
ZENworks® 11 Support Pack 4

System Updates Reference

October 2016

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About This Guide

This *ZENworks System Updates Reference* explains how to obtain updates to ZENworks 11 software on a timely basis and how to schedule automatic downloads of the updates. The guide includes the following sections:

- ◆ Chapter 1, “Configuring Updates,” on page 7
- ◆ Chapter 2, “Managing Update Downloads,” on page 25
- ◆ Chapter 3, “Deploying Updates,” on page 31
- ◆ Chapter 4, “Deleting Updates,” on page 49
- ◆ Chapter 5, “Reviewing the Content of an Update,” on page 51
- ◆ Chapter 6, “Update Statuses,” on page 55
- ◆ Chapter 7, “Configuring the System Update Behavior of the ZENworks Adaptive Agent,” on page 57
- ◆ Chapter 8, “Troubleshooting System Updates,” on page 63

Audience

This guide is intended for ZENworks administrators.

Feedback

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

Additional Documentation

ZENworks is supported by other documentation (in both PDF and HTML formats) that you can use to learn about and implement the product. For additional documentation, see the [ZENworks 11 SP4 documentation website \(http://www.novell.com/documentation/zenworks114\)](http://www.novell.com/documentation/zenworks114).

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1 Configuring Updates

Perform the following tasks to configure your update process:

- ◆ [Section 1.1, “Configuring System Update Settings,” on page 7](#)
- ◆ [Section 1.2, “Creating Deployment Stages,” on page 16](#)

1.1 Configuring System Update Settings

You should configure System Update before attempting to use it. Configure as many of the following settings as necessary for your system:

- ◆ [Section 1.1.1, “System Update Entitlement,” on page 7](#)
- ◆ [Section 1.1.2, “Check for Updates Schedule,” on page 8](#)
- ◆ [Section 1.1.3, “Download Schedule,” on page 9](#)
- ◆ [Section 1.1.4, “Email Notification,” on page 11](#)
- ◆ [Section 1.1.5, “Proxy Server Settings,” on page 12](#)
- ◆ [Section 1.1.6, “Dedicated Server Settings,” on page 13](#)
- ◆ [Section 1.1.7, “Stage Timeout Settings,” on page 14](#)
- ◆ [Section 1.1.8, “Reboot Behavior,” on page 15](#)

1.1.1 System Update Entitlement

In ZENworks 11 or later, you need to activate the System Update entitlement to obtain updates to the ZENworks 11 SP4 software on a timely basis. Before activating the entitlement, ensure that the Primary Server you want to use to activate the entitlement can communicate with the [NCC server \(https://secure-www.novell.com\)](https://secure-www.novell.com).

The System Update Entitlement panel displays the System Update entitlement status and allows you to activate the System Update entitlement for the ZENworks 11 SP4 software in the Management Zone to receive the latest version of ZENworks System Updates and Product Recognition Updates (PRUs) from the Novell Customer Center (NCC) server.

To activate the entitlement:

- 1 In ZCC, click **Configuration**, in the left pane.
- 2 In the **Configuration** page, click **Infrastructure Management > System Update Settings**.
- 3 Configure the following settings:
 - ◆ **Email Address:** Specify a valid email address to be used for communication from Novell. We recommended that you specify the email address used to purchase the System Update Maintenance Entitlement.
 - ◆ **Activation Code:** Specify the System Update entitlement activation code. For more information on how to locate your System Update entitlement activation code, see [TID 7007955 \(http://www.novell.com/support/\)](http://www.novell.com/support/).

To purchase the System Update Maintenance Entitlement, contact an authorized Novell Sales representative or a Certified Novell Partner.

4 Click [Activate](#).

The specified information is validated with the NCC server, and subsequently the entitlement is created for the Management Zone in the NCC server.

Retry System Update Entitlement

During [Step 4](#) in [Section 1.1.1, “System Update Entitlement,” on page 7](#), if validation with the NCC server fails due to connectivity issues, you will be prompted to retry the system update activation process in the background. If you click Yes, the system update activation will be initiated in the background.

The `SUEntitlementConf.properties` file has the following settings, which are used for the System Update Entitlement configuration. The values for these settings are initiated based on the values you enter in the `SUEntitlementConf.properties` file:

- ♦ **connection-timeout:** This is the connection timeout value in seconds for establishing a connection with the NCC server.
- ♦ **retryCount-Activation:** This is the maximum number of retries allowed in the background when configuring the System Update entitlement.
- ♦ **sleepInterval-Activation:** This is the sleep interval allowed between retries for the system update activation in the background.

To change the default value of these settings in the `SUEntitlementConf.properties` file, go to the following path:

Linux: `/etc/opt/novell/zenworks/SUEntitlementConf.properties`

Windows: `%zenworks_home%/conf/SUEntitlementConf.properties`

If you click the [Configure](#) link when the SU-Entitlement activation is in progress in the background, the system displays a warning message.

1.1.2 Check for Updates Schedule

The default is to not schedule update checking (**No Schedule** is displayed in the **Schedule Type** field). With this scheduling option selected, the only way you can check for software updates is to do so manually in the Available System Updates panel on the **System Updates** tab.

You can specify how often you want to check for updates. When you do this, information on available updates is automatically downloaded from Novell to the Available System Updates panel on the **System Updates** tab when the schedule fires. This does not download the update content itself. Downloading can be scheduled in the Download Schedule panel (see [“Download Schedule” on page 9](#)).

To schedule checking for the ZENworks software updates:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **Configuration** tab.
- 2 Click **Management Zone Settings** to expand its options, click **Infrastructure Management** to expand its options, then select **System Update Settings**.

In the Check for Updates panel, there are two scheduling options for updates:

- ♦ **No Schedule:** The default is to not schedule update checking. With this scheduling option selected, the only way you can check for software updates is to do so manually in the [Available System Updates](#) panel on the **System Updates** tab. To specify the **No Schedule** option, continue with [Step 3](#).
 - ♦ **Recurring:** Lets you specify how often you want to check for updates. When you set this option, information on available updates is automatically downloaded from Novell to the [Available System Updates](#) panel on the **System Updates** tab when the schedule fires. This does not download the update content itself. To set a recurring schedule, skip to [Step 4](#).
- 3 (Conditional) To exclude scheduled checking for software updates (the default), click the down-arrow in the **Schedule Type** field, select **No Schedule**, click **Apply** to save the schedule change, then skip to [Step 6](#).

With this option selected, you must check for updates manually. For more information, see [“Manually Downloading Updates” on page 27](#).

- 4 (Conditional) To set a recurring schedule for checking for updates to your ZENworks software, click the down-arrow in the **Schedule Type** field, then select **Recurring**.
- 5 Fill in the fields:
- 5a Select one or more check boxes for the days of the week.
 - 5b To set the time of day for checking to occur, use the **Start Time** box to specify the time.
 - 5c (Optional) For additional scheduling options, click **More Options**, then select the following options as necessary:
 - ♦ **Process Immediately if Device Unable to Execute on Schedule:** Causes checking for updates to occur as soon as possible if the checking cannot be done according to schedule. For example, if a server is down at the scheduled time, checking for updates occurs immediately after the server comes back online.
 - ♦ **Use Coordinated Universal Time:** Causes the schedule to interpret the times you specify as UTC instead of local time.
 - ♦ **Start at a Random Time Between Start and End Times:** Allows checking for updates to occur at a random time between the time you specify here and the time you specified in [Step 5b](#). Fill in the **End Time** fields.
 - ♦ **Restrict Schedule Execution to the Following Date Range:** In addition to the other options, you can specify a date range for when the checking can occur.
 - 5d When you have finished configuring the recurring schedule, click **Apply** to save the schedule change.
- 6 To exit this page, click **OK** when you are finished configuring the schedule.

If you did not click **Apply** to make your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

1.1.3 Download Schedule

The default is to not schedule downloading of updates (**No Schedule** is displayed in the **Schedule Type** field). With this scheduling option selected, the only way you can download updates is to do so manually in the Available System Updates panel on the **System Updates** tab.

If you do specify how often you want to download updates, you should set this schedule in conjunction with the schedule to check for updates (see [“Check for Updates Schedule” on page 8](#)).

After an update has been checked for and its information displayed in the Available System Updates panel on the **System Updates** tab, you can schedule the download from Novell to automatically occur when the schedule fires.

To schedule ZENworks software updates:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **Configuration** tab.
- 2 Click **Management Zone Settings** to expand its options, click **Infrastructure Management** to expand its options, then select **System Update Settings**.

In the Download Schedule panel, there are two scheduling options for downloading updates:

- ♦ **No Schedule:** The default is to not schedule downloading of updates (**No Schedule** is displayed in the **Schedule Type** field). With this scheduling option selected, the only way you can download updates is to do so manually in the **Available System Updates** panel on the **System Updates** tab. To specify the **No Schedule** option, continue with **Step 3**.
 - ♦ **Recurring:** You can specify how often you want to download updates. After an update has been checked for and its information displayed in the **Available System Updates** panel on the **System Updates** tab, you can schedule the download from Novell to automatically occur when the schedule fires. To set a recurring schedule, skip to **Step 4**.
- 3 (Conditional) To exclude scheduled downloading of software updates (the default), click the down-arrow in the **Schedule Type** field, select **No Schedule**, click **Apply** to save the schedule change, then skip to **Step 6**.

With this option selected, you must download updates manually. For more information, see [Section 2.2, "Downloading Updates," on page 26](#).

- 4 (Conditional) To set a recurring schedule for downloading updates to your ZENworks software, click the down-arrow in the **Schedule Type** field, then select **Recurring**.
- 5 Fill in the fields:
 - 5a Select one or more check boxes for the days of the week.
 - 5b To set the time of day for downloading to occur, use the **Start Time** field to specify the time.
 - 5c (Optional) For additional scheduling options, click **More Options**, then select the following options as necessary:
 - ♦ **Process Immediately if Device Unable to Execute on Schedule:** Causes checking for updates to occur as soon as possible if the checking cannot be done according to schedule. For example, if a server is down at the scheduled time, checking for updates occurs immediately after the server comes back online.
 - ♦ **Use Coordinated Universal Time:** Causes the schedule to interpret the times you specify as UTC instead of local time.
 - ♦ **Start at a Random Time Between Start and End Times:** Allows downloading of updates to occur at a random time between the time you specify here and the time you specified in **Step 5b**. Fill in the **End Time** fields.
 - ♦ **Restrict Schedule Execution to the Following Date Range:** In addition to the other options, you can specify the days when downloading can occur.
 - 5d When you have finished configuring the recurring schedule, click **Apply** to save the schedule change.
- 6 To exit this page, click **OK** when you are finished configuring the schedule.

If you did not click **Apply** to make your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

1.1.4 Email Notification

In conjunction with [using stages](#), you can set up email notifications to indicate when each stage has completed. When you deploy an update, you can specify to use the e-mail notifications.

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **Configuration** tab.
- 2 Click **Management Zone Settings** to expand its options, click **Event and Messaging**, then select **Notification Servers** to display the E-mail Notification panel.

Configuration > Notification Servers

Notification Servers
Configure SMTP Server, SNMP Traps and UDP Destinations

E-mail Notification

SMTP Server Address
SMTP Port

SMTP Server requires authentication

User
Password

SNMP Traps

Enable SNMP Trap

Trap target
Port
Community String

UDP Forwarder
Configure UDP Destinations here

UDP Destinations
Add Edit Remove

Server	UDP Port
No items available.	

OK Apply Reset Cancel

Staging must be used to receive notifications, and the stage behavior must be set to one of the following:

- ◆ **Advance Through Stage Automatically With Notification**
- ◆ **Advance To Next Stage and Notify When Complete**

SMTP must be configured in order for the staging email configuration to work.

- 3 (Conditional) If you do not have SMTP configured:
 - 3a To access the SMTP Settings page, click **Configuration** in the left pane, click the arrows in the **Management Zone Settings** heading to expand its options, click **Event and Messaging**, then select **Notification Servers**.
 - 3b In the **email Notification** section, fill in the fields:
 - SMTP Server Address:** Specify the DNS name or IP address of the SMTP server.
 - SMTP Port:** Specify the SMTP server's communication port.
 - Use SSL:** To use an encrypted SSL channel for sending emails. By default this option is disabled.
 - SMTP Server Requires Authentication:** If authentication is required, select this check box, then specify the **User** and **Password** information.

- 3c Click **OK** to save the changes.
 - 3d Click **Management Zone Settings** to expand its options, click **Infrastructure Management**, then select **System Update Settings** to display the email Notification panel.
- 4 Fill in the fields:
- From:** Either specify your administrator e-mail address, or type something descriptive, such as `System-Update-Stage-Notice`. Do not use spaces between words.
- To:** Specify your administrator's email address. You can specify multiple email addresses separated by a comma (,).
- This is the person you want to be notified when the stage ends.
- 5 Click **Apply** to make the changes effective.
 - 6 Either click **OK** to close the page, or continue with [another configuration task](#).
- If you did not click **Apply** to make your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

1.1.5 Proxy Server Settings

This option is useful for restrictive environments where you do not want all of your production servers to have Internet access. This is used in conjunction with the [Dedicated Server Settings](#) panel.

To specify a proxy server:

- 1 In ZENworks Control Center, click **Configuration** in the left pane.
- 2 On the **Configuration** tab, expand the **Management Zone Settings** section (if necessary), click **Infrastructure Management**, then click **System Update Settings** to display the Proxy Server Settings panel.

