HP Client Catalog for Microsoft System Center Products

Technical White Paper



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Abstract

This document describes the HP software update catalog for Microsoft System Center products. It also provides an overview of the custom update process, explains the benefits of using the HP Client Updates Catalog for System Center Products, and gives some insight into how the catalog leverages Windows Management Instrumentation (WMI) and the HP Client Management Interface (HP CMI). Finally, this paper describes the steps that should be followed to import the catalog into the Microsoft System Center family of products and deploy HP software updates to HP client systems.

NOTE

Throughout this document, the terms SMS, Configuration Manager, SCE, System Center Essentials, Microsoft system management products or Microsoft System Center family of products are used interchangeably. They all refer to the Microsoft System Center management products supported by the HP software update catalog in Supported Microsoft System Management Products.

Introduction

Update management—the ability to identify and selectively deploy updates in a timely and automated manner—is an important function of maintaining any set of computers, from a single PC to an enterprise datacenter. Update management can help maintain security and productivity for the managed organization. HP now offers a mechanism to streamline updates for HP systems within a Microsoft System Center management infrastructure. The HP Client Updates Catalog for System Center Products contains software driver and patch information for desktops, notebooks, and workstations. Using Microsoft System Center products such as System Management Server (SMS), System Center Configuration Manager 2007 (SCCM), or System Center Essentials (SCE), organizations can integrate and deploy HP software updates quickly and easily. The HP Client Updates Catalog for System Center Products provides detailed platform information for software updates in order to target appropriate client systems within the managed enterprise.

Benefits

- The HP Client Updates Catalog for System Center Products provides detailed platform information
 for software updates, with applicability and installed rules to determine whether or not an update is
 appropriate for target clients within the managed enterprise and, if so, whether or not it is already
 installed. Administrators do not have to define software updates manually from HP as custom
 updates in Microsoft System Center products.
- If the management console can connect to <u>ftp.hp.com</u>, corporate IT can download HP software updates from the ftp site directly into their System Center administration product.

HP Client Updates Catalog for System Center Products Overview

HP Client Updates Catalog for System Center Products:

- Contains information about HP software updates (also known as SoftPaqs), such as title, description, supported languages, download URL, applicability rules, installed rules, etc. (does not contain the binary code of a software update)
- Includes only software with a self-contained executable setup program that can be silently installed (does not include updates that cannot be silently installed or updates that do not run in Windows)
- Includes only update information for commercial desktops, notebooks, and workstation platforms (does not contain update information for servers)
- Is digitally signed by HP
- Is available at ftp://ftp.hp.com/pub/softlib/software/sms_catalog/HpCatalogForSms.latest.cab

Supported Microsoft System Management Products

- Microsoft System Management Server 2003 R2
- Microsoft System Center Essentials 2007
- Microsoft System Center Configuration Manager 2007

HP Software Update Applicability Rules

Each HP software update included in the catalog has three sets of rules:

- Prerequisite rules: high-level rules for the client scan tool to determine if the software update is applicable to a client
- Applicability rules: low-level rules for the scan tool to determine if the software update is applicable
 to a client
- Installed rules: rules for the scan tool to determine if the software update is already installed on a client

Prerequisites Rules

- Must be an HP computer*
- Supported operating systems of the software update

Applicability Rules

- Supported languages of the software update
- Supported platforms*
- Supported devices* (if the software update is device-specific)

Installed Rules

- For a system BIOS update, BIOS release date* >= release date of the software update
- In case of a non-system BIOS update, the significant file of the software update exists on the machine.

If the client scan tool finds that all prerequisite rules and applicability rules evaluate to **true** and installed rules evaluate to **false** (not installed yet), the software update is **applicable** to the client and will be installed during the next scheduled update to the client.

NOTE

* These checks are done by calling WMI and the extended HP Client Management Interface (HP CMI) detailed in the next section.

How HP software updates leverage Windows Management Instrumentation (WMI) and HP Client Management Interface (HP CMI)

HP software update definitions in the catalog provide applicability rules to a client scan tool of SMS products. Many of those rules query WMI to determine if a software update is applicable to a target client system. The table below shows the namespace and the query of the WMI rules.

Rule	WMI Namespace	Query
HP machine	Root\CIMV2	select * from Win32_ComputerSystem where Manufacturer='Hewlett-Packard'
BIOS release date	Root\CIMV2	select * from Win32_BIOS where ReleaseDate<=' <software bios="" release<br="" update="">date>'</software>
Supported platforms	Root\CIMV2	select * from Win32_BaseBoard where Product LIKE ' <system id="">'</system>
Supported devices	Root\CIMV2	select * from Win32_PnpEntity where DeviceID LIKE ' <device id="">'</device>
	Root\HP\InstrumentedBIOS	select * from HP_PNPDevice where DeviceID LIKE ' <device id="">'</device>

NOTE

Root\HP\InstrumentedBIOS is the namespace provided by HP Client Management Interface (HP CMI). This interface passes hardware and system BIOS information to WMI for manageability applications.

How to deploy HP updates using HP System Software Manager (SSM) with Microsoft System Center Products

Administrators need to selectively distribute software updates to clients. One way to simplify and automate the software update process is to use HP System Software Manager (SSM) combined with a Microsoft System Center product.

HP SSM is a free utility that helps streamline the mass deployment of system software updates to client PCs. SSM reduces the complexity of system software management by delivering the following capabilities:

- Deploying system software updates (for drivers and BIOS, for example) from a centralized file store to multiple client PCs—simultaneously and automatically
- Deploying customer-created update packages

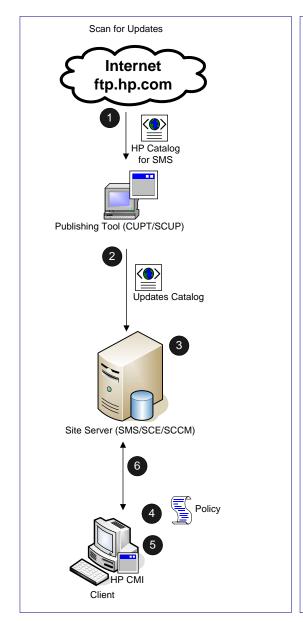
- Enforcing BIOS configurations and passwords
- Logging the changes made to each computer

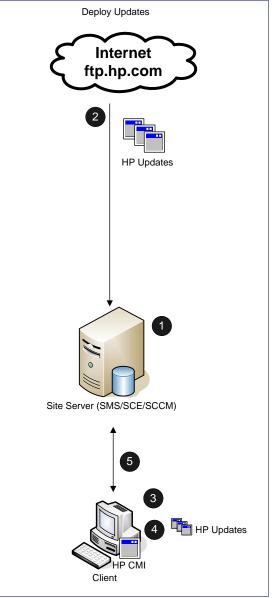
How to Combine Microsoft System Center and HP SSM for the Greatest Benefit

- Download HP SSM from http://www.hp.com/go/SSM.
- Configure a network file share as the file store for SSM.
- Deploy SSM to clients and configure SSM to run on clients with the configured file store on a scheduled basis using SMS.
- Download HP updates from the HP ftp site to the SSM file store.
- Let SSM run on the clients and automatically figure out what updates the client needs and install the updates needed.
- Import the HP Client Updates Catalog for System Center Products into the appropriate System Center product.
- View the compliancy in the System Center product after the custom update scan process and the
 inventory cycle run on clients. Since you let SSM install HP updates, you do not need to distribute
 the same updates using the System Center product and should not do so. You take advantage of the
 SMS custom update process only to scan for compliancy here.

Overview of the Third-Party Update Process in Microsoft System Management Products

The following figure illustrates the two major phases of third-party update deployment in Microsoft system management products.





- Administrator downloads and imports the HP client catalog into the publishing tool.
- 2. Administrator publishes flagged updates to the SMS site server. SCE does not have this step, since the publishing tool is built-in.
- 3. Clients get policies to scan for updates.
- Clients download and scan for update compliance. The scan engine may query WMI/HP CMI for applicability.
- 5. Clients send the compliance information back to the site database.

- Administrator selects/approves HP update(s) for distribution.
- 2. The update packages are downloaded to the distribution point.
- 3. Clients get deployment policies.
- 4. The update packages are downloaded and installed.
- Clients are re-scanned for compliance and the information is sent back to site database.

The specific details on the HP Client Catalog and each supported Microsoft system management product are listed in the next sections for clarity. You can just go to the appropriate section below.

System Center Configuration Manager 2007 and the HP Client Catalog

Overview of SCCM 2007 and the HP Client Catalog

SCCM 2007 utilizes Windows Server Update Services (WSUS) and System Center Update Publisher (SCUP) for the software update process. SCUP allows an SCCM administrator to import and select custom software updates to publish to WSUS. SCCM synchronizes with WSUS to get the software update metadata and informs managed client systems about the updates. Client systems then scans and reports the update compliance status to the site server. SCCM administrators review the update compliance and create packages to deploy necessary updates.

The SCCM custom update process includes three phases:

- 1. Importing and publishing third-party updates
- 2. Scanning clients for update compliance
- 3. Deploying updates

Importing and Publishing Third-Party Updates

HP customers can configure the import list in SCUP to reference the link to the HP Client Updates Catalog for System Center Products on the HP ftp site and import it into SCUP. The catalog contains the metadata of available updates. The administrator then selects updates to publish to WSUS. SCCM synchronizes with WSUS on schedule or on demand to insert the software update metadata into the SCCM Software Update Point server role. When the synchronization is completed, a site-wide machine policy is created to allow managed systems to retrieve and initiate a scan for software update compliance.

