
GroupWise 2014 R2

Interoperability Guide

June 2016

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About This Guide

This *GroupWise 2014 Interoperability Guide* helps you use GroupWise in the context of other software products.

For information about additional GroupWise-related software from GroupWise partners, see the [Micro Focus Partner Product Guide](http://www.novell.com/partnerguides/) (<http://www.novell.com/partnerguides/>).

The following resources provide additional information about using GroupWise 2014:

- ♦ [Micro Focus Support and Knowledgebase](http://www.novell.com/support/) (<http://www.novell.com/support/>)

To search the GroupWise documentation from the Micro Focus Support website, click **Advanced Search**, select **Documentation** in the **Search In** drop-down list, select **GroupWise** in the **Products** drop-down list, type the search string, then click **Search**.

- ♦ [GroupWise Support Forums](https://forums.novell.com/forumdisplay.php/356-GroupWise) (<https://forums.novell.com/forumdisplay.php/356-GroupWise>)
- ♦ [GroupWise Support Community](http://www.novell.com/support/kb/product.php?id=GroupWise) (<http://www.novell.com/support/kb/product.php?id=GroupWise>)
- ♦ [GroupWise Cool Solutions](https://www.novell.com/communities/cool solutions/category/groupwise/) (<https://www.novell.com/communities/cool solutions/category/groupwise/>)

Audience

This guide is intended for network administrators who install and administer GroupWise.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the User Comment feature at the bottom of each page of the online documentation.

Additional Documentation

For additional GroupWise documentation, see the [Micro Focus GroupWise 2014 Documentation website](http://www.novell.com/documentation/groupwise2014/) (<http://www.novell.com/documentation/groupwise2014/>).

Clustering

- ♦ [Chapter 1, “Using Novell Cluster Services with GroupWise 2014,” on page 9](#)
- ♦ [Chapter 2, “Using Windows Server Failover Clustering with GroupWise 2014,” on page 19](#)

1 Using Novell Cluster Services with GroupWise 2014

- ♦ [Section 1.1, “Creating a New GroupWise System to Work with Novell Cluster Services,” on page 9](#)
- ♦ [Section 1.2, “Upgrading a Clustered Linux GroupWise System to GroupWise 2014,” on page 13](#)

1.1 Creating a New GroupWise System to Work with Novell Cluster Services

For detailed instructions on configuring GroupWise to work with Novell Cluster Services, see “[Novell Cluster Services on Linux](#)” in the [GroupWise 2012 Interoperability Guide](#). The procedure for installing GroupWise 2014 differs from the GroupWise 2014 procedure in the following ways:

- ♦ [“GroupWise 2014 Installation Wizard” on page 9](#)
- ♦ [“GroupWise 2014 Admin Console” on page 9](#)
- ♦ [“GroupWise 2014 Admin Service” on page 10](#)
- ♦ [“GroupWise 2014 Installation Console” on page 10](#)
- ♦ [“GroupWise 2014 Load and Unload Scripts” on page 11](#)
- ♦ [“GroupWise 2014 Cluster Test” on page 12](#)

GroupWise 2014 Installation Wizard

The GroupWise 2014 Installation Wizard is completely different from the GroupWise 2014 Installation program. Therefore, the specific installation instructions in “[Setting Up a New GroupWise System in a Linux Cluster](#)” in the [GroupWise 2012 Interoperability Guide](#) no longer apply. There is no longer a **Configure GroupWise for Clustering** option for taking care of certain clustering configuration tasks. Those tasks are taken care of in other ways in GroupWise 2014.

- 1 Install the GroupWise Server component on each cluster node where a GroupWise agent will run for a domain or a post office.

Follow the instructions in [Step 1](#) through [Step 9](#) in “[Linux: Installing the GroupWise Server Software](#)” in the [GroupWise 2014 R2 Installation Guide](#).

IMPORTANT: Install the GroupWise Server component on *all* cluster nodes before setting up any domains or post offices. Do not start the GroupWise Installation Console at the end of the installation process.

GroupWise 2014 Admin Console

In GroupWise 2014, the GroupWise Admin console replaces ConsoleOne as the GroupWise administration tool. The instructions that include ConsoleOne in the [GroupWise 2012 Interoperability Guide](#) can easily be adapted to apply to the GroupWise Admin console in GroupWise 2014. For more

information, see “[Working with the GroupWise Administration Console](#)” in *GroupWise 2014 R2 Installation Guide* and “[GroupWise Administration Console](#)” in the *GroupWise 2014 R2 Administration Guide*.

GroupWise 2014 Admin Service

You must configure the GroupWise Admin Service to function in a cluster, so that it keeps track of which cluster resources are available to it at each point in time. Configuring the GroupWise Admin Service for clustering ensures that files associated with domains and post offices are created on cluster volumes, rather than on individual cluster nodes.

File	Standard Location	Clustered location
Domain SSL Certificate, MTA SSL Certificate, GWIA SSL Certificate	/opt/novell/groupwise/certificates	/groupwise/certificates (a peer to the domain folder)
Post Office SSL Certificate, POA SSL Certificate	/opt/novell/groupwise/certificates	/groupwise/certificates (a peer to the post office folder)
MTA Log Files	/var/log/novell/groupwise/ domain.mta	/groupwise/agents/logs (a peer to the domain folder)
GWIA Log Files	/var/log/novell/groupwise/ gwia.domain	/groupwise/agents/logs (a peer to the domain folder)
POA Log Files	/var/log/novell/groupwise/ post_office.poa	/groupwise/agents/logs (a peer to the post office folder)

On each cluster node:

- 1 Run the following command to enable the GroupWise Admin Service to run in a clustering environment:

```
gwadminutil config -cluster enable
```

You should receive the following response:

```
Cluster: enabled
Default Port: 9710
```

- 2 Use the following command to restart the GroupWise Admin Service.

```
rcgrpwise restart gwadminservice
```

Your GroupWise system is now ready to function in a cluster.

GroupWise 2014 Installation Console

In the Installation console, when you are creating domains and post offices in a cluster, a few fields require cluster-specific information.

- ♦ [Domain Fields](#)
- ♦ [Post Office Fields](#)

Domain Fields

When you follow the instructions in “[Creating the Primary Domain](#)” in the *GroupWise 2014 R2 Installation Guide*, pay special attention to the following fields:

- ♦ In the **Host** field, specify the secondary IP address of the shared resource where you want to create the domain.
- ♦ In the **Domain Folder** field, specify a folder on the shared resource where you want to create the domain.

Post Office Fields

When you follow the instructions in [Step 2](#) through [Step 8](#) in “[Adding a Post Office](#)” in the *GroupWise 2014 R2 Installation Guide*, pay special attention to the following fields:

- ♦ In the **Owning Domain Host** field, specify the secondary IP address of the shared resource where the owning domain is located.
- ♦ In the **Owning Domain Admin Port** field, specify the port on the shared resource for the domain.
- ♦ In the **Host** field, specify the secondary IP address of the shared resource where you want to create the post office.
- ♦ In the **Post Office Folder** field, specify a folder on the shared resource where you want to create the post office.

GroupWise 2014 Load and Unload Scripts

The sample load and unload scripts that are provided in the following sections of “[Novell Cluster Services on Linux](#)” in the *GroupWise 2012 Interoperability Guide* should not be used with GroupWise 2014:

- ♦ “[Configuring GroupWise Cluster Resources to Load and Unload the Linux Agents](#)”
- ♦ “[Configuring the Linux GWIA Cluster Resource to Load and Unload the GWIA and Its MTA](#)”

Use the following scripts instead:

- ♦ [Sample Cluster Load Script](#)
- ♦ [Sample Cluster Unload Script](#)

Sample Cluster Load Script

This sample cluster load script performs the following actions:

- ♦ Establishes what to do for certain error conditions.
- ♦ Creates the GroupWise agent services (if they do not already exist).
- ♦ Starts the GroupWise Admin Service listeners with clustering enabled for the MTA and POA.
- ♦ Starts the POA, MTA, and GWIA (in that order if all are present)

```
#!/bin/bash
./opt/novell/ncs/lib/ncsfncs
exit_on_error nss /poolact=DOM
exit_on_error ncpcon mount DOM=254
exit_on_error add_secondary_ipaddress 151.155.136.248
exit_on_error ncpcon bind --ncpservname=DOM --ipaddress=151.155.136.248
exit_on_error novcifs --add '--vserver=".cn=DOM.ou=servers.o=novell.t=GW14-TREE."'
--ip-addr=151.155.136.248
```

```
# Start gwadmin service
exit_on_error /etc/init.d/grpwise start gwadminservice

#create agent services
exit_on_error /opt/novell/groupwise/admin/gwadminutil services
                                -i /media/nss/DOM/utah
exit_on_error /opt/novell/groupwise/admin/gwadminutil services
                                -i /media/nss/DOM/utah/wpgate/gwia
exit_on_error /opt/novell/groupwise/admin/gwadminutil services
                                -i /media/nss/DOM/provo

#start admin service listeners
exit_on_error /opt/novell/groupwise/admin/gwadmin-ipc start utah cluster
exit_on_error /opt/novell/groupwise/admin/gwadmin-ipc start provo.utah cluster

#start GroupWise agents
exit_on_error /etc/init.d/grpwise start utah
exit_on_error /etc/init.d/grpwise start gwia.utah
exit_on_error /etc/init.d/grpwise start provo.utah

exit 0
```

Sample Cluster Unload Script

This sample cluster unload script performs the following actions:

- ♦ Stops the GroupWise Admin Service listeners for the MTA and POA
- ♦ Stops the MTA, GWIA, and POA (in that order if all are present)
- ♦ Lists error conditions that can be ignored

```
#!/bin/bash
. /opt/novell/ncs/lib/ncsfncs

# Stop admin service listeners
ignore_error /opt/novell/groupwise/admin/gwadmin-ipc stop utah
ignore_error /opt/novell/groupwise/admin/gwadmin-ipc stop provo.utah

# Stop GroupWise agents
ignore_error /etc/init.d/grpwise stop utah
ignore_error /etc/init.d/grpwise stop gwia.utah
ignore_error /etc/init.d/grpwise stop provo.utah

ignore_error novcifs
                --remove '--vserver=".cn=DOM.ou=servers.o=novell.t=GW14-TREE."'
                --ip-addr=151.155.136.248
ignore_error ncpcon unbind --ncpservname=DOM --ipaddress=151.155.136.248
ignore_error del_secondary_ipaddress 151.155.136.248
ignore_error nss /pooldeact=DOM

exit 0
```

GroupWise 2014 Cluster Test

Follow the instructions in [“Testing Your Clustered GroupWise System on Linux”](#) to verify that the GroupWise Admin console keeps track of the cluster resources that are currently available to it.

