Third Party System Management Integration Solution

Oracle® Hardware Management Connector Update Catalog 1.1 for Microsoft System Center Configuration Manager 2007

A complete list of currently supported servers, service processors, and service processor firmware is available at the following web site:

http://www.sun.com/system-management/tools.jsp

Please consult this web site before configuring the Oracle Hardware Management Connector Update Catalog 1.1 for Microsoft System Center Configuration Manager 2007.

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Preface

This document describes how to install and use the Oracle Hardware Management Connector Update Catalog 1.1 for Microsoft System Center Configuration Manager 2007 (Oracle HMC Update Catalog), which enables you to distribute driver updates to your Sun x86 servers using the Software Updates feature in Microsoft System Center Configuration Manager 2007.

How this Document is Organized

This document contains the following sections:

- Preface
- Introduction
- Installing Oracle HMC Update Catalog
- Distributing Updates
- Release Notes

This document is intended for experienced IT professionals, field sales representatives and support engineers.

Before You Read This Document

To fully understand the information provided in this document and perform the tasks discussed, you should use it in conjunction with the documentation and on-line help that is supplied with Microsoft System Center Configuration Manager 2007.

Typographic Conventions

The following typographic conventions are used in this document:

Typeface	Meaning	Examples
AaBbCc1234	Elements written as seen on screen.	Click the **File** menu. Select **Open=>New**.
AaBbCc1234	Code that you type.	cd ..
AaBbCc1234	Hyperlink to an external web site.	www.oracle.com
AaBbCc1234	Cross reference within this document.	See Installing for more information.

Terms and Definitions

The following terms are used in this manual:

Term	Definition
SCCM	Microsoft System Center Configuration Manager 2007
SCUP	System Center Updates Publisher
SMS	System Management Server 2003
WSUS	Windows Server Update Services

Supported Servers

A complete and current list of supported servers is available at the following web site:

http://www.sun.com/system-management/tools.jsp

Please consult this web site before importing the Oracle HMC Update Catalog.

Introduction

The Oracle Hardware Management Connector Update Catalog 1.1 for Microsoft System Center Configuration Manager 2007 (Oracle HMC Update Catalog) provides Windows driver updates for Oracle's Sun x86 servers and Sun Blade x86 server modules.

Once you have downloaded the Oracle HMC Update Catalog and imported it into Microsoft System Center Configuration Manager 2007 (SCCM), you can perform the following tasks:

- Select individual driver updates and examine each of their attributes, settings, and applicability rules (see Figure 1).

- Publish selected driver updates to the SCCM Site Server.

- Review the compliance state of Sun x86 servers for an overview of which drivers are installed and so on.

- Create Software Updates, based on the Oracle HMC Update Catalog, and add the updates to an SCCM Update Deployment Package.

- Target the driver updates at a collection of Sun servers or Blade modules.

Overview

The Oracle HMC Update Catalog provides the latest Windows drivers which have been tested on supported Sun x86 servers. Each update in the catalog is packaged for distribution and installation via the software update mechanisms contained in SCCM. The Oracle HMC Update Catalog contains applicability rules that determine whether a particular Windows driver is appropriate for a server and whether an earlier version of the driver was previously installed (see Figure 1). The Oracle HMC Update Catalog also contains location information that enables SCCM to automatically find and download driver updates for Sun x86 servers from Sun's driver download site.

Working together, Oracle HMC Update Catalog and SCCM give you fine-grained control over which driver updates are distributed, where they are distributed, and when. In addition, flags can be set in SCCM to control whether and when servers reboot following a set of driver updates.

For example, Figure 1 shows the driver updates from Oracle HMC Update Catalog and the applicability rules available.
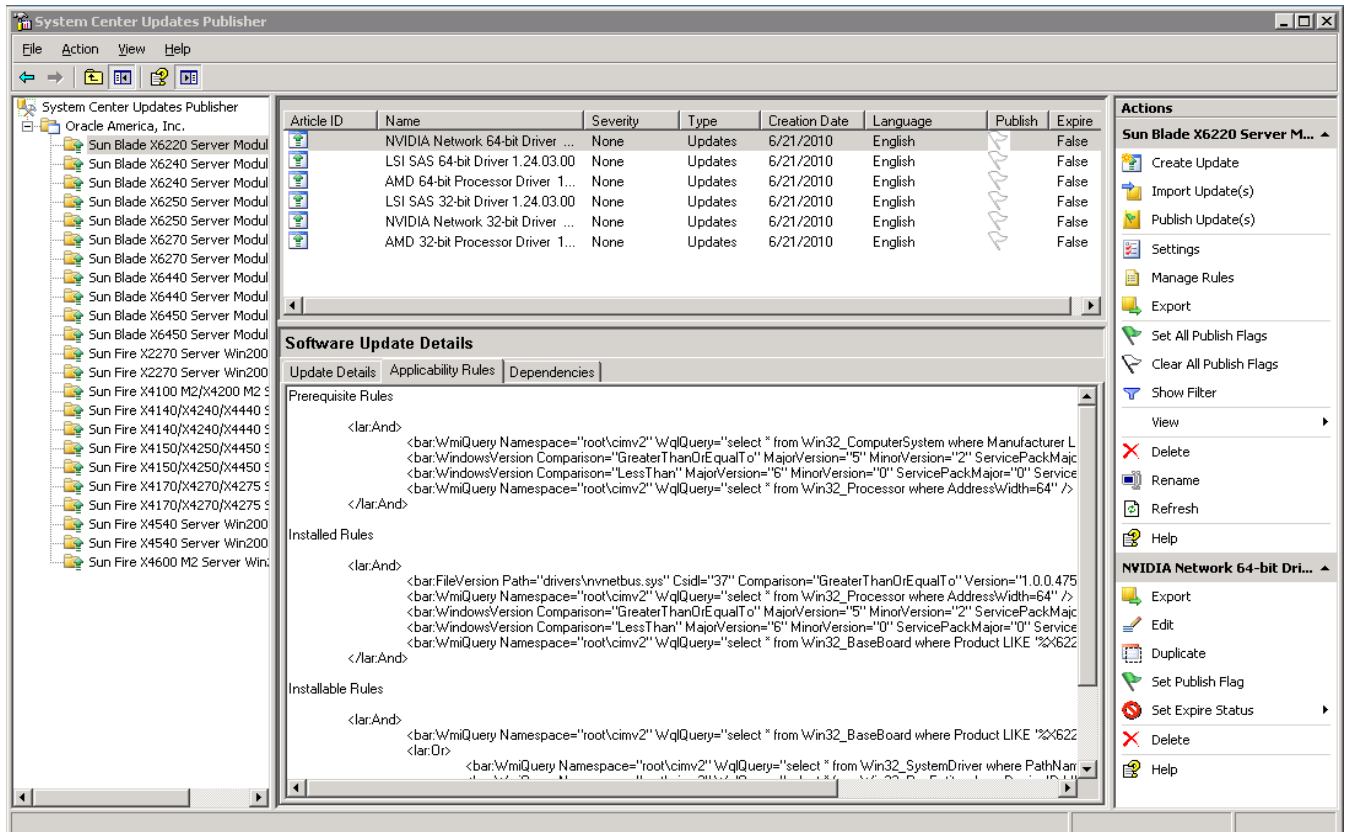
Figure 1: Oracle Driver Updates and Applicability Rules

