ALTIRIS® Patch Management Solution™ 6.2 for Windows Help
Notice

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Document Date: February 13, 2007

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Chapter 1
Introduction

Altiris® Patch Management Solution™ software lets you scan computers for security vulnerabilities, report on the findings, and automate the downloading and distribution of needed Microsoft security patches. You can review and download specific patches from Microsoft, create collections of computers that require a specific patch, and apply the patch to the computers that need them.

Key features include

- Support for operating system and applications for English, German, Spanish, Japanese, Chinese, Portuguese, and French.
- Information repository that provides detailed information on each software bulletin, such as technical details, severity ratings, and number of executables.
- Software repository that automates the downloads from the vendor site prior to distribution without administrator intervention.
- Patch-specific inventory for determining supported operating systems, applications and the associated service pack level, and whether a patch is installed.
- Improved distribution wizard and targeting that automatically determines the patch installation requirements and assigns Altiris® Notification Server™ collections based on the requirements.
- Extensive control over installations, such as integration with QChain, reboot control, and easy selection of command-line options.
- Integration with other Altiris products, such as Altiris® Recovery Solution.

Patch Management Processes

1. Download Software Management Resources
2. Download Security Patch
3. Scan Results
4. Install Security Patch

Web Administration
Automated Alerts
Altiris Web Site
Microsoft Web Site
Managed Computers
Notification Server
Managed Computers
Patch Management Solution Features

<table>
<thead>
<tr>
<th>Feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Information Repository</td>
<td>The repository provides comprehensive data on software bulletins, software updates, inventory rules, and so on. The process to populate the information repository from the Microsoft* Patch Management Import files starts after installation is complete.</td>
</tr>
<tr>
<td>Comprehensive Inventory</td>
<td>Detailed information on the operating system and installed applications, as well as inventory on software update installations. For effective targeting during distribution, inventory results populate predefined collections based on operating system service pack levels and application versions.</td>
</tr>
<tr>
<td>Software Repository</td>
<td>Patch Management Solution automatically downloads all staged software updates from the vendor site prior to distribution. This allows for staging of software updates prior to distribution.</td>
</tr>
<tr>
<td>Software Update Analysis</td>
<td>Automated evaluation of patch dependencies reduces the labor requirements of patch management.</td>
</tr>
<tr>
<td>Simplified Distribution Tasks</td>
<td>A wizard simplifies the management of distribution policies. Instead of creating a task for each individual software update, you create a single policy for the software bulletin. Example: If you have 3 software bulletins with 7 software updates, you only have to manage 3 distribution tasks. Also, most software bulletins have software updates for different operating system versions and the languages associated with them.</td>
</tr>
<tr>
<td>Recovery Solution Integration</td>
<td>After Altiris Recovery Solution is installed, Patch Management Solution provides an agent option to automatically create a snapshot prior to software update installations. This allows for roll back when a software update causes problems.</td>
</tr>
</tbody>
</table>

Previous releases of Patch Management Solution used Microsoft Baseline Security Analyzer (MBSA) as the primary means for the verification that a patch was installed. This release of Patch Management Solution uses the Microsoft Patch Management Import files as the means for patch management. See Microsoft Patch Management Import (page 32).

Overview

This section gives you a brief overview of Patch Management Solution and how it uses inventory it gathers to create Software Update packages. After you create Software Update tasks, the associated packages are sent to managed computers and the appropriate Software Update programs are installed.
**A. Collections are automatically created from inventory**

As part of the deployment of the Software Update Agent, the Inventory Rule Agent gets installed on managed computers and sends back inventory specifically needed for managing software updates. Inventory includes software vendor, software release, and service pack information.

From this inventory, Patch Management Solution creates specific collections to target only the computers that individual software updates should go to. These collections are created when the software bulletins that contain them are staged.

These collections contain computers that are applicable for the software update.
B. Software bulletin information needs to be downloaded

After Patch Management Solution gets installed, you decide when to download software bulletin information from the Altiris Web site. This information includes the severity of each software bulletin as well as details on its software updates and where they can be downloaded from Microsoft. This information also includes rules for creating collections and rules how to verify that the software update is installed.

Note
Notification Server needs an internet connection to download the Microsoft Patch Management Import files that contain software bulletin information.

C. You stage software bulletins to download software updates and create packages

When you stage a software bulletin, each associated software update executable automatically gets downloaded from Microsoft. You can then create a Software Update task for each software bulletin you want to deploy. From the information in software bulletin executables, Patch Management Solution then creates a Software Update package for each software update.

There are one or more software updates associated with each software bulletin. Every software update applies to a software release/service pack combination. Each software update also has a Software Installation Type.

D. You create Software Update tasks to deploy downloaded software updates

Software Update tasks can be created using the Software Update Task Wizard. Software Update tasks use the associations created from the inventory received from the Inventory Rule Agent to select the appropriate collections to which the software updates should go.

When you create a Software Update task, one or more programs are automatically created and attached to the Software Update package associated with the software update. When the managed computer receives the Software Update task, it first verifies that the software update is needed, then downloads the Software Update package and launches the required program. This program then installs the software update.

To save network bandwidth, the agent verifies that the software update is needed. The software update may already be there for multiple reasons (Example: Sometimes another process rolls out a software update). If the software update is already installed, it does not download and reinstall (Example: You image a computer and its image already has the Software Update Agent. In this case, the software update will be not reinstalled).

At an interval, the Software Update task is re-evaluated and, if needed, reinstalled. Example: If some operation removes a software update, it will be reinstalled.

Note
Notification Server needs an internet connection so it can automatically download the update files from the Microsoft Web site.

E. Behind the scenes

Software Installation types determine install options, such as the command-line argument to run the executable.
Note
The Software Installation Type and Software Installation Option can be viewed on the Configuration tab view by selecting Configuration > Resource Settings > Resource Types > Software Management > Patch Management. To view all resources in a Software Installation Type or Software Installation Option, click either Software Installation Type or Software Installation Option in the left pane, and then click the List Resources tab in the content pane.

When a Software Update task is created, one or more programs are created using the selected Software Installation Options (found under the Installation Options section of the Advanced tab). The Installation Options that are available depend on the Software Installation Type. For information, see Software Update Task (page 24).

How Patch Management Solution Conserves Network Bandwidth
The solution has been designed so that network bandwidth usage between the Notification Server and the Software Update Agent is minimized. The following features significantly reduce long term network requirements for this solution.

- Only inventory results that have changed are sent by the Software Update Agent to Notification Server.

  Note
  This is default behavior. You can configure individual software inventory policies to always send inventory results.

- You can enable or disable event capture of package events (the information about package download success, failure, or refresh). See "Advanced Settings" in the Altiris Notification Server Help.

- The Software Update Agent has a locally cached store of inventory rules. The Notification Server will only be contacted when new inventory rules are available.

- Only delta updates are performed for inventory rules. The Software Update Agent will only request inventory rules that are new or changed compared to the local agent cache.

- For patches with software update inventory rules, the installation of the software update will only execute (and send an NSE) if the rule evaluates as "NotInstalled". Also, software updates with inventory rules will not be downloaded (and hence executed) on a client computer if an update is not applicable or is already installed.

See Also
- Troubleshooting (page 56)
Chapter 2
Installing Patch Management Solution

- Prerequisites (page 10)
- Installation (page 11)
- Upgrading (page 11)
- Installing the Altiris Agent (page 12)
- Licensing (page 13)

Prerequisites

Prerequisites for Patch Management Solution

- Install and configure Notification Server 6.0 SP3 R2 or later. See the Altiris Notification Server Help for Notification Server requirements.

\textbf{Note}
If Notification Server proxy settings have been configured, Patch Management Solution uses them to download software update information from the Altiris Web site and to download software updates from Microsoft. For more information on proxy settings, see the Altiris Notification Server 6.0 Release Notes or the Altiris Notification Server Help.

- Install or upgrade the Altiris Agent 6.0 SP3 on every computer to which you are sending patches.

\textbf{Note}
It may take some planning and time before you install Patch Management Solution. Microsoft typically releases patches on the second Tuesday of each month and Altiris updates the PMImport.cab file shortly afterwards. Because of this, we recommend that you install or update Patch Management Solution at least two weeks before Microsoft releases its patches. This gives you enough time before a PMImport.cab file update to make sure that you have the Altiris Agent upgraded to 6.0 SP3 on all computers as well as install and set up Patch Management Solution. Notification Server provides reports (in particular, see the reports under the Altiris Agent Installation Status folder) that let you know the status of the Altiris Agent installation. For more information, see the Altiris Notification Server Help.

Minimum requirements for running the Software Update Agent

- Win32 computers running Windows 95 or later
- MSI 1.1
Installation

Before installing Patch Management Solution, review the requirements information (see Prerequisites on page 10).

**Note**
The software updates that Patch Management Solution distributes are provided by Microsoft for its software products. You must ensure that each software update will work correctly in your environment before deploying it. We recommend that you first install the software update in a test environment before deploying it to your production environment.

**To install Altiris Infrastructure on the Notification Server**
1. Select **Start > Programs > Altiris > Altiris Console**.
   This starts the Altiris Console.
2. In the Altiris Console, click the **Getting Started** tab.
3. Click the **Install Altiris Solutions from the Solutions Center** link.
4. Click the **Solutions** button.
5. Click **Altiris Patch Management for Windows**.
6. Click **Start**.
   The Install Wizard appears and provides configuration options.
7. Select the languages you want to manage in your environment.
8. Select the **Download Actions** you wish to run immediately after install.

**Note**
The **Microsoft Patch Management Import** task must complete before bulletins can be staged and distributed. **Microsoft Patch Management Import** should take around 20 minutes to run, depending on your network speed.

Upgrading

**Note**
You must have Patch Management Solution 6.1 or later installed before you can upgrade to Patch Management Solution 6.2.

**Note**
Patch Management Solution 6.2 will only work with Software Update Agent 6.2. To upgrade from Patch Management Solution 6.1, you must also upgrade the Software Update Agent on your managed computers.

**To upgrade Patch Management Solution to 6.2**
1. Make sure you have Patch Management Solution 6.1 or later installed.
2. Install Patch Management Solution. See **Installation** (page 11).
3. Upgrade the Software Update Agent on your managed computers.
To upgrade computers running Software Update Agent 6.1, in the Configuration tab select Configuration > Solutions Settings > Software Management > Patch Management > Windows > Software Update Agent Rollout and enable the Software Update Agent Upgrade policy.