1.2 Upgrading a Clustered Linux GroupWise System to GroupWise 2014

- ♦ [Section 1.2.1, “Installing the GroupWise 2014 Software,” on page 13](#)
- ♦ [Section 1.2.2, “Configuring the GroupWise Admin Service to Function in a Cluster,” on page 14](#)
- ♦ [Section 1.2.3, “Upgrading Domains and Post Offices,” on page 14](#)
- ♦ [Section 1.2.4, “Finishing the GroupWise Software Upgrade,” on page 15](#)
- ♦ [Section 1.2.5, “Providing New Load and Unload Scripts,” on page 15](#)
- ♦ [Section 1.2.6, “Testing the Upgraded Cluster,” on page 17](#)

1.2.1 Installing the GroupWise 2014 Software

As with any upgrade, you must upgrade the primary domain first.

- 1 Stop all GroupWise agents that are running on the node that you want to upgrade first.
- 2 Install the GroupWise Server component on the first node.

Follow the instructions in [Step 1](#) through [Step 9](#) in “[Linux: Installing the GroupWise Server Software](#)” in the *GroupWise 2014 R2 Installation Guide*.

IMPORTANT: Do not start the GroupWise Admin console after installing the GroupWise software.

- 3 Continue with [Configuring the GroupWise Admin Service to Function in a Cluster](#).

1.2.2 Configuring the GroupWise Admin Service to Function in a Cluster

You must configure the GroupWise Admin Service to function in a cluster, so that it keeps track of which cluster resources are available to it at each point in time. Configuring the GroupWise Admin Service for clustering ensures that files associated with domains and post offices are created on cluster volumes, rather than on individual cluster nodes.

File	Standard Location	Clustered location
Domain SSL Certificate, MTA SSL Certificate, GWIA SSL Certificate	/opt/novell/groupwise/certificates	/groupwise/certificates (a peer to the domain folder)
Post Office SSL Certificate, POA SSL Certificate	/opt/novell/groupwise/certificates	/groupwise/certificates (a peer to the post office folder)
MTA Log Files	/var/log/novell/groupwise/ domain.mta	/groupwise/agents/logs (a peer to the domain folder)
GWIA Log Files	/var/log/novell/groupwise/ gwia.domain	/groupwise/agents/logs (a peer to the domain folder)
POA Log Files	/var/log/novell/groupwise/ post_office.poa	/groupwise/agents/logs (a peer to the post office folder)

- 1 Run the following command to enable the GroupWise Admin Service to run in a clustering environment:

```
gadminutil config -cluster enable
```

You should receive the following response:

```
Cluster: enabled  
Default Port: 9710
```

- 2 Use the following command to restart the GroupWise Admin Service.

```
rcgrpwise restart gwadminservice
```

Your GroupWise system is now ready to function in a cluster.

- 3 For convenience, configure the GroupWise Installation console to use an authentication mode of a user name and password, rather than the default token-based authentication mode:

```
gadminutil installcfg -m user -u user_name -p password
```

- 4 Continue with [Upgrading Domains and Post Offices](#).

1.2.3 Upgrading Domains and Post Offices

For background information about upgrading your GroupWise system, see “[GroupWise System Upgrade](#)” in the [GroupWise 2014 R2 Installation Guide](#).

- 1 In a web browser, start the GroupWise Installation console:

```
https://domain_server_secondary_ip_address:9710/gwadmin-console/install
```

- 2 Provide the user name as password that you established in [Step 3 in Section 1.2.2, “Configuring the GroupWise Admin Service to Function in a Cluster,”](#) on page 14.
- 3 In the GroupWise Installation console, click **Upgrade an Existing Domain or Post Office GroupWise 2014**.
The Installation console provides a list of agents on the current node. The list is built from the `gwha.conf` file.
- 4 (Conditional) If there are any domains or post offices that are not currently online to this node, select them, then click **Remove** to remove them from the list.
- 5 For each domain and post office, verify that the IP address in the list is the secondary IP address of the cluster resource.
- 6 For each domain and post office, verify that there are no port conflicts for the Admin port.
- 7 (Conditional) If you need to change the IP address or Admin port for a domain or post office, click the name of the domain or post office, update the information, then click **OK**.
- 8 Click **Next** to continue with the upgrade.
- 9 On the Credentials page:
 - 9a (Conditional) If the primary domain is being upgraded, specify the user name for the GroupWise Super Admin, and type the password twice for confirmation.
or
Specify the IP address, Admin port, and Admin credentials of the owning domain.
- 10 Click **Next** to display the Summary page.
- 11 Review the summary, then click **Finish**.
- 12 Continue with [Finishing the GroupWise Software Upgrade](#).

1.2.4 Finishing the GroupWise Software Upgrade

- 1 On each cluster node, repeat the steps in the following sections:
 - ♦ [Section 1.2.1, “Installing the GroupWise 2014 Software,”](#) on page 13
 - ♦ [Section 1.2.2, “Configuring the GroupWise Admin Service to Function in a Cluster,”](#) on page 14
 - ♦ [Section 1.2.3, “Upgrading Domains and Post Offices,”](#) on page 14
 Remember that you cannot upgrade a post office until its owning domain as been upgraded.
- 2 Continue with [Providing New Load and Unload Scripts](#).

1.2.5 Providing New Load and Unload Scripts

- 1 In iManager, replace the existing load script for each cluster resource with a new load script that is similar to the following example:

```
#!/bin/bash
./opt/novell/ncs/lib/ncsfuns
exit_on_error nss /poolact=DOM
exit_on_error ncpcon mount DOM=254
exit_on_error add_secondary_ipaddress 151.155.136.248
exit_on_error ncpcon bind --ncpservname=DOM --ipaddress=151.155.136.248
exit_on_error novcifs --add '--vserver=".cn=DOM.ou=servers.o=novell.t=GW14-
TREE." '
--ip-addr=151.155.136.248
```

```

# Start gwadmin service
exit_on_error /etc/init.d/grpwise start gwadminservice

#create agent services
exit_on_error /opt/novell/groupwise/admin/gwadminutil services
                                -i /media/nss/DOM/utah
exit_on_error /opt/novell/groupwise/admin/gwadminutil services
                                -i /media/nss/DOM/utah/wpgate/
gwia
exit_on_error /opt/novell/groupwise/admin/gwadminutil services
                                -i /media/nss/DOM/provo

#start admin service listeners
exit_on_error /opt/novell/groupwise/admin/gwadmin-ipc start utah cluster
exit_on_error /opt/novell/groupwise/admin/gwadmin-ipc start provo.utah cluster

#start GroupWise agents
exit_on_error /etc/init.d/grpwise start utah
exit_on_error /etc/init.d/grpwise start gwia.utah
exit_on_error /etc/init.d/grpwise start provo.utah

exit 0

```

This sample cluster load script performs the following actions:

- ♦ Establishes what to do for certain error conditions.
- ♦ Creates the GroupWise agent services (if they do not already exist).
- ♦ Starts the GroupWise Admin Service listeners with clustering enabled for the MTA and POA.
- ♦ Starts the POA, MTA, and GWIA (in that order if all are present)

- 2 Replace the existing unload script for each cluster resource with a new unload script that is similar to the following example:

```

#!/bin/bash
. /opt/novell/ncs/lib/ncsfuns

# Stop admin service listeners
ignore_error /opt/novell/groupwise/admin/gwadmin-ipc stop utah
ignore_error /opt/novell/groupwise/admin/gwadmin-ipc stop provo.utah

# Stop GroupWise agents
ignore_error /etc/init.d/grpwise stop utah
ignore_error /etc/init.d/grpwise stop gwia.utah
ignore_error /etc/init.d/grpwise stop provo.utah

ignore_error novcifs
                --remove '--vserver=".cn=DOM.ou=servers.o=novell.t=GW14-TREE."'
                --ip-addr=151.155.136.248
ignore_error ncpcon unbind --ncpservname=DOM --ipaddress=151.155.136.248
ignore_error del_secondary_ipaddress 151.155.136.248
ignore_error nss /pooldeact=DOM

exit 0

```

This sample cluster unload script performs the following actions:

- ♦ Stops the GroupWise Admin Service listeners for the MTA and POA
- ♦ Stops the MTA, GWIA, and POA (in that order if all are present)
- ♦ Lists error conditions that can be ignored

NOTE: The `pkill` command used in earlier versions of the GroupWise unload script is no longer needed. In GroupWise 2014, the `grpwise` script terminates GroupWise agent processes according to the `wait` setting specified in the `gwha.conf` file. The default is 60 seconds. If that amount of time is not sufficient to ensure a clean shutdown of the agents in your GroupWise system, increase the `wait` setting as needed.

- 3 Continue with [Testing the Upgraded Cluster](#).

1.2.6 Testing the Upgraded Cluster

- 1 Follow the instructions in “[Testing Your Clustered GroupWise System on Linux](#)” to verify that the GroupWise Admin console keeps track of the cluster resources that are currently available to it.