The supported Sun x86 servers are shown on the left hand of the screen, under the **Oracle America, Inc.** collection. The applicability rules are shown in the bottom half of the screen.

SCCM Software Update Process

SCCM uses two processes to perform driver updates. The first is a scan of client computers to determine which clients require an update, and the second performs the requested updates.

The scanning process is explained in Figure 2 below. Once the scanning process has completed, SCCM displays for each driver update how many clients request the update, how many already have the update installed and how many do not require the update.

Figure 2: Workflow for Import Catalog and Select and Publish Updates

SCCM uses a second process to perform each driver update on any server that requested the update during the scan phase. The update process is explained in Figure 3.

Deploy Driver Updates to Sun Servers

In this process, you use SCCM to install driver updates on the Sun servers that were previously identified.
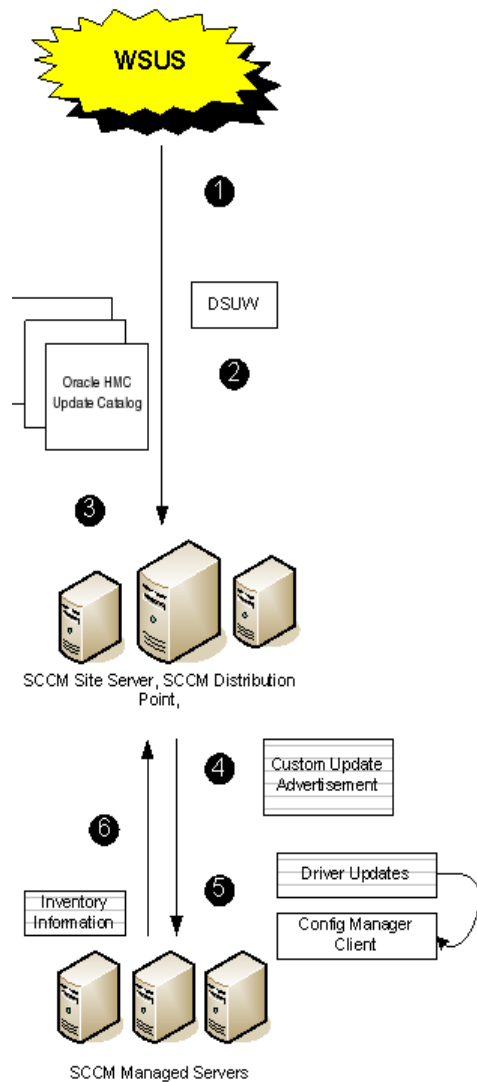
1. Based on the results from the scan phase, you determine which driver updates are required by the managed clients and choose which updates to distribute.

2. You create a a deployment package for distribution to clients using the SCCM Deploy Software Updates wizard.

3. Driver updates are downloaded from the WSUS server.

4. Clients receive an advertisement for the distribution from the SCCM Distribution Point.

5. The updates package is downloaded and installed via the Configuration Manager Client.

6. The client is re-scanned to ensure that the updates were applied. The client sends inventory information back to the SCCM site database.

Figure 3: Creating Update Packages and Installing Driver Updates

Installing Oracle HMC Update Catalog

In order to use the Oracle HMC Update Catalog to distribute Windows driver updates for Sun x86 servers, some Microsoft utilities need to be installed. The first required utility is the System Center Updates Publisher (SCUP), which is used to publish driver updates to SCCM. The second required utility is Windows Server Update Services (WSUS), which is used to distribute driver updates. This section contains the following:

- System Center Updates Publisher

- Windows Server Update Services

- Downloading Oracle HMC Update Catalog

- Importing Oracle HMC Update Catalog into SCUP

- Publishing Oracle HMC Update Catalog from SCUP to WSUS

System Center Updates Publisher

System Center Updates Publisher (SCUP), which works with SCCM, is necessary to enable SCCM to scan computers for updates required to non-Microsoft software, and then download and install those driver updates if necessary. You use SCUP to import Oracle HMC Update Catalog and publish it to the SCCM Site Server for use using its Software Updates functionality.

Prerequisites

In order to use SCUP, you must be running SCCM 2007. SCUP is a stand-alone tool that can be either installed on the same server as the SCCM 2007 Site Server or it can be installed on a separate server. If there is not an existing instance of SQL Server, the SCUP installation package can install SQL Server Express as its embedded database.

To use SCUP, you also need to upgrade to the Microsoft Management Console (MMC) 3.0. For more information, please see the SCUP documentation.