Installing the Altiris Agent

The Altiris Agent must be installed on the computers you want to manage, if you have not done so already (through the use of other Altiris solutions that require the agent).

When installing the agent, you specify the computers on which to install the agent. For large numbers of computers, you can use the Resource Discovery and Network Discovery features of Notification Server to discover the computers on your network and create a list from which you can select the computers on which to install the agent. If you have only a few computers to manage, such as during an evaluation, you can skip computer discovery and perform the agent installation procedure.

Resource Discovery is used to discover Windows computers. The following procedure describes how to use this feature.

Network Discovery can discover computers using Ping, Circular DNS resolution, SNMP, and NetBIOS name and domain. You can discover Linux/UNIX, Mac OS, and Windows computers. For details, see the Network Discovery Product Guide, which you can access from the Altiris Web site (altiris.com/support/documentation) or the Altiris Documentation page in the Altiris Console.

You need administrator rights to install the Altiris Agent.

For more information on the Altiris Agent, see the Notification Server documentation.

To discover Windows computers using Resource Discovery

1. On the Notification Server computer, select Start > All Programs > Altiris > Altiris Console to open the Altiris Console.
2. In the console, click the Configuration tab.
3. In the left pane, select Configuration > Server Settings > Discovery Methods > Resource Discovery.
4. In the content pane, click and select the domains in which to search for computers. (Optional) Enter the name of a domain and click .
5. Select the discovery methods you want to use. You must select at least one method.
   - Select the Domain Browse List option to discover computers (including Windows 95, 98, 98 SE, and ME computers) that are currently sharing files.
   - Select the Domain Membership option to discover computers that have trust accounts in the domain and are running Windows NT, 2000, XP, and 2003. This method will not find any Windows 98, 98 SE, or ME computers.
6. Click Discover Now.
7. After the discovery process completes, click Apply.

The computers in the specified domains are discovered and can be selected to receive the agent.
To install the Altiris Agent

This procedure does not work with Windows 98, 98 SE, and ME computers. For these operating systems, see the “Pull Method” in the Notification Server documentation.

1. On the Notification Server computer, select Start > All Programs > Altiris > Altiris Console to open the Altiris Console.

2. In the console, click the Configuration tab.

3. In the left pane, select Configuration > Altiris Agent > Altiris Agent Rollout > Altiris Agent Installation.

4. In the content pane, do one or both of the following:
   - If you did not perform a computer discovery (because you only have a few computers on which you want to install the agent, such as during an evaluation) or you want to specify a computer manually, enter the name of the computer on which you want to install the agent in the field next to the Add button, and then click Add. Repeat this for all computers on which you want to install the agent.
   - If you performed a computer discovery, click Select Computers. In the dialog that opens, select the computers to which you want to install the agent. Click OK.

   **Note**
   The fact that a computer can be discovered does not mean that you can push the agent to it. The computer must be running an operating system that supports having agents pushed to it.

5. Click Install Altiris Agent. The Options page opens to let you set configuration properties for the Altiris Agent.

6. Select the Show the Altiris Agent icon in the system tray option.

7. Click Proceed with Install.

The Altiris Agent is installed to the computers.

Licensing

Each Altiris product comes with a 7-day trial license that is installed by default. You can register and obtain a 30-day evaluation license through our Web site at www.altiris.com or purchase a full product license.

To view your current license, open the Altiris Console, click the Configuration tab, and select Licensing.

For more information, see "Licensing Altiris Software" in the Altiris Getting Started Guide on the product CD or on our Web site at www.altiris.com/support/documentation.

**Note**
Automatic Upgrade Protection (AUP) is required for ongoing use of Patch Management Solution. Without current AUP, you cannot download and use new Microsoft Patch Management Import files. However, you can continue to use Microsoft Patch Management Import files that were downloaded prior to the expiration of AUP.
Chapter 3
Getting Started with Patch Management Solution

The Getting Started tasks guide you through the basic setup, configuration, and use of Patch Management Solution. Each task has a procedure and, in many cases, exercises to illustrate the steps of the procedure.

**Getting Started tasks**

The tasks are listed sequentially. You must work through the tasks in sequence to complete all of them.

1. Installing the Altiris Agent (page 12)
2. Configuring Patch Management Core Solution (page 15)
3. Downloading Microsoft Patch Management Import (page 15)
4. Downloading QChain (page 15)
5. Installing the Software Update Agent (page 16)
6. Viewing a Report to Decide Which Updates to Install (page 18)
7. Staging Software Bulletins (page 19)
8. Creating Software Update Tasks (page 20)
9. Viewing Results of Software Update Tasks (page 21)

You can perform Getting Started tasks from the Quick Start page or from the Altiris Console, the primary interface for Altiris solutions.

**To open the Quick Start page manually**

1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Quick Starts.
3. In the content pane, select Patch Management Solution Quick Start.

For more information, see Quick Starts (page 23).

**Prerequisites for Getting Started tasks**

- Notification Server 6.0 SP3.
- Patch Management Solution 6.2 installed on the Notification Server (see Installing Patch Management Solution on page 10).
- Client computers with either Windows XP Professional or Windows 2000 Professional and the Altiris Agent installed.

**Exercise Scenario**

In the following exercises, you are the system administrator of Test Company. You have already installed Patch Management Solution and now need to implement it.
Configuring Patch Management Core Solution

After Patch Management Solution is installed, you must download Microsoft Patch Management Import and QChain before you can stage or distribute any updates. With the installation of Patch Management Solution, all English language releases are automatically installed so you can specify software updates to exclude from the Microsoft Patch Management Import download. Exclude software updates for software you do not use in your organization and select any additional languages you wish to download.

To configure Patch Management Core Solution

1. In the Altiris Console, click the Configuration tab.
2. In the left pane, select Configuration > Solutions Settings > Software Management > Patch Management > Server Settings > Global Settings > Patch Management Core Solution.
3. Make any wanted changes.
4. Click Apply.

Downloading Microsoft Patch Management Import

Microsoft Patch Management Import downloads and imports all software management resources from these files into the Notification Database.

To download Microsoft Patch Management Import

1. Access the Microsoft Patch Management Import page:
   - Option 1: From the left pane of the Quick Start, click Download Microsoft Patch Management Import.
   - Option 2: From the Altiris Console, click the Configuration tab. In the left pane, select Configuration > Solution Settings > Software Management > Patch Management > Server Settings > Microsoft Settings > Microsoft Patch Management Import.
2. Make any wanted changes.
3. Download Microsoft Patch Management Import:
   - Option 1: In the Quick Start page, in the content pane, click the context menu icon and select Start Download Task.
   - Option 2: In the Altiris Console in the left pane, right-click Microsoft Patch Management Import and select Start Download Task.

Downloading QChain

QChain chains software updates together before they are distributed to managed computers.

To download QChain

1. Access the QChain page:
2. Download QChain:
   - Option 1: From the content pane of the Quick Start, click the context menu icon and select Start Download Task.
   - Option 2: From the Altiris Console, in the left pane, right-click QChain and select Start Download Task.

Installing the Software Update Agent

The Software Update Agent must be installed on managed computers on which you want to use Patch Management Solution. The Software Update Agent inventories programs that are installed on the managed computer and sends this data to the Notification Server. The Software Update Agent then uses this information to track operating systems and applications that are installed on managed computers, discover vulnerabilities, and match them with packages that are defined by the Notification Server. You can use this information when deciding which updates to send to which managed computers.

Note
The Inventory Rule Agent automatically runs the following policies on managed computers: Default Windows OS Inventory Policy, Default Windows Software Release Inventory Policy, Default Microsoft Vulnerability Analysis Policy, and Default Microsoft Software Inventory Policy. For information, see Software Inventory (page 33).

Caution
If you have a large number of computers to deploy the Software Update Agent to, consider deploying the agent during off-peak hours to minimize network traffic at peak times. Deploying the software agent can take some time, depending on the number of managed computers and the Altiris Agent settings.

To install the Software Update Agent

Exercise
Test Company wants to install the Software Update Agent on all managed computers that do not already have it installed. When deciding when to install the agent, consider your environment. In Test Company’s situation, there are more than 200 computers. To minimize the risk of slowing down or disrupting the network, set the install schedule to a time when most employees are not in the office.

1. Access the Software Update Agent Install page:
   - Option 1: From the left pane of the Quick Start, click Deploy Software Update Agent.
   - Option 2: From the Altiris Console, click the Configuration tab. In the left pane, select Configuration > Solutions Settings > Software Management
2. In the content pane, select Enable.

3. Make any wanted changes.

   To make changes to Applies to collections and Schedule, click on the relevant hyperlinks and a dialog box for each item will appear. For a description of each page item, see "Altiris Agent Upgrade Page" in Altiris Notification Server Help.

**Exercise**

Employees at Test Company go home before 7 p.m. Leave the collection as All Windows Computers without Software Update Agent Installed. Set the Schedule to run daily at 7 p.m. and ensure Run once ASAP is not selected.

4. Click Apply.

When the Software Update Agent is installed on a managed computer, a new tab, Software Updates, appears in the Altiris Agent window, displaying software updates for that computer. To open the Altiris Agent window, select the Altiris Agent icon in the system tray of the managed computer.

**See Also**

- Software Update Agent (page 49)
- Software Update Agent Rollout (page 36)

## Viewing Patch Management for Windows Dashboard

Confirm the Software Update Agent installation was successful the Patch Management for Windows dashboard.

The dashboard is a central location that links several reports showing valuable Patch Management Solution information. Use it to access the Software Update Agent Execution Summary report (which lists computers with the Software Update Agent installed), agent version, and the operating system information.

**To view the Patch Management for Windows dashboard**

1. Access the Patch Management for Windows dashboard:

   - Option 1: From the left pane of the Quick Start, select Check Progress.
   - Option 2: From the Altiris Console, click the Reports tab. In the left pane, select Dashboards > Patch Management for Windows Dashboard.

2. In the content pane, under Configuration, select Computers with Software Update Agent.

3. Click Refresh.
### Viewing a Report to Decide Which Updates to Install

Running reports helps you determine which software updates need to be installed on which computers to address vulnerabilities. Individual software updates are bundled into software bulletins. Each software bulletin has a resource manager page containing explanations of the updates and hyperlinks to the vendor’s Web site for more information.

Once you have decided to install a particular bulletin, we recommend that you install it in a test environment before rolling it out across your network.

You can stage or distribute software updates directly from reports by double-clicking on the update name in the report.