2 Using Windows Server Failover Clustering with GroupWise 2014

Windows Server 2012 Failover Clustering and Windows Server 2008 Failover Clustering are very similar in regards to how GroupWise 2014 interacts with them. In Windows Server 2012 Failover Clustering, the term “Cluster Role” replaces the term “Cluster Resource” as used in Windows Server 2008 Failover Clustering. The example in this section uses Windows Server 2012 functionality and terminology.

- ♦ [Section 2.1, “Creating a New GroupWise 2014 System in a Windows Failover Cluster,” on page 19](#)
- ♦ [Section 2.2, “Upgrading a Clustered Windows GroupWise System to GroupWise 2014,” on page 27](#)

2.1 Creating a New GroupWise 2014 System in a Windows Failover Cluster

The following sections assume a working knowledge of Windows Server Failover Clustering.

- ♦ [Section 2.1.1, “Preparing to Install GroupWise in the Cluster,” on page 19](#)
- ♦ [Section 2.1.2, “Installing the GroupWise Software,” on page 20](#)
- ♦ [Section 2.1.3, “Configuring the GroupWise Admin Service for Clustering,” on page 21](#)
- ♦ [Section 2.1.4, “Creating the Primary Domain,” on page 21](#)
- ♦ [Section 2.1.5, “Creating a Post Office,” on page 22](#)
- ♦ [Section 2.1.6, “Creating a Script to Start and Stop the GroupWise Agents,” on page 24](#)
- ♦ [Section 2.1.7, “Adding the Script to the Cluster Role,” on page 24](#)
- ♦ [Section 2.1.8, “Testing the Cluster Role,” on page 26](#)
- ♦ [Section 2.1.9, “Clustering the DVA,” on page 26](#)

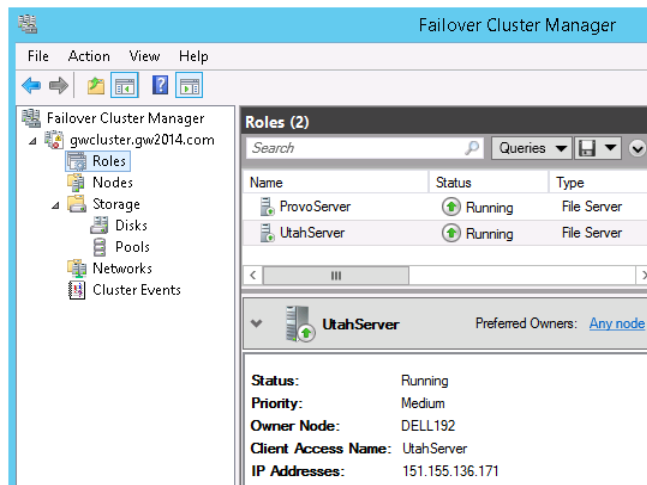
2.1.1 Preparing to Install GroupWise in the Cluster

- 1 Define at least one Cluster Role.

For a very simple GroupWise system with a primary domain and one post office, you could handle the domain and the post office as a single Cluster Role. For a typical GroupWise system with multiple domains and post offices, you might to have a Cluster Role for each domain and post office.

- 2 Configure each Cluster Role with the type of File Server.

- 3 Configure each File Server Cluster Role with a shared cluster disk and an IP address.
The following example shows two Cluster Roles, ProvoServer and UtahServer.



- 4 Continue with [Installing the GroupWise Software](#).

2.1.2 Installing the GroupWise Software

- 1 Install the GroupWise Server component on each cluster node where a GroupWise agent will run for a domain or a post office.

Follow the instructions in [Step 1](#) through [Step 9](#) in “[Windows: Installing the GroupWise Server Software](#)” in the [GroupWise 2014 R2 Installation Guide](#).

IMPORTANT: Install the GroupWise Server component on *all* cluster nodes before setting up any domains or post offices.

- 2 Continue with [Configuring the GroupWise Admin Service for Clustering](#).

2.1.3 Configuring the GroupWise Admin Service for Clustering

Configuring the GroupWise Admin Service for clustering ensures that files associated with domains and post offices are created on cluster volumes, rather than on individual cluster nodes.

File	Standard Location	Clustered location
Domain SSL Certificate, MTA SSL Certificate, GWIA SSL Certificate	c:\Program Files\Novell\ GroupWise Server\ certificates	\groupwise\certificates (a peer to the domain folder)
Post Office SSL Certificate, POA SSL Certificate	c:\Program Files\Novell\ GroupWise Server\ certificates	\groupwise\certificates (a peer to the post office folder)
MTA Log Files	\domain_folder\mslocal	\groupwise\agents\logs (a peer to the domain folder)
GWIA Log Files	\domain_folder\wpgate\000.prc	\groupwise\agents\logs (a peer to the domain folder)
POA Log Files	\post_office_folder\wpcout\ofs	\groupwise\agents\logs (a peer to the post office folder)

- 1 Run the following command to enable the GroupWise Admin Service to run in a clustering environment:

```
gwadminutil config -cluster enable
```

You should receive the following response:

```
Cluster: enabled  
Default Port: 9710
```

- 2 Restart the GroupWise Admin Service.

Use the Windows Services administrative tool.

or

Use the following commands at the Windows command prompt:

```
sc stop gwadmin  
sc start gwadmin
```

- 3 Continue with [Creating the Primary Domain](#).

2.1.4 Creating the Primary Domain

- 1 Ensure that the primary domain Cluster Role is online on the cluster node where you want to create the primary domain.
- 2 Use the **GroupWise Install** icon on the Windows desktop to access the GroupWise Installation console.
- 3 (Conditional) If you receive a certificate error, continue past it.

- 4 Follow the instructions in “[Creating the Primary Domain](#)” in the *GroupWise 2014 R2 Installation Guide*.

Pay special attention to the **Host** and **Domain Folder** fields on the System Settings page.

Novell GroupWise Installation

Install Language: English

Create a New GroupWise System

System Settings
Credential Settings
Summary

System Name: gwClusterSystem

Internet Domain Name: gw2014.com

Host: 151.155.136.171

GroupWise Domain Name: Utah

Domain Folder: M:\Utah Browse...

Language: English - US

Time Zone: (GMT-07:00) Mountain Time (US & Canada)

MTA Settings

MTP Port: 7100

HTTP Port: 7180

Admin Port: 9710

Options

☒ Create Internet Agent

Hostname/DNS "A Record" Name: utahServer.gw2014.com

☐ Create Post Office

Existing Configuration

- ♦ In the **Host** field, specify the IP address of the domain Cluster Role.
- ♦ In the **Domain Folder** field, specify a folder on the domain Cluster Role volume.

The clustering example used in this section sets up a GWIA in the primary domain but does not create any post offices on the primary domain server. The post office will be created later on a different Cluster Role.

- 5 Continue following the standard instructions to finish creating the primary domain.

NOTE: After you create the primary domain on its Cluster Role, the GroupWise Install and GroupWise Administration desktop icons no longer work. The Admin Service is now listening on the IP address of the primary domain Cluster Role, not the IP address of the physical node.

- 6 (Optional) Create new desktop shortcuts for the Installation console and the Administration console that use the proper IP address.
- 7 Continue with [Creating a Post Office](#).

2.1.5 Creating a Post Office

Although you can create a post office on the same Cluster Role with a domain, it is not typical to do so. In this example, the post office is created on a separate Cluster Role.

- 1 Online the post office Cluster Role to a cluster node.
- 2 Use the **GroupWise Install** icon on the Windows desktop to access the GroupWise Installation console.

- 3 Follow the instructions in [Step 2](#) through [Step 8](#) in “[Adding a Post Office](#)” in the *GroupWise 2014 R2 Installation Guide*.

As with the domain creation process, pay special attention to specific fields.

3a On the System Settings page:

The screenshot shows the 'Novell GroupWise Installation' window with the 'Add a New Post Office' title bar. The 'System Settings' tab is selected in the left sidebar. The main area contains the following fields: 'Owning Domain Host' with the value '151.155.136.171', 'Owning Domain Admin Port' with the value '9710', 'Admin Name' with the value 'admin', and 'Password' with masked characters. A vertical 'Existing Configuration' bar is on the right. The top right shows 'Install Language: English'.

- ◆ In the **Owning Domain Host** field, specify the IP address of the primary domain Cluster Role that you set up in [Section 2.1.4, “Creating the Primary Domain,”](#) on page 21.
- ◆ In the **Owning Domain Admin Port** field, specify port on the primary domain Cluster Role.

3b On the Post Office Settings page:

The screenshot shows the 'Novell GroupWise Installation' window with the 'Add a New Post Office' title bar. The 'Post Office Settings' tab is selected in the left sidebar. The main area contains the following fields: 'GroupWise Domain Name' with the value 'Utah', 'Post Office Name' with the value 'Provo', 'Host' with the value '151.155.136.172', 'Post Office Folder' with the value 'N:\Provo', 'Language' with a dropdown set to 'English - US', and 'Time Zone' with a dropdown set to '(GMT-07:00) Mountain Time (US & Canada)'. There is a checkbox for 'Create Document Viewer Agent' which is unchecked. A vertical 'Existing Configuration' bar is on the right. The top right shows 'Install Language: English'.

- ◆ In the **Host** field, specify the IP address of the post office Cluster Role.
 - ◆ In the **Post Office Folder** field, specify a folder on the post office Cluster Role volume.
- The clustering example used in this section does not set up a DVA with the post office. For DVA clustering recommendations, see [Section 2.1.9, “Clustering the DVA,”](#) on page 26.

- 4 Continue following the standard instructions to finish creating the post office.