The screenshot shows a window titled "Proxy Server Settings". It contains the following elements:

- Proxy Server Address: A text input field.
- Proxy Server Port: A text input field.
- Proxy Server requires authentication: A checkbox.
- User: A text input field, visible only if the checkbox is checked.
- Password: A text input field, visible only if the checkbox is checked.

- 3 Fill in the fields:
- Proxy Server Address:** Specify the DNS name or IP address of the proxy server.
- Proxy Server Port:** Specify the proxy server's communication port.
- Proxy Server Requires Authentication:** When you select this check box, the **User** and **Password** fields become editable. If authentication is required, select this check box and specify the username and password for access to the proxy server.
- 4 Click **Apply** to make the changes effective.
 - 5 Either click **OK** to close the page, or continue with [another configuration task](#).
- If you did not click **Apply** to make your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

1.1.6 Dedicated Server Settings

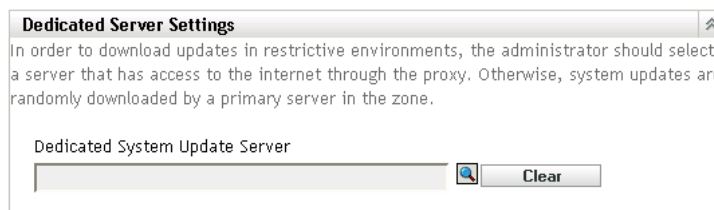
By default, any available Primary Server in the Management Zone can be used randomly to download the updates. However, you can specify one ZENworks Server to be dedicated to handling your update downloads. The server that you select should have access to the Internet, directly or through a [proxy server](#). The zone-wide pre-install actions will run on the dedicated system update server.

The following sections contain more information:

- ♦ [“Specifying a Dedicated Update Server” on page 13](#)
- ♦ [“Clearing a Dedicated Update Server” on page 13](#)

Specifying a Dedicated Update Server

- 1 In ZENworks Control Center, click **Configuration** in the left pane.
- 2 On the **Configuration** tab, expand the **Management Zone Settings** section (if necessary), click **Infrastructure Management**, then click **System Update Settings** to display the Dedicated Server Settings panel.



- 3 Browse for and select a ZENworks Primary Server.
The server's identification is displayed in the **Dedicated System Update Server** field.
This ZENworks Server must be a member of the Management Zone.
- 4 Click **Apply** to make the changes effective.
- 5 Either click **OK** to close the page, or continue with [another configuration task](#).
If you did not click **Apply** to make your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

Clearing a Dedicated Update Server

Clearing a dedicated update server causes your updates to be retrieved randomly from any Primary Server in the Management Zone.

- 1 In ZENworks Control Center, click **Configuration** in the left pane.
- 2 On the **Configuration** tab, expand the **Management Zone Settings** section (if necessary), click **Infrastructure Management**, then click **System Update Settings** to display the Dedicated Server Settings panel.



- 3 Click **Clear** to remove the dedicated server from the **Dedicated System Update Server** field.
- 4 (Conditional) If you need to revert to the last saved dedicated server setting, click **Reset**. This resets the dedicated server to the last saved setting, such as when you last clicked **Apply** or **OK**.
- 5 Click **Apply** to make the change effective.

IMPORTANT: Previous settings cannot be restored after you click **Apply**.

1.1.7 Stage Timeout Settings

Deployment stages are optional; however, stages allow you to deploy an update one step at a time, such as to a test group first, then to your managed devices. If a failure occurs during the update process, the process is halted. [E-mail notifications](#) can let you know when each stage has completed.

The global default timeout setting is 3 days. This provides the same timeout length for each stage. For information about setting the timeout for individual stages, see [“Modifying the Stage Timeout” on page 19](#).

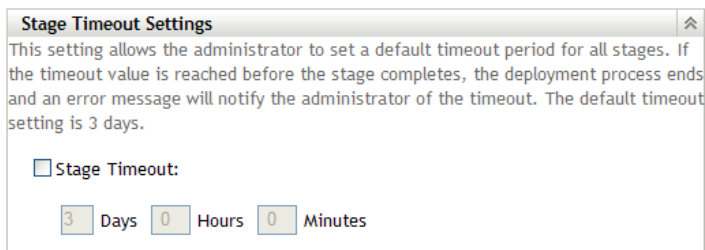
Set this value to be long enough to accommodate updating all of the devices you plan to update.

When the timeout value is reached, the stage’s deployment stops and an email message is sent, if email notification is configured. You can cancel the deployment, or you can clear the error to restart the stage and reset the timeout. Or, you can ignore all pending devices to trigger a stage progression (either automatic, or wait for administrator action based on the setting).

You can use [email notification](#) to know when a stage has completed.

To configure global stage timeout settings:

- 1 In ZENworks Control Center, click **Configuration** in the left pane.
- 2 On the **Configuration** tab, expand the **Management Zone Settings** panel (if necessary), click **Infrastructure Management**, then click **System Update Settings** to display the Stage Timeout Settings panel.



- 3 Select the **Stage Timeout** check box, then specify the days, hours, and minutes desired.
- 4 Click **Apply** to make the changes effective.

- 5 Either click **OK** to close the page, or continue with [another configuration task](#).

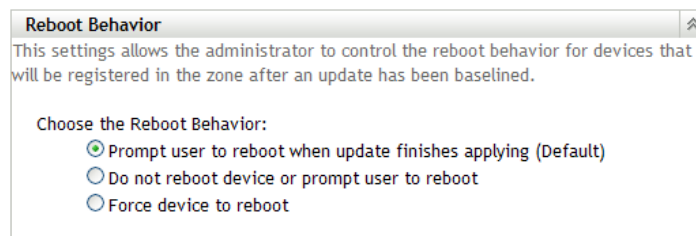
If you did not click **Apply** to make your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

1.1.8 Reboot Behavior

Some updates do not require a device to be rebooted after they have been deployed to a device. However, if a reboot is required to complete the update process, the deployment is not completed until the device is rebooted.

To configure the reboot behavior:

- 1 In ZENworks Control Center, click **Configuration** in the left pane.
- 2 On the **Configuration** tab, expand the **Management Zone Settings** panel (if necessary), click **Infrastructure Management**, then click **System Update Settings** to display the Reboot Behavior panel:



- 3 Select one of the following options:
 - ♦ **Prompt User to Reboot When Update Finishes Applying (Default):** After the update has been applied, a request to reboot is immediately displayed. If the user initially rejects rebooting, the user is periodically requested to reboot the device, until the device is rebooted.
 - ♦ **Do Not Reboot Device:** The device does not reboot; however, the user is periodically requested to reboot the device, until the device is rebooted.
 - ♦ **Start ZENworks Services:** Select this option to start ZENworks services incase reboot is supressed while deploying the update to the device. It is not applicable for Primary Servers. For information about Reboot-less Agent, see section“[Reboot-less Agent](#)” in the *ZENworks 11 SP4 Discovery, Deployment, and Retirement Reference*.
 - ♦ **Force Device to Reboot:** After the update has been applied, the device is automatically rebooted without user intervention if a reboot is required by the update.
- 4 Click **Apply** to make the changes effective.
- 5 Either click **OK** to close the page, or continue with [another configuration task](#).

If you did not click **Apply** to make some of your changes effective, clicking **OK** does so. Clicking **Cancel** also closes the page, but loses your unapplied changes.

1.2 Creating Deployment Stages

Deployment stages are optional; however, stages allow you to deploy an update one step at a time, such as to a test group first, then to your managed devices. [If a failure occurs during the update process, the process is halted. E-mail notifications](#) can let you know when each stage has completed.

The following sections contain more information:

- ◆ [Section 1.2.1, “Understanding Stages,” on page 16](#)
- ◆ [Section 1.2.2, “Creating and Populating a Deployment Stage,” on page 18](#)
- ◆ [Section 1.2.3, “Modifying the Stage Timeout,” on page 19](#)
- ◆ [Section 1.2.4, “Modifying Staging Behavior,” on page 20](#)
- ◆ [Section 1.2.5, “Modifying Reboot Behavior,” on page 21](#)
- ◆ [Section 1.2.6, “Modifying the Membership of a Deployment Stage,” on page 21](#)
- ◆ [Section 1.2.7, “Renaming a Deployment Stage,” on page 22](#)
- ◆ [Section 1.2.8, “Deleting a Deployment Stage,” on page 23](#)
- ◆ [Section 1.2.9, “Rearranging the Order in Which Stages Start,” on page 23](#)

1.2.1 Understanding Stages

You can do the following with stages:

- ◆ Set them up for different devices or groups, such as for a test group, specific devices or device groups, or all managed devices in the zone.
- ◆ Modify an existing stage’s membership.
- ◆ Change the order in which the stages run.
- ◆ Rename and delete stages.
- ◆ Specify the default timeout for a stage. When the timeout value is reached, the stage’s deployment stops and an email message is sent, if email notification is configured. You can cancel the deployment, or you can clear the error to restart the stage and reset the timeout. Or, you can ignore all pending devices to trigger a stage progression (either automatic, or wait for administrator action based on the setting).
- ◆ Specify the reboot behavior when devices complete the update: prompt a reboot, force a reboot, or suppress rebooting.
- ◆ Specify how the update process is to advance through the stages:
 - ◆ Automatically, with or without notification
 - ◆ One stage at a time with notification when each stage is completed
 - ◆ Bypass the configured stages and immediately apply the update to all devices

There are many reasons for creating deployment stages:

- ◆ Testing the update on certain devices before deploying it to your production environment
- ◆ Including all Primary Servers in one stage so they can be updated at the same time.
- ◆ Grouping your servers in several stages so that the update process isn’t too intensive for the Primary Server being used to perform the updates.
- ◆ Grouping the workstations in several stages so that the update process isn’t too intensive for the Primary Server being used to perform the updates.

Any managed devices that are not part of a stage are automatically updated after the last deployment stage has been processed.

You cannot configure stages when an update is in progress.

NOTE: Actions on this page are available only to administrators with the following rights:

- ◆ Deploy Update rights
 - ◆ View Leaf rights
-

The following figure illustrates the Deployment Stages panel on the System Updates page:

Figure 1-1 The Deployment Stages Panel

Ordinal	Stage Name	Stage Members	Staging Behavior	Reboot Behavior	Stage Timeout
1	Deployment Stage: Test	View/Modify Members	Advance Through Stage Automatically	Prompt User	3 days 0 hours 0 minutes
2	Deployment Stage: Production	View/Modify Members	Advance Through Stage Automatically	Prompt User	3 days 0 hours 0 minutes

The following table explains the column information. For some columns, you can sort the listed information by clicking a column heading. Click it again to reverse the sorting order.

Table 1-1 Deployment Stages column descriptions.

Column Heading	Explanation
Ordinal	<p>Displays the order in which the stages run. You can rearrange the staging order by using the Move Up and Move Down options. For more information, see “Rearranging the Order in Which Stages Start” on page 23.</p> <p>The first stage listed always displays ordinal 1, the second, ordinal 2, and so on. Therefore, you do not need to include a sequence number in your stage names.</p>
Stage Name	<p>Name of the stage, which you specify when creating the stage by using the Action > Add Stage option.</p> <p>Make this name descriptive enough to indicate its purpose.</p>
Stage Members	<p>This column contains the View/Modify Members option, which opens the Modify Stage Members dialog box that lists all of the members of the stage. You can use the dialog box to add or remove members from the stage.</p> <p>Stage membership can include individual devices and groups that contain devices.</p> <p>For more information, see “Modifying the Membership of a Deployment Stage” on page 21.</p>
Staging Behavior	<p>Displays the current behavior for each stage, which you can change by using the Action > Modify Staging Behavior option. For more information, see “Modifying Staging Behavior” on page 20.</p>

Column Heading **Explanation**

Reboot Behavior Displays the reboot behavior of devices after the update is deployed.

Some updates do not require a device to be rebooted after they have been deployed to a device. However, if a reboot is required to complete the update process, the deployment is not completed until the device is rebooted.

You have the following reboot options:

- ◆ **Prompt User to Reboot When Update Finishes Applying (Default):** After the update has been applied, a request to reboot is immediately displayed. If the user initially rejects rebooting, the user is periodically requested to reboot the device, until the device is rebooted.
- ◆ **Do Not Reboot Device:** The device does not reboot; however, the user is periodically requested to reboot the device, until the device is rebooted.
 - ◆ **Start ZENworks Services:** Select this option to start ZENworks services incase reboot is suppressed while deploying the update to the device. It is not applicable for Primary Servers. For information about Reboot-less Agent, see section “[Reboot-less Agent](#)” in the *ZENworks 11 SP4 Discovery, Deployment, and Retirement Reference*.
- ◆ **Force Device to Reboot:** After the update has been applied, the device is automatically rebooted without user intervention, if a reboot is required by the update.

For more information, see “[Modifying Reboot Behavior](#)” on page 21.

Stage Timeout

Displays the stage timeout, which you can change by using the **Action > Modify Stage Timeout** option. The default is 3 days, 0 hours, and 0 minutes, which is the global timeout value that can be changed in “[Stage Timeout Settings](#)” on page 14. Changing the value here only changes it for the selected deployment stage.

When the timeout value is reached, the stage's deployment stops and an email message is sent, if email notification is configured. You can cancel the deployment, or you can clear the error to restart the stage and reset the timeout. Or, you can ignore all pending devices to trigger a stage progression (either automatic, or wait for administrator action based on the setting).

For more information, see “[Modifying the Stage Timeout](#)” on page 19.

1.2.2 Creating and Populating a Deployment Stage

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.