Scanning Clients for Update Compliance

When a managed system receives the machine policy, a compliance scan is scheduled. Windows Update Agent (WUA) connects to the WSUS server, retrieves the list of updates and scans the managed system against applicability and installed rules of each update. HP updates have rules to check WMI and HP Client Management Interface (HP CMI) for applicability. The SCCM Software Update Client Agent sends compliance information back to the site server. Based on the compliance status, an administrator can see which updates are needed by managed systems and can then decide which of the updates to distribute.

Deploying Updates

Once the administrator determines which updates need to be distributed, the administrator selects software updates and distributes them to client systems by creating deployments and deployment packages. When clients of the targeted collections receive a new deployment from the management point, clients download software updates from a distribution point that has a deployment package containing the necessary software update binaries. The binaries are then installed on clients and the compliance status ua reported to the site server.

SCCM Installation

SCCM, WSUS, and SCUP need to be installed and configured before importing the HP Client Updates Catalog for System Center Products into SCUP. If you have the full version of SCCM 2007, follow the installation instructions provided in the documentation to install and configure the software.

If you would like to try SCCM, you can download the evaluation version from http://www.microsoft.com/systemcenter/configmgr/default.mspx.

You also need to make sure the site server has been configured for software updates. The Administrator Checklist for Software Updates link should be helpful: http://technet.microsoft.com/en-us/library/bb694174.aspx.

How to Import the HP Client Catalog to SCCM 2007

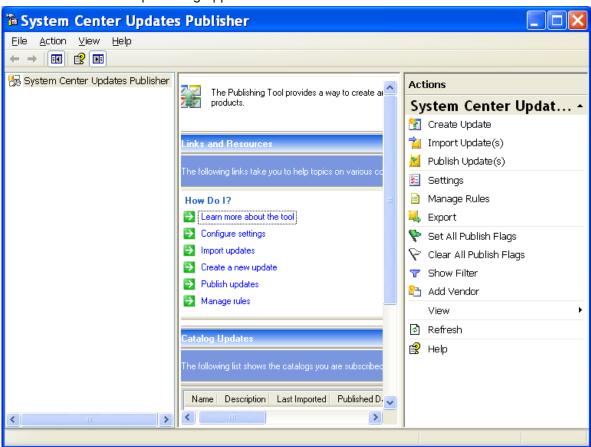
After installing and configuring the SCCM site server, WSUS, and SCUP, you can use the following steps to import the HP Client Catalog and publish HP software updates to SCCM.

NOTE

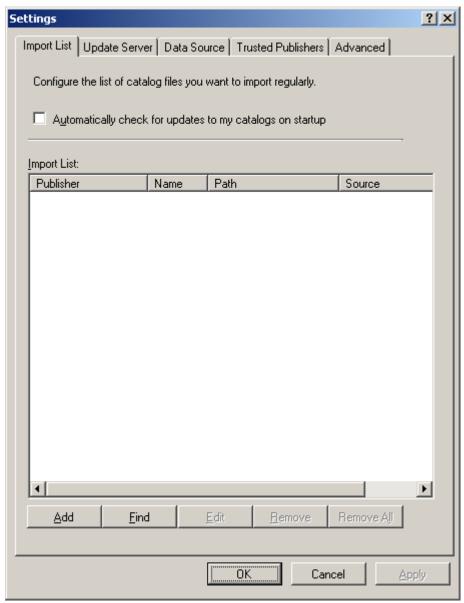
We recommend that you try these updates in a test environment before rolling them out to the production environment.

Import the HP Client Catalog into SCUP

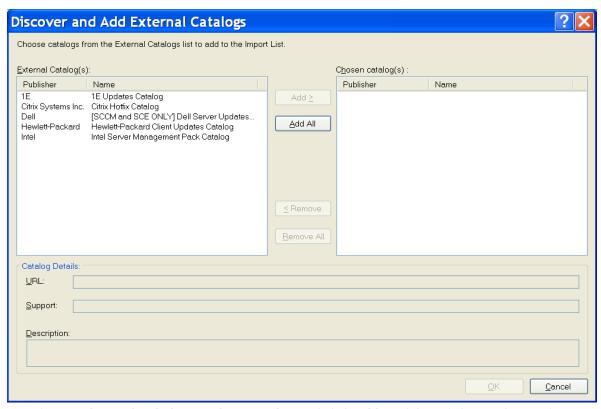
Click Start > All Programs > System Center Updates Publisher > System Center Updates Publisher
to launch the SCCM publishing application.



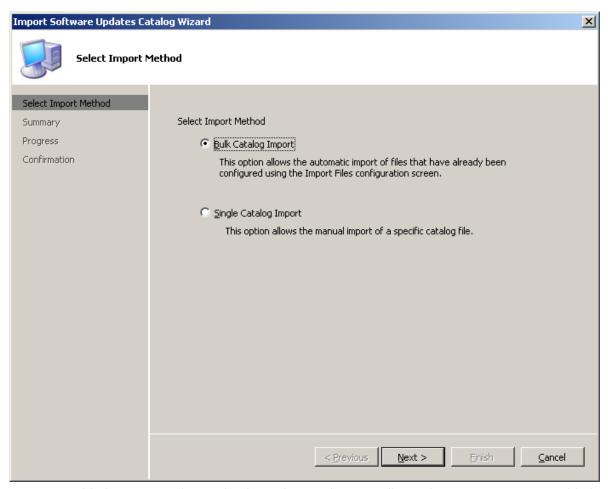
2. In the Actions pane, click Settings. The Settings dialog is displayed.



3. Click **Find** to use the Microsoft master updates catalog. The **Discover and Add External Catalogs** dialog displays.

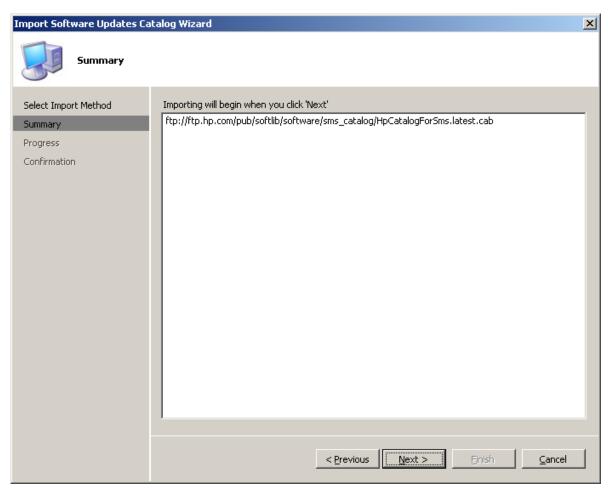


- Select Hewlett-Packard Client Updates Catalog and click Add, and then click OK. The Hewlett-Packard catalog now appears in the Settings dialog.
- 5. Click **OK** to close the **Settings** dialog. Since the catalog entry is added to the SCUP database, you just need to add the HP Client Catalog once; the next time you need to import the catalog, you can start from the next step.
- 6. Click **Import Updates** on the **Actions** pane of the SCUP console to bring up the **Import Software Updates Catalog Wizard**.



Since you added an entry to the catalog list in the initial steps, Bulk Catalog Import option is enabled and selected as the default.

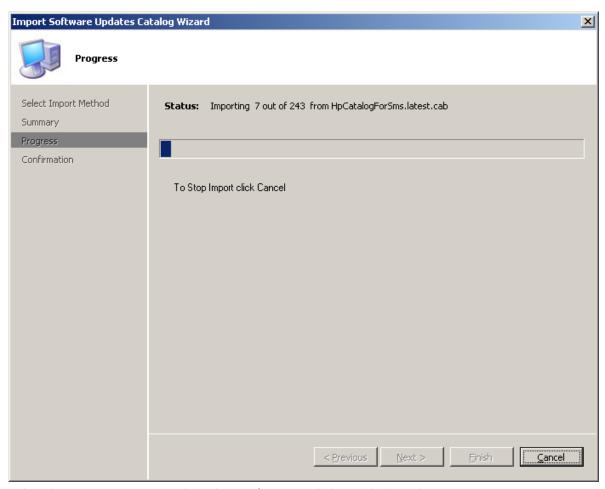
7. Click **Next**. The **Summary** dialog of the wizard displays the catalog(s) to be imported.



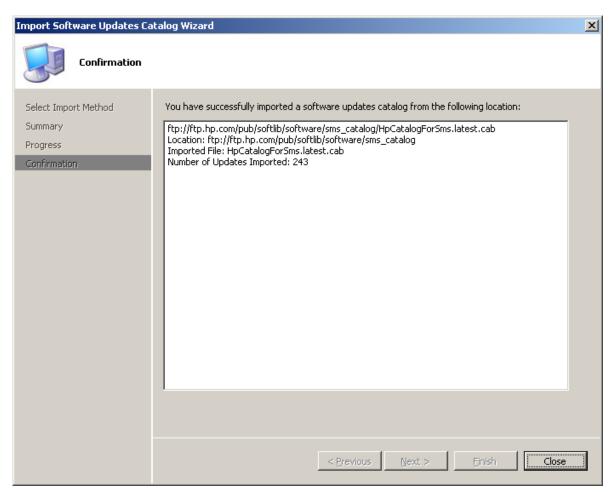
8. Click **Next**. SCUP downloads and validates the catalog and displays the Security Warning to confirm that you would like to accept this catalog signed and published by Hewlett-Packard.



