APPENDIX E

Troubleshooting

This appendix contains provides general troubleshooting information.

It includes:

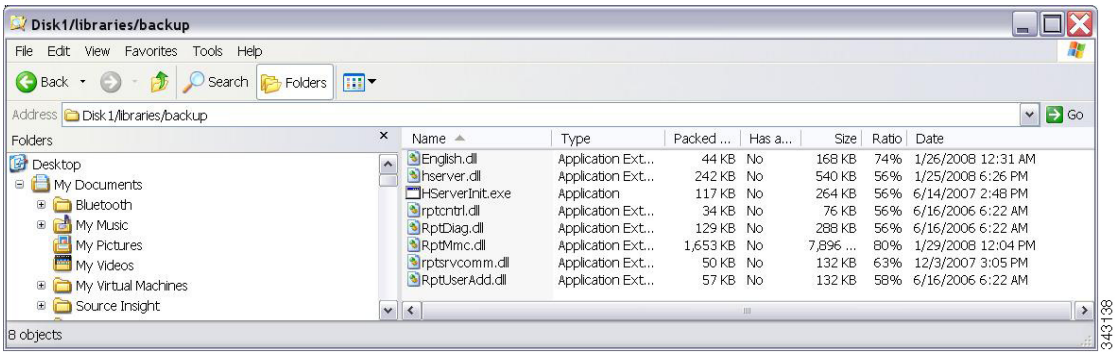
Problem with Cisco VXC Manager Upgrade Installation

Problem: Files that were in use during the upgrade process were not overwritten.

Solution: Do the following:

- Navigate to the folder VXC-Mv<ReleaseNumber>\Disk1\libraries\backup

Figure E-1 Backup Folder Contents



- For each file listed in the backup folder (see Figure E-1), check the modification date and file size properties
- Compare the file properties shown in the backup folder to the properties for the same file in its destination folder. Table E-1 shows the paths to the destination folders for each file in the backup folder

Table E-1 .Destination Folder Paths

File Name	Path to Destination Folder
English.dll	~\Program Files\Cisco\VXC-M
HServer.dll	~\Inetpub\wwwroot
HServerInit.exe	~\Program Files\Cisco\VXC-M
rptcntrl.dll	~\WINDOWS\system32
rptdiag.dll	~\Program Files\Cisco\VXC-M\Utilities
RptMmc.dll	~\Program Files\Cisco\VXC-M
RptSrvComm.dll	~\WINDOWS\system32
RptUserAdd.dll	~\WINDOWS\system32

- If the properties shown for a file in the backup folder do not match the properties for that file in its destination folder, make a copy of the file in the backup folder and put it in the appropriate destination folder.

License Error

Problem: If Cisco VXC Manager discovers non-Cisco devices, this results in a pop-up license error that automatically appears every time such devices check in or if the administrator tries to manage these non-Cisco devices.

Solution: Upload a valid license for the non-Cisco devices. If a valid license is not available, delete the non-Cisco devices from the Device Manager and disconnect the devices from the network.

PCoIP clients unable to connect following firmware upgrade

Problem: If Cisco VXC Manager is used to upgrade the firmware for Cisco VXC 2111/2211 PCoIP clients, the client may be unable to connect to the virtual machine following the upgrade.

Solution: The local user must access the On Screen Display menu for the client and do the following:

Procedure

Step 1 Choose **Options > Config > Unlock**.

Step 2 Leave the password field blank, and click **OK.**

Step 3 Click the **Connection Management** tab and uncheck **Enable Connection Management**.

Step 4 Click the **VMware View** tab and check **Enable VMware View** and **FQDN**.

Step 5 In the FQDN field, enter the FQDN of the broker server hosting the virtual machine.

Step 6 In the Port field, delete the port value of zero (**0**) and leave the field blank.

Step 7 Click **OK**.

Step 8 When asked to reset the client for the changes to take effect, click **Yes**.

Remote Shadowing Problems

Problem: You are having problems with Remote Shadowing.

Solution: Ensure that you set the appropriate preferences in Remote Shadow to **Viewer** or **Browser**.

Setting the Correct Logging Levels

Problem: You want to set the logging levels appropriately.

Solution: Set logging levels to Debug only for isolating problems. During normal Cisco VXC Manager functioning, set the logging levels to either Warning or Error.