Ordinal	Stage Name	Stage Members	Staging Behavior	Reboot Behavior	Stage Timeout
1	Deployment Stage: Test	View/Modify Members	Advance Through Stage Automatically	Prompt User	3 days 0 hours 0 minutes
2	Deployment Stage: Production	View/Modify Members	Advance Through Stage Automatically	Prompt User	3 days 0 hours 0 minutes

- 2 In the Deployment Stages panel, click **Action**, then select **Add Stage**.

You cannot add a stage while a deployment is in process.

- 3 Specify a deployment stage name, then click **OK**.

Deployment stages appear as device folders on the **Devices** tab, so you should specify names that help you to know a folder's purpose.

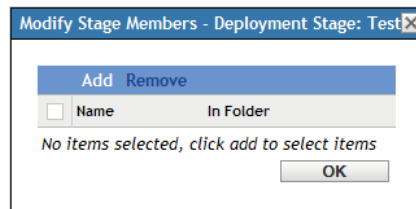
You might want to include something like “Deployment Stage” at the beginning of the name to sort the groups in the devices listing in ZENworks Control Center.

For information about naming in ZENworks Control Center, see “[Naming Objects in ZENworks Control Center](#)” in the *ZENworks 11 SP4 ZENworks Control Center Reference*.

A newly created stage does not have any members. You must modify the stage’s membership to add them.

4 Add devices to a deployment stage:

- 4a** In the **Stage Members** column, click **View/Modify Members** for the stage for which you want to add members.



- 4b** Click **Add**, browse for and select the devices, then click **OK**.

You can add individual devices or device groups, or any combination of them.

You can have both managed servers and workstations in the same deployment stage or in different stages, or you can split your servers and workstations into separate deployment stages.

IMPORTANT: Some of your network servers will be Primary Servers for use in ZENworks management, while other servers on your network might only be managed devices with the ZENworks Adaptive Agent installed on them.

You must update your Primary Servers before updating any of the other managed servers and especially before updating any managed workstations.

- 4c** Repeat [Step 4b](#) until you are finished adding members to the stage.
- 4d** To add members to another stage, repeat [Step 4a](#) through [Step 4c](#).
- 5** Repeat [Step 2](#) through [Step 4](#) until you have created all of your deployment stages.
- 6** If you need to reorder the sequence of the deployment stages, select a stage, then click **Move Up** or **Move Down**.

If you are using one of the stages for test purposes, make sure that it is first in the listing.

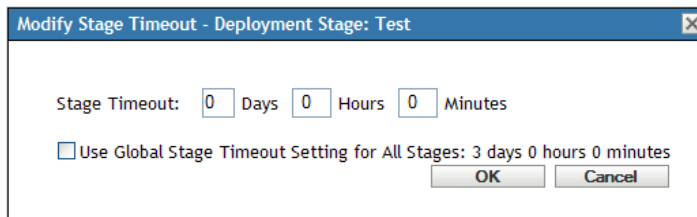
1.2.3 Modifying the Stage Timeout

A stage timeout sets the length of time before a stage terminates. The default timeout is 3 days. You set the value for individual stage timeouts by using the procedure in this section. The global stage timeout value is established by following the steps in “[Stage Timeout Settings](#)” on [page 14](#).

You cannot modify a stage if an update is in progress.

To set the timeout value for a selected stage:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deployment Stages panel, select the check box for a stage, click **Action**, then select **Modify Stage Timeout** to display the following dialog box:



3 Specify the timeout value.

This change in timeout value only applies to the selected stage. If you specify a timeout value for this stage, set its value to be long enough to accommodate updating all of the devices in the stage.

When the timeout value is reached, the stage's deployment stops and an email message is sent, if email notification is configured. You can cancel the deployment, or you can clear the error to restart the stage and reset the timeout. Or, you can ignore all pending devices to trigger a stage progression (either automatic, or wait for administrator action based on the setting).

4 (Optional) Select the **Use Global Stage Timeout Setting for All Stages** check box to specify using the global timeout value (default of 3 days, 0 hours, and 0 minutes).

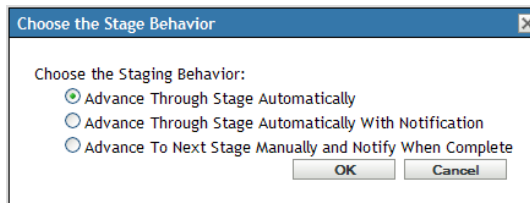
For more information, see ["Stage Timeout Settings"](#) on page 14.

5 Click **OK**.

1.2.4 Modifying Staging Behavior

The default stage behavior is to automatically advance through the configured stages. You can change this default behavior. If you change the staging behavior for one stage, the change becomes effective for all stages.

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deployment Stages panel, select the check box next to any stage, click **Action**, then select **Modify Stage Behavior** to display the following dialog box:



3 Select one of the following stage behaviors:

Advance Through Stages Automatically: As soon as one stage has completed its updates, the next stage begins. This is the default behavior (its check box is enabled).

After the last stage has completed, all applicable devices that are not members of a stage are then processed.

Advance Through Stages Automatically with Notification: Starts the first stage, sends an e-mail notification when it has completed, then automatically starts the next stage, and so on.

To use this option, a notification method must be set up on the [System Update Download Settings](#) page in the **email Notification** section.

Advance to Next Stage Manually and Notify When Complete: Use this method for user action between the stages, such as reviewing the results of an update to a test group.

This option automatically starts the first stage. After any stage has completed, e-mail notification is sent, then the system waits for you to manually start the next stage.

To use this option, a notification method must be set up on the [System Update Download Settings page](#) in the **email Notification** section.

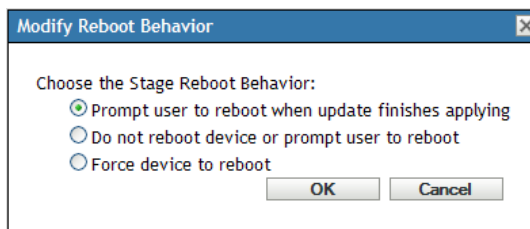
- 4 Click **OK**.

1.2.5 Modifying Reboot Behavior

Some updates do not require a device to be rebooted after they have been deployed to a device. However, if a reboot is required to complete the update process, the deployment is not completed until the device is rebooted.

To modify the reboot behavior:

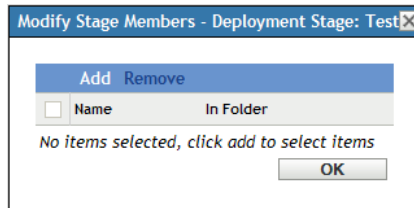
- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deployment Stages panel, select the check box for one or more the deployment stages, click **Action**, then click **Modify Reboot Behavior**.



- 3 Select one of the following options:
 - ◆ **Prompt User to Reboot When Update Finishes Applying (Default):** After the update has been applied, a request to reboot is immediately displayed. If the user initially rejects rebooting, the user is periodically requested to reboot the device, until the device is rebooted.
 - ◆ **Do Not Reboot Device:** The device does not reboot; however, the user is periodically requested to reboot the device, until the device is rebooted.
 - ◆ **Start ZENworks Services:** Select this option to start ZENworks services incase reboot is suppressed while deploying the update to the device. It is not applicable for Primary Servers. For information about Reboot-less Agent, see section "[Reboot-less Agent](#)" in the *ZENworks 11 SP4 Discovery, Deployment, and Retirement Reference*.
 - ◆ **Force Device to Reboot:** After the update has been applied, the device is automatically rebooted without user intervention, if a reboot is required by the update.
- 4 Click **OK**.

1.2.6 Modifying the Membership of a Deployment Stage

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 (Optional) Add devices to a deployment stage:
 - 2a In the **Stage Members** column, click **View/Modify Members** for the stage for which you want to add members.



- 2b Click **Add**, browse for and select the devices, then click **OK**.

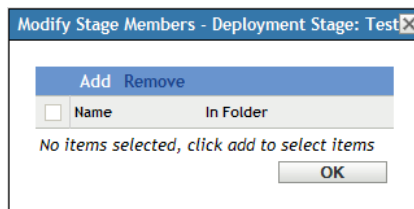
You can add individual devices or device groups, or any combination of them.

You can have both managed servers and workstations in the same deployment stage or in different stages, or you can split your servers and workstations into separate deployment stages.

IMPORTANT: Some of your network servers will be Primary Servers for use in ZENworks management, while other servers on your network might only be managed devices with the ZENworks Adaptive Agent installed on them.

You must update your Primary Servers before updating any of the other managed servers and especially before updating any managed workstations.

- 2c Repeat [Step 2b](#) until you are finished adding members to the stage.
- 2d To add members to another stage, repeat [Step 2a](#) through [Step 2c](#).
- 3 (Optional) Remove devices from a deployment stage:
 - 3a In the **Stage Members** column, click **View/Modify Members** for the stage for which you want to remove members.



- 3b Select the check box next one or more devices that you want to remove, then click **Remove**.
- 4 Click **OK** when you have finished configuring the stage's membership.

1.2.7 Renaming a Deployment Stage

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deployment Stages panel, click the check box for the deployment stage to be renamed.
- 3 Click **Rename**.
- 4 In the Rename dialog box, specify the new name, then click **OK**.

For information about naming in ZENworks Control Center, see “[Naming Objects in ZENworks Control Center](#)” in the [ZENworks 11 SP4 ZENworks Control Center Reference](#).

1.2.8 Deleting a Deployment Stage

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deployment Stages panel, click the check box for one or more of the deployment stages to be deleted.
- 3 Click **Delete**.

Deleted stages cannot be recovered.

1.2.9 Rearranging the Order in Which Stages Start

All updates that use stages deploy to the devices that are members of the stages according to the currently listed staging order.

To rearrange the staging order:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deployment Stages panel, click the check box for the deployment stage to be moved.
- 3 Click **Move Up** or **Move Down** as necessary to rearrange the staging order.
- 4 Repeat **Step 2** and **Step 3** as necessary for each stage.

2 Managing Update Downloads

The Available System Updates panel on the System Updates page displays the updates that are available after you have checked for them. This includes the Product Recognition Update (PRU), which Novell provides to update your knowledgebase so that ZENworks Inventory can recognize newer software. The display refreshed according to the schedule you set in “[Check for Updates Schedule](#)” on page 8.

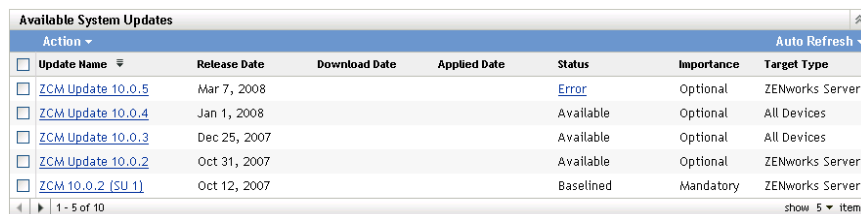
The following sections contain more information:

- ◆ [Section 2.1, “Understanding Available Updates,”](#) on page 25
- ◆ [Section 2.2, “Downloading Updates,”](#) on page 26
- ◆ [Section 2.3, “Downloading and Installing the PRU,”](#) on page 28
- ◆ [Section 2.4, “Canceling or Deleting a System Update,”](#) on page 28
- ◆ [Section 2.5, “Authorizing an Update,”](#) on page 29

2.1 Understanding Available Updates

The following figure illustrates the Available System Updates panel:

Figure 2-1 Available System Updates Panel



Available System Updates							
Action	Update Name	Release Date	Download Date	Applied Date	Status	Importance	Target Type
<input type="checkbox"/>	ZCM Update 10.0.5	Mar 7, 2008			Error	Optional	ZENworks Servers
<input type="checkbox"/>	ZCM Update 10.0.4	Jan 1, 2008			Available	Optional	All Devices
<input type="checkbox"/>	ZCM Update 10.0.3	Dec 25, 2007			Available	Optional	All Devices
<input type="checkbox"/>	ZCM Update 10.0.2	Oct 31, 2007			Available	Optional	ZENworks Servers
<input type="checkbox"/>	ZCM 10.0.2 (SU 1)	Oct 12, 2007			Baselined	Mandatory	ZENworks Servers

The following table explains the column information and the **Auto Refresh** drop-down list (on the right side of the panel, above **Target Type**). For some columns, you can sort the listed information by clicking a column heading. Click it again to reverse the sorting order.

Table 2-1 Available System Updates column descriptions.

Column Heading or List	Explanation
Update Name	Displays the name of the update, which is created by Novell. Click the name to access the Release Details page. For more information, see Chapter 5, “Reviewing the Content of an Update,” on page 51.
Release Date	Displays the date that Novell created the update.
Download Date	Displays the date that you downloaded the update.