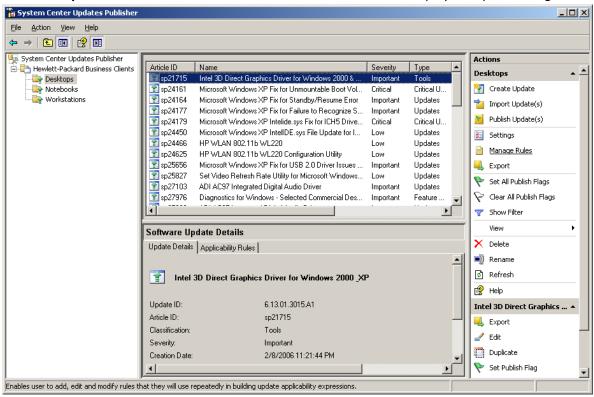
9. If you accept the catalog, click **Accept**. The **Progress** dialog shows the importing progress.



When the importation is complete, the **Confirmation** dialog is displayed.



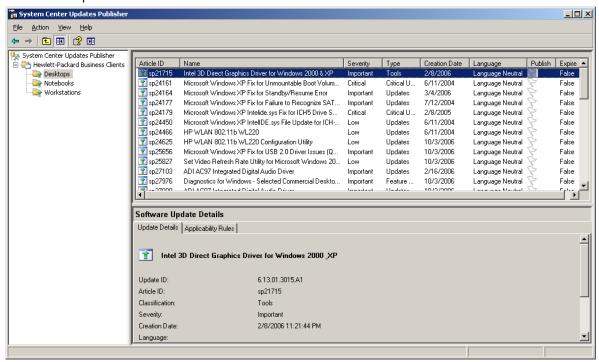
10. Click Close. The SCUP window displays the Hewlett-Packard Business Clients node under System Center Update Publisher. Click Hewlett-Packard Business Clients to display the update categories.



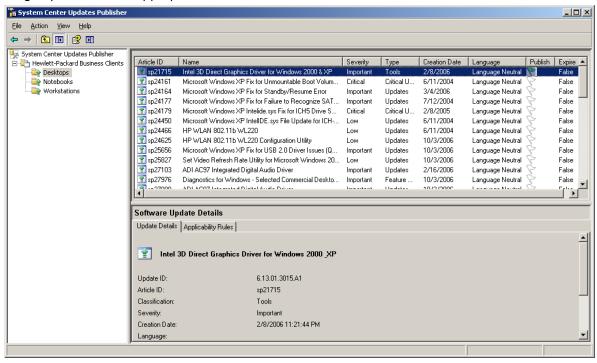
Publish HP updates to WSUS

You choose which updates to publish to WSUS.

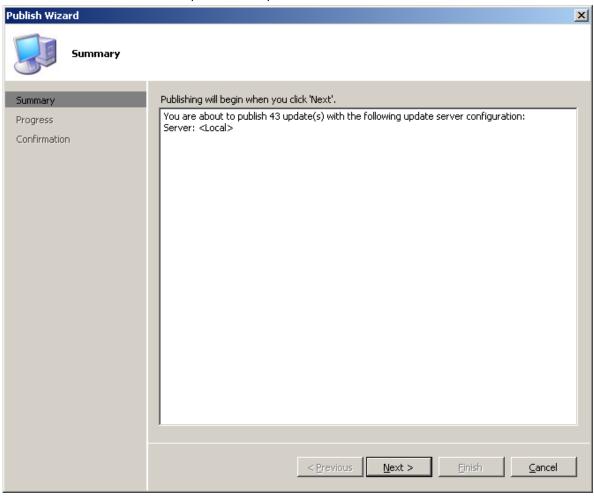
 In the tree pane of the SCUP console, select a category under the Hewlett-Packard Business Clients node to see all updates under that category. Notice that all updates are not initially flagged in the Publish column. The bottom section of the result pane displays the main details of the currently selected update.



- 2. You can double-click a software update in the list to see all the details about the update. Please DO NOT CHANGE the software package properties, or the update may not work properly.
- Right-click the desired software update in the result pane, then click Set Publish Flag. The flag should turn to green. Notice the Classification information of the updates. The updates will be grouped under the appropriate classification in the SCCM console.



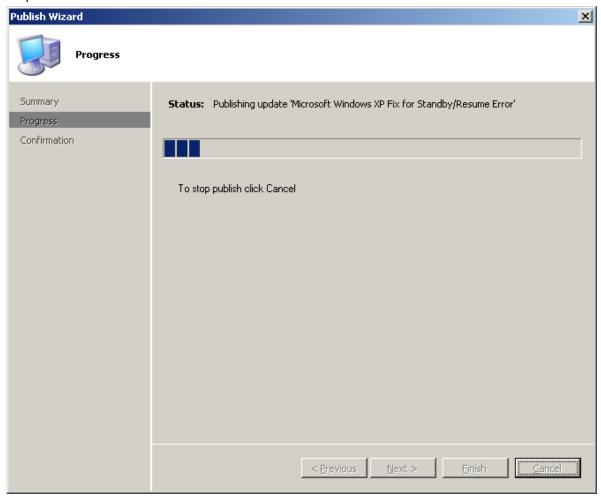
- 4. Repeat step 3 as many times as needed to flag the software updates to be published. You can also select entire folders: right-click, then select "Set All Publish Flags" to publish groups of updates.
- 5. Once you get the desired updates flagged for publishing, select and right-click the **Hewlett-Packard Business Clients** node on the tree pane and select **Publish Update(s)** to publish only the flagged software updates under the selected node to WSUS. The **Summary** dialog of the Publish Wizard shows the numbers updates to be published to WSUS.



 Click Next. You may be prompted to accept software update binaries signed by Hewlett-Packard Company. If you are publishing multiple HP updates, you may want to select Always accept content from "Hewlett-Packard Company".



Click Accept. The Progress dialog of the Publish Wizard displays the progress of the publishing process.



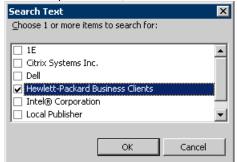
- 8. Once the publishing is done, click **Close** on the **Confirmation** dialog. Although the updates are published to WSUS, the data about the updates are not updated in the SCCM site server database until the next synchronization between SCCM and WSUS. You can either wait for the scheduled complete synchronization or force a delta synchronization between SCCM and WSUS in the next.
- Click Start. Point to All Programs > Microsoft System Center > Configuration Manager 2007, then click ConfigMgr Console to launch the Configuration Manager Console.
- 10.In the left treeview pane, expand **Site Database** > **Computer Management** > **Software Updates**, then right click **Update Repository**, then click **Run Synchronization**.
 - A **Run Update Synchronization** message box appears prompting to run the synchronization process on the site.
- 11.Click Yes.
 - The synchronization process is initiated. This process may take a few minutes to complete. There is no visual indication that the process has completed. You can view the synchronization log to determine successful completion using the steps below.
- 12.In the left treeview pane, expand **Site Database** > **System Status** > **Site Status**, expand the site server, and then click **Component Status**.
 - The list of SCCM server components and their current status appears in the results pane.
- 13.In the results pane, select and right click SMS_WSUS_SYNC_MANAGER, and then click Show Messages > All.

The SMS Status Message Viewer for the site server window appears displaying the status messages for the WSUS Sync Manager. Notice the most recent messages with IDs of 6701, 6705 and 6702. These messages indicate the sync process has started, is in progress, and completed, respectively.

- 14.On the File menu, click Exit.
 - The Configuration Manager Console window appears.
- 15. In the tree pane, expand the **Site Database**, expand **Computer Management**, expand **Software Updates**, select and right-click **Update Repository**, and click **Refresh**.
 - The classification nodes under Update Repository are updated to include **Hewlett-Packard Business Clients** node. Depending on the classification of the published updates, it is possible that not all classification nodes have the Hewlett-Packard Business Clients node.
- 16. You can also create a Search Folder which contains all Hewlett-Packard Updates for business clients, regardless of the update category. Expand **Update Repository** and right click **Search Folders**, then click **New Search Folder**. The **Search Folder Criteria** dialog appears.
- 17. Scroll down the top list and select **Vendor**.

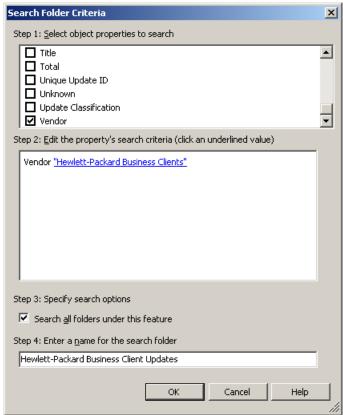


18. In the Step 2 section, click on **<items to find>**. The **Search Text** dialog appears.



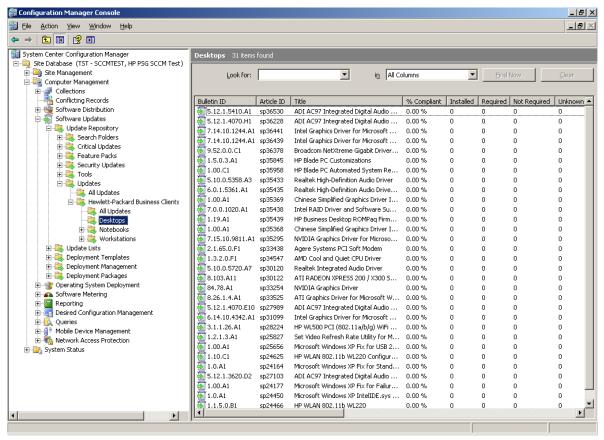
19. Select Hewlett-Packard Business Clients and click OK.

- 20. Select the checkbox next to Search all folders under this feature.
- 21. Enter a name for the search folder, such as **Hewlett-Packard Business Client Updates**, then click **OK** to save.



Your new search folder appears under the Search Folders node.

Click on the **Hewlett-Packard Business Client Updates** search folder, or expand a classification node, expand **Hewlett-Packard Business Clients**, and then expand a category, for example **Desktops**.