NOTE: As an alternative to creating the post office in the GroupWise Installation console, you can create the post office in the GroupWise Admin console. Online the post office Cluster Role to the same node where the owning domain Cluster Role is running. Then follow the instructions in “[Creating a New Post Office on an Existing Domain or Post Office Server](#)” in the *GroupWise 2014 R2 Installation Guide*.

2.1.6 Creating a Script to Start and Stop the GroupWise Agents

When a domain or post office Cluster Role is started, stopped, or moved to a new cluster node, the accompanying GroupWise agents must also be started and stopped. The GroupWise Admin Service also needs to keep track of when domains and post office are added or removed from its cluster node. This is accomplished by adding a Windows cluster Generic Script resource to the domain or post office Cluster Role.

The Generic Script performs the following actions:

- Creates a Windows service for each GroupWise agent if the service does not already exist.
- Starts the GroupWise Admin Service for the domain or post office Cluster Role.
- Starts the MTA, and optionally the GWIA, for a domain Cluster Role.
- Starts the POA for a post office Cluster Role.

The Generic Script must be a Visual Basic script. A template is provided in the following location:

```
c:\Program Files\Novell\GroupWise Server\
agents\data\cluster\groupwise_cluster_template.vbs
```

The script file provides background information about how to edit the script.

- 1 Create a folder for the script on each cluster node, such as `c:\gwcluster`.
- 2 Copy the template script into the `gwcluster` folder on each cluster node.
- 3 Edit the template file for a specific Cluster Role.

For a domain Cluster Role, the script would look similar to the following example, which enables the MTA and the GWIA for the Utah domain:

```
gwAgents.Add "Utah MTA", "M:\Utah"
gwAgents.Add "Utah GWIA", "M:\Utah\wpgate\gwia"
```

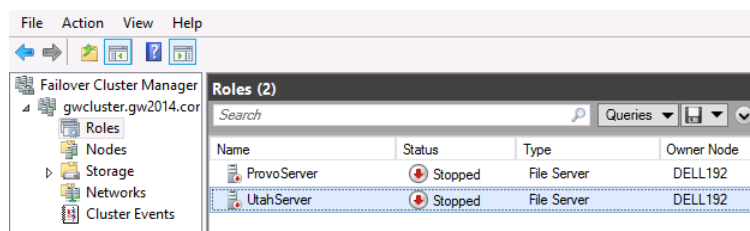
For a post office Cluster Role, the script would look similar to the following example, which enables the POA for the Provo post office:

```
gwAgents.Add "Provo POA", "M:\Provo"
```

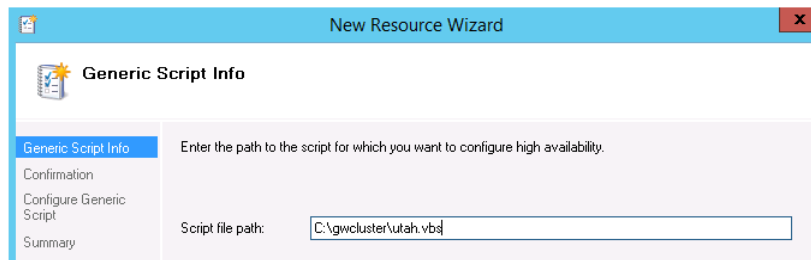
- 4 Save the edited template file with a descriptive name that associates it with its Cluster Role.
- 5 Copy the customized script to each cluster node, ensuring that it is in the same location on all cluster nodes.
- 6 Continue with [Adding the Script to the Cluster Role](#).

2.1.7 Adding the Script to the Cluster Role

- 1 In the Failover Cluster Manager, stop or offline the Cluster Role.
- 2 Highlight the Cluster Role.



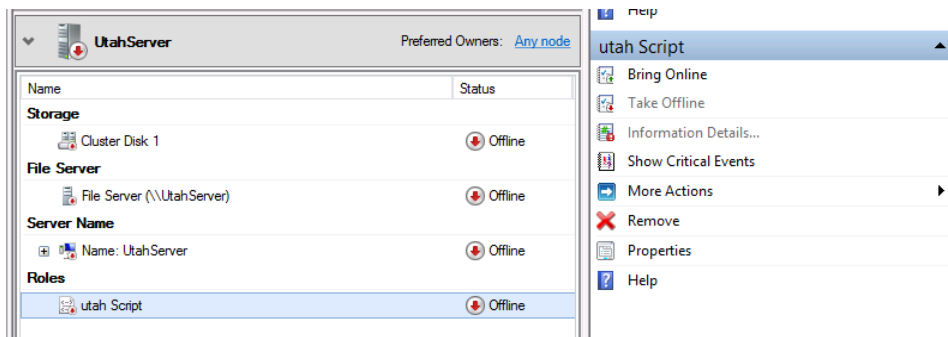
- 3 On the **Actions** menu in the right column, click **Add Resource > Generic Script**.
- 4 Select **Generic Script** as the resource type.



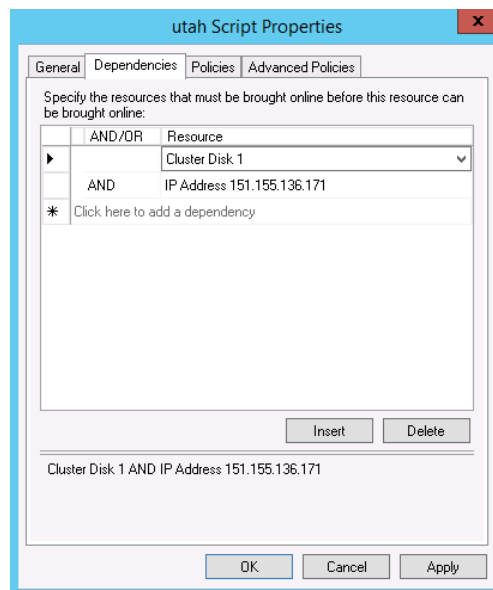
- 5 Specify the full path to the script.
- 6 Click **Next**, then click **Finish**.

IMPORTANT: If there are any errors in the script, or if the script is not available on all of the cluster nodes, the addition of the Generic Script resource fails.

- 7 Edit the properties of the script to add dependencies, so that the file system and IP address are enabled on the Cluster Role before the script is run.



- 7a Highlight the Generic Script resource, then click **Properties** on the Script menu on the right.



- 7b Click the **Dependencies** tab.
- 7c Click [Click here to add a dependency](#), then select the Cluster Disk as the first dependency.
- 7d Click [Click here to add a dependency](#) again, then add the IP address.
- 7e Click **OK** to save your changes.
- 8 Continue with [Testing the Cluster Role](#).

2.1.8 Testing the Cluster Role

- 1 Bring the Cluster Role online.
- 2 Move the Cluster Role to a different node.

2.1.9 Clustering the DVA

Complete instructions for clustering the DVA are beyond the scope of this example. The following suggestions should help you cluster the DVA:

- ♦ Do not install the DVA as part of installing a post office. Instead, install it independently. Use the following command on the cluster disk where you want the DVA to run:

```
gwadminutil services -i -dva
```

For more instructions, see the following sections in the [GroupWise 2014 R2 Installation Guide](#):

- ♦ [“Windows: Installing and Starting a New DVA”](#)
- ♦ [“Setting Up the DVA”](#)
- ♦ Create a script and a Generic Script resource to control the DVA. The line for the DVA would look similar to the following example:

```
gwAgents.Add "GWDVA", "M:\Provo"
```

For instruction, see:

- ♦ [Section 2.1.6, “Creating a Script to Start and Stop the GroupWise Agents,” on page 24](#)
- ♦ [Section 2.1.7, “Adding the Script to the Cluster Role,” on page 24](#)
- ♦ Configure the DVA to function in the cluster.
This requires editing the DVA startup file. For instructions, see [“Configuring DVA Log Settings”](#) in the [GroupWise 2014 R2 Administration Guide](#).

Two aspects of the DVA must to customized:

- ♦ Configure the DVA with the IP address of the Cluster Role.
- ♦ Configure the DVA to create its log files in the following folder:

```
\groupwise\agents\logs
```

If you are setting up the DVA as part a post office Cluster Role, this folder has already been created when you configured the GroupWise Admin Service to run for the clustered post office. If not, you must manually create this folder. In either case, you must configure the DVA to have its log files created in this location.

2.2 Upgrading a Clustered Windows GroupWise System to GroupWise 2014

If your existing GroupWise system is in a cluster, you must change the way it is configured in the cluster to enable the GroupWise 2014 domains, post offices, and agents to function in the cluster.

- 1 Stop the GroupWise agents for the domain or post office.
- 2 Remove the cluster Resource Group for the domain or post office.
- 3 Upgrade each domain or post office.

For instructions, see “[GroupWise System Upgrade](#)” in the *GroupWise 2014 R2 Installation Guide*

- 4 Create a Cluster Role for each domain or post office.

or

Create a Cluster Role for a domain and one or more post offices, as required by the existing architecture of your Windows Failover cluster.

For instructions, see [Section 2.1.1, “Preparing to Install GroupWise in the Cluster,”](#) on page 19.

- 5 Create a script to control the agents in the Cluster Role.

For instructions, see:

- ♦ [Section 2.1.6, “Creating a Script to Start and Stop the GroupWise Agents,”](#) on page 24
- ♦ [Section 2.1.7, “Adding the Script to the Cluster Role,”](#) on page 24

- 6 Test the new Cluster Role.

For instructions, see [Section 2.1.8, “Testing the Cluster Role,”](#) on page 26.

- 7 (Optional) Cluster the DVAs in your GroupWise system.

For instructions, see [Section 2.1.9, “Clustering the DVA,”](#) on page 26.

3 Messenger

Novell Messenger relies on having GroupWise users defined in NetIQ eDirectory. The association of both GroupWise and Messenger users with eDirectory User objects enables the display of Messenger presence in the GroupWise client.