Column Heading or List	Explanation
Applied Date	Displays the date that you applied the update.
Status	Displays the current status of the update, which is automatically updated every 15 seconds. For more information on the individual statuses, see Chapter 6, "Update Statuses," on page 55.
Importance	Displays the relative importance of the update's content to your ZENworks installation. Some possible entries include: OPTIONAL: Not required for normal operation of ZENworks. MANDATORY: A required update that must be applied.
Target Type	Displays the type of update, such as: ZENworks Servers: The update applies only to ZENworks Servers. All Devices: The update applies to all managed devices, including ZENworks Servers.
Auto Refresh	Click Auto Refresh (the menu item on the right side of the panel, above Target Type), then select one of the following: <ul style="list-style-type: none"> ◆ No Auto Refresh ◆ 15-second Refresh ◆ 30-second Refresh ◆ 60-second Refresh <p>By default the panel view is not automatically refreshed. However, you can manually refresh the view by clicking the System Updates tab.</p>

2.2 Downloading Updates

You can schedule the downloads, or download them manually:

- ◆ [Section 2.2.1, "Scheduling Update Downloads,"](#) on page 26
- ◆ [Section 2.2.2, "Manually Checking for Updates,"](#) on page 27
- ◆ [Section 2.2.3, "Manually Downloading Updates,"](#) on page 27
- ◆ [Section 2.2.4, "Manually Importing Updates to Servers without Internet Connectivity,"](#) on page 27

IMPORTANT: For releases post ZENworks 11.2.1, the system update is not available via Novell Customer Center (NCC) due issues related to the file size. For more information, see [TID 7010390](http://www.novell.com/support/kb/doc.php?id=7010390) (<http://www.novell.com/support/kb/doc.php?id=7010390>) in the Novell Support Knowledgebase. The update needs to be imported as indicated in [Section 2.2.4, "Manually Importing Updates to Servers without Internet Connectivity,"](#) on page 27.

2.2.1 Scheduling Update Downloads

You can schedule both checking for updates and downloading them:

- ◆ ["Check for Updates Schedule"](#) on page 8
- ◆ ["Download Schedule"](#) on page 9

2.2.2 Manually Checking for Updates

If the most recent updates are not being displayed in the Available System Updates panel on the System Updates page, you can manually refresh the display.

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Available System Updates panel, click **Action > Check for Updates**.
Any available updates are displayed with a status of **Available**.
- 3 To re-sort the listed updates, click the heading for any of the columns in the Available System Updates panel.
Click the heading a second time to reverse the sorting order.

2.2.3 Manually Downloading Updates

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Available System Updates panel, select the check box next to one or more updates, click **Action**, then click **Download Update**.

The update is downloaded and its status is eventually set to `Downloaded`.

Depending on the size of the update, the downloading process can take some time.

- 3 To refresh the view of the download progress (**Status** column), click the **System Updates** tab or use the **Auto Refresh** option.
- 4 If you want to use deployment stages to apply the selected updates, go to [Chapter 3, "Deploying Updates," on page 31](#) to configure the stages and deploy the updates.

or

To immediately apply the downloaded updates to all applicable devices in the Management Zone, select the check box for the downloaded update that you want to deploy, then click **Action > Deploy Update to Devices**. The Create System Update Deployment Wizard steps you through the deployment process. For more information, see [Chapter 3, "Deploying Updates," on page 31](#).

If the download of the system update does not complete successfully, click the **Error** link and perform the required steps based on the displayed message. Files that are already downloaded are not automatically removed. The download will resume from where it went into the **Error** state.

2.2.4 Manually Importing Updates to Servers without Internet Connectivity

If you have servers in your environment that do not have Internet access, you can obtain the update or Product Recognition Update (PRU) files from the [Novell Downloads page \(http://download.novell.com\)](http://download.novell.com), copy the files onto a CD or other media, and then use the CD to import the files to a ZENworks Primary Server by using the `zman system-update-import` command. For more information, see "[System Update/Product Recognition Update Commands](#)" in the [ZENworks 11 SP4 Command Line Utilities Reference](#).

After the files are on a ZENworks Primary Server, the update or PRU displays in the Available System Updates panel on the **System Updates** tab in ZENworks Control Center (**Configuration > System Updates**). You can then follow the instructions in [Chapter 3, "Deploying Updates," on page 31](#) to deploy the update to managed devices.

2.3 Downloading and Installing the PRU

Novell provides a Product Recognition Update (PRU) to update your knowledgebase so that ZENworks Inventory can recognize newer software.

This action deploys the PRU to your database and sets its deployment to your managed devices to be scheduled. Deployment is then done by the ZENworks Adaptive Agent on the devices.

If the PRU is not up-to-date, Inventory might return some software as unrecognized. However, you can use the [Local Software Products](#) utility to take a fingerprint of the unrecognized software to update your knowledgebase.

To download and install the PRU:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 If a PRU is not displayed in the Available System Updates panel, click **Action > Check for Updates**.
Information for the latest PRU is displayed, if it is available.
- 3 To download a listed PRU, go to the Available System Updates panel, select the check box for a listed PRU, then click **Action > Download Update**.
- 4 To install a downloaded PRU, go to the Available System Updates panel, then click **Action > Deploy PRU Now**.

The PRU is now listed in the Deploying System Updates panel, where its progress is displayed.

2.4 Canceling or Deleting a System Update

You can cancel the downloading of an update, or you can delete the update from the Available System Updates list.

To cancel an update:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 Select the check box for a system update that is being downloaded, then click **Action > Cancel Download**.

Cancelling an update cancels the downloading of an update. Files that are already downloaded are not automatically removed, but if you delete the update, any downloaded files are removed.

You can resume the download by clicking **Download Update**. The download will resume from where it was canceled.

If a server's connection to the ZENworks database is lost while downloading an update, the download does not resume after reconnecting. Attempting to use the **Cancel Download** action results in the update hanging in the Cancel state. Use the `zman sudo --force` command to delete the update.

To delete an update:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 Select the check box for the system update that you want to delete, then click **Action > Delete Update**.

Deleting an update removes it from the list and all downloaded files are removed. However, if the deleted update is still available on the update server the next time that you check for updates, it is displayed in the list again for possible downloading.

- 3 Click **OK** to confirm the deletion.

2.5 Authorizing an Update

You can authorize any downloaded update before deploying it to devices. The deploy options are available only if the updates are authorized.

To authorize an update:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 Select the check box for the system update that you want to download
- 3 Click **Action** > **Authorize Update**.

3 Deploying Updates

- ◆ Section 3.1, “Update Prerequisites,” on page 31
- ◆ Section 3.2, “Understanding Deploying Updates,” on page 31
- ◆ Section 3.3, “Deploying Updates,” on page 34
- ◆ Section 3.4, “Starting a Pending Stage,” on page 40
- ◆ Section 3.5, “Rescheduling a Deployment,” on page 40
- ◆ Section 3.6, “Bypassing Staging,” on page 41
- ◆ Section 3.7, “Canceling a Deployment,” on page 41
- ◆ Section 3.8, “Clearing an Error to Retry a Deployment,” on page 42
- ◆ Section 3.9, “System Update Fails on the Device with an Error Code,” on page 42
- ◆ Section 3.10, “Viewing Status by Device,” on page 42
- ◆ Section 3.11, “Standalone Agent Updater,” on page 46

3.1 Update Prerequisites

- ◆ All the Primary Servers should be updated before you update the agents and the Satellite Servers in the zone. To ensure the proper functioning of ZENworks, it is recommended that all Primary Servers are updated in as short a time as possible - ideally, immediately after the first Primary Server is updated.

Once the first Primary Server is updated, all the additional Primary Servers can be updated in parallel.

NOTE: If a dedicated system update server is configured in the zone, this server should be the first to be updated.

- ◆ While updating the first Primary Server, stop the ZENworks Monitor, ZENworks Server, and the ZENworks Loader services on all other servers. If you do not stop the services, the database might get affected.

During the update of the additional Primary Servers, ensure that the ZENworks Monitor, ZENworks Server, and ZENworks Loader services continue to remain stopped, and the ZENworks Adaptive Agent service is running on the servers that have not been updated.

The ZENworks Adaptive Agent service should be running to initiate the update.

3.2 Understanding Deploying Updates

You have the following options for deploying an update:

- ◆ Deploy the update to all devices without using deployment stages. You can schedule the deployment.

- ◆ Deploy the update by using deployment stages where one stage automatically starts after the previous one has completed, unless you have configured stages to pause the deployment and send email notifications to the administrator. You can schedule the deployment.
- ◆ Deploy the update by using deployment stages with e-mail notification to allow manual control for starting the next stage. You can use this option to test the update before deploying it to all devices in your production environment. You can schedule the deployment.
- ◆ Deploy the update to specific devices (selected individually and by device groups) without using deployment stages. You can use this option to test the update before deploying it to all devices in your production environment. You can schedule the deployment.

If you choose to retire a managed device in ZENworks Control Center before deploying an update to all the devices in the Management Zone, you must first ensure that the device has retired and subsequently apply the update. The device is retired only when the ZENworks Adaptive Agent installed on the device is refreshed. If you deploy the update before the agent is refreshed, the update is also applied to the retired device. The agent is automatically refreshed during the next device refresh schedule (the default device refresh interval is set to 12 hours). If you want to deploy the update before the next device refresh schedule, you must manually refresh the agent.

The Deploying System Updates panel displays the progress and results of deploying an update.

Updates are removed from this panel when the entire update process completes. You can view the Deployment History panel on the Release Details page for information on deployed updates.

NOTE: Actions on this page are available only to administrators with the following rights:

- ◆ Deploy Update rights
 - ◆ View Leaf rights
-

The following figure illustrates the Deploying System Updates panel:

Figure 3-1 Deploying System Updates Panel

Deploying System Updates							
Action ▾							
<input type="checkbox"/> Update Name	Start Schedule	Reboot Behavior	Stage	Status	Pending	Successful	Failed
<input type="checkbox"/> ZCM Update 10.0.2	Now	Prompt User	All Devices Stage	In Process	1	0	0

The following table explains the column information. For some columns, you can sort the listed information by clicking a column heading. Click it again to reverse the sorting order.

Table 3-1 Deploying System Updates column descriptions

Column Heading	Explanation
Update Name	Displays the name of the update, which is created by Novell. Click the name to access the Status by Device page. You can also click the underlined number in the Pending , Successful , or Failed columns to view the appropriate Status by Device page, filtered to display devices with that status.
Start Schedule	Displays the current schedule, if any has been set. Use the Reschedule Deployment action to reschedule the update. For more information, see Section 3.5, “Rescheduling a Deployment,” on page 40 . Each device can have its own schedule.

Column Heading	Explanation
Reboot Behavior	<p>Displays the reboot behavior of devices after the update is deployed.</p> <p>Some updates do not require a device to be rebooted after they have been deployed to a device. However, if a reboot is required to complete the update process, the deployment is not completed until the device is rebooted.</p> <p>You have the following reboot options:</p> <ul style="list-style-type: none"> ◆ Prompt User to Reboot When Update Finishes Applying: After the update has been applied, a request to reboot is immediately displayed. If the user initially rejects rebooting, the user is periodically requested to reboot the device, until the device is rebooted. This is the default. ◆ Do Not Reboot Device: The device does not reboot; however, the user is periodically requested to reboot the device, until the device is rebooted. <ul style="list-style-type: none"> ◆ Start ZENworks Services: Select this option to start ZENworks services incase reboot is supressed while deploying the update to the device. It is not applicable for Primary Servers. For information about Reboot-less Agent, see section“Reboot-less Agent” in the ZENworks 11 SP4 Discovery, Deployment, and Retirement Reference. ◆ Force Device to Reboot: After the update has been applied, the device is automatically rebooted without user intervention, if a reboot is required by the update.
Stage	<p>Indicates the deployment state. The possible entries are:</p> <p>stage_name: The update is being deployed to the managed devices that are members of the current stage that is listed.</p> <p>Selected Devices Stage: The update is being deployed to selected managed devices without the use of stages.</p> <p>All Devices Stage: The update is being deployed to all managed devices in the Management Zone without the use of stages.</p> <p>All Devices Stage is displayed after the last stage has completed, which means any devices left in the Management Zone that were not part of a completed stage are then receiving the update. In other words, managed devices cannot skip an update.</p> <p>If stages are being used, click a stage name to view the device status for each stage member. For more information, see Section 3.10, “Viewing Status by Device,” on page 42.</p>
Status	<p>Indicates the status of the update being deployed (for the current stage, if stages are being used). For information on the possible statuses, see Chapter 6, “Update Statuses,” on page 55.</p> <p>Click an item in the Status column to view a message explaining the current status.</p> <p>When the status for an update reaches either the APPLIED or BASELINE status, the update deployment item is no longer displayed in this panel, but is displayed in the Deployment History panel. For more information, see Section 3.10, “Viewing Status by Device,” on page 42.</p>

Column Heading	Explanation
Pending	<p>Displays the number of devices for which the update deployment process is pending. A device can be pending if it is a member of a stage when stages are not automatically started after another stage completes.</p> <p>Click the number to view the Status by Device page, which displays the devices that have a pending deployment of the update. For more information, see Section 3.10, “Viewing Status by Device,” on page 42.</p>
Successful	<p>Displays the number of devices for which the update deployment process is complete.</p> <p>Click the number to view the Status by Device page, which displays the devices that successfully received the update. For more information, see Section 3.10, “Viewing Status by Device,” on page 42.</p>
Failed	<p>Number of devices for which the update deployment process has failed.</p> <p>Click the number to view the Status by Device page, which displays the devices that failed to receive the update. For more information, see Section 3.10, “Viewing Status by Device,” on page 42.</p> <p>For failed deployments, you have the option of ignoring the error and continuing, or you can redeploy the update if the error has been resolved.</p>

3.3 Deploying Updates

- 1 (Optional) Before deploying the updates, ensure that the health of the Primary Servers and the database in the Management zone is conducive for the deployment by performing diagnostic tests on the Primary Server using the ZENworks Diagnostic Center tool.
For detailed information about the ZENworks Diagnostic Center tool, see “[ZENworks Diagnostic Center](#)” in the [ZENworks 11 SP4 Command Line Utilities Reference](#).
- 2 (Optional) If you want to use deployment stages, set them up if you have not previously done so.
For more information, see [Section 1.2, “Creating Deployment Stages,” on page 16.](#)

NOTE

If you are using profiling or monitoring tools during the System Update, ensure that you use the Java Development Kit (JDK) binaries (`jvisualvm.exe`) from the custom installation of JDK, and not the binary files installed by ZENworks. If you use the ZENworks binaries, during the update, when JDK gets upgraded, it will fail to update any in-use binary file(s), causing the System Update to fail.