Windows Server Update Services

Windows Server Update Services (WSUS) is an infrastructure provided by Microsoft that enables you to deploy the latest Microsoft product updates to computers running Windows. Using WSUS, you can manage the distribution of updates that are released through Microsoft Update to computers on the network. The SCUP publishing tool extends the capability of WSUS to manage custom updates, such as the Oracle HMC Update Catalog. These custom updates are not visible in the WSUS Administrator Console, but they can be transferred to the SCCM Site Server using the *Synchronize Updates* command in SCCM.

Prerequisites

WSUS can be installed either on the SCCM Site Server or on another server. If you are running SCCM 2007 SP1 or later, use WSUS 3.0 SP2. For more information on WSUS, see the SCCM documentation.

It is also necessary to install the .NET Framework. The download information is contained in the release notes for WSUS.

SCUP can be configured to publish custom updates to a WSUS server. Instructions for doing this can be found at:
http://blogs.technet.com/jasonlewis/archive/2007/11/30/how-to-setup-scup-and-configmgr-2007-to-deploy-custom-updates.aspx

Downloading Oracle HMC Update Catalog

Before you start, make sure you have downloaded the latest Oracle HMC Update Catalog from the following web site:

http://www.sun.com/system-management/tools.jsp

Save the Oracle HMC Update Catalog to a working directory on the local system from which you plan to perform the installation and uncompress it. When the Oracle HMC Update Catalog is uncompressed you have two folders, Software and Legal.

Importing Oracle HMC Update Catalog into SCUP

Once you have the latest Oracle HMC Update Catalog, you must import it into SCUP.

▶ To import the Oracle HMC Update Catalog into SCUP:

1. Open the SCUP Console by clicking **Start -> All Programs -> Systems Center Updates Publisher**.

2. In the the SCUP Console, click **Actions -> Import Updates**.

   The Import Software Updates Catalog Wizard opens, see Figure 4.

3. Click **Single Catalog Import**, then click **Next**.
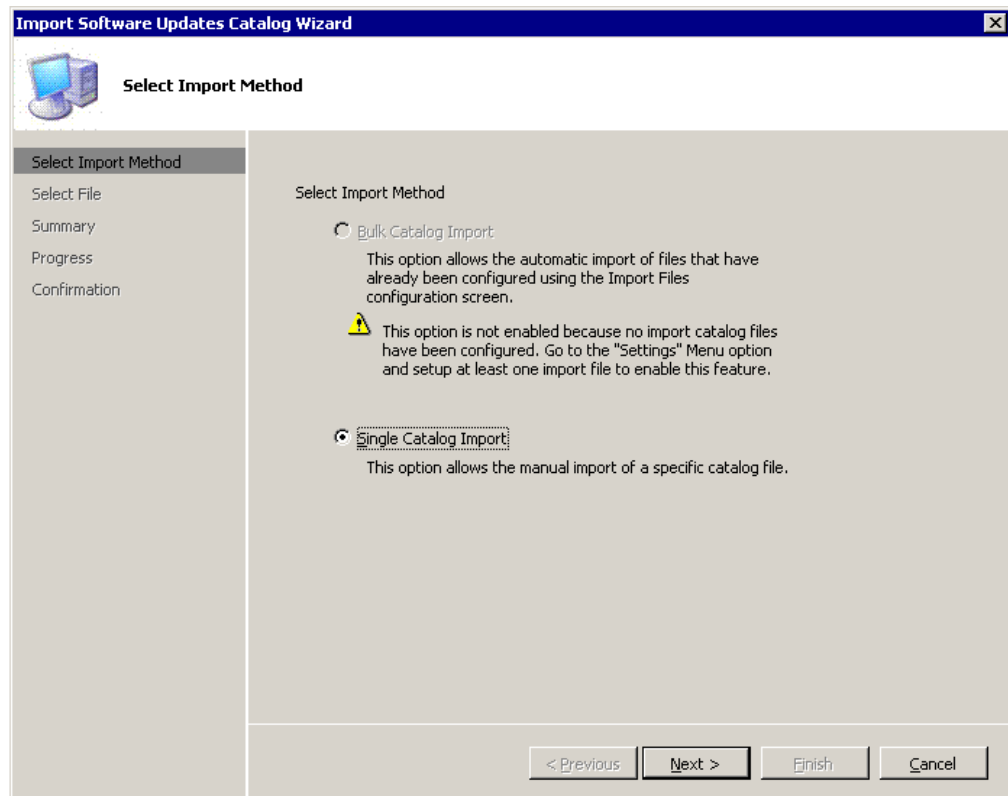
Figure 4: SCUP Select Import Method Dialog Box

4. Click **Browse** and in the file browser that opens, select the latest Oracle HMC Update Catalog .CAB file which is in the SOFTWARE folder.

   For more information on preparing the Oracle HMC Update Catalog see Downloading Oracle HMC Update Catalog.