GroupWise 2014 users can be defined in NetIQ eDirectory, in Microsoft Active Directory, or in the native GroupWise directory. Customized setup is required when you want Messenger presence to display in the GroupWise client, but your GroupWise users are not currently in eDirectory.

For native GroupWise users, you can directly associate them with new eDirectory objects.

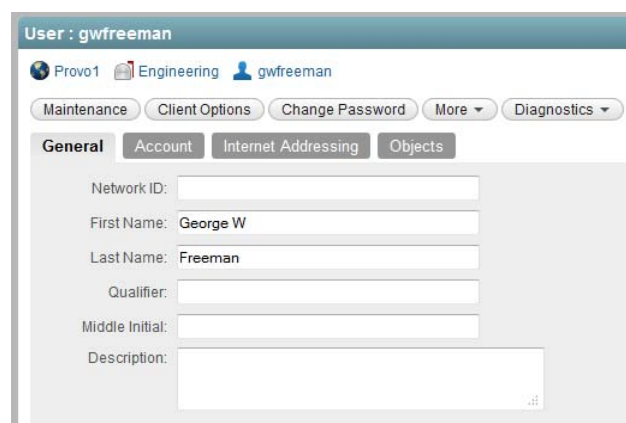
For GroupWise users that have been imported from an LDAP directory such as Microsoft Active Directory, the GroupWise users already have direct associations with an LDAP directory, so they cannot also be directly associated with eDirectory. In this case, you still must create eDirectory objects for them, but you configure your Messenger system to establish a secondary association between GroupWise users and their eDirectory User objects that relies on their email addresses.

- [Section 3.1, “Verifying a User’s Directory Association,” on page 29](#)
- [Section 3.2, “Associating Native GroupWise Users with eDirectory Objects,” on page 30](#)
- [Section 3.3, “Associating Imported GroupWise Users through Their Email Addresses,” on page 32](#)
- [Section 3.4, “Adding Users to the Messenger Contact List,” on page 37](#)

3.1 Verifying a User’s Directory Association

- 1 In the [GroupWise Admin console](#), browse to and click a user.
- 2 Click the **General** tab.

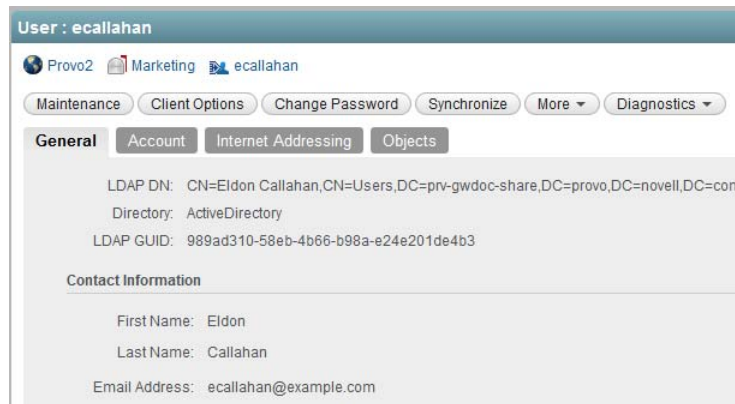
When the **General** tab provides fields for specifying the user’s personal information, it shows that the user is a native GroupWise user.



The screenshot shows the 'User : gwfreeman' profile page in the GroupWise Admin console. At the top, there are tabs for 'Provo1', 'Engineering', and 'gwfreeman'. Below these are buttons for 'Maintenance', 'Client Options', 'Change Password', 'More', and 'Diagnostics'. The 'General' tab is selected, showing fields for 'Network ID', 'First Name' (George W), 'Last Name' (Freeman), 'Qualifier', 'Middle Initial', and 'Description'. The 'Description' field is a large text area.

- 3 To handle a native GroupWise user, skip to [Section 3.2, “Associating Native GroupWise Users with eDirectory Objects,” on page 30](#).

- 4 When the **General** tab lists user information that has been imported from an LDAP directory such as Microsoft Active Directory:



Skip to [Section 3.3, “Associating Imported GroupWise Users through Their Email Addresses,”](#) on page 32

3.2 Associating Native GroupWise Users with eDirectory Objects

For background information about native GroupWise users, see “[Manually Creating GroupWise Accounts](#)” in the *GroupWise 2014 R2 Administration Guide*.

For native GroupWise users, you can manually create eDirectory objects for them, so that their Messenger presence displays in the GroupWise client.

- ♦ [Section 3.2.1, “Creating eDirectory Objects for Native GroupWise Users,”](#) on page 30
- ♦ [Section 3.2.2, “Associating the eDirectory User Objects with the Native GroupWise User Objects,”](#) on page 31

3.2.1 Creating eDirectory Objects for Native GroupWise Users

- 1 In the [GroupWise Admin console](#), create or verify the existence of an LDAP Directory object that represents eDirectory in your GroupWise system.

For instructions, see “[Setting Up an LDAP Directory](#)” in the *GroupWise 2014 R2 Administration Guide*.

- 2 In ConsoleOne with the Messenger snapin installed, display the properties of the DefaultScopeProfile object in your Messenger system.

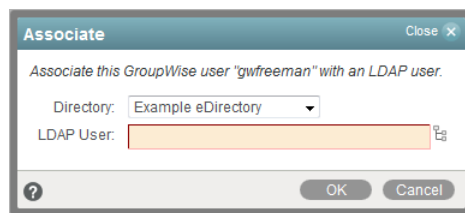
The DefaultScopeProfile object lists the contexts that Messenger searches for User objects in order to provide Messenger functionality to those users.



- 3 Make a note of the contexts that are valid for users in your Messenger system.
- 4 In a valid user context, create eDirectory User objects that correspond to native GroupWise User objects.
 - 4a Create the eDirectory User objects with the same names as the GroupWise User objects.
 - 4b Have the GroupWise users set the password on their eDirectory accounts to be same the password that they use to log in to Messenger.
- 5 Continue with [Associating the eDirectory User Objects with the Native GroupWise User Objects](#).

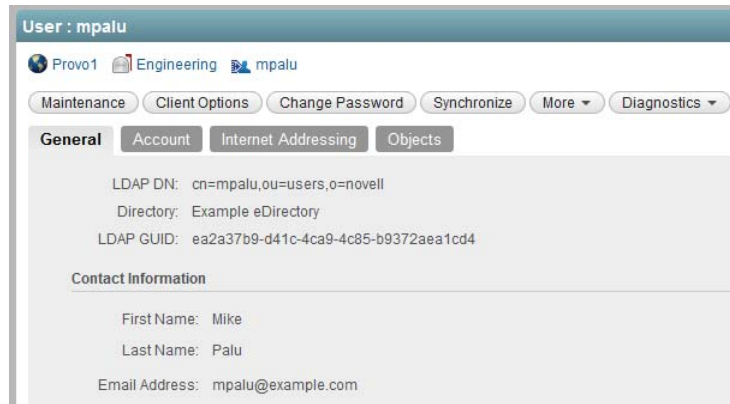
3.2.2 Associating the eDirectory User Objects with the Native GroupWise User Objects

- 1 In the [GroupWise Admin console](#), browse to and click the name of a native GroupWise user.
- 2 Click **More > Associate**.



- 3 Select the LDAP Directory object for eDirectory, select the eDirectory User object, then click **OK**.

- 4 Display the User **General** tab to see the LDAP association.



- 5 Repeat [Step 1](#) through [Step 4](#) to associate all of the native GroupWise users with their new eDirectory User objects.
- 6 Skip to [Section 3.4, “Adding Users to the Messenger Contact List,”](#) on page 37.

3.3 Associating Imported GroupWise Users through Their Email Addresses

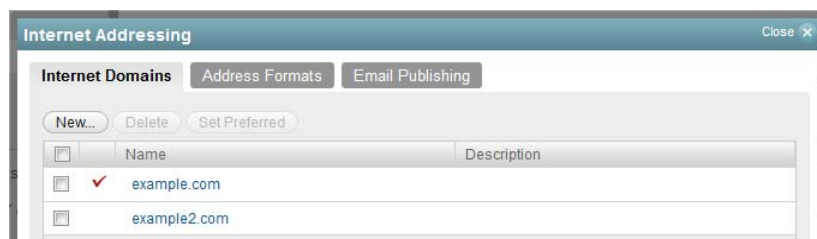
For background information about importing GroupWise users, see [“Creating GroupWise Accounts by Importing Users from an LDAP Directory”](#) in the *GroupWise 2014 R2 Administration Guide*.

Imported GroupWise users that are already explicitly associated with an LDAP directory other than eDirectory, such as Microsoft Active Directory, can be associated with your Messenger system through their email addresses. You configure your Messenger system with a Messenger Host for each GroupWise Internet domain that appears in GroupWise users' email addresses.

- [Section 3.3.1, “Verifying Your GroupWise System’s Internet Domains,”](#) on page 32
- [Section 3.3.2, “Creating eDirectory Objects for the Imported GroupWise Users,”](#) on page 33
- [Section 3.3.3, “Creating Scope Profiles for GroupWise Internet Domains,”](#) on page 33
- [Section 3.3.4, “Creating Messenger Hosts for GroupWise Internet Domains,”](#) on page 35
- [Section 3.3.5, “Updating the Messenger System Host List,”](#) on page 36

3.3.1 Verifying Your GroupWise System’s Internet Domains

- 1 (Conditional) If your GroupWise system uses only one Internet domain, skip to [Section 3.3.2, “Creating eDirectory Objects for the Imported GroupWise Users,”](#) on page 33.
- 2 In the [GroupWise Admin console](#), click **System > Internet Addressing**.



- 3 Make a list of the Internet domain names that your GroupWise users use in their email addresses.
- 4 Continue with [Creating eDirectory Objects for the Imported GroupWise Users](#).