- 3 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab to display the Available System Updates panel.
- 4 (Conditional) If new updates are not being displayed, click **Action > Check for Updates**.

The following illustrates available updates:

Available System Updates							
Action	Update Name	Release Date	Download Date	Applied Date	Status	Importance	Target Type
<input type="checkbox"/>	ZCM Update 10.0.5	Mar 7, 2008			Available	Optional	ZENworks Servers
<input type="checkbox"/>	ZCM Update 10.0.4	Jan 1, 2008			Available	Optional	All Devices
<input type="checkbox"/>	ZCM Update 10.0.3	Dec 25, 2007			Available	Optional	All Devices
<input type="checkbox"/>	ZCM Update 10.0.2	Oct 31, 2007			Available	Optional	ZENworks Servers
<input type="checkbox"/>	ZCM 10.0.2 (SU 1)	Oct 12, 2007			Baselined	Mandatory	ZENworks Servers
<input type="checkbox"/>	ZCM 10.0.1 (PMR)	Jul 12, 2007			Baselined	Mandatory	ZENworks Servers
<input type="checkbox"/>	Update for ZCM 10.0.8	Apr 8, 2008	Apr 11, 2008		Aborted	Optional	All Devices
<input type="checkbox"/>	Update for ZCM 10.0.7	Apr 7, 2008			Available	Optional	All Devices
<input type="checkbox"/>	Update for ZCM 10.0.6	Apr 7, 2008	Apr 10, 2008	Apr 10, 2008	Baselined	Optional	All Devices
<input type="checkbox"/>	20 content files	Aug 19, 2006	Apr 10, 2008		Downloaded	Optional	All Devices

- (Optional) To view the content of an available update, click the name of the update (in the **Update Name** column) to display the Release Details page:

For more information, see [Chapter 5, “Reviewing the Content of an Update,”](#) on page 51.

- To download an update, select the check box for it, click **Action >** then click **Download Updates**.

After an update has completed downloading, its status is automatically changed to **Downloaded**. The length of time to download an update depends on its size and your hardware configuration.

You can download multiple updates at a time, but you can only deploy one at a time. Because these steps are repeated for each update, you only need to download the update you plan to deploy at this time.

The following illustrates downloaded updates:

Available System Updates							
Action	Update Name	Release Date	Download Date	Applied Date	Status	Importance	Target Type
<input type="checkbox"/>	ZCM Update 10.0.5	Mar 7, 2008			Error	Optional	ZENworks Servers
<input type="checkbox"/>	ZCM Update 10.0.4	Jan 1, 2008			Available	Optional	All Devices
<input type="checkbox"/>	ZCM Update 10.0.3	Dec 25, 2007			Available	Optional	All Devices
<input type="checkbox"/>	ZCM Update 10.0.2	Oct 31, 2007	Apr 12, 2008		In Process	Optional	ZENworks Servers
<input type="checkbox"/>	ZCM 10.0.2 (SU 1)	Oct 12, 2007			Baselined	Mandatory	ZENworks Servers

- Determine whether to deploy the downloaded update, then select its check box.

You can deploy only one update at a time.

If you want to review the content of the update that you downloaded, see [Chapter 5, “Reviewing the Content of an Update,”](#) on page 51 for instructions about reviewing the content of a downloaded update.

If you want to download a different update for deployment, return to [Step 5](#).

- Click **Action > Deploy Update to Devices**.

This starts the Create System Update Deployment Wizard for deploying the update to all applicable devices. If deployment stages are enabled, they can be used.

The Deployment Wizard provides you with many options, including scheduling the deployment.

- In the Deployment Wizard, complete the following steps:

- On the Choose the System Update and Deployment Option page, select a deployment option (all of them can be scheduled in a subsequent wizard page).

NOTE: Depending on the size of your ZENworks system, we recommend as a best practice to deploy the selected update to one ZENworks Primary Server before deploying the update to other Primary Servers and to the managed devices that contact those servers.

We recommend that you perform the following actions in order:

1. Designate a ZENworks Primary Server to download the system update.
2. After the system update is in the **Downloaded** state, assign the update to only the designated Primary Server you chose above.
3. Refresh the ZENworks Agent on the Server and let the system update finish, then reboot the Server.
4. After the Server is restarted and running, update the other Primary Servers in your system, followed by managed devices.

In a production environment, we recommend that you use the **Deploy System Updates to Selected Devices in the Management Zone** option to update the first Primary Server, update the remaining Primary Servers, and then update the managed devices. Or you should use the **Deploy System Updates Using Stages to Devices in the Management Zone** option to deploy the update to a stage containing the first Primary Server before deploying the update to other stages containing the remaining Primary Servers and managed devices.

-
- ♦ **Deploy System Updates to Selected Devices in the Management Zone:** Deploys the selected update to only the devices that you select in [Step 9e](#). Stages are not used. If you choose this option, the next page of the wizard lets you select the reboot behavior for the devices included in the deployment.
 - ♦ **Deploy System Updates to All Devices in the Management Zone:** Deploys the selected update to all devices in the Management Zone. Stages are not used. If you choose this option, the next page of the wizard lets you select the reboot behavior for the devices included in the deployment.

NOTE: This option is available to administrators only if they have Deploy Update rights and View Leaf rights to all devices in the zone.

This option does not guarantee that ZENworks Servers are updated before managed devices. In a large ZENworks system or in a production environment, we recommend that you use one of the other options.

- ♦ **Deploy System Updates Using Stages to Devices in the Management Zone:** The selected update is deployed to only the devices that have membership in one of the stages. The stages are executed one after the other; that is, a stage does not start until the previous stage completes. After all stages complete, the **All Devices** stage is run. If you choose this option, and because the reboot behavior is set per stage, the next page of the wizard lets you select the reboot behavior for the **All Devices Stage**, which runs automatically after all other stages.

NOTE: This option is available to administrators only if they have Deploy Update rights and View Leaf rights to all devices in the zone.

For more information on stages, see the [Section 1.2, "Creating Deployment Stages,"](#) on page 16.

- 9b** Click **Next** to display the following page:

Create System Update Deployment

Step 2: Choose the Reboot Behavior for the Deployment

Choose the Reboot Behavior for the Deployment:

- Prompt user to reboot when update finishes applying
- Do not reboot device
- Force device to reboot

<< Back Next >> Cancel

9c Select one of the following options:

- ◆ **Prompt User to Reboot When Update Finishes Applying:** After the update has been applied, a request to reboot is immediately displayed. If the user initially rejects rebooting, the user is periodically requested to reboot the device, until the device is rebooted. This is the default.
- ◆ **Do Not Reboot Device:** The device does not reboot; however, the user is periodically requested to reboot the device, until the device is rebooted.
 - ◆ **Start ZENworks Services:** Select this option to start ZENworks services incase reboot is suppressed while deploying the update to the device. It is not applicable for Primary Servers. For information about Reboot-less Agent, see section“[Reboot-less Agent](#)” in the [ZENworks 11 SP4 Discovery, Deployment, and Retirement Reference](#).
- ◆ **Force Device to Reboot:** After the update has been applied, the device is automatically rebooted without user intervention, if a reboot is required by the update.

Some updates do not require a device to be rebooted after they have been deployed to a device. However, if a reboot is required to complete the update process, the deployment is not completed until the device is rebooted.

9d Click **Next**.

9e (Conditional) If you selected **Deploy System Updates to Selected Devices** in the Management Zone in [Step 9a](#), the following wizard page displays:

Create System Update Deployment

Step 3: Choose the Deployment Devices and Groups

Add Remove

<input type="checkbox"/>	Name	In Folder
No items selected, click add to select items		

<< Back Next >> Cancel

9f To add devices or groups to the deployment configuration, click **Add**, browse for and select the devices or device groups to include in the update deployment, then click **OK**.

9g Click **Next** to display the Choose the Deployment Schedule page.

9h Fill in the fields:

Schedule Type: Select one of the schedule options:

- ◆ **Now:** Immediately deploys the update when you finish the wizard.

Create System Update Deployment

Step 2: Choose the Deployment Schedule

Schedule Type:

Now

This schedule will run immediately upon the completion of the wizard.

<< Back Next >> Cancel

- ◆ **Date Specific:** Deploys the update according to the schedule that you set. The following options are displayed for the **Date Specific** option:

Create System Update Deployment
Step 4: Choose the Deployment Schedule

Schedule Type:
Date Specific

Start Date(s): 4/12/08

Run event every year
 Process immediately if device unable to execute on schedule

Select when schedule execution should start:
 Start immediately at Start Time
 Start at a random time between Start and End Times

Start Time: 1 :00 am End Time: 1 :00 am

Fill in the fields:

- ◆ **Start Date:** Select the deployment date from the calendar.
- ◆ **Run Event Every Year:** Select this option to deploy the update every year on the start date.
- ◆ **Process Immediately if Device Unable to Execute on Schedule:** Do not use this option for updates. It does not apply to updates.
- ◆ **Start Immediately at Start Time:** Lets you deploy updates at the start time you specify.
- ◆ **Start at a Random Time Between Start and End Times:** Lets you deploy updates at a random time between the times you specify. Fill in the **End Time** fields.

9i Click **Next** to display the Review Deployment Options page, then review the information.

Create System Update Deployment
Step 5: Review Deployment Options

Update Name: ZCM Update 10.0.2
Deployment Type: Deploy System Updates to Selected Devices in the Management Zone
Deployment Reboot Behavior: Prompt user to reboot when update finishes applying
Deployment Schedule:


Schedule Type:
Date Specific

Dates scheduled event will be performed on:
4/12/08

Start time:
1:00 AM

End time:

10 If you are satisfied, click **Finish** to start the update's deployment; otherwise, click **Back** to make changes.

- 11 (Conditional) If you chose the deployment schedule type as **Now** in [Step 9h](#), the update is deployed only during the next device refresh schedule. However, if you want to immediately apply the update to the device, you must manually refresh the managed device in one of the following ways:
- ◆ Click the **Devices** tab > the **Managed** tab > **Servers** or **Workstations**, then select the check box next to the devices you want to refresh, click **Quick Tasks** > **Refresh Device**.
 - ◆ On the managed device, right-click the  icon, then click **Refresh**.
 - ◆ On the Linux unmanaged device, open a terminal, change your current working directory to `/opt/novell/zenworks/bin/`, and execute `./zac ref`.
- 12 To observe the progress of the update deployment, do any of the following:
- ◆ In ZENworks Control Center, observe the panels on the System Updates page:
 - ◆ The Available System Updates panel automatically displays **Baselined** in the **Status** column when the deployment has completed.
 - ◆ The Deployed System Updates panel displays the update in its listing when the deployment has completed.
- 13 To verify that the update was successfully deployed:
- 13a** To verify that the MSIs or RPMs have been installed and the update process is complete, review the following log files:
- Windows:** `%zenworks_home%\logs\system-update\<<SU_GUID>\system-update.log`
- Linux:** `/var/opt/novell/log/zenworks/system-update/<SU_GUID>/system-update.log`
- 13b** Test the ZENworks software on the device to ensure that it is working properly.
- 13c** To ensure that the update has been deployed, do one of the following to determine whether the version number has been incremented (for example, the first update for ZENworks should change the value from 10.0.x to 10.0.2):
- ◆ Open the Windows Registry and browse to the following:


```
HKEY_LOCAL_MACHINE/Software/Novell
```

For the **ZCM** key, the update process should have incremented the **version** value.
 - ◆ On a Windows device, review the following file:


```
Installation_path\Novell\ZENworks\version.txt
```
 - ◆ On a Linux device, review the following file:


```
/etc/opt/novell/zenworks/version.txt
```
- 13d** Repeat [Step 13a](#) through [Step 13c](#) for each test device.
- 14 (Conditional) If you are receiving email notifications at the completion of the deployment stages and are ready to begin the next stage, go to the Deployed System Updates panel, then click **Action** > **Advance to Next Stage**.
- 15 To deploy another update, repeat from [Step 5](#).

3.3.1 Upgrading the Agent in VDI environment

Perform the following steps to upgrade Master image:

- 1 Switch on the master image and deploy the SU to master image.
- 2 Backup the `initial-web-service` file from the `%ZENworks_Home%\conf` location.

- 3 If you want to add a registration key, you can add in the `initial-web-service` file.
The first line of the `initial-web-service` file contains the list of IP addresses and host names of the server to which this device has registered. Add the registration key in the second line.
- 4 Unregister the device by using the `zac unr` command.
- 5 Clear the Workstation GUID by using `zac fsg -d` command.
- 6 At the command prompt, go to `%ZENworks_Home%\bin\preboot` folder, then run the `ZISWIN.exe -w` command to clear Image-safe Data.
- 7 Clear the cache by using the `zac cc` command.
- 8 Copy the backed up `initial-web-service` file to `%ZENworks_Home%\conf` location.

Shutdown the master image, take the snapshot, and use the snapshot for recomposing the desktop pools. For more information about updating master image, see [Update Linked-Clone Desktops \(VMware\)](#).

3.4 Starting a Pending Stage

The default stage behavior is to automatically advance through the configured stages. However, you can configure stage behavior for individual stages or for all stages.

The **Start Pending Stage** option is only available if you used the **Advance to Next Stage Manually and Notify When Complete** option to stop each stage for manual input before continuing, instead of having the stages complete automatically.