**Note**

Instead of evaluating each update individually, you can stage all the software bulletins listed in the *Manage Software Updates* page. However, this can result in increased network bandwidth use.

### To view the Detected Microsoft Vulnerabilities by Computer report

**Exercise**

Test Company management’s main concern is addressing security issues covered by critical Microsoft updates. You have been tasked with finding critical vulnerabilities and installing required critical updates.

1. Access the *Detected Microsoft Vulnerabilities by Computer* page:
   - Option 1: From the left pane of the Quick Start, click *Microsoft Compliance by Computer*.
   - Option 2: From the Altiris Console, click the *Reports* tab. In the left pane, select *Reports > Software Management > Patch Management > Compliance and Vulnerability > Microsoft Compliance and Vulnerability by Computer*.

2. In the content pane, click *Run this Report*.

3. Leave the default settings and click *Refresh*.

   A list of software updates appears.

4. For information about an update, right-click on any update and select *Resource Manager*.

5. At the bottom of the *Summaries* tab, under *Additional Information*, click the hyperlink to the Microsoft TechNet article on the bulletin.

6. With the information provided in *Resource Manager* as a guide, make a note of the bulletins you wish to install.
**Exercise**  
View the **Count of Software Updates by Severity** report in the folder **Reports > Software Management > Patch Management > Software Update Summary**. Set the **Update Severity** field to **Critical**. The report will list all available critical updates. Choose three of these updates to stage and distribute.

The following reports also provide information on software updates:

- **Compliance and Vulnerability > Microsoft Compliance and Vulnerability by Bulletin**
- **Inventory > Applicable Microsoft Updates by Computer**
- **Inventory > Installed Microsoft Software Updates by Computer**

If you want to view compliance reports for your entire organization from a single console when using more than one Notification Server, see **Reporting on Patch Management Data in a Hierarchy** (page 55).

### Staging Software Bulletins

After you determine which software updates to deploy (see **Viewing a Report to Decide Which Updates to Install** on page 18), you need to stage them. Staging software bulletins downloads the software updates included in a software bulletin to the Notification Server. You must first stage a software bulletin to create a Software Update Task to install the updates. Software Update tasks install the software updates to the Windows computers that need them.

**To stage Software Bulletins**

**Exercise**  
Now that you have decided which updates to distribute, you must stage them.

1. Access the **Manage Software Updates** page:
   - Option 1: From the left pane of the Quick Start, in the left pane, click **Stage and Distribute Microsoft Patches**.
   - Option 2: From the Altiris Console, in the left pane, select **Tasks > Software Management > Patch Management > Manage Software Updates**.

   **Note**  
   If the Microsoft Patch Management Import download has not yet completed, a dialog box appears with a message saying the Manage Software Updates page is disabled until Microsoft Patch Management Import is complete.

2. In the content pane, select the software bulletins you want to stage.

   **Exercise**  
   Stage the software bulletins you chose in **Viewing a Report to Decide Which Updates to Install** (page 18).

3. Click the **Stage Bulletin** toolbar item.

   **Note**  
   You can also stage software bulletins by right-clicking them and selecting **Stage**.
Confirming Software Bulletin Status

A Software Update Task cannot be created until all the updates in a bulletin have successfully downloaded. When updates are downloading, a progress dialog box appears.

To confirm the status of updates in the Manage Software Updates page

1. Access the Manage Software Updates page:
   - Option 1: From the left pane of the Quick Start, click Stage and Distribute Microsoft Patches.
   - Option 2: From the Altiris Console, click the Tasks tab. In the left pane, select Tasks > Software Management > Patch Management > Manage Software Updates.
2. Click Update. When the #Updates and #Downloaded columns are equal, the downloads have completed.

Viewing Software Bulletin Status - Summary Report

You can also run the Software Bulletin Status - Summary report for more information on the status of Software Bulletins. This report displays summary information on software bulletins and the number of software updates for each bulletin. The results can be filtered to display only enabled bulletins, bulletins of a particular severity, or bulletins with full/partial software update downloads.

To view the Software Bulletin Status - Summary report

Exercise
Run the report to see the status of the bulletins you want to distribute.

1. In the Altiris Console, click the Reports tab.
3. In the content pane, click Run this Report.
4. To report on staged Microsoft software bulletins, set the Vendor field to Microsoft.
5. Set the Bulletin Status field to Staged.
6. Click Refresh.

Creating Software Update Tasks

After you stage software bulletins and download the associated software updates, you must create Software Update tasks to deploy software updates to the appropriate Windows computers.

To create Software Update tasks

Exercise
Create a Software Update task for each of the critical updates you staged in the exercise component of Staging Software Bulletins (page 19).

1. Access the Manage Software Updates page:
- Option 1: From the left pane of the Quick Start, click **Stage and Distribute Microsoft Patches**.

- Option 2: From the Altiris Console, click the **Tasks** tab. In the left pane, select **Tasks > Software Management > Patch Management > Manage Software Updates**.

2. In the content pane, select any staged software bulletins you want to distribute.

**Exercise**
Select the three critical bulletins you staged.

3. Click the **Software Update Task Wizard** toolbar item.

**Note**
If a Software Update task has been already created for a bulletin, a warning dialog appears giving you two options. If you select **Create a new task**, the wizard opens. If you select **Edit an existing task**, a dialog opens with the existing task list, and you must choose which one to edit.

4. Leave the defaults in the first page of the Software Update Task Wizard and click **Next**. New Software Update tasks are enabled by default.

5. Leave the defaults in the second page of the wizard. Click **Finish**.

The Software Update Agent downloads the Software Update package and installs it on appropriate managed computers.

### Viewing Results of Software Update Tasks

Patch Management Solution contains a number of reports you can use to check if software updates were successfully distributed by Software Update Tasks.

**To view the Software Update Distribution Summary report**

**Exercise**
Run the **Software Update Execution Summary Report - 30 Days** report from the Patch Management for Windows dashboard to see if the Software Update Tasks succeeded, failed, or were not executed.

1. Access the Patch Management for Windows dashboard:
   - Option 1: In the Altiris Console, click the **Reports** tab. In the left pane, select **Dashboards > Patch Management for Windows**.
   - Option 2: In the Quick Start page, in the left pane, click **Check Progress**.

2. In the content pane, click **Software Update Execution Summary Report - 30 Days** to run the related report. In the content pane, click **Run this report**.

For more information on the available reports, see **Reports Tab View** (page 29).

You can also view update details for individual computers by accessing Resource Manager. For information, see **Resource Manager** (page 54).
Creating an Automatic Update Schedule

Now that you have distributed initial updates, you can automate the update distribution process for ongoing use. Patch Management Solution lets you create a schedule for the automatic installation of software updates. Consider your company’s business requirements before you specify a schedule. Certain times will be better than others for installing updates in different working environments.

To create an automatic update installation schedule

Exercise
The employees at Test Company leave the office by 7 p.m. You want to roll out updates at 10:30 p.m. each day to ensure that the updates will not interfere with anyone’s work.

1. In the Altiris Console, select the Configuration tab.
2. In the left pane, select Configuration > Solution Settings > Software Management > Patch Management > Windows > Software Update Agent Configuration > Default Software Update Agent Configuration Policy.
3. In the content pane, make any wanted changes to the schedule, collections, and reboot options. For a description of these items, see Software Update Agent Configuration (page 33).

Exercise
The default collection to receive updates is Default Software Update Agent Configuration Policy. Do not change this setting. Test Company has an overseas office with employees who need to synchronize files daily with employees in your office. Because of the time differences, these synchronizations never happen between 1 a.m. and 3 a.m. your time. Set the Reboot computer schedule accordingly to ensure reboots do not disrupt file synchronizations between the two offices.

4. Click Apply.
Chapter 4
Using Patch Management Solution

Quick Links
- User Interface (page 23)
- Software Resources (page 43)
- Software Bulletins (page 45)
- Software Updates (page 47)
- Software Update Agent (page 49)
- Resource Manager (page 54)
- Reporting on Patch Management Data in a Hierarchy (page 55)
- Troubleshooting (page 56)

User Interface

Folders and items for the Patch Management Solution are placed in the Software Management folder in the Tasks, Resources, Reports, and Configuration tabviews in the Altiris Console.

Note
The Software Management folder is also shared with Altiris® Software Delivery Solution™.

Quick Starts (page 23)
- Tasks Tab View (page 24)
- Resources Tab View (page 28)
- Reports Tab View (page 29)
- Configuration Tab View (page 30)
- Software Update Task Wizard (page 37)
- Security (page 40)
- Configuring Background Actions (page 42)

Quick Starts

This page accesses commonly used patch management policies, tasks, and reports.

To access the Quick Start page
1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Quick Starts.
3. In the content pane, select **Patch Management Solution Quick Start**. A page opens in a new window.

In the content pane of the Quick Start page, a description of each item is provided in the Quick Start Help dialog.

**Tasks Tab View**

The following folders and items are used to manage updates.

**Quick Links**
- **Notification Policies** (page 24)
- **Software Update Task** (page 24)
- **Manage Software Updates** (page 26)

**Notification Policies**

Notification policies tell you when certain conditions exist. Example: The **New Software Bulletin Available** policy generates a report whenever a new software bulletin becomes available.

Generally, Notification policies get enabled and disabled automatically. However, you can edit or clone them to fit your needs.

**To access these policies**
1. In the Altiris Console, click the **Tasks** tab.
2. In the left pane, select **Tasks > Software Management > Patch Management > Notification Policies > Global**.

**Software Update Task**

This folder stores Software Update tasks. We recommend that you use the Software Update Task Wizard to create Software Update tasks, though they can be created manually. See **Software Updates** (page 47).

**To access this folder**
1. In the Altiris Console, click the **Tasks** tab.
2. In the left pane, select **Tasks > Software Management > Patch Management > Software Update Task**.

**To enable a Software Update Task**
1. Select **Enable**.
2. Click **Apply**.

**To create a new Software Update task without using the Software Update Task Wizard**
1. In the Altiris Console, click the **Tasks** tab.
2. In the left pane, select **Tasks > Software Management > Patch Management > Software Update Tasks > Microsoft**.
3. Right-click on the Microsoft folder and select New > Software Update Task.

**Note**
Software Update tasks can be located in other folders, depending on where they were placed after their creation. Software Update task page items.