Notice that **Compliant**, **Installed**, **Required**, **Not Required** and **Unknown** initial values are zero. When the next software update scan occurs on client systems, clients report to the site database whether each update is applicable or installed for each client. Then the administrator can see the reported data and decide which updates need to be distributed.

- Installed displays the number of clients reporting that the update has been installed.
- Required displays the number of clients reporting that the update is applicable and not yet installed
 or the installation status has not reached the site server database.
- Not Required shows the number of clients not applicable for an update.
- **Unknown** displays the number of clients that have not had a successful scan for the software update compliance or the scan result has not been reported back to the site server.

To check the software update scan schedule, in the console tree of Configuration Manager Console, expand **Site Database**, expand **Site Management**, expand your <site code – site name>, expand **Site Settings**, click **Client Agents**, right-click **Software Updates Client Agent** in the result pane, then click **Properties**. Part of the **General** tab is the scan schedule. Once the client systems scan and report the compliance status, you can decide the update(s) to deploy to target collections using the steps in the next section.

How to Distribute an HP Software Update from SCCM 2007 to HP Client Systems

The following steps show a simple deployment of one update. SCCM provides the facility for you to plan your software update list and deployment template ahead of time to take a full advantage of SCCM. Please refer to the SCCM links in the section For more information at the end of this document to learn more about SCCM.

 Run the Configuration Manager Console. In the tree pane, expand Software Updates, expand Update Repository, expand an update classification like Updates, expand Hewlett-Packard Business Clients and then click All Updates. The information for all HP updates of the selected classification appears in the results pane.

2. Click to select a software update required by client(s) that you would like to distribute, and then in the Actions pane, click **Deploy Software Updates**.

General dialog box of Deploy Software Updates Wizard (DSUW) appears.

- 3. In the Name box, type the name of the update you want to distribute.
- 4. In the **Description** box, type a description for the update and then click **Next**.

The **DSUW Deployment Template** dialog box appears prompting to create a deployment template or to use an existing deployment template for distributing software updates. If you have existing deployment templates to use, select it and skip to step 12. If you do not have any deployment template, you will need to create one.

- 5. Click **Create a new deployment definition** and click **Next** to create a deployment template. **Collection** dialog appears prompting you for the targeted collection.
- Click Browse button. Browse Collection dialog appears. Select the collection you would like to target for this update and click OK on the Browse Collection dialog. You are back on Collection dialog.
- 7. Click Next.

Display/Time Settings dialog appears to let you set whether to display or suppress notifications on clients, to use UTC or client local time to evaluate deployment schedules, and to specify the duration of the deployment.

8. Choose the appropriate values for your deployment and click **Next**.

Restart Settings dialog shows. You can set to suppress a system restart for servers or workstations and allow a system restart outside of the maintenance windows.

9. Choose the appropriate values for your deployment and click **Next**.

Event Generation dialog shows. You have the options to disable Operation Manager alerts while software updates run and generate Operations Manager alert when a software update installation fails.

10. Choose the appropriate values for your deployment and click **Next**.

Download Settings dialog shows. You can tell SCCM what to do when clients of a slow or unreliable network boundary download update binaries and whether to allow clients to download updates from unprotected distribution points.

11. Choose the appropriate values for your deployment and click **Next**.

Create Template dialog shows. By default, you should save the selected deployment properties as a template to save time and to ensure consistency for future deployments. Enter a name and a description for the template.

12.Click Next.

DSUW Deployment Package dialog box appears prompting to name the new deployment package to add the updates to.

- 13. Click Create a new deployment package.
- 14. In the **Name** box, type a name for the package.
- 15. In the **Description** box, type a description.
- 16.In the **Package Source** box, type a share where client systems have access so they can download the update binaries.
- 17. Click **Enable binary differential replication** if you want clients that use BITS to continue downloading the files at the bit within a file if they are disconnected during file transfer, and then click **Next**.

The **DSUW Distribution Points** dialog box appears allowing you to designate the distribution points to distribute the package to.

18. Click Browse.

The **Add Distribution Points** dialog box appears displaying the site(s) that can be targeted. Under Distribution points, click to select the site(s) to serve as the distribution point(s) for this deployment, and then click **OK**.

The **DSUW Distribution Points** dialog box appears displaying the distribution points to distribute the package to.

19. Click Next.

The **DSUW Download Location** dialog box appears allowing you to configure whether or not to download updates automatically from the Internet or to retrieve them from a network location.

20. Click **Download software updates from the Internet** to pull the updates from the published location, and then click **Next**.

The **DSUW Language Selection** dialog box appears allowing you to configure which languages updates should be downloaded for. Notice that the default is the same as you configured in the properties of the software update point.

21. Click Next to accept the configured languages.

The **DSUW Set Deployment Schedule** dialog box appears allowing you to configure when the update deployment will be made available to clients, and when the deployment becomes mandatory. Notice that the default values are to become available now, and become mandatory in two weeks time. By default Wake on LAN is not enabled for the deployment, and updates can only be deployed within any configured maintenance windows for the targeted collection.

Click **Next** to accept the default values.

The **DSUW Summary** dialog box appears indicating you have successfully completed the wizard.

22. Click Next.

The **DSUW Progress** dialog box appears displaying the progress of the deployment. When complete, the **DSUW Completed** dialog box appears displaying the status on each phase of the deployment.

23. Verify that each phase of the process was successful, including the download of the update file, and then click **Close**.

The **Configuration Manager Console** appears displaying the list of security updates in the results pane.

24. In the tree pane, click **Deployment Management**.

The Deployment Management information appears in the results pane. Notice the deployment name and values listed from the DSUW.

25.In the tree pane, expand **Deployment Management**, expand the name of your deployment, and then click **Software Updates**.

The list of software updates in this deployment appears in the results pane.

Notice the list of updates includes the update you selected prior to starting the DSUW.

26.In the tree pane, expand **Deployment Packages**, expand your deployment package, and then click **Software Updates**.

The Software Updates information appears in the results pane. Notice that the list of updates available in this deployment package is those you selected prior to launching the DSUW, which only included the update you selected.

27.In the tree pane, expand **Deployment Packages**, expand your deployment package, and then click **Distribution Points**.

The distribution points assigned to this deployment package appears in the results pane. Notice that this matches the distribution points you selected in the DSUW.

Issues & Limitation

Publishing partner updates to WSUS requires download of binaries

The SCUP RTM version downloads binaries of all selected custom updates published to WSUS during the publishing process. This results in the following issues:

- 1. Publishing many updates at once can take a long time as the binaries are downloaded.
- 2. Clients cannot scan to determine update applicability until the updates exist in WSUS, which requires the download of the associated binaries.
- 3. SCUP keeps a list of trusted publishers and will prompt you for each certificate used to sign partner update binaries if the certificate is not yet cached in this list. Hence, the initial publishing of a large number of partner updates may take some time because you need to accept those prompts.
- 4. Downloading update binaries of updates that have not been scanned yet can increase the amount of network traffic to the WSUS server even if some of those updates result in 'Not Required' after scanning by clients.

This problem has been submitted to Microsoft by HP.

WMI

The HP Client Catalog leverages Windows Management Instrumentation (WMI) to check applicability rules. Hence, WMI service needs to be running on scanning systems.

System Center Essentials 2007 & the HP Client Catalog

Overview of SCE and the HP Client Catalog

SCE has the built-in publishing tool and leverages Windows Server Update Services (WSUS) to scan and update managed clients. The SCE third party update process includes three phases:

- 1. Importing and approving custom updates
- 2. Scanning clients for applicability
- Installing updates

Importing and Approving Third Party Updates

HP customers can import the HP Client Updates Catalog for System Center Products into SCE using the SCE interface since the publishing tool is built into SCE. The SCE administrator then approves the desired updates to install on groups of managed systems. SCE then synchronizes with WSUS about the approved updates.

Scanning Clients for Applicability

Windows Update Agent (WUA) on each managed system provides WSUS a list of products installed on the client system. WSUS responds with the list of updates applicable to that system. WUA evaluates the applicability rules of the updates.

Installing Updates

WUA then downloads the binaries of the applicable updates, installs them on the system and reports status back to WSUS.

SCE Installation

SCE needs to be installed and configured before importing the HP Client Updates Catalog for System Center Products. If you have the full version of SCE, follow the installation instructions provided in the documentation to install and configure the software.

If you would like to try SCE, you can download the evaluation version at http://www.microsoft.com/systemcenter/essentials/default.mspx.

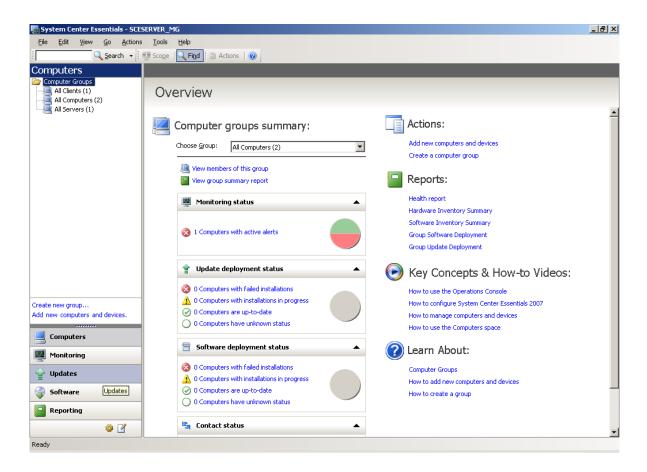
How to Import the HP Client Catalog to SCE

After installing and configuring SCE, you can use the following steps to import the HP Client Updates Catalog for System Center Products into SCE.