To start a pending stage:

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, select the check boxes for an update.
- 3 Click **Action** > **Start Pending Stage**.

3.5 Rescheduling a Deployment

You cannot reschedule a deployment after it starts:

- ♦ [Section 3.5.1, “Rescheduling a Deployment for the All Stages Status,”](#) on page 40
- ♦ [Section 3.5.2, “Rescheduling a Deployment for the Other Statuses,”](#) on page 41

3.5.1 Rescheduling a Deployment for the All Stages Status

- 1 Select the check box for an update.
Because all devices do not need to have the update deployed at the same time, you can set individual deployment schedules for the devices.
- 2 Click **Action** > **Reschedule Deployment** to open the Redeployment Schedule dialog box.
- 3 Either click **OK** to accept the default schedule of **Now**, or select **Date Specific** in the **Schedule Type** field, specify the new date, then click **OK**.

3.5.2 Rescheduling a Deployment for the Other Statuses

- 1 Select the check box for an update.
- 2 Click **Action** > **Reschedule Deployment**.
- 3 In the Status by Device page, select the check box for an update, then click **Reschedule Deployment**.
- 4 On the Status by Device page, select one or more devices that are listed in the **Device** column.
- 5 Click **Reschedule Devices** to open the Redeployment Schedule dialog box.
- 6 Either click **OK** to accept the default schedule of **Now**, or select **Date Specific** in the **Schedule Type** field and specify the new date, then click **OK**.

3.6 Bypassing Staging

You can bypass the stages at any time and immediately deploy the update to all managed devices in the Management Zone.

- 1 Select the check box for an update.
- 2 Click **Action** > **Bypass Stages and Apply to All Devices**.

3.7 Canceling a Deployment

This option is mainly for canceling a deployment that has not yet started.

If you select to apply the update only through stages, and if you cancel the update deployment, the status in the Available System Updates panel is changed to **Aborted**.

However, for an update, you can select to deploy to individual devices, as well as through stages for the other devices. Therefore, the status in the Available System Updates panel is changed to:

- ♦ **Ready** if you cancel only the staged deployment.
- ♦ **Aborted** if you cancel both the staged deployment and the deployment for individually selected devices.

To cancel a deployment:

- 1 Select the check box for an update.
- 2 Click **Action** > **Cancel Deployment**.

WARNING: If you cancel a deployment that is currently running (not just scheduled), all deployment actions performed up to that point cannot be reversed. There currently is no rollback option.

- 3 Click **OK** to confirm canceling the deployment.

3.8 Clearing an Error to Retry a Deployment

To continue with the deployment after determining that an error is not serious enough to stop the deployment:

- 1 Click **Action** > **Clear Error and Continue**.

3.9 System Update Fails on the Device with an Error Code

When you deploy an update on the managed device, the system update checks for the availability of the Windows installer service, before making any change to the device.

If installation of other MSIs, not related to ZENworks, is in progress and the system update installation begins, the update of subsequent ZENworks MSIs fails. The Windows installer displays the following error with the error code 1618:

```
ERROR_INSTALL_ALREADY_RUNNING
```

You need to redeploy the update on the managed device to successfully update the ZENworks MSIs.

3.10 Viewing Status by Device

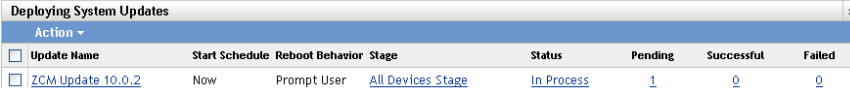
The following sections contain more information:

- ♦ [Section 3.10.1, “Understanding Device Statuses,” on page 42](#)
- ♦ [Section 3.10.2, “Viewing a Device’s Properties,” on page 43](#)
- ♦ [Section 3.10.3, “Viewing Information on a Device’s Status,” on page 44](#)
- ♦ [Section 3.10.4, “Toggling Ignored Devices,” on page 44](#)
- ♦ [Section 3.10.5, “Redeploying Updates to Devices,” on page 45](#)
- ♦ [Section 3.10.6, “Rescheduling Updates to Devices,” on page 45](#)
- ♦ [Section 3.10.7, “Refreshing Devices,” on page 46](#)

3.10.1 Understanding Device Statuses

The following graphic illustrates the Deploying System Updates panel on the System Updates page:

Figure 3-2 Deploying System Updates Panel



Deploying System Updates								
Action ▾								
<input type="checkbox"/>	Update Name	Start Schedule	Reboot Behavior	Stage	Status	Pending	Successful	Failed
<input type="checkbox"/>	ZCM Update 10.0.2	Now	Prompt User	All Devices Stage	In Process	1	0	0

You can click any of the underlined links to display the corresponding status of devices. For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:

Figure 3-3 Device by Status Page for Devices with Pending Status

Update for ZCM 10.0.7 - Devices with Pending Status				
Action ▾				
<input type="checkbox"/> Ignore Device	Device ▲	Status	Device Type	In Folder
<input type="checkbox"/>	zendoc3a	Update Assigned	Server	/devices/servers/zendoc3a

1 - 1 of 1 show 5 ▾ items

The possible statuses that can be viewed on this page are:

All Devices: Lists all devices that were configured to receive the selected update, regardless of status.

Pending Devices: Lists only the devices where the selected update is pending.

Successful Devices: Lists all of the devices where the selected update has been successfully deployed.

Failed Devices: Lists only the devices where the selected update failed.

Update Assigned: Lists only the devices where the selected update has been assigned.

The following table explains the column information. For some columns, you can sort the listed information by clicking a column heading. Click it again to reverse the sorting order. This page refreshes automatically to allow you to work with devices as the update is applied on them.

Column Heading	Explanation
Device	The device's name. Click it to display the device's properties page in ZENworks Control Center.
Status	The current update deployment status for the device. Click the status item to view information about the status. For more information on the individual statuses, see Chapter 6, "Update Statuses," on page 55 .
Device Type	Whether the device is a server or workstation.
In Folder	Displays the ZENworks Control Center folder where the device's ZENworks object resides.

3.10.2 Viewing a Device's Properties

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, click an underlined link in the **Update Name**, **Stage**, **Pending**, **Successful**, or **Failed** column to display the appropriate Status by Device page.

For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:

Update for ZCM 10.0.7 - Devices with Pending Status					
Action ▾					
<input type="checkbox"/>	Ignore Device	Device ↕	Status	Device Type	In Folder
<input type="checkbox"/>		zendoc3a	Update Assigned	Server	/ devices/ servers/ zendoc3a

- 3 Click the underlined link in the **Device** column to display the device’s properties.

3.10.3 Viewing Information on a Device’s Status

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, click an underlined link in the **Update Name**, **Stage**, **Pending**, **Successful**, or **Failed** column to display the appropriate Status by Device page.

For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:

Update for ZCM 10.0.7 - Devices with Pending Status					
Action ▾					
<input type="checkbox"/>	Ignore Device	Device ↕	Status	Device Type	In Folder
<input type="checkbox"/>		zendoc3a	Update Assigned	Server	/ devices/ servers/ zendoc3a

- 3 Click the underlined link in the **Status** column to display status information about the device.

3.10.4 Toggling Ignored Devices

Ignoring a device is helpful if an update fails on a device and you want to continue with the deployment without resolving the error. For example, if a device is offline, you might want to ignore that device so that the deployment can continue.

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, click an underlined link in the **Update Name**, **Stage**, **Pending**, **Successful**, or **Failed** column to display the appropriate Status by Device page.

For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:

Update for ZCM 10.0.7 - Devices with Pending Status					
Action ▾					
<input type="checkbox"/>	Ignore Device	Device ↕	Status	Device Type	In Folder
<input type="checkbox"/>		zendoc3a	Update Assigned	Server	/ devices/ servers/ zendoc3a

- 3 Click the check box next to one or more devices.
- 4 Click **Action > Toggle Ignored Devices**.

The options available from the **Action** menu vary, depending on whether you are viewing the All Assigned Devices Status panel, the Devices with Pending Status panel, or the Devices with Failed Status panel. If you are viewing the Devices with Success Status panel, no options are available.

3.10.5 Redeploying Updates to Devices

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, click an underlined link in the **Update Name**, **Stage**, **Pending**, **Successful**, or **Failed** column to display the appropriate Status by Device page.

For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:

Update for ZCM 10.0.7 - Devices with Pending Status					
Action ▾					
<input type="checkbox"/>	Ignore Device	Device	Status	Device Type	In Folder
<input type="checkbox"/>		zendoc3a	Update Assigned	Server	/ devices/ servers/ zendoc3a

- 3 Select the check box next to one or more devices.
- 4 Click **Action > Redeploy Update to Devices**.

The options available from the **Action** menu vary, depending on whether you are viewing the All Assigned Devices Status panel, the Devices with Pending Status panel, or the Devices with Failed Status panel. If you are viewing the Devices with Success Status panel, no options are available.

3.10.6 Rescheduling Updates to Devices

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, click an underlined link in the **Update Name**, **Stage**, **Pending**, **Successful**, or **Failed** column to display the appropriate Status by Device page.

For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:

Update for ZCM 10.0.7 - Devices with Pending Status					
Action ▾					
<input type="checkbox"/>	Ignore Device	Device	Status	Device Type	In Folder
<input type="checkbox"/>		zendoc3a	Update Assigned	Server	/ devices/ servers/ zendoc3a

- 3 Select the check box next to one or more devices.
- 4 Click **Action > Reschedule Devices**.

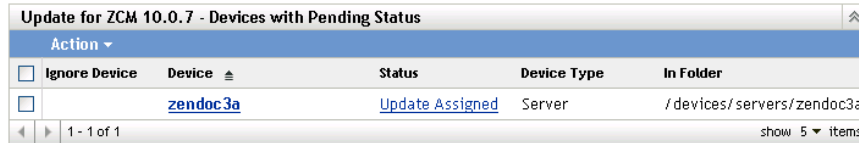
The options available from the **Action** menu vary, depending on whether you are viewing the All Assigned Devices Status panel, the Devices with Pending Status panel, or the Devices with Failed Status panel. If you are viewing the Devices with Success Status panel, no options are available.

The **Reschedule Devices** option displays only when the update deployment is scheduled. If the update has a schedule of **Now**, this option is not available.

3.10.7 Refreshing Devices

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Deploying System Updates panel, click an underlined link in the **Update Name**, **Stage**, **Pending**, **Successful**, or **Failed** column to display the appropriate Status by Device page.

For example, if you click the link in the **Pending** column, you see the status of devices on which the deployment is pending, as in the following figure:



Update for ZCM 10.0.7 - Devices with Pending Status				
Action ▾				
<input type="checkbox"/> Ignore Device	Device ↕	Status	Device Type	In Folder
<input type="checkbox"/>	zendoc3a	Update Assigned	Server	/ devices / servers / zendoc3a

- 3 Select the check box next to one or more devices.
- 4 Click **Action > Refresh Device**.

The options available from the **Action** menu vary, depending on whether you are viewing the All Assigned Devices Status panel, the Devices with Pending Status panel, or the Devices with Failed Status panel. If you are viewing the Devices with Success Status panel, no options are available.

3.11 Standalone Agent Updater

The Standalone Agent Updater is an independent executable to update Windows managed devices and Windows Satellite Servers. Even if the device is unable to connect to the server, the Standalone Agent Updater can update the device to the latest version of the agent. The executable can be generated on any ZENworks Primary Server in the zone by using the `zman system-update-create-package (sucp)` command for the update that is imported into the zone.

IMPORTANT

- ♦ .NET 4.0 full framework must be installed on your device to execute Standalone Agent Updater.
 - ♦ Only a system user with administrative privileges can execute this tool.
 - ♦ If the device is not registered to any zone, then it will automatically register with the zone from where the standalone updater executable has been created.
 - ♦ Using Standalone Agent Updater, you cannot update the managed devices which are registered to a different zone.
 - ♦ The ZENworks agent or service does not have to be in a working state for the update to be applied through the Standalone Agent Updater.
 - ♦ ZENworks 11 SP3 supports updating only Windows platform through the Standalone Agent Updater (both 32 bit and 64 bit platforms).
 - ♦ If the zone CA or server certificates have undergone change, then the existing Standalone Agent Updater executables need to be created again.
-

The Standalone Agent Updater contains the following sections:

- ♦ [Section 3.11.1, “Creating the Standalone Agent Updater executable,” on page 47](#)
- ♦ [Section 3.11.2, “Executing the Standalone Agent Updater,” on page 47](#)
- ♦ [Section 3.11.3, “Viewing the Standalone Agent Updater log files,” on page 47](#)

3.11.1 Creating the Standalone Agent Updater executable

Standalone updater package is created by using the `zman sucp` command.

To create a system update package for a specific device:

- 1 Run the following `zman` command:

```
zman sucp <System_Update_Name or SystemUpdate GUID> <device path relative to /  
Devices or Device GUID> [-n|--package-name=Standalone update package name]
```

For example, `zman sucp 5011030000fc50000000002013052716 /Devices/Workstations/
managed-device1` for generating package for the `managed-device1` workstation.

- 2 (Conditional) If the package-name (or `-n`) is not specified with a Standalone Agent Updater Package name, then the package is created as `<deviceName>[<deviceGUID>].exe` and stored.

To create a system update package for a platform:

- 1 Run the following `zman` command:

```
zman sucp <System_Update_Name or SystemUpdate GUID> -p=<OS Platform> -  
a=<Architecture>
```

`-p, --platform=<OS Platform>`: OS platform for the standalone update package. Valid value is Windows.