### General Tab Page Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Bulletin</td>
<td>The name of the bulletin or bulletins you have chosen to make tasks for. You cannot edit the software bulletins through the Software Update Task Wizard. Double-click on a software bulletin to open the Resource Manager. This gives you detailed information on the software bulletin. You can only select a software bulletin that has been previously staged. <strong>Note</strong> If you use the Software Update Task Wizard, the correct software bulletin is automatically selected.</td>
</tr>
<tr>
<td>Name</td>
<td>The name of the tasks you have chosen from the tasks window. This field is populated automatically if only one task is listed in the Tasks field.</td>
</tr>
<tr>
<td>Description</td>
<td>The Microsoft description of the bulletin.</td>
</tr>
<tr>
<td>Base Collection</td>
<td>Specifies the target collection or collections to which the Software Update task applies. If you use the Software Update Task Wizard, the correct target collection for the selected software bulletin is automatically applied. To change the collection, click on the hyperlink to open the Collection Selector.</td>
</tr>
</tbody>
</table>
Manage Software Updates

This page lets you view and stage all software bulletins provided by the Altiris Microsoft Patch Management Import files.

When you stage a software bulletin, all associated updates get downloaded to the Notification Server from the Microsoft Web site. When the number in the # Updates column equals the number in the # Downloaded column, all updates for the software bulletin have been downloaded.

Sometimes not all software updates can be downloaded for a software bulletin because Microsoft may stop hosting the bulletin or relocate it. You cannot create a Software Update task unless all updates for a software bulletin are downloaded.

To access this page

1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Software Management > Patch Management > Manage Software Updates.

### Advanced Tab Page Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Software Update Task</td>
<td>Click to enable the Software Update task for the software bulletin and included software updates. There is an update name for each individual executable files for each software update included in a software bulletin.</td>
</tr>
<tr>
<td><strong>Update Name</strong></td>
<td>The name of each software update executable. If <strong>Enable</strong> is selected, all of the executables will be enabled. Click the hyperlink to open the resource manager page for the software update.</td>
</tr>
<tr>
<td><strong>Culture</strong></td>
<td>The language and culture of the software update.</td>
</tr>
<tr>
<td><strong>Package</strong></td>
<td>The software package associated with the update. Click the hyperlink to open the package's resource manager.</td>
</tr>
<tr>
<td><strong>Command Line</strong></td>
<td>The command-line to be run against the package. Click the hyperlink to open the command-line options dialog to change the recommended options.</td>
</tr>
</tbody>
</table>

### Package Options

- **Use Multicast when the Altiris Agent's multicast option is enabled**
- **Allow immediate reboot if required** - Select if a software update requires a reboot prior to installing an additional update.
- **Initiate execution (other than agent default)** - Select to run the Software Update task at a different time to that specified in the Software Update Agent settings.
- **Override default reinstallation attempts after task failure** - Select to override the Software Update Agent's default settings for reinstallation attempts after task installation failure.
### Page Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Show</td>
<td>Select the view that best meets your needs.</td>
</tr>
<tr>
<td>Vendor</td>
<td>The name of the vendor supplying the update.</td>
</tr>
<tr>
<td>Software Bulletin list</td>
<td>From this list, you can perform an action on one or more software bulletins by right-clicking or selecting a toolbar item.</td>
</tr>
</tbody>
</table>

### Software Bulletin List Items

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Bulletin</td>
<td>The name Microsoft assigned to the software bulletin.</td>
</tr>
<tr>
<td>Severity</td>
<td>The severity as defined by Microsoft.</td>
</tr>
<tr>
<td>Custom Severity</td>
<td>The severity as defined by the user. See Custom Severity Levels (page 46).</td>
</tr>
<tr>
<td>Staged</td>
<td>True = Staged. False = Disabled.</td>
</tr>
<tr>
<td>Note</td>
<td>You must stage the software bulletin to download its associated software updates.</td>
</tr>
<tr>
<td># Tasks</td>
<td>The number of Software Update tasks created for the bulletin.</td>
</tr>
<tr>
<td># Updates</td>
<td>The number of software updates included in the software bulletin.</td>
</tr>
<tr>
<td># Downloaded</td>
<td>The number of software updates downloaded.</td>
</tr>
</tbody>
</table>

**Note**
If you want to see which software updates have not been downloaded, run the Software Update Download Status report and select “Fail” as the Download Status.

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Release Date</td>
<td>The date Microsoft released the software bulletin.</td>
</tr>
<tr>
<td>Revision Date</td>
<td>The last date Microsoft revised this software bulletin.</td>
</tr>
<tr>
<td>Bulletin Description</td>
<td>The description Microsoft gave to the software bulletin.</td>
</tr>
</tbody>
</table>

### Shortcut Menu Items

The following table lists the Patch Management Solution shortcut menu items that may be available when you right-click a software bulletin on the Manage Software Updates page or on a report.

<table>
<thead>
<tr>
<th>Shortcut Menu Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>View Tasks</td>
<td>View a report of tasks that have been created for the selected software bulletin.</td>
</tr>
<tr>
<td>View Targeted Computers</td>
<td>Runs the Computers with Software Bulletin Prerequisites Installed report.</td>
</tr>
<tr>
<td>List Software Updates</td>
<td>Runs a report listing all updates for this software bulletin. To view resource information for the update, double-click on the update name.</td>
</tr>
</tbody>
</table>
### Shortcut Menu Item | Description
--- | ---
Resource Manager | Shows detailed information including summary, severity, and affected platforms. A hyperlink is provided to the Microsoft Web site where that update is explained in further detail.
Move | Relocate this resource to another location in the Resource tab.
Stage/Disable | Stages or disables the selected software bulletin. Disabling also disables all associated Software Update tasks.
Distribute Software Updates | Launches the Software Update Task Wizard and automatically inputs information from the selected software bulletin.
**Note**
This option is only available after the software bulletin has been staged and all associated software updates have been downloaded.
Recreate All Packages | Redownloads and recreates the software updates in the selected software bulletin.
Software update packages that are missing will be downloaded. Software updates that are partially downloaded (Example: a disconnected network) will be recreated.
Software Update Task Wizard | Starts the Software Update Task Wizard.

**See Also**
- [Software Bulletins](#) (page 45)

## Resources Tab View

Folders and items in the **Resources** tab can be found by clicking on the **Resources** tab, and then navigating to **Resource Management > Collections > Software Management and Resource Management > Resources > Software Management** in the left pane.

Patch Management Solution creates collections that are populated when the Notification Database receives inventory from the Inventory Rule Agent. These collections are then used by Patch Management Solution to distribute software updates. Default collections are hidden as they require no user input. However, you can create any collection to fit your needs. For information, see [Altiris Notification Server Help](#).

The collections that Patch Management Solution creates are based on the resource folders that Patch Management Solution creates under the **Resource Management > Resources > Software Management > Software** folder.

You can double-click on any resource in the resource folders to launch the Resource Manager. The Resource Manager shows details about that resource.

**See Also**
- [Software Resources](#) (page 43)
Reports Tab View

This section discusses the folders and items that Patch Management Solution places in the Reports tab view.

Quick Links
- Patch Management for Windows dashboard (page 29)
- Reports (page 29)

Patch Management for Windows dashboard

From the dashboard, you can see how many computers have the Software Update Agent installed, how many bulletins have been added in the last 30 days, a summary of software update distribution, and related reports.

To access this page
1. In the Altiris Console, click the Reports tab.
2. In the left pane, select Dashboards > Patch Management for Windows.

Note
Each result in the left pane of the dashboard is linked to a report. When you click on a report hyperlink, the report runs in the right pane.

Reports

You can use or modify predefined reports, or create your own. For information, see Altiris Notification Server Help.

Altiris Infrastructure provides numerous predefined reports to help you analyze patch management information.

These reports are found in the Altiris Console under the Reports tab by navigating to Reports > Software Management > Patch Management in the left pane. The reports are organized into the following categories:

Agent Information - Contains a single comprehensive report that returns information on software update download and execution, (Example: package download errors, including wrong platform, insufficient space, and so forth), and information about computers with the Software Update Agent installed.

Agent Software Update Packages - Contains reports on Software Update package downloads, errors, and so forth.

Agent Task Execution - Contains reports on Software Update task execution such as Software Update Distribution Summary, Task Execution by Computer, and more.

Compliance and Vulnerability - Contains the Microsoft Software Update Compliance by Bulletin report that reports on computer compliance levels for each available Software Bulletin.

Inventory - Contains reports on computer inventory such as Applicable Microsoft Updates by Computer, Installed Microsoft Software Updates by Computer, and more.

Software Bulletins - Contains reports such as Software Bulletin Status - Summary, that displays summary information on software bulletins and the number of software
updates for each bulletin, and **Software Bulletins by Software Component for Windows.**

**Software Update Summary** - Contains reports such as **Software Update Download Status**, which lists all failed or successful software update downloads. This folder also contains **Count of Software Updates by Severity**.

**Notes**
- Information contained in the Software Delivery Execution table (Evt_AeX_SWD_Execution) is used to generate Patch Management reports. Purging the table will result in incorrect report results.
- Any report that displays software updates lets you stage or distribute those updates by right-clicking on the update name (see **Shortcut Menu Items** on page 27).
- Every report result with computers as the primary result lets you create a collection based on the report results. To create a collection based on report results click the collection icon on the report page toolbar. For information, see **Altiris Notification Server Help.**

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**Configuration Tab View**

**Quick Links**
- Global Settings (page 30)
- Microsoft Settings (page 31)
- Software Inventory (page 33)
- Software Update Agent Configuration (page 33)
- Software Update Agent Rollout (page 36)
- Software Update Agent Uninstall (page 37)

**Global Settings**

This folder contains items for managing languages, excluding resources, and so on for Patch Management globally, regardless of platform.

The folder is located in the **Configuration** tab under **Configuration > Solutions Settings > Software Management > Patch Management > Server Settings** in the left pane.

**Quick Links**
- Patch Management Core Solution (page 30)
- Download Software Update Packages (page 31)
- Revise Software Update Tasks (page 31)

**See Also**
- Configuring Background Actions (page 42)

**Patch Management Core Solution**

This page sets global settings that apply to all software updates, regardless of platform.
To access this page
1. In the Altiris Console, click the **Configuration** tab.
2. In the left pane, select **Configuration > Solution Settings > Software Management > Patch Management > Server Settings > Global Settings > Patch Management Core Solution**.

Download Software Update Packages
This background action is started after you stage a software bulletin to check software update package availability. It downloads the appropriate software update packages from the Microsoft Web site.

**Note**
Microsoft updates are hosted on HTTP servers and are downloaded through HTTP.

**Note**
Background actions can be triggered immediately from the context menu (by right-clicking on the background action) by clicking **Start Task** and **Stop Task**.