3.3.2 Creating eDirectory Objects for the Imported GroupWise Users

- 1 In ConsoleOne with the Messenger snapin installed, display the properties of the DefaultScopeProfile object in your Messenger system.

The DefaultScopeProfile object lists the contexts that Messenger searches for User objects in order to provide Messenger functionality to those users.



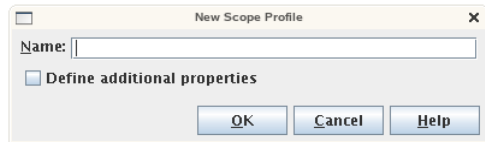
- 2 Make a note of the contexts that are valid for users in your Messenger system.
If your GroupWise system has more than one Internet domain, you need a context for users from each GroupWise Internet domain.
- 3 (Conditional) As needed, create an eDirectory context for each GroupWise Internet domain, and add it to the Default Scope Profile.
- 4 In contexts that correspond to imported users' GroupWise Internet domains, create eDirectory User objects that correspond to imported GroupWise User objects.
 - 4a Create the eDirectory User objects with the same names as the GroupWise User objects.
 - 4b Have the GroupWise users set the password on their eDirectory accounts to be same the password that they use to log in to Messenger.
- 5 Continue with [Creating Scope Profiles for GroupWise Internet Domains](#).

3.3.3 Creating Scope Profiles for GroupWise Internet Domains

The ScopeProfile object for each GroupWise Internet domain lists the eDirectory contexts where Messenger searches for User objects for users who have that Internet domain in their email addresses.

- 1 In ConsoleOne with the Messenger snapin installed, browse to and expand the MessengerService object.
- 2 To create a new Scope Profile, right-click the ScopeContainer object, then click **New > Object**.

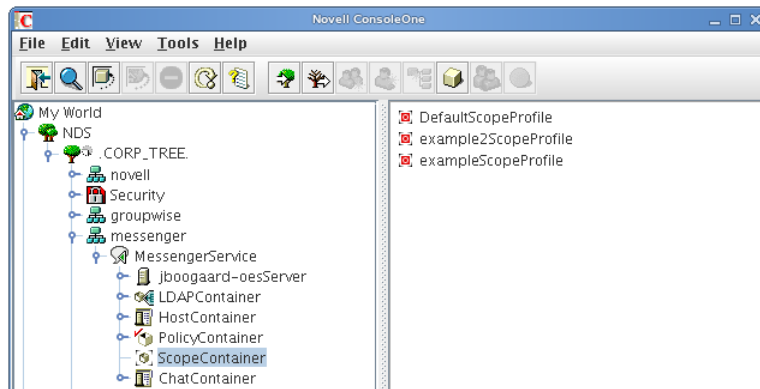
- 3 Select **nnmScopeProfile**, then click **OK**.



- 4 Specify a unique name, then click **OK**.

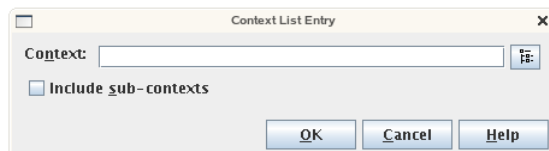
You might want to use a name that is related to the GroupWise Internet domain that you are creating the Scope Profile for.

- 5 (Conditional) If your GroupWise system has more than one Internet domain, repeat [Step 2](#) through [Step 4](#) to create a Scope Profile for each GroupWise Internet domain.



- 6 To configure a Scope Profile, right-click the ScopeProfile object, then click **Properties**.

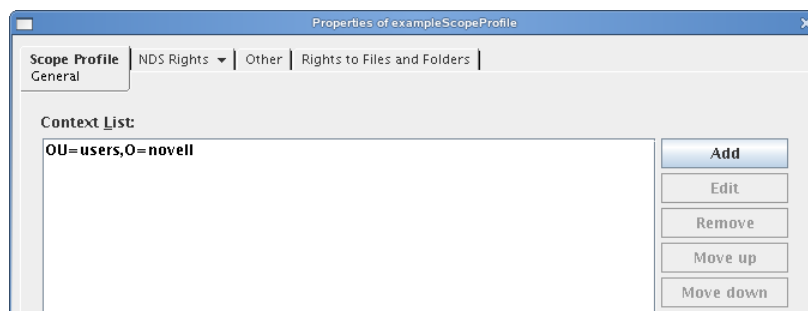
- 7 Click **Add** to add a context to the Scope Profile.



- 8 Browse to and select a context where you created eDirectory User objects in [Section 3.3.2](#), "Creating eDirectory Objects for the Imported GroupWise Users," on page 33.

- 9 (Optional) Click **Include Subcontexts** so that Messenger searches the selected context and all of its subcontexts for User objects.

- 10 Click **OK** to add the context to the list of contexts associated with the Scope Profile.

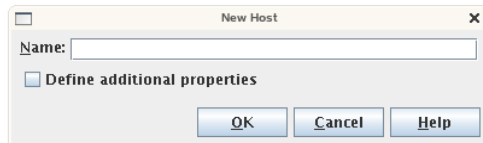


- 11 (Conditional) If User objects are located in multiple contexts, repeat [Step 7](#) through [Step 10](#) to add each context to the Scope Profile.
- 12 When you have finished adding contexts, click **OK** to save the new Scope Profile for the GroupWise Internet domain.
- 13 (Conditional) If your GroupWise system has more than one Internet domain, repeat [Step 6](#) through [Step 12](#) to configure the Scope Profile for each GroupWise Internet domain.
- 14 Continue with [Creating Messenger Hosts for GroupWise Internet Domains](#).

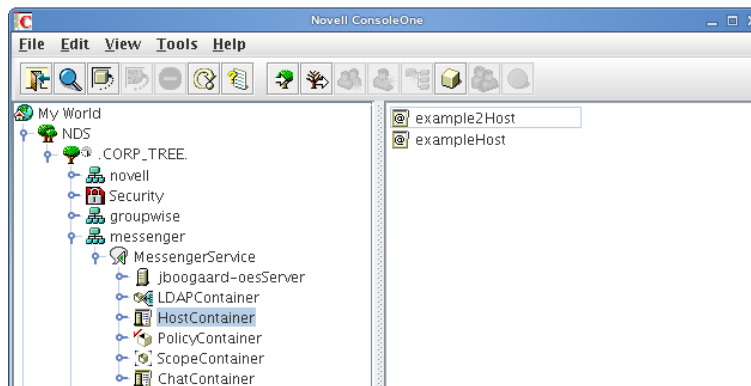
3.3.4 Creating Messenger Hosts for GroupWise Internet Domains

A Messenger Host object links a GroupWise Internet domain (such as `example.com`) to a Scope Profile that provides the contexts where Messenger searches for users that are associated with that Internet domain.

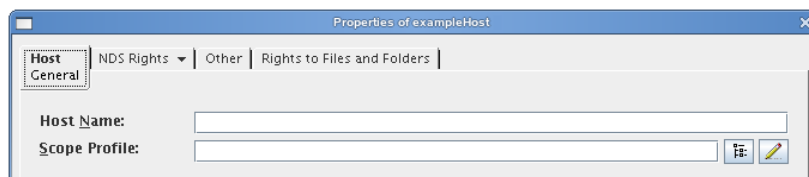
- 1 In ConsoleOne with the Messenger snapin installed, browse to and expand the MessengerService object.
- 2 To create a new Host object, right-click the HostContainer object, then click **New > Object**.
- 3 Select **nnmHost**, then click **OK**.



- 4 Specify a unique name, then click **OK**.
You might want to use a name that is related to the GroupWise Internet domain that you are creating the Host object for.
- 5 (Conditional) If your GroupWise system has more than one Internet domain, repeat [Step 2](#) through [Step 4](#) to create a Host object for each GroupWise Internet domain.



- 6 To configure the Host object, right-click the Host object, then click **Properties**.

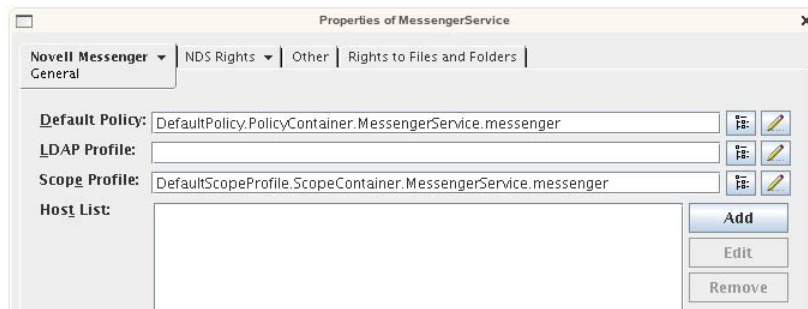


- 7 In the **Host Name** field, specify the GroupWise Internet domain that the Host object represents, such as `example.com`.
- 8 In the **Scope Profile** field, browse to and select the Scope Profile that you created for the GroupWise Internet domain in [Section 3.3.3, “Creating Scope Profiles for GroupWise Internet Domains,” on page 33](#).
- 9 Click **OK** to save the Host object.
The Host object links the GroupWise Internet domain to one or more contexts in eDirectory that are listed in the Scope Profile.
- 10 (Conditional) If your GroupWise system has more than one Internet domain, repeat [Step 6](#) through [Step 9](#) for each Host object that represents a GroupWise Internet domain.
- 11 Continue with [Updating the Messenger System Host List](#).

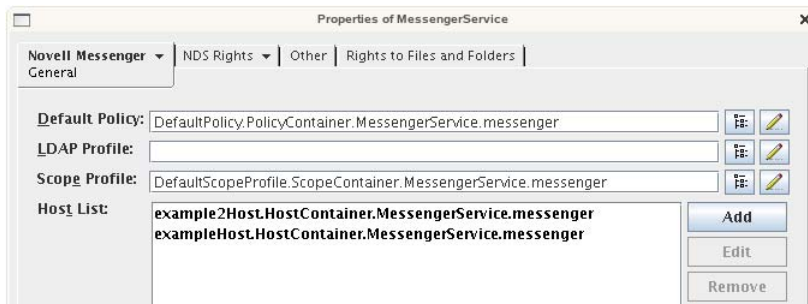
3.3.5 Updating the Messenger System Host List

The Messenger system Host List lists all of the Host objects that Messenger is currently searching for Internet domains and Scope Profiles.