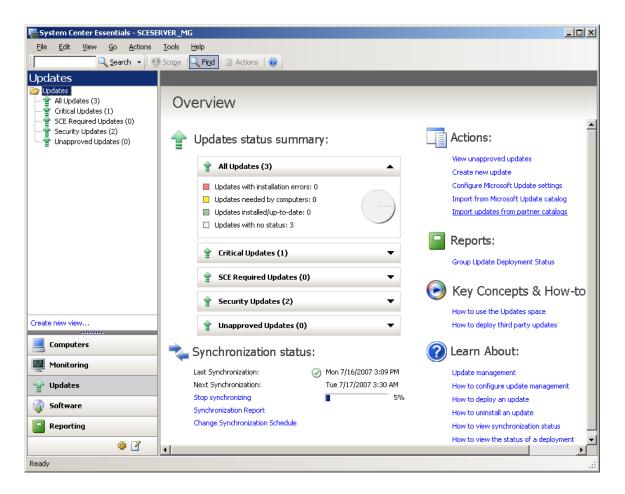
NOTE

We recommend that you try these updates in a test environment before rolling them out to the production environment.

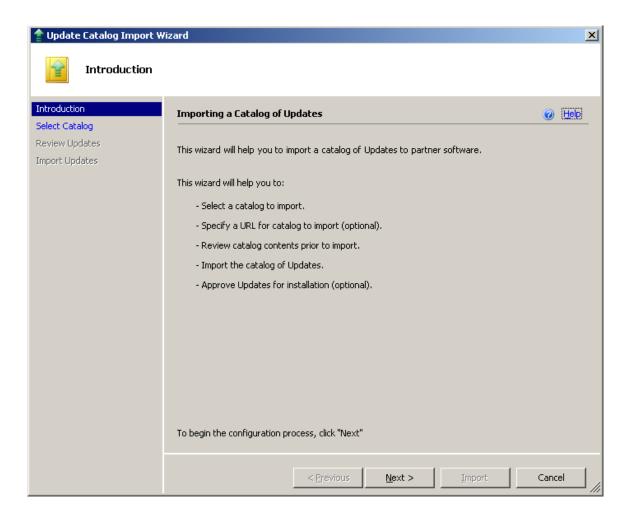
Click Start. Point to All Programs > System Center Essentials 2007, then click System Center
Essentials 2007 Console to launch the SCE console. SCE Console window appears. Notice the
MMC 3.0 based console displays a navigation pane on the left side and a detail pane on the
right side.



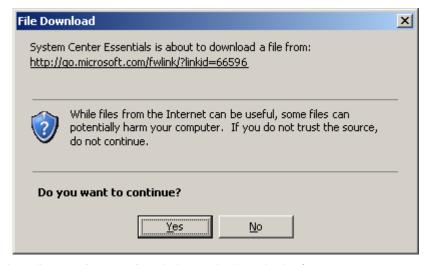
2. Click **Updates** on the bottom of the navigation pane. The detail pane shows an overview of updates and actions.



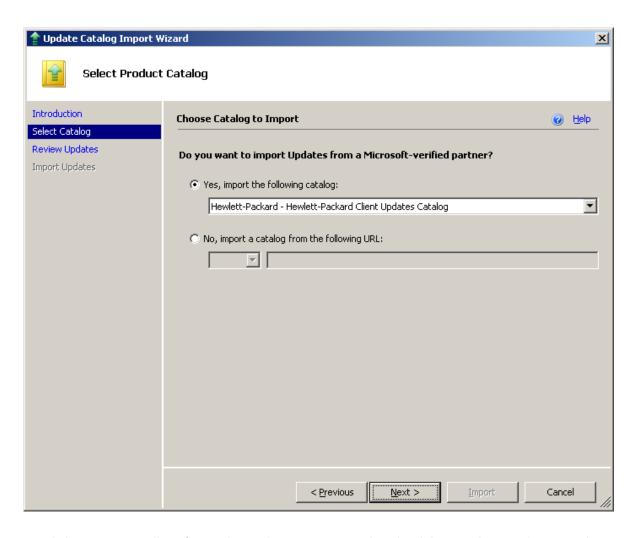
3. Under the Actions: section, click Import updates from partner catalogs to launch the Update Catalog Import Wizard.



 From the Introduction dialog, click Next. SCE will confirm with you that it is going to download the master catalog from Microsoft to display the list of Microsoft-verified partner catalogs.



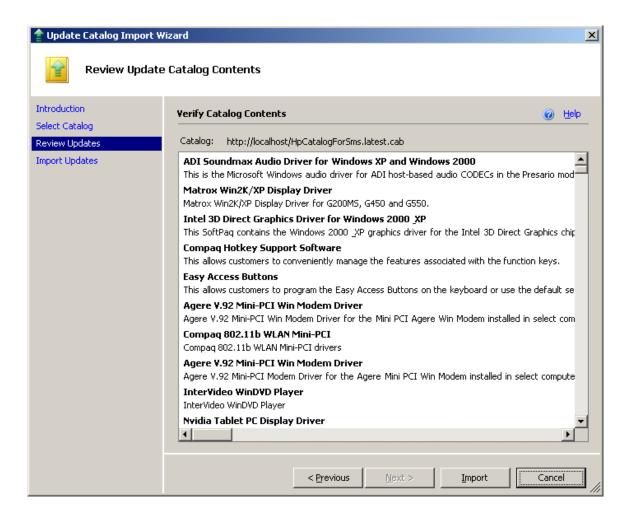
Click **Yes**. The **Select Product Catalog** dialog is displayed. The first option, **Yes, import the following catalog**, is selected by default. Verify that Hewlett-Packard – Hewlett Packard Client Updates Catalog is selected.



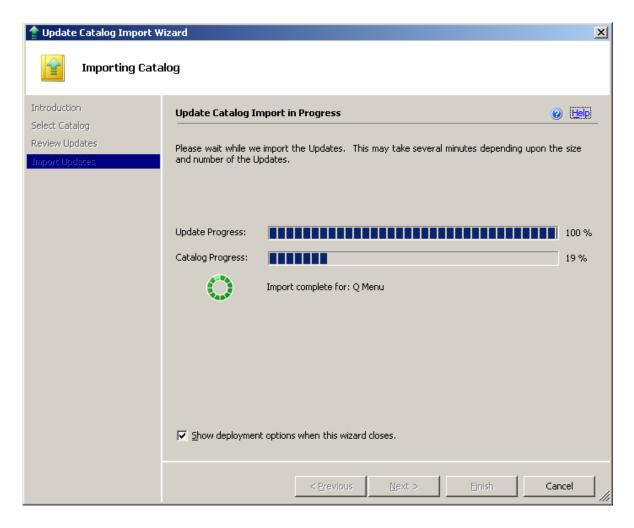
5. Click **Next**. SCE will confirm with you that it is going to download the HP Client Updates Catalog for System Center Products from the HP site.



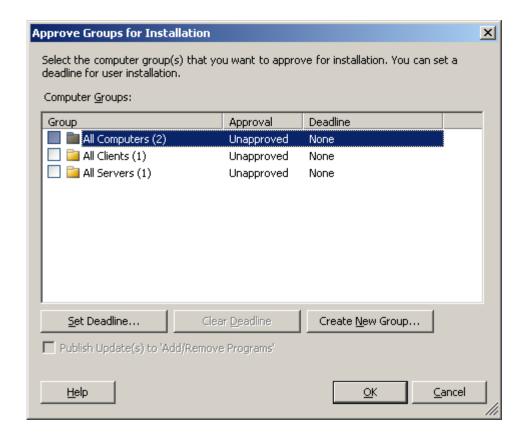
6. Click Yes. SCE downloads the catalog and loads it, listing the updates in the catalog.



7. Review and verify the updates, then click Import. By default, Show deployment options when this wizard closes checkbox is checked. Leave it checked to be prompted to select groups for installation at the end of the wizard.



8. Click Finish. If Show deployment options when this wizard closes was checked in the previous step, the Approve Groups for Installation dialog shows.

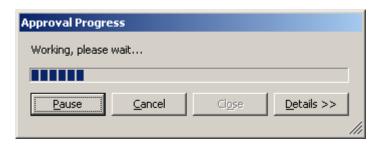


9. Select the computer group(s) to which you want to apply the imported updates.

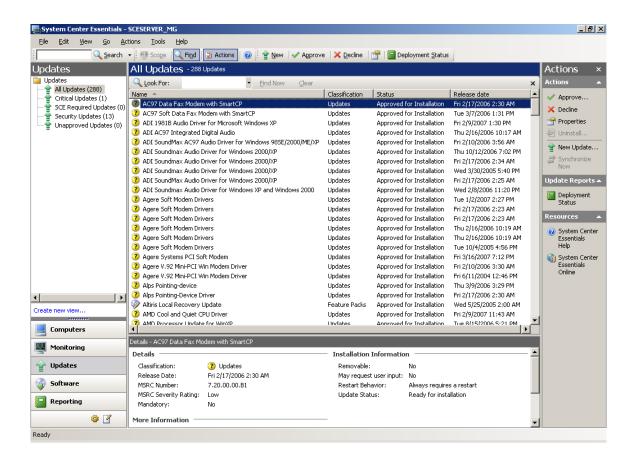
NOTE:

You have the option to create new computer group(s) from this dialog and you can also set the deadline by which clients must apply the updates.

Click **OK**. The **Approval Progress** dialog is displayed. Click **Details** to view additional information.



10. When the approval process finishes, click Close. The Updates view of the SCE Console shows the imported updates and their status. You can select updates to Decline or Approve. Declined updates are automatically removed from the SCE Updates view. WSUS and WUA then deploy the approved applicable updates to the selected managed systems and feedback installation status back to SCE.