Revise Software Update Tasks
This page lets you update Software Update tasks with the latest versions of software updates and bulletins released by the vendor. The task completes the following software update synchronization and data cleanup processes:

- Updates Software Update tasks. New managed languages are imported and added to existing Software Update tasks.
- Updates software update advertisement installation options. If the new Microsoft Patch Management Import file specifies an Altiris recommended command-line, existing Software Update tasks will be revised to use the Altiris recommended command-line.
- Updates program command-lines. This changes the install .exe.
- Deletes empty Software Update tasks if they have no software advertisements.
- Assigns the Software Update Prerequisite Collection to software update advertisements.
- Cleans up software update packages not associated with software updates.
- Cleans up software installation files not associated with software update packages.
- Cleans up software updates not associated with Software Bulletins.
- Cleans up software prerequisite collections not associated with software updates.

Microsoft Settings
This folder contains items used for setting up Patch Management specifically for Windows. It is located in the **Configuration** tab under **Configuration > Solutions Settings > Software Management > Patch Management > Server Settings** in the left pane.

After the Patch Management Solution install process is complete, the Download QChain and Microsoft Patch Management Import background actions are launched.
Quick Links

- Download QChain (page 32)
- Microsoft Patch Management Import (page 32)
- Microsoft (page 32)

See Also

- Configuring Background Actions (page 42)

Download QChain

QChain chains software updates together before they are sent out to managed computers.

Microsoft Patch Management Import

This background action downloads the Microsoft Patch Management Import files and imports all software management resources from the Microsoft Patch Management Import files. These resources are necessary for populating the Manage Software Updates page and updating patches to managed computers. To see when this process has completed, look on the History tab view. The Result and Status columns will tell you if the process has completed.

Notes

- Background actions are configured by default to run daily.
- Background actions can be triggered immediately from the context menu (by right-clicking on the background action) by clicking Start Task and Stop Task.
- Automatic Upgrade Protection (AUP) is required for ongoing use of Patch Management Solution. Without it, you cannot download and use new Microsoft Patch Management Import files. However, you can continue to use Microsoft Patch Management Import files that were downloaded prior to the expiration of AUP.
- We recommend you select Automatically revise software update tasks after Microsoft Patch Management Import to automatically update to the latest data Microsoft Patch Management Import data.
- If Only Download if modified and Automatically revise software update tasks after Microsoft Patch Management Import are selected and Microsoft Patch Management Import does not update, you must manually run Revise Software Update Tasks. See Revise Software Update Tasks (page 31).
- To change where the Microsoft Patch Management Import is referencing its files from, edit the following registry key: [HKLM\SOFTWARE\Altiris\Patch Management]\"PMImportHostAndProtocol"="http://www.samplelocation.com"

Microsoft

This page lets you set up how you want Microsoft software updates distributed. Some of these settings are used as default values in the Software Update Task Wizard (see Software Update Task Wizard on page 37). All Microsoft software updates will have these settings by default.
If you change these settings, existing Software Update tasks and packages will not be updated with these defaults. You can force them to be updated by re-creating packages from the Manage Software Updates page (see Manage Software Updates on page 26).

Software Inventory

Patch Management Solution inventories supported operating systems, applications, service packs, and installed patches. The information is utilized to automatically create collections based on service pack level for effective distribution targeting.

The Software Inventory folder can be found by clicking on the Configuration tab and then navigating to Configuration > Solutions Settings > Software Management > Patch Management > Windows > Software Inventory in the left pane. The following four policies are automatically run by the Inventory Rule Agent when it is installed on a managed computer by the Software Update Agent.

Global

- Default Windows OS Inventory Policy - Gathers operating system (version information) inventory on the managed computer.
- Default Windows Software Release Inventory Policy - Gathers software (software release and service pack) inventory from the managed computer.

Microsoft

- Default Microsoft Software Inventory Policy - Gathers non-operating system inventory on installed applications, such as Microsoft Office, from the managed computer so collections can be created.
- Default Microsoft Vulnerability Analysis Policy - Gathers data on which software updates have already been installed on the managed computer.

Software Update Agent Configuration

The Software Update Agent is a plug-in agent for the Altiris Agent that performs the distribution of software updates. This agent needs to be deployed to all managed computers that you want to distribute software updates to.

The Default Software Update Agent Configuration Policy policy lets you provide the settings for the Software Update Agent (see Software Update Agent on page 49). The collection targeted by this policy (also named Default Software Update Agent Configuration Policy) cannot be changed as it is a collection specifically designed to pick up any agents that do not have a configuration policy applied to them. As well, other collections cannot be added to the policy.

These settings apply to all Windows computers that have the Software Update Agent installed.

To access this page

1. In the Altiris Console, click the Configuration tab.
2. In the left pane, select Configuration > Solutions Settings > Software Management > Patch Management > Windows > Software Update Agent Configuration > Default Software Update Agent Configuration Policy.
## General Tab Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable</td>
<td>Select to enable the policy.</td>
</tr>
<tr>
<td>Applies to Collections</td>
<td>Specifies the collection or collections to which this policy applies.</td>
</tr>
</tbody>
</table>
General Tab Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Update Installation</td>
<td>These options determine when software updates get installed on the managed computer and when the managed computer gets rebooted after software updates are installed. This allows for effective batching of software update installations.</td>
</tr>
<tr>
<td></td>
<td><strong>Schedule</strong> - Click on the hyperlink to specify a schedule for applying software updates to the managed computer. On this schedule, QChain is called to chain the software updates together, and then the software updates are sent to the managed computer. QChain is only applicable to computers running Windows NT 4 or later. This schedule displays on the <strong>Software Updates</strong> tab of the Altiris Agent.</td>
</tr>
<tr>
<td></td>
<td><strong>Reinstallation attempts after task failure</strong> - Set the number of times Patch Management should attempt to reinstall a software update after a task failure.</td>
</tr>
<tr>
<td></td>
<td><strong>Reinstallation attempts when reboot is required</strong> - Sometimes a software update requires a reboot. This sets the number of times to retry the software update installation after the reboot.</td>
</tr>
<tr>
<td></td>
<td><strong>Maximum number of consecutive successful installations allowed per update</strong> - The number of times an update can be installed. This is reset with reboot.</td>
</tr>
<tr>
<td></td>
<td><strong>Allow user to initiate</strong> - Allows users to initiate software update installation from the Altiris Agent by clicking the <strong>Start Software Update</strong> button.</td>
</tr>
<tr>
<td></td>
<td><strong>Perform Recovery Solution snapshot before applying software updates</strong> - Only appears if Altiris Recovery Solution is installed. Select to automatically create a snapshot prior to software update installations. This allows for effective roll back when a software update disrupts computer functions.</td>
</tr>
<tr>
<td>Reboot Defaults</td>
<td><strong>Allow reboot after installation</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Never</strong> - Select if you do not want to automatically reboot the user’s computer after a software update installation.</td>
</tr>
<tr>
<td></td>
<td><strong>Immediate</strong> - Select to reboot the user’s computer immediately after a software update installation.</td>
</tr>
<tr>
<td></td>
<td><strong>Multiple</strong> - If <strong>Immediate</strong> is selected, select <strong>Multiple</strong> to allow multiple reboots during the default installation schedule.</td>
</tr>
<tr>
<td></td>
<td><strong>Scheduled</strong> - Select if software updates require a reboot and you wish to specify a reboot schedule. Example: you do not wish to affect user productivity with repeated reboots during work hours, so you create an after hours reboot schedule. This schedule displays on the <strong>Software Updates</strong> tab of the Altiris Agent.</td>
</tr>
</tbody>
</table>
|                                           | **Note**  
We recommend you do not set your reboot schedule too soon after the **Software Update Installation** schedule. The reboot schedule can cause the computer to reboot before updates have finished installing. |
The Software Update Agent Rollout folder contains two policies and their associated packages and collections. These policies are used for deploying the Software Update Agent and upgrading the Software Update Agent.

- The **Software Update Agent Install** policy deploys the Software Update Agent to all computers in the **All Windows Computers without Software Update Agent Installed** collection (by default).
• The **Software Update Agent Upgrade** policy performs an upgrade of the Software Update Agent to all computers in the **All Windows Computers Requiring Software Update Agent Upgrade** collection (by default).

The **Software Update Agent Rollout** folder can be found by clicking on the **Configuration** tab and then selecting **Configuration > Solutions Settings > Software Management > Patch Management > Windows > Software Update Agent Rollout** in the left pane.

**Note**
Under the **Software Update Agent Rollout** folder, you will also find two collections and a package associated with these policies.

When the Software Update Agent is deployed, the Inventory Rule Agent and the Package Agent are also installed. The Inventory Rule Agent gathers inventory that is granular enough for Patch Management Solution to inform you of which patches need to be distributed to which computers. The Package Agent helps in the sending of software updates.

The Software Update Agent gets installed on managed computers after you enable the **Software Update Agent Install** policy.

For a description of the fields in the **Software Update Agent Rollout** policies, see "Altiris Agent Upgrade Page" in *Altiris Notification Server Help*.

### Software Update Agent Uninstall

The **Software Update Agent Uninstall** folder contains a policy you can use to uninstall the Software Update Agent. This policy uninstalls the Software Update Agent from all computers listed in the **Computers With Software Update Agent Installed** collection (by default).

The **Software Update Agent Uninstall** folder can be found by clicking on the **Configuration** tab and then navigating to **Configuration > Solutions Settings > Software Management > Patch Management > Windows > Software Update Agent Uninstall** in the left pane.

**Note**
Before using this policy, ensure that the **Software Update Agent Install** policy is disabled.

If you want to uninstall the Software Update Agent from your managed computers, enable the **Software Update Agent Uninstall** policy. A collection has been provided which this policy will use for the uninstallation. You can, however, change the collection or collections that apply to this policy to meet your needs.