5. Once you have located the path to the Oracle HMC Update Catalog, as shown in Figure 5, click **Next.**
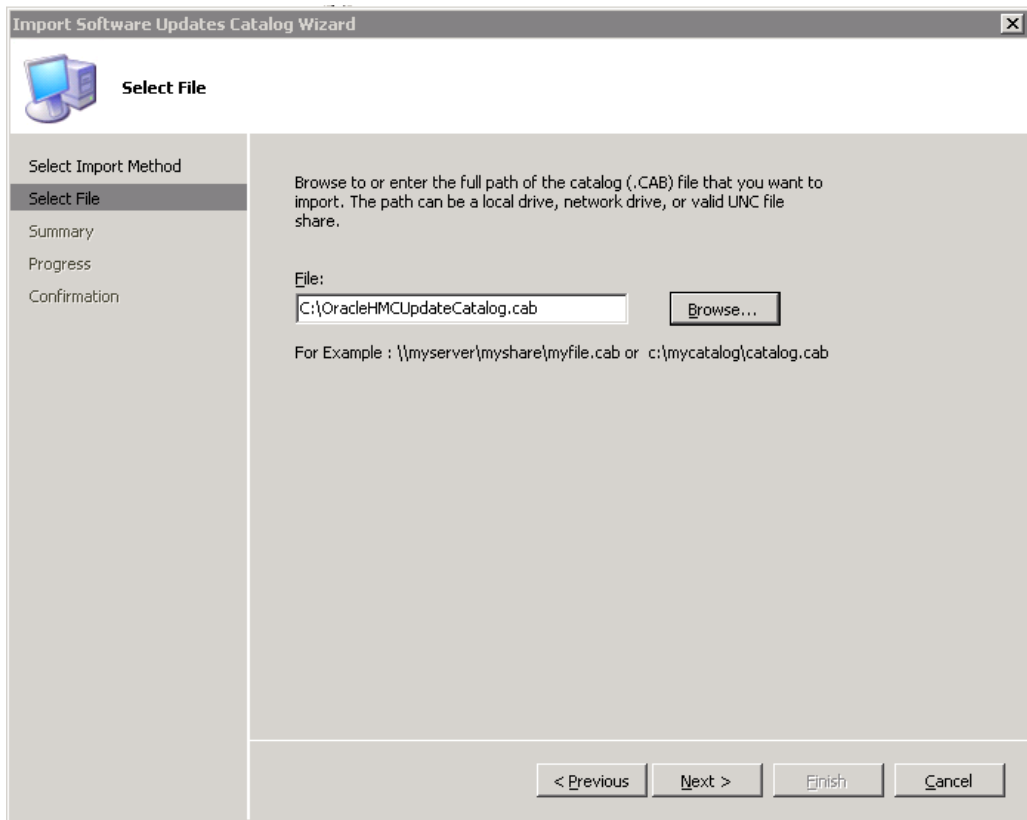
Figure 5: SCUP Select Catalog File Dialog Box

6. You are asked to accept the catalog signed by Oracle America, Inc. as seen Figure 6.
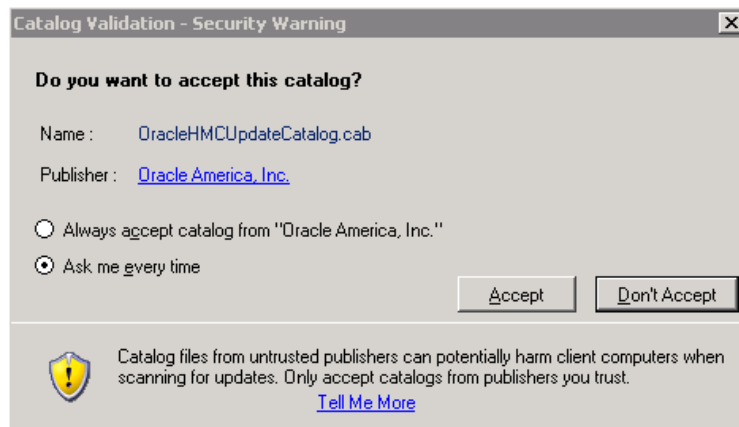
Figure 6: Accept Oracle America, Inc. as a Trusted Publisher

7. Click **Accept** and then click **OK.**

The SCUP publishing tool imports the catalog.

When the update has completed, a summary screen is displayed showing the number of driver updates imported.

To display all of the imported driver updates, click on the plus sign next to Oracle America in the left hand pane of the SCUP tool.

Publishing Oracle HMC Update Catalog from SCUP to WSUS

Once you have finished importing the Oracle HMC Update Catalog, you can choose which driver updates to publish to WSUS.

▶ To publish Oracle HMC Update Catalog from SCUP to WSUS:

1. Depending on whether you want to publish all drivers or select specific drivers, choose one of the following:

   - If you want to publish all of the available drivers, right click on Oracle America in the left-hand SCUP pane and choose **Set All Publish Flags**.

   - If you want to choose drivers for specific platforms, select the platform in the left-hand pane and the driver updates in the right-hand pane. Right click on the desired driver update and choose **Set Publish Flag** for the driver. Repeat until you have selected all of the drivers you want.

   When you have selected the publish flags for your desired updates the selected flags are green.

2. Right click on **System Center Updates Publisher** in the left-hand pane and select **Publish Updates**, see Figure 7.
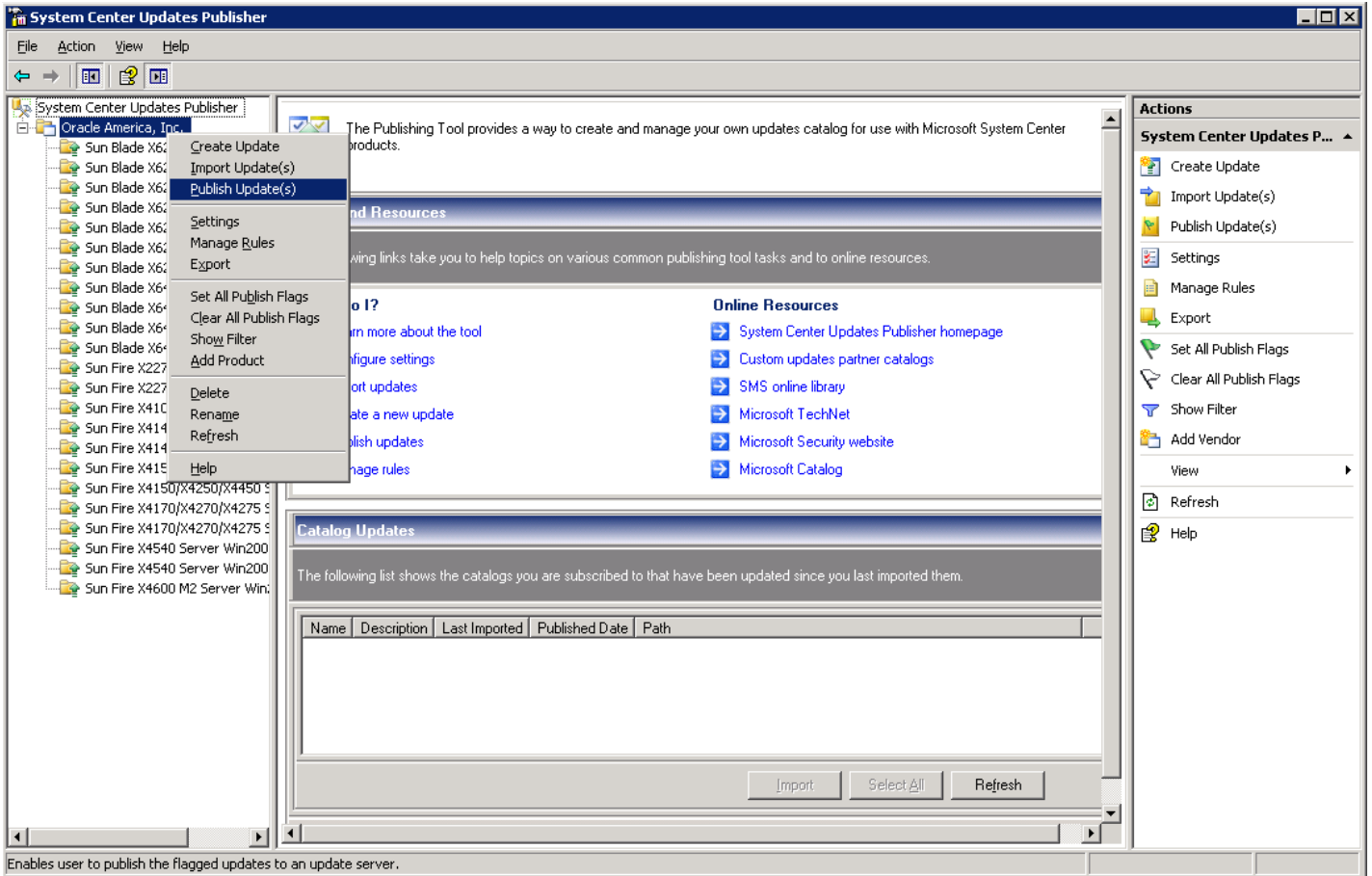
Figure 7: SCUP Publish Updates Command