Viewing Service Logs—Example

Use these procedures to view the logged activity for the Cisco VXC Manager service logs including:

- Web Services Log—Details the activity of the Cisco VXC Manager Web Services for device management.
- TFTP Log—Details the Trivial File Transfer Protocol activity for distributing software packages to devices.
- Standard Services Log—Details the activity of the Cisco VXC Manager Standard Services.
- DHCP Log—Details the activity of the Cisco VXC Manager Dynamic Host Configuration Protocol as it assigns IP addresses to devices.

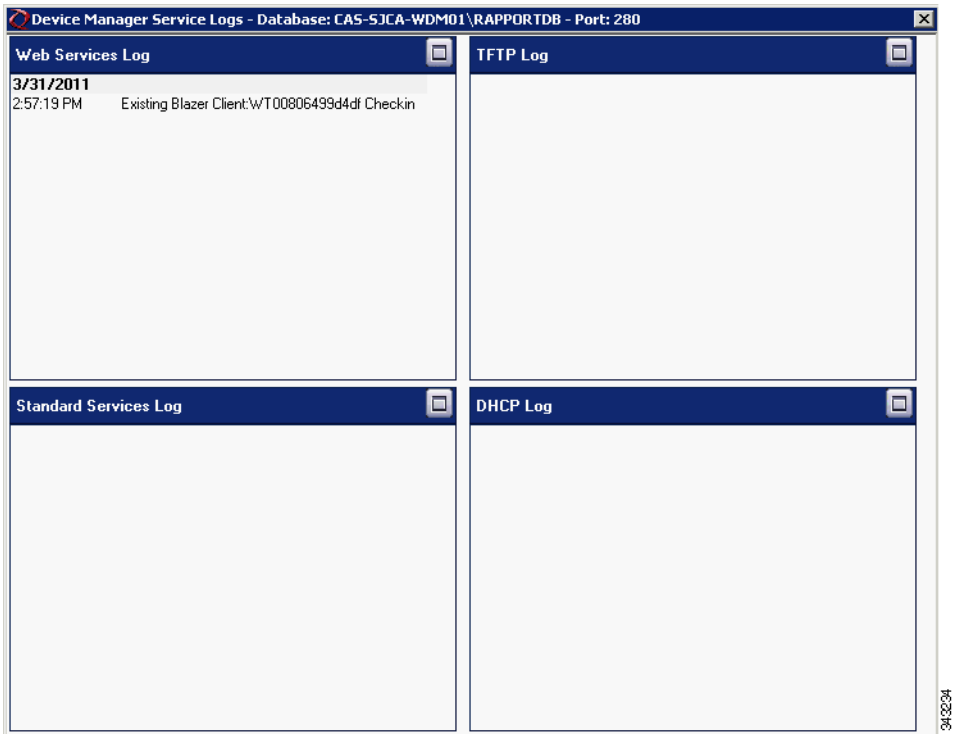
Tip For information on setting the level of logging activity for the Cisco VXC Manager service logs, refer to Logging Preferences, page 7-75.

To view the Cisco VXC Manager service logs:

Procedure

Step 1 Double-click the **Service Logs** icon in the Cisco VXC Manager system tray to open the Cisco VXC Manager Service Logs window.

Figure E-2 Service Logs



Step 2 Review the information for the log you want.

Tip To expand a window for any of the logs, click its maximize button.

Changing the IP Address of the Cisco VXC Manager Server

Problem: You want to change the IP address of the Cisco VXC Manager Server, where the HServer is running.

Solution: Change the IP address of the Cisco VXC Manager Server by completing the following:

Procedure

Step 1 Change the following registry settings:

- Configuration Manager\Software Repositories\Master = new IP address
- HKLM\Software\Rapport\SWRep\FTPUserDomain = new IP address

Step 2 Restart IIS.

Step 3 Restart Cisco VXC Manager services (use the Services tab).