**See Also**
• Uninstalling the Software Update Agent (page 53)

### Software Update Task Wizard

The **Software Update Task Wizard** allows you to easily create and set up Software Update tasks to distribute updates to managed computers. These tasks are stored in the **Software Update Task** folder. Software Update tasks must be created before you can install software updates to managed computers.
The Software Update Task Wizard has two pages that need to be configured. The items in the pages are described in the following tables:
### General Page Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Bulletin</td>
<td>The name of the bulletin or bulletins you have chosen. Double-click on a software bulletin to open</td>
</tr>
<tr>
<td></td>
<td>the Resource Manager. This gives you detailed information on the software bulletin.</td>
</tr>
<tr>
<td></td>
<td>You can only select a software bulletin that has been previously staged.</td>
</tr>
<tr>
<td>Name</td>
<td>The name of the tasks you have chosen from the tasks window. This field is populated automatically if</td>
</tr>
<tr>
<td></td>
<td>there is only one task listed in the Tasks field.</td>
</tr>
<tr>
<td>Description</td>
<td>The Microsoft description of the bulletin.</td>
</tr>
<tr>
<td>Base Collection</td>
<td>Specifies the target collection or collections to which the Software Update task applies.</td>
</tr>
<tr>
<td></td>
<td>If you use the Software Update Task Wizard, the correct target collection for the selected software</td>
</tr>
<tr>
<td></td>
<td>bulletin is automatically applied. The default collection is also automatically applied to the</td>
</tr>
<tr>
<td></td>
<td>Software Update task.</td>
</tr>
<tr>
<td></td>
<td>If you want to change the collection, click on the hyperlink to open the Collection Selector.</td>
</tr>
<tr>
<td>Package Options</td>
<td><strong>Use Multicast when the Altiris Agent’s multicast option is enabled</strong> - Select to allow</td>
</tr>
<tr>
<td></td>
<td>multicasting if it is specified in the Software Update Agent’s settings.</td>
</tr>
<tr>
<td></td>
<td><strong>Allow immediate reboot if required</strong> - Select to allow an immediate reboot, if a software update</td>
</tr>
<tr>
<td></td>
<td>requires a reboot prior to installing an additional update.</td>
</tr>
<tr>
<td></td>
<td><strong>Initiate execution (other than agent default)</strong> - Select to run the Software Update task at a</td>
</tr>
<tr>
<td></td>
<td>different time to that specified in the Software Update Agent settings.</td>
</tr>
<tr>
<td></td>
<td><strong>Override default reinstallation attempts after task failure</strong> - Select to override the Software</td>
</tr>
<tr>
<td></td>
<td>Update Agent’s default settings for reinstallation attempts after task installation failure.</td>
</tr>
</tbody>
</table>
Options (or Advanced) Page Items

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enable Software Update Task</td>
<td>Click to enable the Software Update task for the software bulletin and included software updates. There is an update name for each individual executable file for each software update included in a software bulletin.</td>
</tr>
<tr>
<td>Update Name</td>
<td>The name of each software update executable included in a software bulletin. If Enable is selected, all of the updates will be enabled by default. Clear the checkbox to disable an update. Click on the hyperlink to open the resource manager page for the software update.</td>
</tr>
<tr>
<td>Culture</td>
<td>The language and culture of the software update.</td>
</tr>
<tr>
<td>Package</td>
<td>The software package associated with the update. Click on the hyperlink to open the package’s resource manager.</td>
</tr>
<tr>
<td>Command Line</td>
<td>The command-line to be run against the package. Click on the hyperlink to open the command-line options dialog box that lets you change the update installation options. Options include No UI, No reboot, Reboot, No display, Unattended install, No command-line Arguments, and Custom.</td>
</tr>
<tr>
<td>Note</td>
<td>The fields in the Command-line Options dialog box, which act as software update installation settings are automatically populated. If the default software update installation options do not work as the vendor intended, the Altiris recommended command line arguments field will appear and be selected by default, to ensure a successful install.</td>
</tr>
<tr>
<td>Finish</td>
<td>Click to complete the wizard. When you click Finish, a Software Update task gets created for this software update in the appropriate vendor folder in the Tasks tab under Tasks &gt; Software Management &gt; Patch Management &gt; Software Update Task.</td>
</tr>
<tr>
<td>Apply</td>
<td>Apply changes (only appears when editing a Software Update task).</td>
</tr>
<tr>
<td>Back</td>
<td>Click to go to the previous page.</td>
</tr>
<tr>
<td>Cancel</td>
<td>Click to discard changes and close the wizard.</td>
</tr>
</tbody>
</table>

See Also
- Software Update Task (page 24)
- Creating Software Update Tasks (page 20)

Security

In addition to standard security roles privileges included in Notification Server, Patch Management Solution provides additional security privileges and permissions for administrating your patches. These privileges and permissions let you assign access to specific tasks, such as enabling patches for distribution and creating distribution tasks.
Global Privileges

Patch Management Solution adds two global privileges to each role: **Stage Software Bulletin** and **Distribute Software Update**. These privileges are similar but are provided to allow a separation of duties within your organization.

- **Stage Software Bulletin** - If this is enabled, users in this role can stage software bulletins to download the software updates. However, to distribute software updates, they also need the **Distribute Software Update** privilege.

- **Distribute Software Update** - If this is enabled, users in this role have the privilege of distributing software updates, which includes creating functional Software Update tasks. If this is not enabled, users cannot run the Software Update task Wizard or select software bulletins in new Software Update tasks that they create. Therefore, they cannot create a functional Software Update task. Use this for granting privileges to distribute approved software updates throughout your organization.

**Stage Software Bulletin Versus Distribute Software Update**

If you grant the **Stage Software Bulletin** privilege in a role, but not the **Distribute Software Update** privilege, users in that role can stage or disable any software bulletin. However, they cannot create a functional Software Update task. Users can enable Software Update tasks that have already been created.

If you grant the **Distribute Software Update** privilege in a role, but not the **Stage Software Bulletin** privilege, users in that role can distribute any software update for any staged software bulletin. They can enable any Software Update task; however, they cannot stage any software bulletin.

If you grant both of these privileges, users can stage software bulletins and distribute software updates for staged software bulletins.

**To view or edit Patch Management Security Privileges**

1. In the Altiris Console, click the **Configuration** tab.
2. In the left pane, select **Configuration > Server Settings > Notification Server Settings > Security Role Management**.
3. In the content pane, choose a security role.
4. View and edit the **Software Update Management Privileges** section under **Global Privileges**.
5. Click **Apply** to save changes.

**Permissions**

Patch Management Solution adds a Software Update Management permission to the Permission Selection of a collection. This permission is called **Apply Software Update Tasks**.

Each Software Update task has a target collection. Rights must be granted on the target collection to apply Software Update tasks. This permission lets you limit who can distribute software updates to different classes of computers. Example: this lets you control who can distribute software to servers in your organization.
Suppose you have a server support team and a desktop support team. You can limit permissions so each of these teams can only apply Software Update tasks to the computers that they have responsibility for.

You control who has permission to apply Software Update tasks by limiting who has permission to access the target collection on the Software Update task page. This is found on either the General tab of a Software Update task or the first step in the Software Update Task Wizard. With the Apply Software Update Tasks permission, users can only access those collections that they have permission to access in the Applies to target collection field. If they do not have permission, they cannot select any collections for this field, and the Software Update task cannot be properly created.

To create an Apply Software Update Tasks permission
1. Set up a security role (see “Security Role Management” in the Altiris Notification Server Help) containing the users to whom you want to grant permission.
2. In the Resources tab view, navigate to the collection that the role will be granted permission to use.
3. Right-click on the collection, and select Properties.
4. Click the Security tab.
5. Click the Add button.
6. Select the role you previously set up, and click the Select button.
7. Select the Apply Software Update Tasks permission and any other permissions that you want this role to have.
8. Click the Select button.
9. Click Apply to save changes.

Note
Make sure you grant the necessary parent permissions for this role by granting limited viewing permissions for the tree path on which the collection is located. Example: in the Resources tab view, in the left pane, grant this role limited viewing permissions on the Resource Management folder. This lets the role view the whole path to the collection. Otherwise, even though you grant the role permissions for the collection, the user cannot view the path to that collection and cannot actually see the collection.

Now, users in the role you have set up can select those collections in the Software Update task that they have permission to select.

Configuring Background Actions

Patch Management Solution includes a number of Background Actions for the Notification Server. These actions run automatically when required and assist in updating key components of Patch Management Solution.

This section shows you how to locate the Background Actions in the Altiris Console, modify parameters associated with the actions, and track the status of ongoing updates.

To locate Background Actions
1. In the Altiris Console, click the Configuration tab.
2. In the left pane, select Configuration > Solution Settings > Software Management > Patch Management > Server Settings.

3. Some Background Actions are found in the Global Settings folder and some in the Microsoft Settings folder.

**To modify Background Action Parameters**

Background Actions include configurable parameters that specify the download locations, how often the actions are run, and whether or not to update the item when a file change is detected.

1. Select a Background Action.
2. On the General tab, review the options available or modify the schedule to a weekly or custom schedule.

**Note**
The Download Software Update Packages Background Action has no schedule to edit.

**To track a Background Action**

1. Select a background action.
2. Click the History tab to view the information on the background action. The table includes the status, result of the last download, file version, when the task started, and when the task completed.

**To run a Background Action**

- In the left pane, right-click the background action you want to run, and select Start Download Task from the context menu.

**See Also**
- Global Settings (page 30)
- Microsoft Settings (page 31)

**Software Resources**

Patch Management Solution includes an information repository specifically tailored to automate the patch management process. This repository consists of the software management resources imported by the Microsoft Patch Management Import Background Action (see Configuring Background Actions on page 42).

This repository provides a significant amount of data on software bulletins and software updates. These resources are then exposed and utilized in various aspects of the Patch Management Solution, including being used for creating collections.

This section discusses software management resources so you can gain a general understanding of the information used in the Patch Management Solution.

**See Also**
- Resources Tab View (page 28)
Resource Types

A resource type is a template for entering resource data. With each resource type, attributes are specified, which define the data stored about a resource. There are a number of resource types specific to Patch Management Solution.

To view resource type information
1. In the Altiris Console, click the Configuration tab.
2. In the left pane, select Configuration > Resource Settings > Resource Types > Software Management > Patch Management.
4. In the content pane, click the List Resources tab. You can view the various software installation types. This information helps classify software update packages and provides information on the methods required to install a particular software update.

Resources

A resource is the most generic term to mean any item that is tracked or managed by the Altiris Infrastructure. Patch Management Solution utilizes resources to track the various software bulletins, software updates, and software releases.

To view a Patch Management resource
1. In the Altiris Console, click the Resources tab.
3. In the content pane, right-click on a resource and select Resource Manager.
4. The Managing Resource window appears. This view provides additional information on the selected resource. Example: if you selected an operating system resource, it provides general information on the version.
5. Click the Associations tab. This view provides additional information that associates other resource data to the selected resource.
6. In the drop-down menu, select Service Pack Applies to Software Release. The table now displays all the service packs available for resource.