Issues & Limitation

KB 937467

KB 937467 Update files are not getting downloaded to the Essentials 2007 server when importing updates from a partner catalog. If you installed SCE RTM version, be sure to get the Microsoft System Center Essentials 2007 Post Release Hotfix Rollup from

http://www.microsoft.com/downloads/details.aspx?familyid=c9f977e4-d26f-4038-88b7-b70b13aa8e3d&displaylang=en

HP Client Catalog Import Time

The SCE RTM version does not allow users to select desired updates from a partner catalog to import and downloads all the update binaries in a catalog during the import. Hence, the import time for a large catalog can be hours. This problem has been submitted to Microsoft by HP.

WM

The HP Client Catalog leverages Windows Management Instrumentation (WMI) to check applicability rules. Hence, WMI service needs to be running on scanning systems.

SMS 2003 R2 Custom Updates & the HP Client Catalog

Overview of SMS 2003 R2 Custom Updates & the HP Client Catalog

SMS 2003 R2 contains two components to allow custom software updates: Custom Updates Publishing Tool (CUPT) and Inventory Tool for Custom Updates (ITCU). The publishing tool can be installed on a workstation in an office or on an SMS site server. CUPT allows SMS administrators to design and select custom updates to publish to SMS. The inventory tool needs to be installed on an SMS site server. ITCU adds custom updates collections, a new package with the client scan program and scheduled jobs for clients to scan for custom updates to the SMS site server. The inventory tool needs to be installed on an SMS site server.

ITCU consists of two components:

- An Integrated Scanner to evaluate target clients for software update compliance.
- A Publishing Tool that lets HP and others create software update catalogs that can be imported into SMS. SMS use these catalogs to determine whether available software updates are applicable to target client hardware, and automatically performs scheduled updates as necessary.

The SMS custom software update process includes three phases:

- Enabling custom updates
- 2. Scanning clients for update applicability
- 3. Deploying updates

Enabling Custom Updates

HP customers can download the HP Client Updates Catalog for System Center Products from the HP ftp site and import it into CUPT. The HP Client Catalog defines all of the available updates. The administrator then selects and publishes the catalog to the SMS site server. SMS sends the updates catalog and the scan program to the appropriate distribution points.

Scanning for Custom Updates

Once the custom updates are enabled, they are targeted to specific client collections. Clients within these collections retrieve the policy/advertisement from the management point in their scheduled policy update cycle. Clients then download the updates catalog and the scan program from the distribution point. The scan program executes and checks the machine against applicability and installed rules in the updates catalog. HP updates have rules to check WMI and HP Client Management Interface (HP CMI) for applicability. Clients then send inventory information back to the SMS site database. Based on the scan results, the SMS administrator can see which updates are needed by the clients and can then decide which of the updates to distribute.

NOTE:

The SMS client scan tool requires MS XML 6.0 to work properly. See the section "MS XML Parser 6.0" under "Issues and Limitations" on page 50.

Deploying Custom Updates

Once the SMS administrator determines which updates need to be distributed, the administrator selects the software updates and distributes them to clients by creating packages and advertisements for targeted collections using the wizard (Note: advertisements of HP software updates should be configured to be downloaded to clients instead of running directly from the distribution point).

SMS downloads HP updates from the HP ftp site and sends the packages to the distribution point. Clients of the targeted collections retrieve the policy/advertisement from the management point. Clients download the update package and execute the patch install program. The patch install program spawns HP software update executable(s). Finally, client machines are scanned again to make sure the updates installed and the inventory information is sent back to the site database for reporting.

CUPT and ITCU Installation

CUPT and ITCU need to be installed and configured properly before importing the HP Client Updates Catalog for System Center Products. If you are an MSDN subscriber, you can go to the MSDN subscriber downloads site, log in, and download SMS 2003 R2. The site is http://msdn2.microsoft.com/en-us/subscriptions/.

If you are not an MSDN subscriber and would like to try CUPT and ITCU, you can download the evaluation version at http://www.microsoft.com/technet/sms/2003/evaluate/r2.mspx.

Follow the instructions in the SMS 2003 R2 Documentation to install CUPT and ITCU.

How to Import the HP Client Updates Catalog for System Center Products into SMS 2003 R2

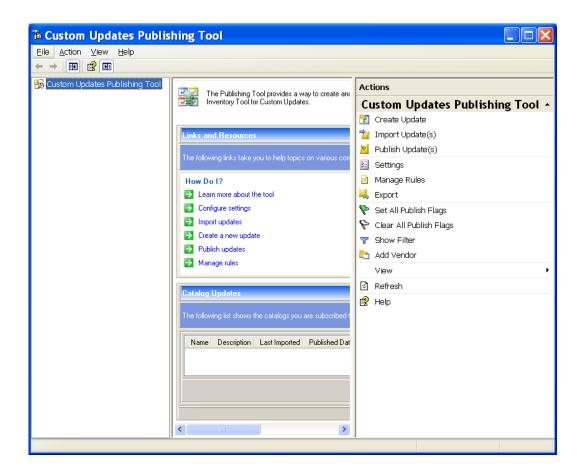
After installing SMS 2003 R2's CUPT and ITCU on your SMS site server, you can use the following steps to import the HP Client Catalog and publish HP software updates to SMS.

NOTE

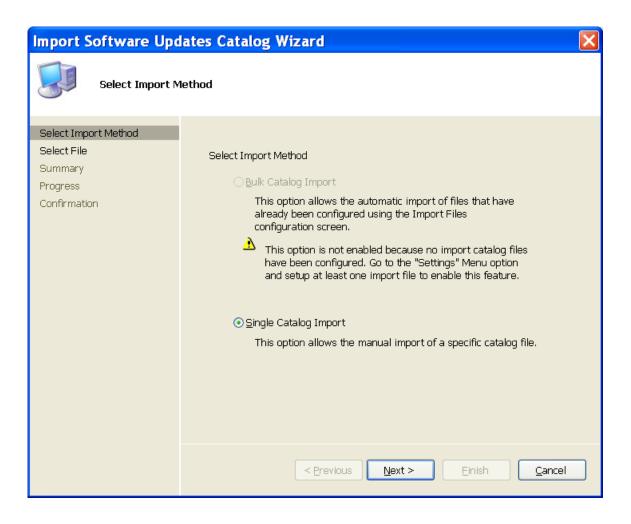
We recommend that you try these updates in a test environment before rolling them out to the production environment.

Import the HP Client Updates Catalog for System Center Products into CUPT

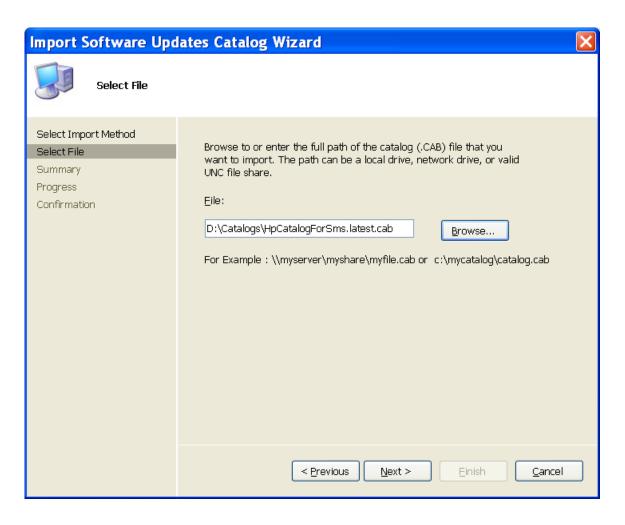
- 1. Download the latest HP Client Updates Catalog for System Center Products from the HP FTP site at ttp://ftp.hp.com/pub/softlib/software/sms catalog/HpCatalogForSms.latest.cab
- 2. Click Start > All Programs > Systems Management Server > Custom Updates > Publishing Tool to launch the Custom Updates Publishing Tool console.



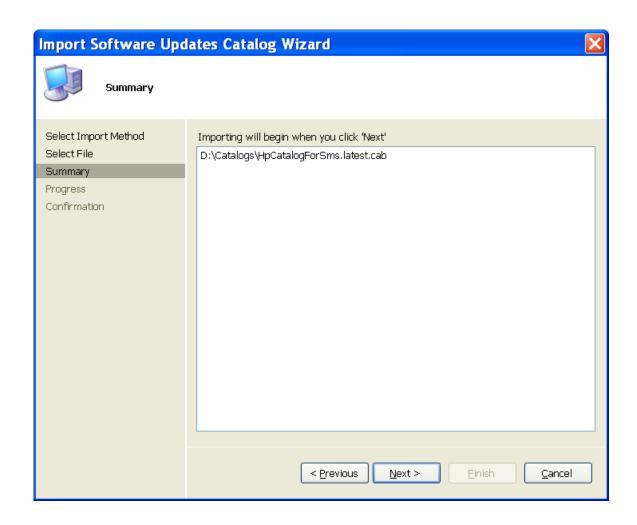
3. In the Actions pane, click Import Update(s).



4. Click Next to accept the default Single Catalog Import option.



5. Click **Browse** to locate and select the latest HP Client Updates Catalog for System Center Products downloaded in step 1, then click **Next**.