`-a, --arch=<Architecture>`: Device architecture for the standalone update package. Valid values are "32" and "64".

The created standalone updater package is stored in the following path:

- ♦ **For Linux:** `/opt/novell/zenworks/install/downloads/system-update/`
- ♦ **For Windows:** `%ZENWORKS_HOME%\install\downloads\system-update`

3.11.2 Executing the Standalone Agent Updater

To execute the Standalone Agent Updater:

- 1 Copy the EXE file to the agent device.
- 2 Log into the managed device as an administrator.
- 3 Double click the EXE file to start the upgrade. Running the EXE from a command prompt with `-v` provides verbose output while upgrading or if any errors occur.

3.11.3 Viewing the Standalone Agent Updater log files

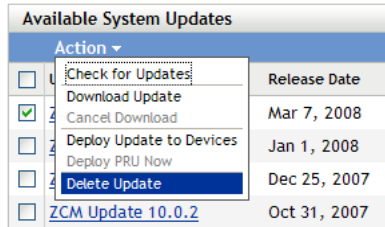
While creating the standalone update package on the Primary Server by using the `zman sucp` command, if any error displays, then see `zman.log` and `loader-messages.log` files.

While executing the standalone agent updater on the managed device, if any error displays, then see `%zenworks_home%\logs\system-update\<<SU_GUID>\system-update.log` file.

4 Deleting Updates

You can clear an update that fails to download, or an update that you do not want to deploy.

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Available System Updates panel, select the check boxes for one or more updates.
- 3 Click **Action > Delete Update**.



The update is deleted from the list and all downloaded files are removed. However, if the deleted update is still available on the update server, it is displayed in the list again for possible downloading the next time that you check for updates.

5 Reviewing the Content of an Update

You might want to review the content of an update for the following reasons:

- ♦ To determine whether to download the update
- ♦ To determine whether to deploy a downloaded update
- ♦ To review what was deployed by the update
- ♦ To review the history of the update

This section contains the following information:

- ♦ [Section 5.1, “Viewing the Release Details Page,” on page 51](#)
- ♦ [Section 5.2, “Update Release Details,” on page 51](#)
- ♦ [Section 5.3, “Deployment History,” on page 52](#)

5.1 Viewing the Release Details Page

- 1 In ZENworks Control Center, click **Configuration** in the left pane, then click the **System Updates** tab.
- 2 In the Available System Updates panel, click an update name in the **Update Name** column to display the Release Details page:.

5.2 Update Release Details

Table 5-1 Information from the System Update Release Details Panel

Column Heading	Explanation
Update Name	The name of the update, which is created by Novell.
Update GUID	The update's GUID.
Release Date	The date the update was released by Novell.
Download Date	The date you downloaded the content of the update, including all files necessary to install the update.
Priority Level	The relative importance of the update's content to your ZENworks installation. Some possible entries: OPTIONAL: Not required for normal operation of ZENworks. MANDATORY: A required update that must be applied.
Description	Brief information about the purpose of the update and its content.
Targets	Indicates whether the target devices are Primary Servers only, all managed devices, or servers with ZENworks roles.
Product Version	The version of ZENworks in this update.

Column Heading	Explanation
Prerequisite Updates	Any updates that are required for this update.
Superseded Updates	Any updates that the current update supersedes.
Update Notes	Brief information about important issues related to the update.
Update Readme	Information pertinent to deploying the update, such as last-minute instructions. Click this entry to open the Readme.
Updated Files	Lists all of the files contained in the update that will be applied to update your ZENworks software.
Content Replication Status	Displays the content replication status of the current update on Primary Servers and Content Satellite Servers. It is advisable to deploy the update to managed devices only after all the servers have 100% replication.

5.3 Deployment History

This Deployment History panel displays a current snapshot of the history for the selected update. It does not automatically refresh its content.

The following sections contain more information:

- ◆ [Section 5.3.1, “Understanding Deployment History Details,” on page 52](#)
- ◆ [Section 5.3.2, “Performing Deployment History Tasks,” on page 53](#)

5.3.1 Understanding Deployment History Details

Table 5-2 Columns for the Deployment History Details Panel

Column Heading	Explanation
Stage	<p>Indicates the deployment method used. The possible entries are:</p> <p>stage_name: The update was deployed to the managed devices that are members of the stage that is listed.</p> <p>Selected Devices Stage: The update was deployed to selected managed devices in the Management Zone that are not members of a stage.</p> <p>All Devices Stage: The update was deployed to all managed devices in the Management Zone that are not members of a stage.</p>
Status	<p>Indicates the status of the update that was successfully deployed, such as Applied or Baselined.</p> <p>In Process: The update is currently being deployed to the members of the stage.</p> <p>For more information on the individual statuses, see Chapter 6, “Update Statuses,” on page 55.</p>

Column Heading	Explanation
Pending	<p>Displays the number of devices for which the update deployment process is pending. A device can be pending if it is a member of a stage when stages are not automatically started after another stage completes.</p> <p>Click the number to view the Status by Device page, which displays the devices that have the deployment of the update pending.</p>
Successful	<p>Displays the number of devices for which the update deployment process has completed.</p> <p>Click the number to view the Status by Device page, with the devices displayed that successfully received the update.</p>
Failed	<p>Displays the number of devices for which the update deployment process has failed.</p> <p>Click the number to view the Status by Device page, which displays the devices that failed to receive the update.</p> <p>For failed deployments, you have the option of ignoring the error and continuing, or you can redeploy the update if the error has been resolved.</p>

5.3.2 Performing Deployment History Tasks

Table 5-3 Tasks for Evaluating an Update's Deployment History

Task	Steps	Additional Details
View which devices have their deployment pending	<ol style="list-style-type: none"> 1. In the Deployment Stages panel, click the number in the Pending column. 2. On the Status by Device page, review the information. 	Displays devices where the deployment of the update is pending.
View the devices where deployment was successful	<ol style="list-style-type: none"> 1. In the Deployment Stages panel, click the number in the Successful column. 2. On the Status by Device page, review the information. 	Displays devices that have had the selected update successfully applied.
View which devices had the deployment fail	<ol style="list-style-type: none"> 1. In the Deployment Stages panel, click the number in the Failed column. 2. On the Status by Device page, review the information. 	<p>Displays devices where the update deployment failed.</p> <p>In order to consider a deployment successfully finished when there are failed devices, the failed devices should either be ignored, or the error should be fixed before you redeploy the update to those failed devices.</p>

6 Update Statuses

The following update statuses can be displayed in the **Status** column of several System Update panels in ZENworks Control Center:

Aborted: The deployment of the update was stopped, such as by selecting **Action > Cancel Deployment**.

Applied: The update was successfully applied to the managed devices.

Available: Updates with this status have downloaded the information about the update, which you can view by clicking the update name in the **Update ID** column.

Awaiting Reboot: The device is waiting for you to manually reboot after the update has been applied.

Baselined: The update has been assigned to the `/Devices` folder, meaning that all new devices added to the Management Zone automatically get the update, unless they are already at that update level. When an update is baselined, any packages (MSIs and RPMs) that were updated by the system update have been deleted and replaced with the new packages. A baselined update is considered complete; although, individual devices could have been ignored.

In previous versions of ZENworks Configuration Management, when an update was baselined, the ZENworks Agent packages on all ZENworks Servers were rebuilt with the latest software. In this version, however, the agent packages are rebuilt during the upgrade process of each individual Server.

Canceled: Displays after you select **Action > Cancel Download** and the download or deployment was successfully canceled.

Canceling: Temporarily displays after you select **Action > Cancel Download**.

Deploying: The update is currently being deployed. See [Chapter 3, “Deploying Updates,” on page 31](#) for further deployment information and for actions that you can take on an update that is being deployed.

Downloaded: You have downloaded the update’s content and it is ready for deployment. See [Chapter 3, “Deploying Updates,” on page 31](#) for further deployment information and for actions that you can take on an update that has been deployed.

Downloading: Displays a percentage of completion during the downloading process. This status changes to **Downloaded** when the download is complete.

Error: The stage failed to complete because of an error with one or more of the devices being updated. You can select to ignore the error and continue, or to fix the error before continuing. This status can also indicate an error in downloading the update.

In Process: That the current stage is active.

Installing Update: The update is currently being installed on the device.

Ready: The current stage is ready to start.

Reboot in Process: Rebooting the device is in process.

Reboot Process Canceled: Rebooting the device after the update was applied was canceled.

Scheduled: The update has a schedule defined for it. See [Chapter 3, “Deploying Updates,” on page 31](#) when creating the deployment in the Create System Update Deployment Wizard. You can alter the update’s schedule by using the **Action > Reschedule Deployment** option.

Stage Complete: The stage has completed.

Status Unknown: The status of updates for the device is unknown.

Superseded: Indicates that the update has been replaced by another update listed in the Available System Updates section. You should see this status only if you are in the process of deploying this update and there are pending devices. You can delete a superseded update, but you cannot deploy it.

Update Aborted: The update was canceled for the device.

Update Completed: Installation of the update has been completed on the device.

Update Completed with Errors: Installation of the update has been completed on the device, but there were errors. Check the update log for details.

Update Assigned: The update has been assigned to the device.

Zone Pre-Update Actions: Actions for the Management Zone are taking place before the server update begins.

Zone Post-Update Actions: Actions for the Management Zone are taking place after the server upgrade finishes.

7 Configuring the System Update Behavior of the ZENworks Adaptive Agent

You can configure System Update behavior on the ZENworks Adaptive Agent that resides on managed devices.

- 1 In ZENworks Control Center, click the **Configuration** tab.
- 2 In the Management Zone Settings panel, click **Device Management**, then click **System Update Agent**.
- 3 Fill in the fields:

Show Permission Prompt: Select **On** to display a dialog box on the managed device when a System Update is ready to begin. If this setting is set to **On**, the user can cancel, postpone, or allow the update to begin.

By default, this setting is set to **Off**, which does not give the user the ability to cancel or postpone the update, and the update begins immediately without the user being prompted.

Permission Prompt Max Postpone This setting specifies how many times the user can postpone the update. If you select **On** for the **Show Permission Prompt** setting, the user is prompted before a System Update begins. The user can then postpone the update. Select **Unlimited** to let the user postpone the update an unlimited number of times. Or, Select **Limit**, then specify a number to let the user postpone the update the specified number of times. By default, the user can postpone the update five times.

Permission Prompt Timeout When the user is prompted for permission to apply the update, you can specify how long you want to wait for an answer before the update begins. To display the permission prompt until the user responds, select **No Timeout**. Or, select **Timeout after _ mins** and specify the number of minutes you want an unanswered prompt to remain on the user's screen before the update starts. By default, the user has five minutes to respond to the prompt.

Specify this value in minutes.

Permission Prompt Nag Time When the user chooses to postpone the start of the update, this setting specifies how often the prompt appears to let the user know that an update is waiting to start. By default, this prompt displays every 15 minutes.

Specify this value in minutes.

Permission Prompt Max Wait Time To prevent the user from continuing to postpone the update without any feedback being given to the ZENworks system, this setting specifies the maximum number of minutes that an update waits for permission before giving up and reporting the update as canceled by the user.

Specify this value in minutes. The default is 120 minutes.

Reboot Prompt Nag Dialog If this setting is set to **On**, a dialog box is displayed on the managed device to remind the user that a reboot is required to complete the update. By default, the setting is set to **On**, and the dialog box displays every 15 minutes.

Reboot Prompt Max Postpone This setting specifies how many times the user can postpone the reboot if one is required for the update. If you select **On** for the **Reboot Prompt Nag Dialog** setting, the user is prompted before a reboot occurs. The user can then postpone the reboot.

Select **Unlimited** to let the user postpone the reboot an unlimited number of times. Or, select **Limit**, then specify a number to let the user postpone the reboot the specified number of times. To postpone a reboot n times, you need to specify the **Limit** as $n-1$. For example, if you want to postpone the reboot 3 times, then you need to specify the **Limit** as 2. By default, the user can postpone the reboot five times.

Reboot Prompt Timeout When an update is assigned with the **Prompt User for Reboot** option, the default behavior is to wait five minutes for a response from the user and, in the absence of a response, automatically initiate the reboot. Select **No Timeout** to display the dialog box until the user responds, without initiating the reboot. Or, select **Timeout after _ mins**, then specify the number of minutes to wait for the reboot response before initiating the reboot.

Reboot Prompt Nag Time When an update assigned with the **Suppress Reboot** option, or if a user chooses to cancel a required reboot, a dialog box displays to remind the user that a reboot is required to complete the update. By default, the dialog box displays every 15 minutes. This setting lets the administrator define how often the prompt is presented to users.

Specify this value in minutes.

Update Watcher Icon You can specify a different icon that displays on the managed device's notification area of the system tray. The path to the file must resolve on the managed device. If the file does not exist, or if the file is not a valid `.ico` file, the default icon displays.

Agent Message Overrides You can provide custom text for Agent System Update messages that display in dialog boxes during the update. Click **Add** to display the Edit Agent System Update Message dialog box. Select a Message Key from the drop-down list, type the desired text, then click **OK**.

You can also remove and edit custom messages that you have created.