- 1 In ConsoleOne with the Messenger snapin installed, right-click the MessengerService object, then click **Properties**.



- 2 Click **Add** to add a Host object to the Host List.
- 3 Browse to and select a Host object that you created in [Section 3.3.4, “Creating Messenger Hosts for GroupWise Internet Domains,” on page 35](#), then click **OK**.
- 4 (Conditional) If you created more than one Host object in [Section 3.3.4, “Creating Messenger Hosts for GroupWise Internet Domains,” on page 35](#), repeat [Step 2](#) through [Step 3](#) for each Host object.



- 5 Click **OK** to save the Host List.
- 6 Restart the Messenger agents.
- 7 Continue with [Adding Users to the Messenger Contact List](#).

3.4 Adding Users to the Messenger Contact List

In order to display Messenger presence in the GroupWise client, you must add the users to your Messenger Contact List. Messenger presence in the GroupWise client is displayed only for the users in your Messenger Contact List. This is true for all configurations of Messenger, not just when associating the eDirectory User objects that are required by Messenger with native and imported GroupWise User objects that require no eDirectory objects.

- 1 In the Messenger client, add all contacts for whom you want Messenger presence displayed.
- 2 Restart the GroupWise client to establish the associations between the GroupWise client and your Messenger contacts.

All users in your Messenger Contact List should now display Messenger presence in the GroupWise client.

4 Novell Vibe

Before installing Novell Vibe 3, you should thoroughly review the documentation provided at the [Novell Vibe 3 documentation website](http://www.novell.com/documentation/vibe34/) (<http://www.novell.com/documentation/vibe34/>). These guides provide detailed product installation and configuration instructions, but they do not include specific instructions for integrating Novell Vibe with GroupWise. This section of the *GroupWise 2014 Interoperability Guide* supplies these product-specific instructions.

- ♦ [Section 4.1, “Configuring GroupWise for Use with Novell Vibe,” on page 39](#)
- ♦ [Section 4.2, “Accessing Your Vibe Site from the GroupWise Client,” on page 41](#)
- ♦ [Section 4.3, “Streamlining Authentication to Vibe,” on page 41](#)

4.1 Configuring GroupWise for Use with Novell Vibe

When you install Novell Vibe with GroupWise, some configuration steps are required to integrate the applications.

- ♦ [Section 4.1.1, “Understanding How Novell Vibe Interacts with an LDAP Directory and GroupWise,” on page 39](#)
- ♦ [Section 4.1.2, “Authenticating through the LDAP Directory,” on page 39](#)
- ♦ [Section 4.1.3, “Using GroupWise as the Vibe Email System,” on page 40](#)
- ♦ [Section 4.1.4, “Enabling GroupWise/Vibe Integration for GroupWise Client Users,” on page 40](#)

4.1.1 Understanding How Novell Vibe Interacts with an LDAP Directory and GroupWise

When you install Novell Vibe in an environment where GroupWise is already set up, the products interact in the following ways:

- ♦ Vibe can use an LDAP directory (NetIQ eDirectory or Microsoft Active Directory) to authenticate Vibe users. This means that you do not need to create Vibe users manually. Vibe can create its user accounts based on the users that already exist in the LDAP directory.
- ♦ Vibe can use GroupWise as its integrated email system. This means that email messages sent from the Vibe site are delivered to GroupWise mailboxes. It also means that GroupWise users can post items to Vibe folders by sending email messages to Vibe folders.
- ♦ Vibe information can be displayed in the GroupWise client. Starting in GroupWise 8.0.2, you can drag and drop GroupWise items into Vibe folders in the GroupWise Folder List to post items to the corresponding folders in your Vibe site. You can also use the GroupWise Find feature to search your Vibe site.

4.1.2 Authenticating through the LDAP Directory

For instructions, see the following sections of the [Novell Vibe 3.4 Installation Guide](#):

- ♦ [“Gathering Directory Services Information”](#)
- ♦ [“Adding Users to Your Vibe Site”](#)

4.1.3 Using GroupWise as the Vibe Email System

For setup instructions, see the following sections of the [Novell Vibe 3.4 Installation Guide](#):

- ♦ “[Gathering Outbound E-Mail Information](#)”
- ♦ “[Enabling Inbound E-Mail](#)”

See also the following section of the [Novell Vibe 3.4 Administration Guide](#):

- ♦ “[Configuring E-Mail Integration](#)”

For basic email usage instructions, see the following sections of the [Novell Vibe 3.4 User Guide](#):

- ♦ “[Sending E-Mail to Team Members and Announcing the Workspace after Its Creation](#)”
- ♦ “[Subscribing to E-Mail Notifications from a Folder](#)”, “[Setting Up a Folder to Receive Entries Via E-Mail](#)” and “[Adding Entries to a Folder Via E-Mail](#)”
- ♦ “[Sending E-Mail from within Vibe](#)”

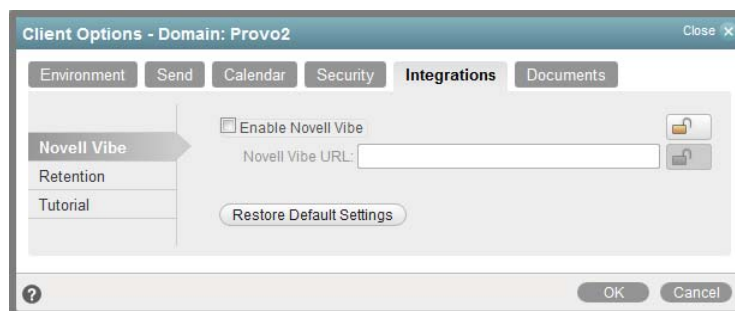
See also the following sections of the [Novell Vibe 3.4 Advanced User Guide](#):

- ♦ “[Enabling Folders to Receive Entries through E-Mail](#)” and “[Configuring Folders to Send E-Mail Notifications to Other Users](#)”
- ♦ “[Sending E-Mail Notifications](#)”
- ♦ “[E-Mailing Files and Attachments to the Vibe Site When You Are Over Your Quota](#)”
- ♦ “[Sending E-Mail](#)”

4.1.4 Enabling GroupWise/Vibe Integration for GroupWise Client Users

Before you can integrate GroupWise and Vibe, your Vibe site must be set up, as described in the [Novell Vibe 3.4 Installation Guide](#).

- 1 In the GroupWise Admin console, click **Domains**, **Post Offices**, or **Users**, then click the object where you want to make Vibe available to GroupWise client users.
- 2 Click **Client Options > Integrations**.



- 3 Select **Enable Novell Vibe**.
- 4 Provide the Vibe URL:
 - 4a Use the following format:

`https://vibe_server/ssf/ws/TeamingServiceV1`

- 4b** (Conditional) If you want to use HTTP instead of HTTPS, include it in the **Novell Vibe URL** field, for example:

```
http://vibe.yourcompanyname.com
```

- 4c** (Conditional) If Vibe is not configured with the default HTTPS port, include the port number after the hostname, for example:

```
vibe.yourcompanyname.com:444
```

- 4d** (Conditional) If Vibe is not installed in the default location, include the path to TeamingServiceV1, for example:

```
vibe.yourcompanyname.com/Web/Vibe/TeamingServiceV1
```

- 5** Click **OK**.

IMPORTANT: In order for GroupWise users to take advantage of GroupWise/Vibe integration, they must provide their GroupWise email address in their Vibe profile.

4.2 Accessing Your Vibe Site from the GroupWise Client

Before you can access the Vibe site from the GroupWise client, you must add your GroupWise email address to your Vibe profile, as described in “[Modifying Your Profile](#)” in the *Novell Vibe 3.4 User Guide*.

The *GroupWise and Vibe Quick Start* describes the Vibe functionality that becomes available in the GroupWise client as a result of the GroupWise/Vibe integration.

4.3 Streamlining Authentication to Vibe

You can implement single sign-on for use with Novell Vibe, so that users do not need to log in separately to GroupWise and Vibe. See the following sections in “[Planning an Advanced Vibe Installation](#)” in the *Novell Vibe 3.4 Installation Guide*:

- ♦ “[Configuring Single Sign-On with Novell Access Manager](#)”
- ♦ “[Configuring Single Sign-On with Internet Information Services for Windows](#)”

5 Novell ZENworks

- ♦ [Section 5.1, “Using ZENworks Configuration Management to Distribute the GroupWise Client,” on page 43](#)
- ♦ [Section 5.2, “Using ZENworks Application Virtualization for GroupWise and Messenger,” on page 45](#)

5.1 Using ZENworks Configuration Management to Distribute the GroupWise Client

You can use the Configuration Management functionality in Novell ZENworks 11 to distribute the GroupWise client to workstations.

- ♦ [Section 5.1.1, “Prerequisites,” on page 43](#)
- ♦ [Section 5.1.2, “Creating a Bundle for the GroupWise Client Software,” on page 44](#)

5.1.1 Prerequisites

Before creating a bundle for the GroupWise client software in Novell ZENworks, you must have the following:

- ❑ A copy of the following GroupWise client software on the machine where you are creating the ZENworks Bundle:
 - ♦ `extract_setupip_packs.cmd`
 - ♦ `setupip.fil`
 - ♦ `setupip.xx` (where `xx` is a two-letter language code)

The GroupWise client software can be found on the GroupWise server in the following location:

Linux: `/opt/novell/groupwise/agents/data/client/setup/win32`
Windows: `c:\Program Files\Novell\GroupWise Server\agents\data\client\setup\win32`

You can also extract the GroupWise Server installation files on your workstation if you don't have access to the GroupWise server. To do this, follow the steps in [Extracting the GroupWise Software](#) in the *GroupWise 2014 R2 Administration Guide*.