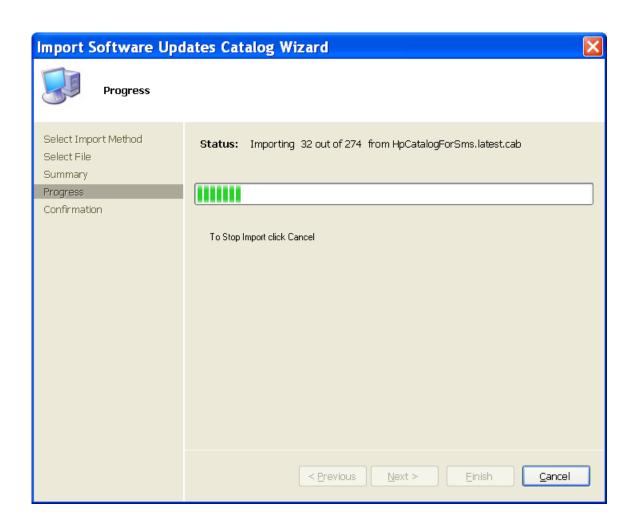


6. Click Next.

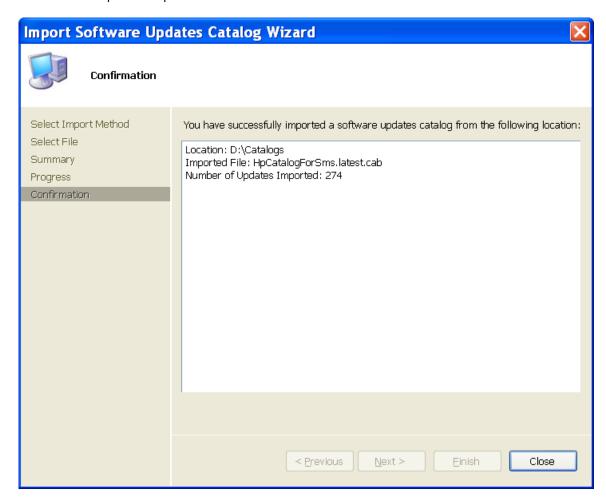
CUPT validates the catalog and displays the Security Warning to confirm that you would like to accept this catalog signed and published by Hewlett-Packard.



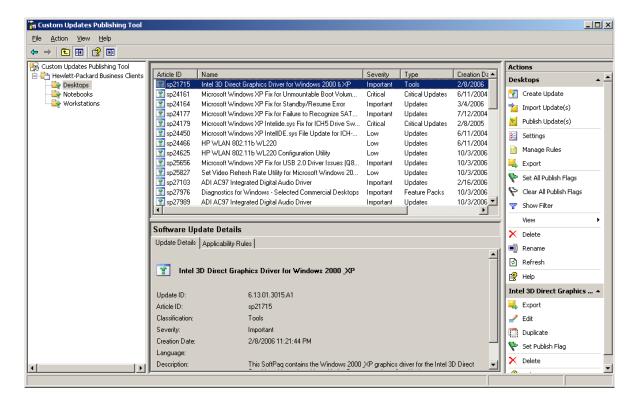
7. If you accept the catalog, click **Accept**.



When the import is done, the **Import Software Catalog Wizard** confirmation dialog box shows the number of updates imported.



8. Click Close.

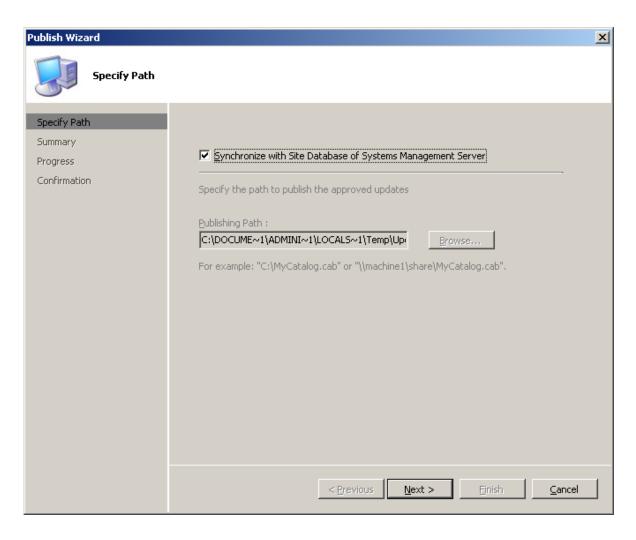


 To display HP software updates, click the Hewlett-Packard Business Clients node under Custom Updates Publishing Tool.

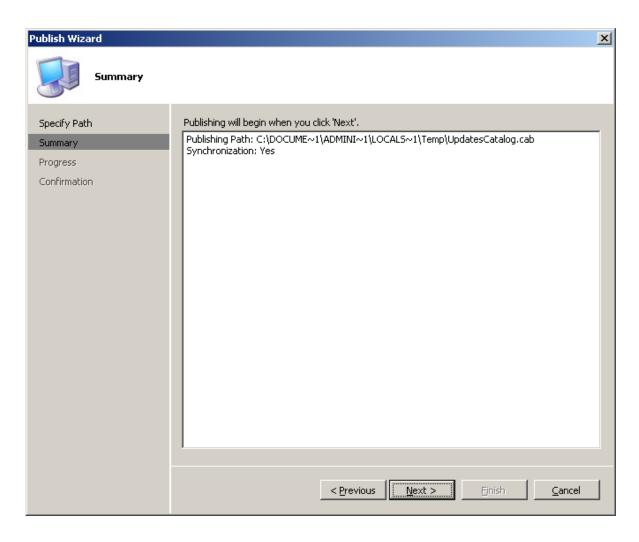
Publish HP updates to SMS

You choose which updates to publish to SMS.

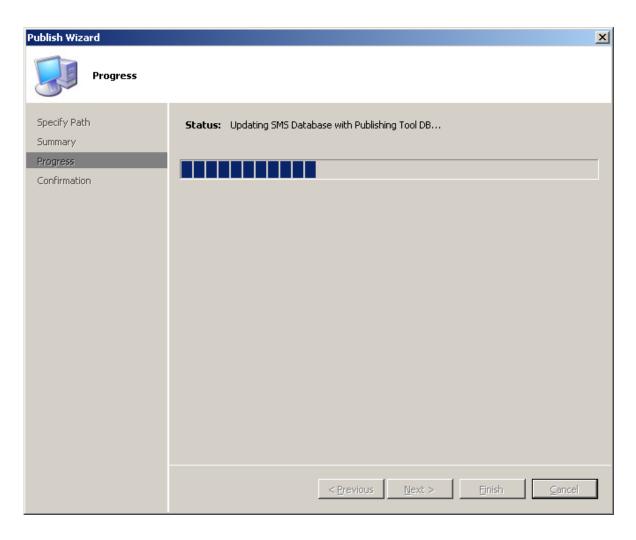
- In the tree pane of the CUPT console, select an update category under the Hewlett-Packard Business Clients node. The result pane shows all the updates of the selected category. Updates are not initially flagged in the Publish column.
- 2. Select the desired update in the result pane and click **Set Publish Flag** in the **Actions** pane. The flag should turn to green.
- 3. Double-click an update in the Result pane to see details about each update. Please DO NOT CHANGE the software package properties, or the update may not work properly.
- 4. Repeat step 2 as many times as needed to flag the desired number of software updates to publish to SMS.
- 5. Since HP software updates are defined with appropriate operating system, language, platform and device rules, you can also click to select the Hewlett-Packard Business Clients node in the tree pane and click Set All Publish Flags in the Actions pane to select all HP software updates to publish to SMS.
- 6. Once you get the desired updates flagged for publishing to SMS, select the **Hewlett-Packard Business Clients** node on the tree pane.
- In the Actions pane, click Publish Updates to publish only the flagged HP client updates to SMS.
 The Publish Wizard displays.



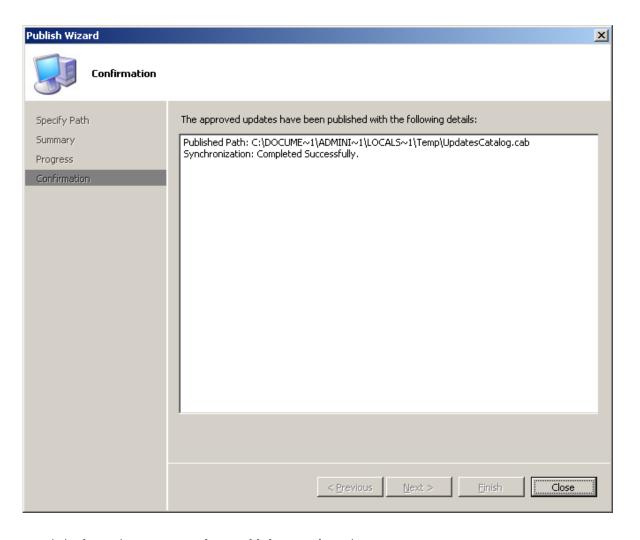
 Click to check the box Synchronize with Site Database of Systems Management Server, then click Next. The Publish Wizard Summary dialog box appears indicating it is ready to publish the update.



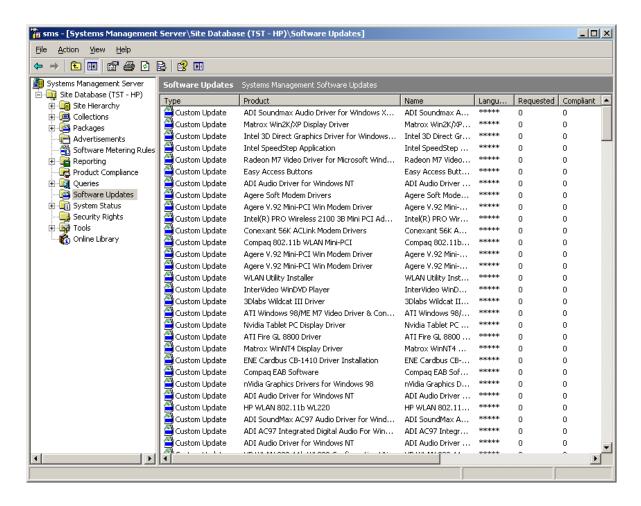
9. Click **Next**. The update(s) are published to SMS. The progress dialog box may show if there are several updates.