Definitions of Software Updates and Software Bulletins

A Software Update or "patch", is any update or hotfix that is used to improve or fix a software product. A software bulletin is a bundle of software updates, released together.
Software Bulletins

This section tells you how to view software bulletins and use them to distribute software updates. For more information on software bulletins, see Manage Software Updates (page 26).

Quick Links
- Viewing Available Software Bulletins (page 45)
- Viewing Details on a Software Bulletin (page 45)
- Custom Severity Levels (page 46)
- Downloading Software Bulletins and Distributing Software Updates (page 46)

Viewing Available Software Bulletins

To view available software bulletins
1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Software Management > Patch Management > Manage Software Updates.

In the content pane, you can view all of the current software bulletins in the database. The default view is All Software Bulletins. You can modify the contents of the table to view the data in different ways.

To view software bulletins by software release
1. From the drop-down list, select Software Bulletins by Software Component for Windows.
2. Select the Status, Bulletin Severity, Software Component, and Software Bulletin information to filter the results.
3. Click the Update button.

Viewing Details on a Software Bulletin

Each software bulletin has a Resource Manager view that provides summary information on the software bulletin and lists all of the available executables for the software bulletin.

1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Software Management > Patch Management > Manage Software Updates.
3. In the Software Bulletin list, double-click on a software bulletin to open its Resource Manager.
4. The Summary tab provides summary information on the selected software bulletin. Scroll down to view information on the affected software release or to access the Microsoft TechNet bulletin.
5. Click the Associations tab to view information on all the software update executables available for this software bulletin.
6. From the Associations tab, you can right-click on the Software Bulletin To Software Update association type and select Resource Manager to view software update drill-down information.

From this Resource Manager page, you can view specific information on the software update.

**Custom Severity Levels**

A Microsoft update deemed critical may not necessarily be critical in your environment, so you can create your own custom severity levels and assign them to bulletins. You create custom severity levels in the Patch Management Core Solution page, and assign them to bulletins in the Software Bulletin List.

**Note**
Before you can assign custom severity levels you must first create them in the Patch Management Core Solution page.

**To create a custom severity level**

1. In the Altiris Console, click the Configuration tab.
2. In the left pane, select Configuration > Solutions Settings > Software Management > Patch Management > Server Settings > Global Settings > Patch Management Core Solution.
3. In the content pane, click the Custom Severity tab.
4. In the Severity Level field, type the name you want to give the custom severity level. Example: Install right away!
5. Click Add.
6. Click Move Up or Move Down to position custom severity levels in the list.
7. Click Apply.

**To assign a custom severity level to a bulletin**

1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Software Management > Patch Management > Manage Software Updates.
3. In the Software Bulletin list, right-click on a software bulletin, and select Custom Severity.
4. Select a severity level.
5. Click Update to view the new Custom Severity column.

**Note**
You cannot alter the Microsoft specified severity levels, only custom severity levels.

**Downloading Software Bulletins and Distributing Software Updates**

After Patch Management Solution is installed, the Microsoft Patch Management Import files are automatically downloaded from an Altiris Web site and extracted to the install...
Altiris\Patch Management\Import folder. After the Microsoft Patch Management Import files have been extracted, its information gets placed in the Notification Database. This process can take several minutes. When this process is completed, you can view the imported information on the **Manage Software Updates** page (see [Manage Software Updates](#) on page 26).

From the **Manage Software Updates** page, you can view software bulletins (see [Viewing Available Software Bulletins](#) on page 45), stage them for download, and create Software Update tasks to distribute security patches to managed computers.

**To download software updates for one or more software bulletins**

1. In the Altiris Console, click the **Tasks** tab.
2. In the left pane, select **Tasks > Software Management > Patch Management > Manage Software Updates**.
3. In the content pane, in the **Show** drop-down menu, select **All Software Bulletins**.
4. Click the **Update** button.
5. Select one or more software bulletins from the bulletin list.
6. Click the **Stage Bulletin** toolbar item to stage all selected bulletins.

**Note**

Alternatively, you can right-click on a software bulletin, and select **Stage**.

**Note**

After software bulletins have been staged, "True" is displayed in the **Staged** column. Click the **Update** button to see a refresh of this list.

Patch Management Solution now launches the Download Software Update Packages Background Action to download software updates for each staged software bulletin. You can view the status of the download by clicking the **History** tab on the **Download Software Update Packages** page. You can also view the status through the Notification Server Log Files. For more information, see the *Altiris Notification Server Reference*.

After the software updates are downloaded, Patch Management Solution automatically creates the package shares on the Notification Server, and the software bulletin packages get deployed.

In the **All Software Bulletins** view, you can view the staged bulletins and the number of executables available for distribution.

To distribute a software update using a Software Update task, see [Software Update Task Wizard](#) (page 37).

**See Also**

- [Staging Software Bulletins](#) (page 19)
- [Creating Software Update Tasks](#) (page 20)

**Software Updates**

Patch Management Solution includes a Software Update Task Wizard that simplifies the management of distribution policies. Instead of creating a task for each individual
software update, you create a single policy for each software bulletin. Example: If you have 3 software bulletins with 7 software updates each, you only have to manage 3 distribution tasks instead of 21 distribution tasks.

Patch Management Solution also provides automated evaluation of patch dependencies to substantially reduce the labor requirements of patch management. This is accomplished by using two computer collections: one to target the general distribution and one to target the correct executable to the right computer. For more information on these collections, see Software Update Task (page 24).

This section discusses software updates, including how to use the Software Update Task Wizard and modifying Software Update tasks.

**Quick Links**
- Software Update Task Wizard (page 37)
- Modifying Software Update Tasks (page 48)

**Modifying Software Update Tasks**

To modify Software Update tasks
1. In the Altiris Console, click the Tasks tab.
2. In the left pane, select Tasks > Software Management > Patch Management > Software Update Task > Microsoft.
3. Select the task in the left pane and modify the properties in the content pane.
4. Click Apply to save changes.

**About Software Updates**

- A computer falls into the Targeted collection if it meets the prerequisites of a software update. These prerequisites are matched against high-level data which is sent back to the server. Examples: Internet Explorer version and OS version.
- A software update is applicable if its Prerequisites are met and if any further tests in the 'IsApplicable' inventory rule are met. These 'IsApplicable' rules are further requirements in addition to the prerequisites that will be determined once the update is sent out to a computer. If the further requirements are not met, the update will appear as Not Currently Applicable in the Software Update Agent interface.
- Updates are installed according to Microsoft specifications. Example: if Microsoft requires a restart, then the computer is restarted after the update is installed. Restarts on managed computers are minimized because the updates that do not require a restart are installed before the software updates that do require a restart.
- Patch Management Solution uses targeted deployments. Updates will not be deployed to a computer unless that computer specifically needs that software update.
- A computer must meet Microsoft prerequisites before any software updates can be sent to that computer. A particular software update will only be sent to a computer that meets the Microsoft prerequisites and also is applicable to that computer (Example: The computer has the appropriate hardware device, computer model, or operating system installed).
- You can add frequently used items to the **Shortcuts** tab. For more information, see the *Altiris Notification Server Help*.

### Software Update Supersedence

When a software update has been superseded and rendered obsolete by another update or updates, the install of the obsolete update will be cancelled by the later update. This will only happen if both updates have been sent to a managed computer and are queued in the software update agent.

### Software Update Agent

Patch Management Solution includes a Software Update Agent that must be deployed on managed computers on which you want to use Patch Management Solution features. The Software Update Agent manages all of the Patch Management Solution functionality on the managed computer. It inventories programs that are installed on the managed computer and sends this data to the Notification Server. It then uses this information to track applications that are installed on the managed computer and matches them with packages that are defined by the Notification Server. You can use this information in deciding which applications to send to which managed computers. Finally, it installs the software updates that you push out to the managed computer.

**Note**

When the Software Update Agent is installed, the Inventory Rule Agent and the Package Agent are automatically installed also.

**Note**

If you have a large number of computers to which you want to deploy the Software Update Agent, consider deploying the agent during off-peak hours to minimize network traffic at peak times.

**To deploy the Software Update Agent**

**Note**

Before deploying the Software Update Agent on a computer, the Altiris Agent must already be installed on that computer.

1. In the Altiris Console, click the **Configuration** tab.
2. In the left pane, select **Configuration > Solutions Settings > Software Management > Patch Management > Windows > Software Update Agent Rollout**.
3. Select the **Software Update Agent Install** policy.
4. In the content pane, make any wanted changes. We recommend accepting the defaults.
   
   By default, the Software Update Agent is deployed as soon as possible after the policy is enabled to computers in the **All Windows Computers without Software Update Agent Installed** collection.
5. Select the **Enable** check box.
6. Click **Apply**.
By default, a new **Software Updates** tab appears in the Altiris Agent console which shows software updates for that computer.

**Note**
This can take some time depending on how many managed computers you have and on your Altiris Agent settings.

### See Also
- Installing the Software Update Agent (page 16)

### Quick Links
- Software Update Agent User Interface (page 50)
- Upgrading the Software Update Agent (page 53)
- Uninstalling the Software Update Agent (page 53)

### Software Update Agent User Interface

When the Software Update Agent is installed on a managed computer, a **Software Updates** tab appears on the Altiris Agent console. From this tab, computer users can view the software updates that have been downloaded to their computer. They can view all received software updates, both those that have been scheduled to be installed and those that have been installed.

The software update information supplied in the tab is detailed in the following table.