3. A dialog box opens, summarizing the action that SCUP is going to take after you click **Next**, see Figure 8.
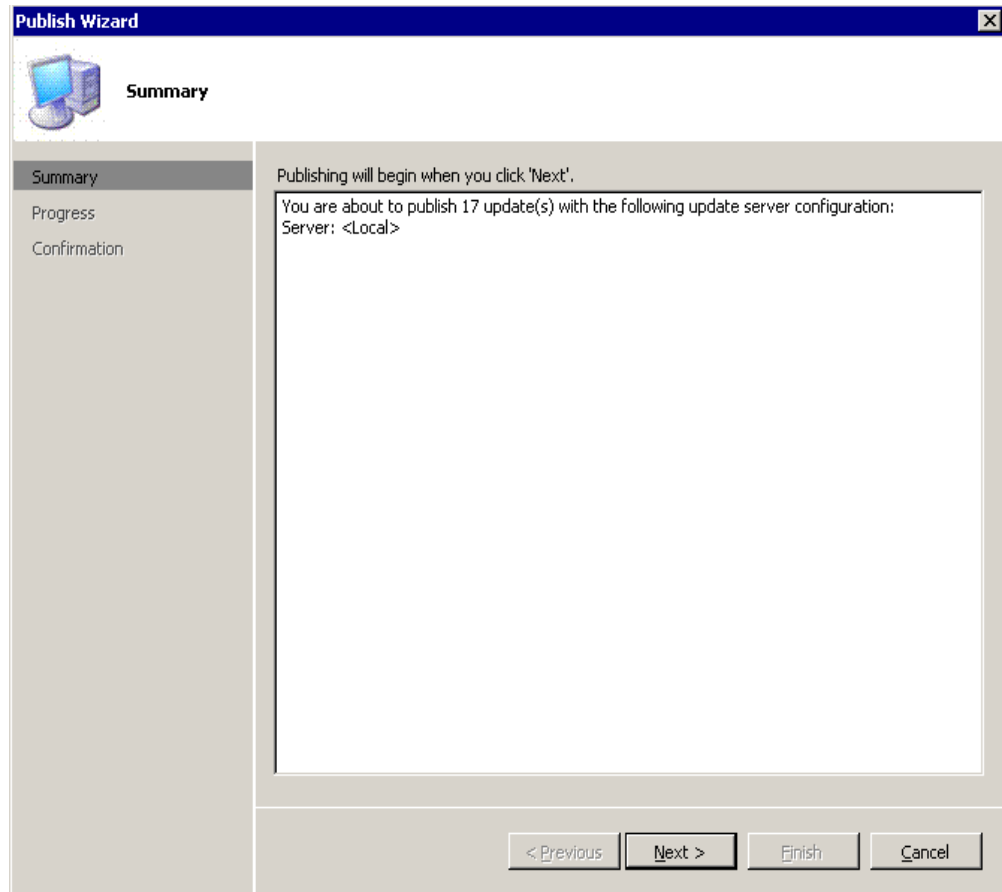
Figure 8: SCUP Publish to WSUS Server

4. During the publishing process, you are asked to accept signed driver binary (EXE) files, see Figure 9.
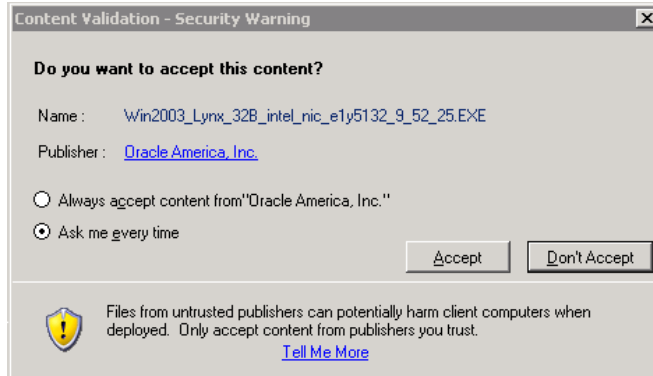
Figure 9: SCUP Publish to WSUS Server

Click **Always accept content from "Oracle America, Inc."** to accept all content supplied by Oracle.