- ❑ A GroupWise MST file to customize the GroupWise install. For information on creating an MST file, see [Using GroupWise Client Custom Installation Options](#) in the *GroupWise 2014 R2 Administration Guide*.

IMPORTANT: If you want a shortcut created on the desktop for GroupWise, make sure that is selected in the MST file.

- ❑ (Optional) A copy of the GroupWise icon which can be found on your GroupWise server in the following location:

`\groupwise_software_path\client\win32\groupwise2014.ico`

IMPORTANT: If you don't want your users to be prompted to install .NET 3.5, you must have it installed on the devices previous to installing GroupWise 2014 R2.

5.1.2 Creating a Bundle for the GroupWise Client Software

ZENworks Configuration Management 11 SP4 deploys software as bundles that include all the files and instructions required to successfully install software on users' workstations. To create a ZENworks bundle for the GroupWise client software follow the steps below:

IMPORTANT: For background information, or for help completing the ZENworks tasks outlined in the steps below, see the ZENworks Configuration Management 11 SP4 documentation at the [Novell ZENworks Documentation website \(http://www.novell.com/documentation/zenworks114/\)](http://www.novell.com/documentation/zenworks114/).

- 1 In the ZENworks Control Center, on the Bundles tab, create a new Window Empty Bundle with the following:
 - ♦ Upload the GroupWise icon as the icon for the bundle. The icon can be found on the GroupWise server in the following location:
`\groupwise_software_path\client\win32\groupwise2014.ico`
 - ♦ Select **Create as Sandbox** and make sure **Define Additional Properties** is selected when you finish the bundle.
- 2 On the **Install** tab of the bundle, add an **Install Files** action to copy the GroupWise client install files to the workstation. Do the following in the **Install Files** action:
 - ♦ Add the following three files:
 - ♦ `extract_setupip_packs.cmd`
 - ♦ `setupip.fil`
 - ♦ `setupip.xx` (where `xx` is a two-letter language code)
 - ♦ Select **Do not compress or encrypt uploaded content** if it is available.
 - ♦ Set the **Destination Directory** to a temporary location on the machine where all of the GroupWise install actions can be performed. For example:
`C:\Windows\Temp\gwclient\`
 - ♦ Make sure **Run as secure system user** or **Run as dynamic administrator** is selected for the action.
- 3 On the **Install** tab of the bundle, add a **Run Script** action to extract the GroupWise client software. Do the following in the **Run Script** action:
 - ♦ In the **Specify a file on the managed device** field, specify the path to the `extract_setupip_packs.cmd` file which was placed on the device in [Step 2](#). For example:
`C:\Windows\Temp\gwclient\extract_setupip_packs.cmd`
 - ♦ In the **Wait before proceeding to next action** box, select **When action is complete**.
 - ♦ On the Advanced tab, make sure **Run as dynamic administrator** or **Run as secure system user** is selected.

When this step runs on the device, a `win32` folder is created in the temporary folder where the GroupWise client install files were placed previously. You need to know the path to this folder for the following steps.

- 4 On the **Install** tab, add an **Install File(s)** action to copy the GroupWise MST file to the workstation to customize the install. Do the following in the **Install File(s)** action:

- ♦ Add the `groupwise.mst` file.
- ♦ Select **Do not compress or encrypt uploaded content** if it is available.
- ♦ Set the **Destination Directory** to be the path to the `win32` folder that gets created by the script in [Step 3](#). For example:

`C:\Windows\Temp\gwclient\win32`

- ♦ Make sure **Run as secure system user** or **Run as dynamic administrator** is selected.

- 5 On the **Install** tab, add a **Launch Executable** action to install the GroupWise client software on the workstation. Do the following in the **Launch Executable** action:

- ♦ In the **Command** field, specify the path to the `install.bat` file which is in the `win32` folder that gets created by the script [Step 3](#). For example:

`C:\Windows\Temp\gwclient\win32\install.bat`

- ♦ In the **Command Line Parameters** field, specify one of the following:

Parameter	Description
<code>/unattended</code>	Users see a window showing that GroupWise is being installed, but do not have to interact with the install.
<code>/silent</code>	Users do not see that GroupWise is being installed.

- ♦ Add two **Environment Variables**:

Name	Value
<code>GW_INST_TRANSFORM_FILE</code>	<code>groupwise.mst</code>
<code>GW_INST_REMOVE_MSI</code>	<code>True</code>

- ♦ If you want GroupWise to be installed for all users on the device, on the **Advanced** tab select **Run as dynamic administrator**. Otherwise, you can use the default **Executable security level** or **Run as logged in user**.

The bundle is now configured to install the GroupWise client. Assign the bundle to a test workstation to test it and make sure it is working as desired before publishing the bundle.

5.2 Using ZENworks Application Virtualization for GroupWise and Messenger

Novell ZENworks Application Virtualization lets you convert applications that run on Microsoft Windows into self-contained virtual applications. After being virtualized, an application becomes a single, isolated file that runs instantly from anywhere, including a thumb drive or other removable media. Unlike traditional installation methods, the single virtual application file does not require a separate setup process, and does not rely on external components and runtimes, reboots, or

administrative privileges. After virtualization, the application is isolated from other system applications, preventing DLL conflicts and other deployment nightmares, yet the experience for the application's user is unchanged.

For instructions on virtualizing the GroupWise client, see "Preparing GroupWise and GroupWise Notify for Virtualization" in the *ZENworks Integration and Streaming Guide* (<http://www.novell.com/documentation/zav90/>).

For instructions on virtualizing the Messenger client, see "Preparing Novell Messenger for Virtualization" in the *ZENworks Integration and Streaming Guide* (<http://www.novell.com/documentation/zav90/>).

6 GroupWise Identity Manager Driver for NetIQ Identity Manager

The GroupWise Identity Manager driver for use with NetIQ Identity Manager provides data integration between users in NetIQ eDirectory and GroupWise accounts in your GroupWise system. For example, the driver can create email accounts automatically when employees are hired. The driver can also disable an email account when a user is no longer active. This configurable solution gives you the ability to increase productivity and streamline business processes by integrating GroupWise and eDirectory.

This guide provides information about certain administrative actions in the GroupWise Admin console that require you to stop the GroupWise Identity Manager driver or disable a user's association:

- ♦ [Section 6.1, "Identity Manager Warnings in the GroupWise Admin Console," on page 47](#)

For additional information, see:

- ♦ [NetIQ Identity Manager \(http://www.novell.com/documentation/idm402/\)](http://www.novell.com/documentation/idm402/)
- ♦ [Identity Manager Drivers \(http://www.netiq.com/documentation/idm402drivers/\)](http://www.netiq.com/documentation/idm402drivers/)

6.1 Identity Manager Warnings in the GroupWise Admin Console

Some GroupWise administrative actions in the GroupWise Admin console require that you stop the GroupWise Identity Manager driver or disable a user's association with it before you perform the action. Most GroupWise administrative actions in the GroupWise Admin console require that you manually restart the GroupWise Identity Manager driver or re-enable the user's association when you have completed the action, but a few do not. By default, these activities generate a warning message in the GroupWise Admin console:

- ♦ [Section 6.1.1, "Enabling Identity Manager Warnings," on page 47](#)
- ♦ [Section 6.1.2, "Associating a GroupWise Object with an eDirectory Object," on page 48](#)
- ♦ [Section 6.1.3, "Disassociating a GroupWise Object's Attributes from an eDirectory Object," on page 48](#)
- ♦ [Section 6.1.4, "Resolving an Invalid Association," on page 48](#)

6.1.1 Enabling Identity Manager Warnings

Identity Manager warnings are disabled by default.

- 1 In the GroupWise Admin console, click **System > System Preferences**.



- 2 Select **Display Identity Manager (DirXML) Warnings**, then click OK.

6.1.2 Associating a GroupWise Object with an eDirectory Object

Using the Identity Manager Management role in NetIQ iManager:

- 1 Stop the GroupWise Identity Manager driver.
- 2 Establish the association, as described in “[Associating GroupWise Users with an LDAP Directory](#)” in the *GroupWise 2014 R2 Administration Guide*.
- 3 Restart the GroupWise Identity Manager driver.

6.1.3 Disassociating a GroupWise Object’s Attributes from an eDirectory Object

In NetIQ iManager:

- 1 Go to the **Identity Manager** tab of the User object, then disable the association with the GroupWise Identity Manager driver.
- 2 Disassociate the objects, as described in “[Dissociating GroupWise Users from an LDAP Directory](#)” in the *GroupWise 2014 R2 Administration Guide*.
- 3 Go to the **Identity Manager** tab of the User object, then enable the association with the GroupWise Identity Manager driver.

6.1.4 Resolving an Invalid Association

In NetIQ iManager:

- 1 Go to the **Identity Manager** tab of the User object, then disable the association with the GroupWise Identity Manager driver.
- 2 Dissociate the user the reassociate the user, as described in “[Directory Associations](#)” in the *GroupWise 2014 R2 Administration Guide*.

7 Mobile Devices

The GroupWise Mobility Service provides data synchronization between GroupWise mailboxes and mobile devices for synchronizing email, appointments, contacts, tasks, notes, and phone messages. The GroupWise Mobility Service is fast, reliable and scalable, and supports the latest device operating systems. For more information, see the [GroupWise Mobility 2.1 Documentation website](#).

To support BlackBerry devices with an operating system earlier than BlackBerry 10.x, use [BlackBerry Enterprise Server for GroupWise](#).