The following table lists the available message keys with their description:

Message Key	Description
AWAITING_PERMISSION	A ZENworks update is available.
AWAITING_REBOOT	A system reboot is required to complete the ZENworks Update.
DEBUG	DEBUG: {0}
ERROR_CHECKING_PREREQUISITE	The update was canceled because one or more prerequisites were not met.
ERROR_DELETING_FILE	{0} could not be deleted. Try deleting the file or directory manually and restarting the ZENworks Update.
ERROR_DURING_INSTALL	An unknown error occurred during the ZENworks Update. Please see the system update log for details.
ERROR_MOVING_FILE	{0} could not be renamed. Try renaming the specified file to {0}.bak and restarting the ZENworks Update.
ERROR_MSI_UNAVAILABLE	It appears that another installation is taking place. When it is complete, restart the ZENworks Update.
ERROR_STARTING_PROCESS	{0} could not be started. Try starting the process manually and restarting the ZENworks Update.
ERROR_STARTING_SERVICE	The {0} service could not be started. Try manually starting the service manually and restarting the ZENworks Update.
ERROR_STOPPING_PROCESS	The {0} process could not be stopped. Try exiting all instances of the process and restarting the ZENworks Update.
ERROR_STOPPING_SERVICE	The {0} service could not be stopped. Try stopping the service manually and restarting the ZENworks Update.
ERROR_ZENWORKS_HOME_NOT_DEFINED	The ZENWORKS_HOME variable is not set on the device. This can result in an undesired behavior. Set the environment variable on this device and retry the update.
EXIT	Exit
FINISHED	The ZENworks Update has completed successfully.
FINISHED_WITH_ERROR	The ZENworks Update has completed; however, some errors were encountered during the update. Contact your ZENworks Administrator to resolve this issue.
INSTALLING_PERCENTAGE	{0}% Complete
MSI_INSTALL_ERROR	An error occurred while installing {0}. msiexec returned {1}.
NO_STATUS_REPORTED	No status has been reported.

Message Key	Description
PERMISSION_MSG	Select OK to allow the update to start; select Cancel to postpone the update. Note: If no selection is made, the update will begin automatically in {1} minutes.
PERMISSION_MSG_NO_POSTPONES_REMAINING	Select OK to allow the update to start. Note: If no selection is made, the update will begin automatically in {1} minutes.
PERMISSION_MSG_NO_POSTPONES_REMAINING_NO_TIMEOUT	Select OK to allow the update to start.
PERMISSION_MSG_NO_TIMEOUT	Select OK to allow the update to start, or select Cancel to postpone the update.
PERMISSION_MSG_POSTPONES_ONE_REMAINING	You will be allowed {0} more opportunities to postpone the update, then the update will be started.
PERMISSION_MSG_POSTPONES_REMAINING	You will be allowed {0} more opportunities to postpone the update, then the update will be started automatically.
PERMISSION_TITLE	ZENworks Update Available
REBOOT_CANCELLED	One or more logged on users have canceled the needed reboot. To complete the ZENworks Update, manually restart your system.
REBOOT_MSG	Select OK to allow the reboot now, or select Cancel to abort the reboot. Note: If no selection is made, the reboot will occur automatically in {1} minutes.
REBOOT_MSG_NO_POSTPONES_REMAINING	Select OK to allow the reboot to start. Note: If no selection is made, the update will begin automatically in {1} minutes.
REBOOT_MSG_NO_POSTPONES_REMAINING_NO_TIMEOUT	Select OK to allow the reboot to start.
REBOOT_MSG_NO_TIMEOUT	Select OK to allow the reboot now, or select Cancel to abort the reboot.
REBOOT_MSG_POSTPONES_ONE_REMAINING	You will be allowed {0} more opportunities to postpone the reboot, then the reboot will be started automatically.
REBOOT_MSG_POSTPONES_REMAINING	You will be allowed {0} more opportunities to postpone the reboot, then the reboot will be started automatically.
REBOOT_TITLE	Restart Required
RESUME_UPDATE_LATER	If an update is postponed, the update might resume later from the Tray icon.

Message Key	Description
SHOW_STATUS	Show Status
SHUTDOWN_ADJUST_FAILED	Unable to get permission to initiate a reboot (error code {0}). Manually restart your system.
SHUTDOWN_INIT_FAILED	A reboot could not be initiated (error code {0}). Restart your system manually.
SHUTDOWN_LUID_FAILED	Unable to get permission to initiate a reboot (error code {0}). Restart your system manually.
SHUTDOWN_MSG	A reboot has been initiated to complete the ZENworks Update.
SHUTDOWN_TOKEN_FAILED	Unable to get permission to initiate a reboot (error code {0}). Restart your system manually.
STATUS_TITLE	ZENworks Update
UNKNOWN	An unknown error occurred during the ZENworks Update. See the system update log for details.
UNKNOWN_STATUS	An unknown status was reported '{0}'
UPDATE_NOT_RUNNING	The ZENworks Update is not running. Contact your ZENworks Administrator to resolve this issue.
WATCHER_ICON_TOOLTIP	ZENworks Update Status

4 Click **OK**.

7.1 ZENworks Updater Service

The ZENworks Updater Service allows you to set a refresh interval to pull down system updates from the Primary Server at a scheduled interval.

7.1.1 Refresh Interval

This setting specifies the interval at which ZENworks Updater Service (ZeUS) gets refreshed. The default refresh interval is set to 6 hours.

You can set a new interval by entering the number of days and hours in the respective fields. The value is limited to 9 days and 23 hours. On refresh, ZeUS pulls down the system updates from the Primary Servers.

The new refresh interval will be effective after ZeUS is refreshed. For example, if you set the interval to 9 hours, ZeUS will refresh after 6 hours according to the existing default interval. However, the next refresh happens after 9 hours according to the new refresh interval. If the refresh interval is set to zero, the default value is considered.

8 Troubleshooting System Updates

The following sections provide solutions to the problems you might encounter while performing a system update:

- ◆ “System update fails on the device” on page 63
- ◆ “System update fails on the device” on page 63
- ◆ “System update hangs” on page 64
- ◆ “System update of a Windows device fails because the ZENUpdater.exe executable crashes” on page 64
- ◆ “An administrator with System Update Deploy right and device level View Leaf right is unable to create the first stage” on page 64
- ◆ “Two ZENworks icons are displayed after System update is completed on a Mac Agent” on page 64
- ◆ “An error message is displayed during the first system update deployment if the system update is not triggered on the dedicated system update server” on page 65
- ◆ “Unable to get updates when you perform the Check For Updates action” on page 65
- ◆ “http-nio CLOSE_WAIT clear connection default value is set to 1 hour” on page 66
- ◆ “Permission prompt not getting displayed on Embedded win 7 device” on page 66
- ◆ “ZeUS service is not working properly” on page 66

System update fails on the device

Source: ZENworks 11 SP4, System Update

Possible Cause: Some antiviruses may interfere with the ZENworks Endpoint Security Management installer, resulting in a system update failure of the ZENworks Adaptive Agent.

Action: Refer to your antivirus documentation and make the required configuration changes to allow exclusions, prior to deploying the system update.

For more information, see [TID 7007545 \(http://www.novell.com/support/\)](http://www.novell.com/support/)

System update fails on the device

Source: ZENworks 11 SP4, System Update

Explanation: While upgrading a Linux device from ZENworks 11 to ZENworks 11 SP4, the `LPMSystemUpdateConfigureAction` fails, displaying an error.

Possible Cause: The lack of Java Heap Space results in an **Out Of Memory** error.

Action: Perform the following steps:

- 1 Navigate to the configure script file in the following location: `/opt/novell/zenworks/bin/novell-zenworks-configure`.
- 2 Modify the last line in the file from `Xms64m -Xmx256m` to `-Xms64m -Xmx512m`.

- 3 Rename the system update log folder
(50110100001e69ca2ccb2865b42bf7b3. This folder can be accessed from the following location: /var/opt/novell/log/zenworks/system-update/
- 4 Run the system update again.

System update hangs

Source: ZENworks 11 SP4, System Update

Explanation: While importing the system update into the Zone, if the database restarts, the download progress gets stuck.

Possible Cause: During the download process, the ZENworks Loader module downloads the update and updates the database with information related to the download progress. ZENworks Control Center reads this information from the database and displays the download progress. If the database restarts in between, the communication between the ZENworks Control Center Service, the Loader module, and the database is interrupted. If the download is still in progress when the database restarts, the download status gets stuck.

Action: Cancel the download which is in progress and re-initiate it again.

OR

Delete the update and download it again.

System update of a Windows device fails because the ZENUdater.exe executable crashes

Source: ZENworks 11 SP4, System Update

Explanation: During the system update of a Windows device, the ZENUdater.exe executable crashes, and the system update fails.

Possible Cause: The ZENUdater crashes because the .NET 4.0 framework has not been installed successfully.

Action: Verify that the .NET 4.0 framework is properly installed on the device. Re-install the .NET 4.0 framework if necessary. Restart ZENUdater.

An administrator with System Update Deploy right and device level View Leaf right is unable to create the first stage

Source: ZENworks 11 SP4, System Update

Explanation: In ZENworks Control Center, the administrator with System Update Deploy right and device level View Leaf right on the entire zone is unable to create the first stage.

Action: The administrator with System Update Deploy right and device level View Leaf right on the entire zone should create a stage only after the super administrator has created the first stage.

Two ZENworks icons are displayed after System update is completed on a Mac Agent

Source: ZENworks 11 SP4.

Explanation: After System update is completed, two ZENworks icons are displayed on a Mac agent.

Action: You must re-login or restart the device.

An error message is displayed during the first system update deployment if the system update is not triggered on the dedicated system update server

Source: ZENworks 11 SP4

Explanation: If you trigger the System Update from any Primary Server other than the Dedicated System Update server that is configured in the Management Zone, the following error message is displayed:

```
Unable to complete your request for the following reason: The ZENworks Server and the ZENworks Loader Services are running on one or more Primary Servers. Shut down the services before proceeding.
```

Possible Cause: The ZENworks Monitor, ZENworks Server, and the ZENworks Loader services on the dedicated system update server are stopped. When a dedicated system update server is configured and available, the zone-wide pre-install actions run only on the dedicated system update server.

Action: Do the following:

- ◆ Stop the ZENworks Monitor, ZENworks Server, and the ZENworks Loader services on all other Primary Servers.
- ◆ Start the ZENworks Monitor, ZENworks Server, and the ZENworks Loader services on the dedicated system update server.
- ◆ Assign the update from the dedicated system update server.

Unable to get updates when you perform the Check For Updates action

Source: ZENworks 11 SP4

Explanation: In ZENworks Control Center when you perform the **Check For Updates** action, there might be a failure.

Possible Cause: The Novell Customer Center (NCC) server displays a warning that the system update entitlement has expired even when that is not the case.

Action: Initiate the Check for Updates process in the background.

- ◆ Click **OK** in the Retry Check for Updates dialog when you are prompted to initiate the **Check For Updates** process in the background. For more information, see the [Section 2.2.2, "Manually Checking for Updates," on page 27](#).

The check for updates process, which is initiated in the background, uses the values configured for the following fields in the `SUEntitlementConf.properties` file:

- ◆ **retryCount-CheckForUpdates**
- ◆ **sleepInterval-CheckForUpdates**

http-nio CLOSE_WAIT clear connection default value is set to 1 hour

Source: ZENworks 11 SP4, System Update

Possible Cause: On a 11 SP4 ZENworks Server, the agent ZeUS service opens a single http-nio connection with port 80. This connection will continue to be in CLOSE_WAIT state on the server even after agent ZeUS service is stopped.

Explanation: This behavior is normal as the default close time for this connection is set to a maximum of one hour. The default value of the ZeUS configurable parameter, `notifier-socket-timeout`, is set to 3600000. The parameter is available in the `\ZeUS\Conf\zeus.conf` configuration file and the default value of the parameter can be configured between 5 minutes and 1 hour.

Action: On the servers, you will see many such connections opened from multiple devices in the zone. You can ignore these CLOSE_WAIT connections as they will be cleaned up in an hour. The maximum number of connections that can be opened to this http-nio port is 20000.

Permission prompt not getting displayed on Embedded win 7 device

Source: ZENworks 11 SP4, System Update

Possible Cause: This is the default behavior of Windows 7 embedded device.

Explanation: The default behavior of Windows 7 embedded device could not be changed from ZENworks as `MessageBox` API provided by `user32.dll` is used.

Action: In the Windows registry, set the value of the `Enabling Default Reply` registry key to 0. This will disable the auto reply on prompts. The folder path of the registry key is `HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\`. For more information, refer to the [MSDN solution](#).

ZeUS service is not working properly

Source: ZENworks 11 SP4, System Update

Explanation: When you demote a Satellite Server and then update the device without performing a reboot, the ZeUS service will not work properly because the `rt.jar` file is missing.

Action: Run the `msiexec -i <filePath> TARGETDIR=<default agent installation path> REBOOT=ReallySuppress ALLUSERS=1 /lvx*+ <log_file_path> " /qn` command to generate the `rt.jar` file again.

In this command:

- ♦ `<filePath>` is the location of the `novell-zenworks-jre` msi file.
- ♦ `<default agent installation path>` is the location where the agent is installed.
- ♦ `<log_file_path>` is the location where you want to create the log file.

Example: `msiexec -i "C:\Program Files (x86)\Novell\ZENworks\cache\zmd\ZenCache\fb739230-e0de-4460-a2d2-cc1dfelb4613\novell-zenworks-jre-1.7.0_80.x86_64.msi" TARGETDIR="C:\Program Files (x86)" REBOOT=ReallySuppress ALLUSERS=1 /lvx*+ "C:\Program Files`

```
(x86)\Novell\ZENworks\logs\system-  
update\5011040000fc5000000002015061004\novell-zenworks-jre-  
1.7.0_80.x86_64.msi.log" /qn
```

