtain Messenger information. See Section 59.11, "Monitoring Messenger Agents," on page 988

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

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

63.21 /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 Section 59.11, "Monitoring Messenger Agents," on page 988

	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.

63.22 /nosnmp

Disables SNMP for the Monitor Agent. The default is to have SNMP enabled. See Section 59.3.2, "Configuring the Monitor Agent for SNMP," on page 977.

	Linux Monitor Agent	Windows Monitor Agent	
Syntax:	nosnmp	/nosnmp	

63.23 /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 Section 59.4, "Configuring Polling of Monitored Agents," on page 978.

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

63.24 /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 Section 59.10, "Configuring Proxy Service Support for the Monitor Web Console," on page 987.

	Linux Monitor Agent	Windows Monitor Agent
Syntax:	proxy	/proxy

63.25 /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	