10. When it completes, the **Publish Wizard** confirmation dialog box appears indicating the synchronization is successful.



- 11. Click Close. The Custom Updates Publishing Tool window appears.
- 12. Run **SMS Administrator Console** on the SMS site. In the console tree, click **Software Updates**, select the **Action** menu, and click **Refresh**. The list of software updates in the details pane should contain the custom updates you published.



Notice that **Requested** and **Compliant** values are zero. When the next custom update scan occurs, client computers download the latest update catalog containing information about published software updates and scan for applicability. When the next hardware inventory occurs, clients report to the SMS site database whether each update is applicable or installed for each client. Then the SMS administrator can see the reported data and decide which updates need to be distributed. **Requested** displays the number of clients reporting that the update is applicable and not yet installed. **Compliant** displays the number of clients reporting that the update is already installed.

To check the custom update scan schedule, in the console tree of SMS Administrator Console, click **Advertisements**, right-click **Custom Updates Tool** in the result pane, then click **Properties**. Click the **Schedule** tab to view the custom update schedule. By default, it is every seven days from the time ITCU is installed. Members of the Custom Updates Tool collection perform a scan for custom updates every time one is scheduled.

How to Distribute HP Software Updates from SMS 2003 R2 to HP Client Systems

To distribute a custom update to SMS clients:

- 1. In the SMS Administrator Console, click **Software Updates**.
 - The list of inventoried software updates appears. Notice the number of updates listed and the various pieces of information available for each update, including the Requested and Compliant columns discussed in the previous section.
- 2. Click Action > All Tasks > Distribute Software Updates.
 - The Distribute Software Updates Wizard dialog box appears.
- Click Next. The Distribute Software Updates Wizard Specify a Software Update Type dialog box appears, prompting you for the type of update to distribute.
- 4. Click Select an update type > Custom Update > Next.
 - The Distribute Software Updates Wizard Create an SMS Package or Modify Packages and Updates dialog box appears, prompting you to create a new package.
- 5. Click **Next** to create a new package.
 - The Distribute Software Updates Wizard **Identify the SMS Package** dialog box appears, prompting you to name the new package.
- 6. In the Package name box, type what you want to name the package (usually the application name) and then click **Next**.
 - The Distribute Software Updates Wizard **Customize the Organization** dialog box appears, prompting you to specify the name of the organization or department that issues the custom updates to the client.
- In the Organization box, type what you would like users to see as the organization to push the software update (for example, Corporate IT Support) and then click Next.
 - The Distribute Software Updates Wizard **Select an Inventory Scanning Program** dialog box appears, prompting you for the package and program to verify has been run to ensure the software updates information has been reported through hardware inventory.
- 8. Click Next to accept the default values of the Custom Updates Tool program and package.
 - The Distribute Software Updates Wizard **Add and Remove Updates** dialog box appears displaying the list of updates that are applicable for the site.
 - Note: You can distribute more than one update in a single operation.
- 9. Select the custom update you would like to distribute, and then click Next.
 - The Distribute Software Updates Wizard **Specify a Source Directory for Files** dialog box appears displaying the default directory to use for the source files to be used as the SMS package (\SMSServer\C\$\<package name>), as well as prompting for a method to download the required updates.
- 10. If the SMS server has Internet connection and can access the HP ftp site, you can leave the default option **Download any available update source files for me automatically** checked. Then click **Next**.
 - The wizard tries to download the update(s) from the ftp link. After downloading successfully, the Distribute Software Updates Wizard Software Updates Status dialog box appears displaying the status of the update to be deployed. Under Ready, a value of Yes should be listed for all updates, indicating that the update file location has been designated. Skip to step 17.
 - If you choose to download HP updates from the HP ftp site manually, click **I will download the source files myself**. Then click **Next**.
 - The Distribute Software Updates Wizard **Software Updates Status** dialog box appears displaying the status of the update to be deployed. If you are going to manually download the update, notice

that under **Ready** a value of **No** is listed. This indicates that the update file location has not been designated yet.

11. Click Properties.

The **Distribute Software Updates Wizard** dialog box appears, displaying properties for the selected software update. Notice that options are available to import the update; to specify command line parameters; and to perform a download from the Internet. Also if you are manually downloading the update, notice that the value for **Binary present** is **No**, indicating that the source file location has not been configured yet.

12. Click Import.

The **Open** dialog box appears, prompting you for the source file.

13. Browse to where you have stored the HP update binary, and then click **Open**.

The **Distribute Software Updates Wizard** dialog box appears, displaying properties for the selected software update. Notice that the **Binary present** value is now **Yes**.

In the Parameters box, notice that there is default syntax that will perform an unattended update.

14. Click OK.

The Distribute Software Updates Wizard **Software Updates Status** dialog box appears displaying the status of the update to be deployed. Notice that under **Ready** a value of **Yes** is now listed. This indicates that the source file is ready to be distributed. Also, notice that the total size of the SMS package is reported. If you have multiple updates in your package, this will indicate the accumulated size of all the selected updates.

15. Repeat steps 11 through 14 to import the binary for each update you are planning on deploying.

16.Click Next.

The Distribute Software Updates Wizard **Update Distribution Points** dialog box appears, prompting you to select the SMS distribution points to use for client access of the updates.

17. Under Name, click to check the box with the SMS site server name, and then click Next.

The Distribute Software Updates Wizard **Configure Installation Agent Settings** dialog box appears displaying the default values for status reporting and system reboots. The default values are to not collect hardware inventory information immediately after the update installation, and to postpone reboots for both servers and workstations.

18. You have the option to check **Collect inventory information immediately** to kick off an immediate inventory report back to the SMS server after the installation, but that can lead to a significant impact on the network and the site server. Click **Next**.

The Distribute Software Updates Wizard **Configure Installation Agent Settings** dialog box appears displaying the default values for unattended installations and update enforcement. The default values are to perform unattended installations and to not include a maximum installation time. The default action is set to postpone restart after waiting five minutes for the user to respond to the installation request. The default time specified to complete the update installation is 30 minutes.

19. Click **Next** to perform an unattended update.

The Distribute Software Updates Wizard **Configure Installation Agent Settings** dialog box appears displaying the default values for notifications and patch postponing. Notice that the default values are to use balloon notifications and to allow the user to postpone the update installation indefinitely.

20. Click **Next** to accept the default values.

The Distribute Software Updates Wizard **Advertise Updates** dialog box appears, prompting you to advertise the software update through SMS. This would be beneficial in ensuring that all clients that require the update receive it, and any failed installation attempts would be retried every week.

21. Click Advertise, and then click Browse.

The **Browse Collection** dialog box appears displaying the list of collections.

22. Click Custom Updates Tool, and then click OK.

The Distribute Software Updates Wizard **Advertise Updates** dialog box appears displaying the advertisement name, collection to be advertised to, and the weekly recurrence schedule.

23. Click Next.

The **Completing the Distribute Software Updates Wizard** dialog box appears, prompting you to complete the update deployment using the **Distribute Software Updates Wizard**.

24. Click Finish.

The SMS Administrator Console window appears.

- 25. You must download HP custom update packages to client machines instead of running them directly from an SMS distribution point. Complete the following steps:
 - In the console tree, click Advertisement. The result pane shows the list of advertisements.
 - Right-click on the HP custom update advertisement just created and click Properties.
 - Select the Advanced Client tab. Under When a distribution point is available locally, click
 Download program from distribution point and under When no distribution point is available
 locally, click Do not run program, then click OK. These options ensure that the package is
 downloaded from the distribution point to a client and the patch runs locally on the client
 machine.

Issues and Limitations

MS XML Parser 6.0

The SMS client scan tool requires MS XML 6.0 to work properly. Hence, SMS administrators need to distribute MS XML 6.0 to clients before trying to deploy HP updates using SMS custom update process. This issue has been confirmed by Microsoft. Refer to the Microsoft Help and Support article at http://support.microsoft.com/kb/933535 for more information.

On a client that does not have MS XML 6.0 installed, the scan tool logs the following error in ScanWrapper.log Failed to execute the WMI query. IWbemServices::ExecQuery retu0x80041003. Since any WMI query to check the manufacturer, platforms and devices will fail, the scan always yields not applicable for all updates to a client.

WMI

The HP Client Catalog leverages Windows Management Instrumentation (WMI) to check applicability rules. WMI service needs to run on clients and the SMS client scan tool needs to have adequate permission to query WMI.

HP Software Update Installation Must Be Downloaded to Clients

As specified in the instructions to distribute software updates from SMS to clients, SMS notifications for HP software updates must be configured to download to clients and run there, not running directly from the SMS distribution point.

For more information

www.microsoft.com/systemcenter/configmgr/default.mspx

System Center Configuration Manager

http://www.microsoft.com/systemcenter/essentials/default.mspx

Systems Center Essentials

www.microsoft.com/technet/prodtechnol/sms/sms2003/cpdg

Systems Management Server 2003 Concepts, Planning, and Deployment Guide

http://support.microsoft.com/kb/933535

The Inventory Tool for Custom Updates in SMS 2003 R2 does not run WMI queries on client computers that do not have MSXML 6.0 installed

www.hp.com/go/EasyDeploy

HP Client Management Solutions

www.hp.com/go/SSM

HP Client Management Solutions - HP System Software Manager

www.hp.com/go/hpcmi

HP Client Management Solutions - HP Client Management Interface

For catalog content issue

Please send email to psgswcatalog@hp.com

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