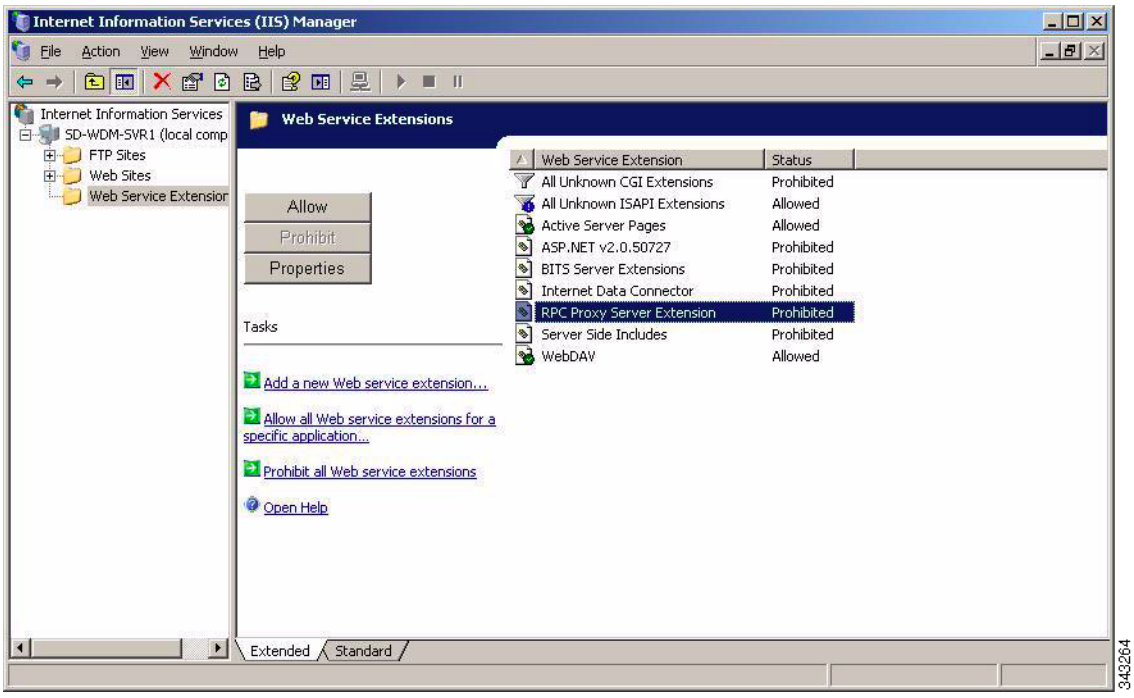
Problems with Repository Test Connection in IIS 6.0

If a test connection with the Master or Remote Repository fails, please verify the following:

Procedure

Step 1 Navigate to **IIS**, choose **World Wide Web Service** and click the **Details** button.

Figure E-3 Web Service Extensions



Step 2 Look at the Web Service Extensions and verify that the status is Allowed for both WebDAV and All Unknown ISAPI Extensions.

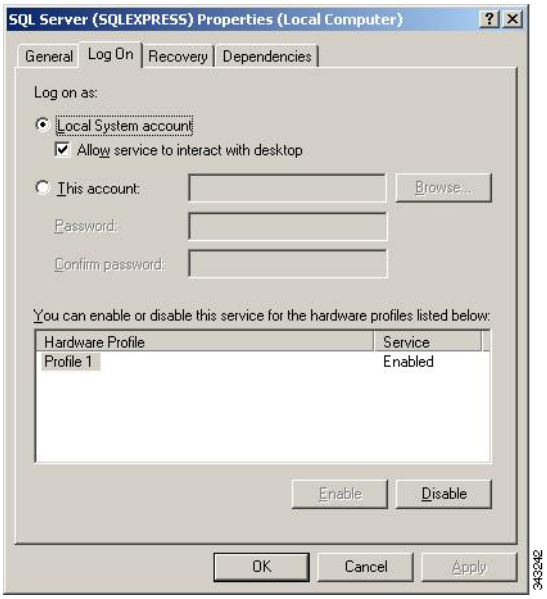
Step 3 For an FTP repository, make sure the Password (for the default user named rapport) is correct.

Step 4 For Linux repositories, make sure the “rapport” folder in WebDAV has all rights enabled. (Please refer to the *Installation Guide for Cisco Virtualization Experience Client Manager*).

Problems with Attaching Database

During the installation, if you encounter a problem attaching a SQL Server 2005 Express Edition database, make sure the “Log on as" setting for the SqlExpress service is set to "Local System account,” and restart the service. (See Figure E-4.)

Figure E-4 SQL Server Properties



Problems with Discovering Devices

Problem: You are having problems with discovering devices.