The updates to WSUS are successfully transferred once the publishing process is complete. Note that you cannot see the updates in the WSUS Administrator Console, but SCCM is able to see them when it synchronizes with the WSUS database.

CHAPTER 4

Distributing Updates

This section describes the configuration steps you need to take in order to distribute updates using SCCM. The section contains:

- Synchronizing Updates from WSUS to SCCM

- Deploying Updates

Synchronizing Updates from WSUS to SCCM

The first step is to install and configure the Software Update Point component to connect to the WSUS server where the Oracle HMC Update Catalog has been installed.

Note - the Software Update Point component is not installed by default, you should install it before following this procedure. In addition you need to know the port number and SSL port number that you specified when installing WSUS to complete this process.

▶ To synchronize updates from WSUS to SCCM:

1. Open the SCCM Configuration Manager Console and navigate to **Site Database -> Site Management -> (your site name) -> Site Settings -> Component Configuration**.

2. Right click on **Software Update Point Component** and select Properties.

3. In the Software Update Point Component Properties dialog, under the **General** tab, select **Active software update point on site server** and enter the port number and SSL port number that you specified when installing WSUS.

4. Under the **Sync Settings** tab select **Do not synchronize from Microsoft Update or an upstream update server**, see Figure 10.
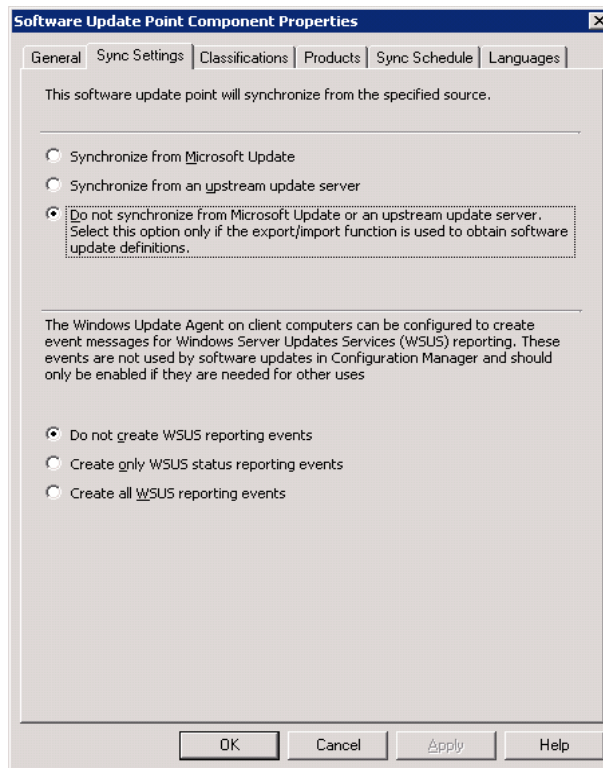
Figure 10: SCCM Software Update Point Component properties

5. This setting configures your software update point to receive custom updates. You can also optionally use the **Sync Schedule** tab to specify a WSUS-to-SCCM synchronization schedule.

6. Navigate to **Site Database -> Site Management -> (your site name) -> Site Settings -> Client Agents.** Check the properties of the **Hardware Inventory Client Agent** and the **Software Updates Client Agent** and make sure that both agents are enabled. Optionally, adjust other properties, such as **Schedule**.

7. Navigate to **Site Database ->Computer Management -> Software Updates,** right click on **Update Repository** and select **Run Synchronization**. The synchronization process may take some time to complete.

    If you receive the message "**Do you want to initiate a site wide software update synchronization?**" click **Yes**.

8. You can view the synchronization status by navigating to **Site Database ->System Status -> Site Status -> (your site name) -> Component Status -> SMS_WSUS_SYNC_MANAGER** and click **Show Messages -> All**. See Figure 11.