<table>
<thead>
<tr>
<th>Column</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Status</td>
<td>Displays the installation status of the software update. The following are the possible status icons or text found in this field.</td>
</tr>
</tbody>
</table>

**Note**
The Applicable and IsInstalled rules mentioned below are inventory rules found in the PMImport.cab files. Not all updates have an IsInstalled rule. There is a lesser degree of IsInstalled rules for older and non-English updates.
<table>
<thead>
<tr>
<th>Status</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>ICONS</strong></td>
</tr>
<tr>
<td></td>
<td>- Red error icon - The maximum reapplication retries for a failed software update has been exceeded.</td>
</tr>
<tr>
<td></td>
<td>- Yellow warning icon - The software update has failed to be applied at least once, but has not exceeded the maximum reapplication retries. It will be reapplied.</td>
</tr>
<tr>
<td></td>
<td>- Green tick icon - The Applicable rule is TRUE and the IsInstalled rule indicates that the update is already installed. It may not have actually been installed by the agent; if this is the case, then the Last Applied date will be empty.</td>
</tr>
<tr>
<td></td>
<td>- Clock icon - The Applicable rule is true and the IsInstalled rule is FALSE. The software update will be scheduled for installation.</td>
</tr>
<tr>
<td></td>
<td>- Icon info - The Applicable rule has evaluated false. This means the software update does not apply to this computer. It is also possible to configure the agent not to display software updates which do not apply by clearing the <strong>Not Currently Applicable</strong> checkbox in the <strong>Show Updates</strong> pane. See About Software Updates (page 48).</td>
</tr>
<tr>
<td></td>
<td>- User icon - The update has been installed by a user.</td>
</tr>
<tr>
<td></td>
<td>- Download icon - The update status is downloading, pending, invalid, retrying, or is required to download.</td>
</tr>
<tr>
<td></td>
<td>- Superseded - The update has been superseded by a later update and will not be installed. See Software Update Supersedence (page 49).</td>
</tr>
<tr>
<td></td>
<td><strong>TEXT</strong></td>
</tr>
<tr>
<td></td>
<td>- “Failed to Install” - The maximum reapplication retries for a failed software update has been exceeded.</td>
</tr>
<tr>
<td></td>
<td>- “Installation Failed - Rescheduled” - The software update has failed to be applied at least once but has not exceeded the maximum reapplication retries. It will be reapplied.</td>
</tr>
<tr>
<td></td>
<td>- “Installed” - The Applicable rule is TRUE and the IsInstalled rule indicates that it is already installed. If the Last Applied date is not empty, it means that the agent has installed the update.</td>
</tr>
<tr>
<td></td>
<td>- “Installation Scheduled” - The Applicable rule is true and the IsInstalled rule is FALSE. The software update will be scheduled for installation.</td>
</tr>
<tr>
<td></td>
<td>- “Not Applicable” - The Applicable rule has evaluated false. This means the software update does not apply to this computer.</td>
</tr>
<tr>
<td></td>
<td>- “Pending” - The Applicable and IsInstalled rules have not yet been evaluated.</td>
</tr>
</tbody>
</table>
The Software Updates tab also includes a Show Updates pane that lets you show or hide updates with the following status:

- **Downloading**
- **Errors - Retrying**
- **Installed by Software Update Agent**
- **Installed by User**
- **Installation Failed**
- **Not Currently Applicable**
- **Update Required**
- **Superseded** (see Software Update Supersedence on page 49)

Depending on the Software Update Agent configuration settings, the computer user can initiate software updates installation by clicking the **Start Software Update** button. For information, see Software Update Agent Configuration (page 33).

### Software Update Agent Command-Line Utility

A command-line utility for installing updates is placed in the directory C:\Program Files\Altiris\Altiris Agent\Agents\PatchMgmtAgent when the Software Update Agent is installed on a computer.
To run the utility, double-click on the file **AeXPatchUtil.exe**. Commands include:

<table>
<thead>
<tr>
<th>Command</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>/I</td>
<td>Run all inventory.</td>
</tr>
<tr>
<td>/Xa</td>
<td>Start Software Update cycle.</td>
</tr>
<tr>
<td>/reboot</td>
<td>Reboot only if the Software Update Agent requires a reboot.</td>
</tr>
<tr>
<td>/C</td>
<td>Update agent policies.</td>
</tr>
<tr>
<td>/?</td>
<td>Usage screen.</td>
</tr>
</tbody>
</table>

### Upgrading the Software Update Agent

The **Software Update Agent Upgrade** policy is used to upgrade the Software Update Agent. If the Software Agent Upgrade policy is enabled, Altiris Infrastructure automatically upgrades older versions of the Software Update Agent on managed computers when a newer agent is available from the Notification Server.

Newer versions of the Software Update Agent are bundled with Altiris Infrastructure. When you install a newer version of the Altiris Infrastructure with a newer agent, you will get the latest version of the Software Update Agent available.

### Uninstalling the Software Update Agent

You can uninstall the Software Update Agent if there is an extended period of time when you do not want to use the Altiris Infrastructure features on an managed computer and you want to eliminate any overhead caused by the agent.

**Note**

After you use the **Software Update Agent Uninstall** policy once to uninstall the agent from a managed computer, you cannot use the same policy to uninstall the agent from that computer using the **Run this task ‘As Soon As Possible’** option. To use the policy again, set a schedule.

### To uninstall the Software Update Agent

1. In the Altiris Console, click the **Configuration** tab.
2. In the left pane, select **Configuration > Solution Settings > Software Management > Patch Management > Windows > Software Update Agent Rollout > Software Update Agent Install**.
3. In the content pane, clear the **Enable** check box.
4. In the left pane, select **Configuration > Solution Settings > Software Management > Patch Management > Windows > Software Update Agent Uninstall > Software Update Agent Uninstall**.
5. In the content pane, ensure that the correct collection is selected in the **Applies to Collections** field.
6. Select whether or not you want to disable download via multicast.
7. Specify the scheduling options.
8. Select the **Enable** check box.
9. Click **Apply**.
10. Restart the managed computer after the Software Update Agent has been uninstalled.

The Software Update Agent will be removed from the managed computers as soon as possible after the policy is enabled. If at a later time you want to reinstall the Software Update Agent, make sure you disable this policy.

**Resource Manager**

Patch Management adds several useful items to the Resource Manager. These items are described in the following sections.

**Quick Links**

- [Computer Resource Manager Software Update Summary](#) (page 54)
- [Inventory Data Classes](#) (page 55)

**Computer Resource Manager Software Update Summary**

Patch Management provides a software update summary page on the Resource Manager. This lets you view software update information on a specific computer, such as how many software updates have run or failed.

**To view this summary information**

1. Click the Configuration tab.
2. In the left pane, select Configuration > Resource Settings > Resource Types > Asset Types > IT > Computer.
3. In the content pane, click the List Resources tab.
4. Find the computer you want in the list.
5. Right-click on the computer name and select Resource Manager.
6. Click the Summaries tab.
7. In the left pane, select Resource Manager > Software Update Summary.

The software update summary screen lists the following information:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reboot</td>
<td>The time of the Last reboot and the next Pending reboot, based on the agent’s reboot schedule.</td>
</tr>
</tbody>
</table>
Inventory Data Classes

Patch Management provides inventory data class information on the Resource Manager. This lets you see what software is installed on a computer without viewing a report.

To view inventory data class information
1. Click the Configuration tab.
2. In the left pane, select Configuration > Resource Settings > Resource Types > Asset Types > IT > Computer.
3. In the content pane, click the List Resources tab.
4. Find the computer you want in the list.
5. Right-click on the computer name and select Resource Manager.
6. Click the Inventory tab.
7. In the left pane, select Data Classes > Software Management > Patch Management.

You can double-click on some items to view drill-down information.

Reporting on Patch Management Data in a Hierarchy

If you have multiple Notification Servers reporting to one central Notification Server, you can view update compliance reports for your entire organization from a single console.

The Software Update Agent sends update data from the computer to a Notification Server. This update data is inventory data. You can configure any Notification Server to forward inventory data to a parent Notification Server.

Patch Management Solution needs to be installed on the parent Notification Server so you can run reports provided by Patch Management Solution. When you run Patch Management Solution-specific reports on the parent Notification Server, you can view your entire organization’s update data.
Note
From the parent Notification Server, you can run all reports based upon inventory classes.

Troubleshooting
This section lists a common troubleshooting problem and gives probable resolutions.

Quick Link
- **Software Updates not Downloading** (page 56)
- **Enabling FTP downloads through a Proxy** (page 56)
- **Reboot on a Schedule not Working Properly** (page 56)
- **Agent Reboot Warning and Snooze Option** (page 57)
- **Windows Update Error Codes** (page 57)

Software Updates not Downloading
Sometimes, during the software update download process, the software updates stop downloading. This can happen if the PMImport.cab files get re-imported while the software updates are downloading.

If this happens, you need to do one of the following so that the software updates can finish downloading:
- Stage another software bulletin. This will add it to the queue and reattempt to download software update files again. (This works for disabling an existing one and re-enabling.)
- Navigate to the **Download Software Update Packages** Background Task, right-click and select **Start Download Task**.

The **Download Software Update Packages** Background Task is found on the **Configuration** tab by selecting **Configuration > Solutions Settings > Software Management > Patch Management > Server Settings > Global Settings**.

Enabling FTP downloads through a Proxy
Patch Management Solution needs to distinguish between using a HTTP Proxy and an FTP Proxy for its FTP needs. To do this, it utilizes a new core setting called "CustomFTPProxyEnabled".

If this setting is not enabled or the setting does not exist, the solution will attempt to use the HTTP Proxy to make the FTP connection.

If the setting does exist and is enabled, then the solution will attempt to connect via a FTP proxy, using the server specified in the HTTP proxy settings, on port 21 only.

Reboot on a Schedule not Working Properly
**Problem:** You set up to reboot the managed computer on a schedule (on the Patch Management Agent Settings page), but the computer does not reboot at the scheduled time.
**Solution:** You do not need to do anything. The computer will reboot as soon as it can after the scheduled time. The agent may take a few minutes to process the scheduled event because the agent can only perform one action at a time.

**Agent Reboot Warning and Snooze Option**

The agent reboot warning and snooze option do not appear to a user who is remotely connected through terminal service. This is working as designed. Because these notifications require responses from the user, they will only be sent to the user of the primary session.

**Windows Update Error Codes**

After a successful Windows update, one of the error codes described in the following table are returned.

All other error codes that are returned by a Windows update are failure error codes. For information on these error codes, search for "List of error codes and error messages for Windows Installer processes" on the Microsoft Web site.

<table>
<thead>
<tr>
<th>Value</th>
<th>Error Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>ERROR_SUCCESS</td>
<td>Action completed successfully.</td>
</tr>
<tr>
<td>1604</td>
<td>ERROR_INSTALL_SUSPEND</td>
<td>Installation suspended, incomplete.</td>
</tr>
<tr>
<td>1641</td>
<td>ERROR_SUCCESS_REBOOT_INITIATED</td>
<td>The installation has started a reboot.</td>
</tr>
<tr>
<td>3010</td>
<td>ERROR_SUCCESS_REBOOT_REQUIRED</td>
<td>A reboot is required to complete the install.</td>
</tr>
<tr>
<td>3011</td>
<td>ERROR_SUCCESS_RESTART_REQUIRED</td>
<td>A restart is required to complete the install.</td>
</tr>
</tbody>
</table>
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