Figure 11: SCCM-WSUS Synchronization Messages
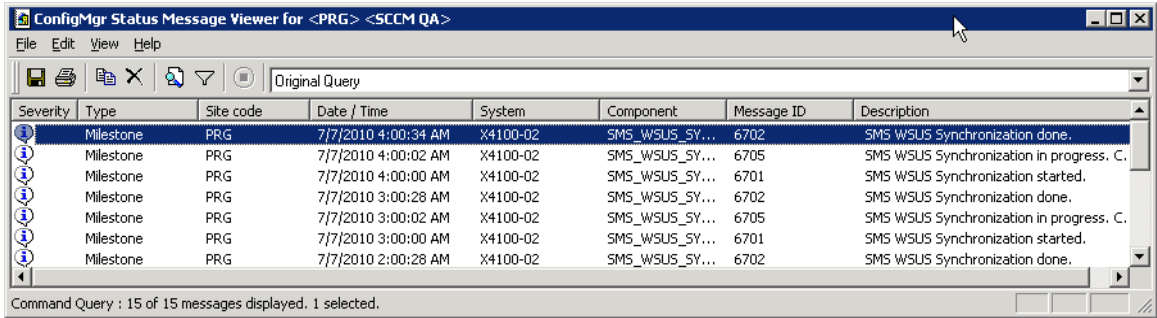
To view the results when synchronization has completed, navigate back to **Site Database ->Computer Management -> Software Updates -> Updates Repository.** Expand **Updates -> Oracle America, Inc. -> All Updates** and you should see a list of all the drivers that you have published.
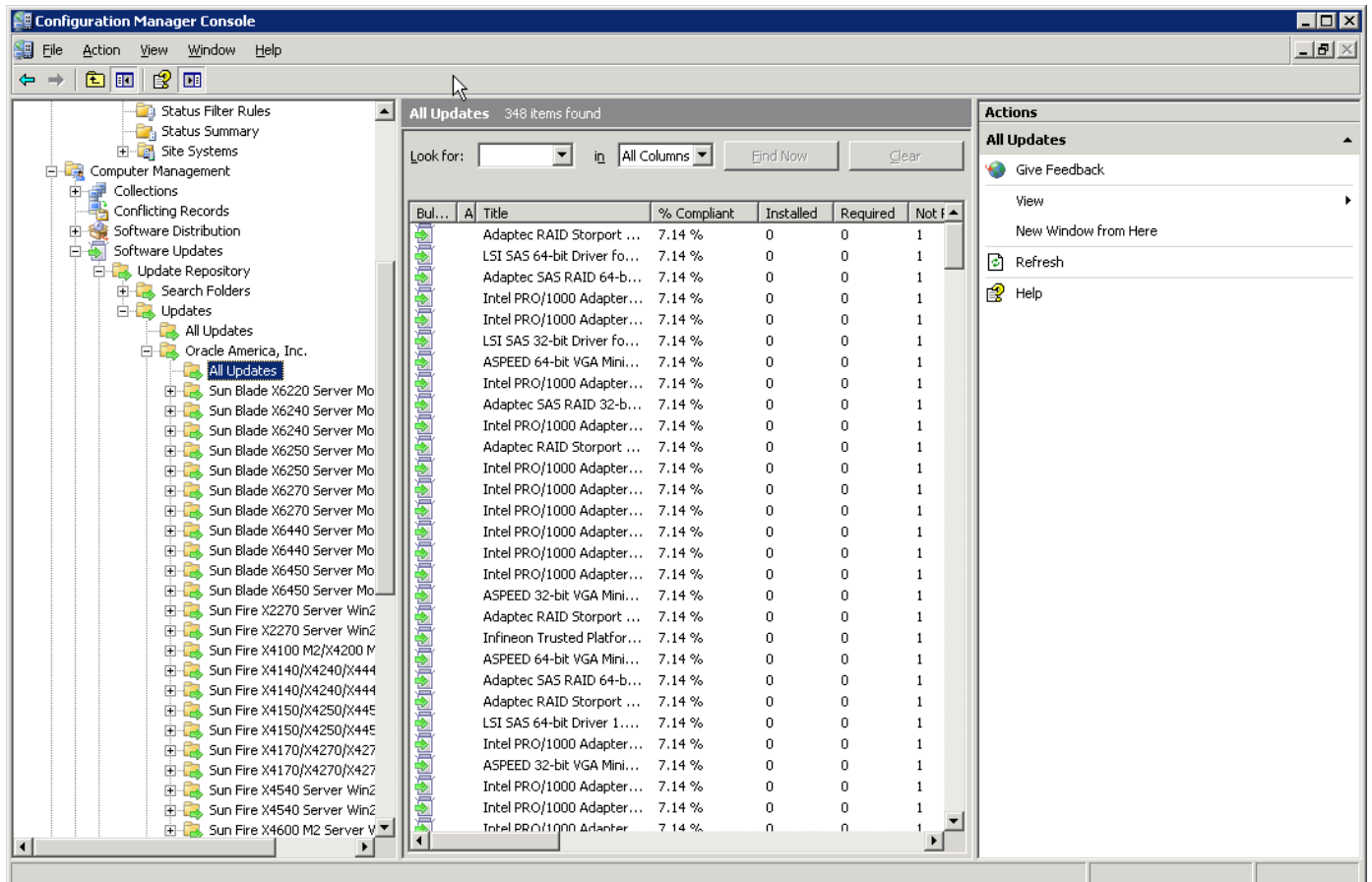

Figure 12: List of driver updates in SCCM.

As seen in Figure 12, **Compliant, Installed, Required, Not Required, and Unknown** show how many servers are in each of these states. Before the first client scan, all servers are marked as **Unknown** with respect to each new driver update.

Deploying Updates

There are a number of ways to deploy software updates from SCCM. The SCCM product documentation describes these in detail. The following recommended procedure, using a Deployment Template and an Update List, results in the fewest Software Update Wizard pages required, and the least number of settings to configure.

Creating a Deployment Template

A deployment template stores preset deployment settings that can be reused by multiple deployments.

▶ To create a deployment template:

Navigate to **Computer Management -> Software Updates -> Deployment Templates**, right click and choose New Deployment Template.

The deployment template wizard walks you through a number of pages where you configure how the Deployment Template should be created. For more information on deployment templates, see:

http://technet.microsoft.com/en-us/library/bb632940.aspx

Creating an Updates List

An updates list allows you to aggregate a set of updates and use them to create one or more deployments.

▶ To create an Updates List:

1. Navigate to **Computer Management -> Software Updates -> Update Repository -> Updates**, select the updates you wish to add to the list, right click and choose Update List. The update list wizard consists of several pages, where you set the update list properties such as the name and description, see Figure 13.
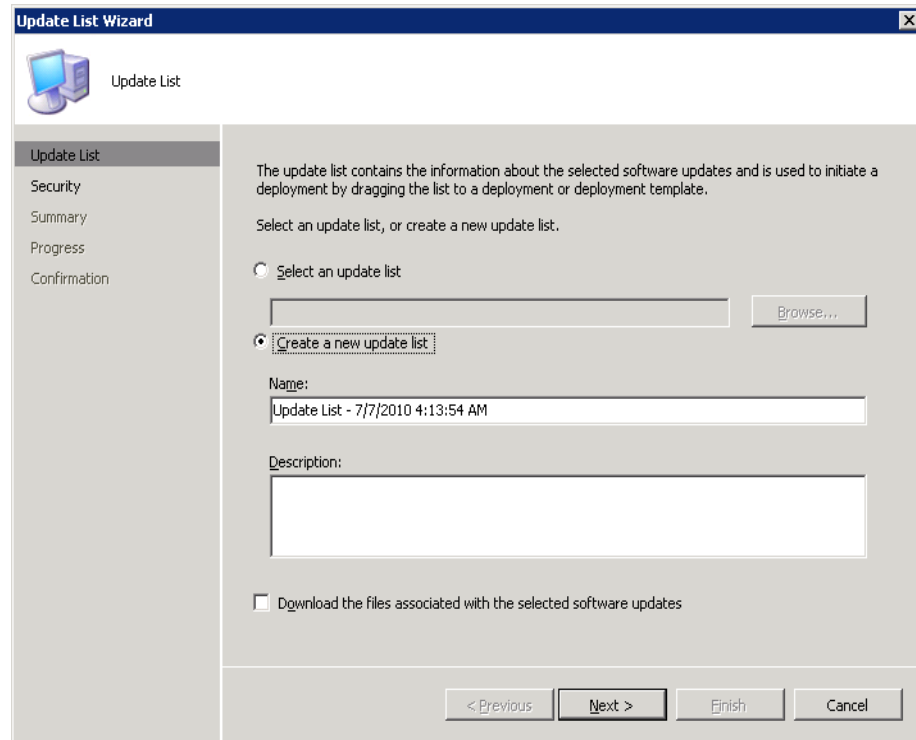
Figure 13: Update List Wizard in SCCM

2. Select **Download the files associated with the selected software updates** and click **Next.**

3. Choose whether to create a new deployment package or add to an existing one. For more information about update lists, see:

http://technet.microsoft.com/en-us/library/bb693591.aspx

Deploying a Package to Clients

Having completed a deployment template, an updates list, and a deployment package, you are now ready to deploy the package to a collection of client systems.

▶ To deploy a package to clients:

1. Navigate to **Computer Management -> Software Updates -> Deployment Templates**, making the template visible in the console.

2. Expand the **Update Lists** node and select the update list you have created.

3. Drag and drop the list onto the deployment template you have created.

   The Deploy Software Updates wizard opens with only four pages to fill out to create the deployment.
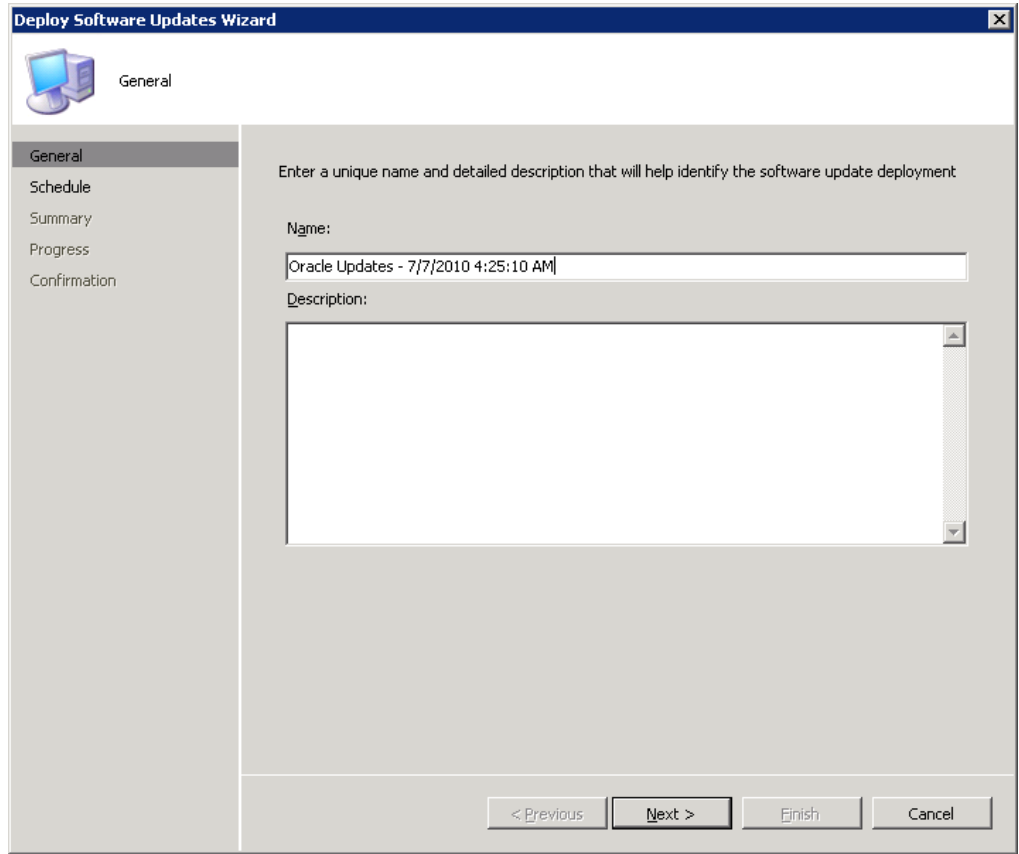
Figure 14: Deploy Software Updates Wizard.

4. On the General Page of the Deploy Software Updates wizard, provide the deployment name and description then click **Next**.

5. On the Schedule Page, specify deployment start time and optionally other schedule options.

6. On the Collection Page, select the target collection for the deployment.

7. On the Summary Page, check your configuration setting and click **Next** to create the deployment.

For more information about software update deployments, see:

http://technet.microsoft.com/en-us/library/bb680906.aspx

Rules for Applying Updates

There are three classes of rules that govern the distribution of driver updates: Prerequisite Rules, Applicability Rules, and Installed Rules. These rules are interpreted by the Windows Update Agent scan tool to determine whether or not to request this update for a particular Sun x86 server. Rules in the Oracle HMC Update Catalog include:

- Prerequisite Rules: Must be a Sun x86 server or Blade module, must be running Windows Server 2003 or Windows Server 2008, and the driver must be designed for the OS architecture (32-bit or 64-bit).

- Applicability Rules: Server or Blade model must be supported by the driver update, the driver must have been previously installed or, if not installed, its corresponding hardware device must be present.

- Installed Rule: if the version of a driver in the Oracle HMC Update Catalog is newer than the version of the currently installed driver, the client requires the update.

If all of the prerequisite and applicability rules return true after the scan, and the client requires the update, then a message is returned to the SCCM site server that the driver should be installed on the client.

Note - do not add, alter, or delete any of the rules in the Oracle HMC Update Catalog.

Release Notes

This section provides the release notes for the current version of Oracle HMC Update Catalog.

Symptom (CR6831505): SCCM does not detect a Sun X6250 server

Cause: Early models of the Sun X6250 server return an incorrect SMBIOS Manufacturer field. This prevents Oracle HMC Update Catalog from identifying the server correctly and makes it incompatible with SCCM. For more information please contact your Sun representative.