Solution: Ensure that the:

- Device service is running correctly
- Server service is running correctly
- Path between the device service and the server service is running correctly (use ping)
- Subnet and IP ranges are defined correctly (when you are attempting to discover devices by subnet or IP range)

Problems with Discovering PXE Devices

Problem: You are having problems with discovering PXE devices.

Solution: Ensure that:

- port 4011 is open in all routers
- IP-Helper addresses are defined and pointing to the Cisco VXC Manager-Server
- the PXE devices have re-booted at least one time after being discovered by Cisco VXC Manager (before Cisco VXC Manager recognizes them as PXE devices, the PXE devices must be re-booted at least one time after being discovered)

Package Errors

Problem: You are receiving package errors.

Solution: Try the following:

- Verify the scripting syntax
- Edit the script (*.rsp) and re-mark out LU command (have target device available)
- Make use of Network Sniffer
- Ensure that the Cisco VXC Manager Server IP address has not changed
- Ensure that the Repository information is correct
- Ensure that you can manually FTP a file to the Repository
- Ensure that you can run an unattended install
- Ensure that the package structure is correct (Folder = *.rsp name = scripts'NUMBER'value)

Problem With HServer Init Requests in IIS 6.0

Problem: You are not able to see the ports in the Preferences window.

Solution: Restart HServerInit and verify the preferences again.

If the ports are still not visible in the Preferences window, an IIS Lockout tool might be running in your server and using the URLScan security tool which stops the request for HServer. To resolve the problem, you need to configure the urlscan.ini file and after configuring, restart the WWW service.

The urlscan.ini file contains the following sections:

- [Options]—This section describes general URLScan options.
- [AllowExtensions] and [DenyExtensions]—This section defines the file name extensions that URLScan permits. • [AllowVerbs] and [DenyVerbs]—This section defines the verbs (also known as HTTP methods) that URLScan permits.
- [DenyHeaders]—This section lists HTTP headers that are not permitted in an HTTP request. If an HTTP request contains one of the HTTP headers that are listed in this section, URLScan rejects the request.
- [DenyURLSequences]—This section lists strings that are not permitted in an HTTP request. URLScan rejects HTTP requests that contain a string that appears in this section.
- [RequestLimits] section—This section enforces limits on the size, in bytes, of separate parts of requests reaching the server.

Configure the urlscan.ini file as follows:

Procedure

Step 1 In the [Options] section configure the following settings:

- [Options]
- AllowDotInPath = 1
- UseAllowVerbs=1
- UseAllowExtensions=1

Step 2 In the [AllowExtensions] and [DenyExtensions] section configure the following settings:

- [AllowExtensions]
- .bat
- .cmd
- .com
- .exe

Step 3 In the [AllowVerbs] and [DenyVerbs] section configure the following settings:

- [Allowed Verbs]
- GET
- HEAD
- POST
- PROPFIND
- MKCOL
- DELETE
- PUT
- MOVE

Step 4 In the [DenyHeaders] section configure the following settings:

- [DenyHeaders]
- Allow “Translate” header

Step 5 In the [RequestLimits] section configure the following settings:

- [RequestLimits]
- MaxAllowedContentLength=4294967296

Wake on LAN Command Does Not Reach Remote Devices

Problem: The HServer is unable to send the WOL command to the remote devices.

Solution: Enable port forwarding for UDP port 16962.

Wake on LAN Does Not Reach Devices in Remote Subnet

Problem: Wake on LAN does not reach devices in a remote subnet.

Solution: To use the Wake On LAN feature when the Cisco VXC Manager and the Cisco VXC clients are in different subnets, you must configure the router to allow directed broadcasts on all subnets where clients are present. For a sample router configuration, see:

Catalyst Layer 3 Switch for Wake-On-LAN Support Across VLANs Configuration Example

Wake on LAN Delayed Response

Problem: Wake on LAN response on the client is delayed (30 to 50 seconds).

Solution: If the Cisco VXC 2112/2212 client is connected to a switch that has spanning tree enabled, you must enable STP PortFast on the connected switch port for Wake on LAN to function as normal. Otherwise, the client must wait for the port to transition to STP forwarding mode (about 30 to 50 seconds) before Wake on LAN takes effect.

Problem in Repository Installation in IIS 7.0 in HTTP Mode

Problem: Repository installation fails in HTTP mode.

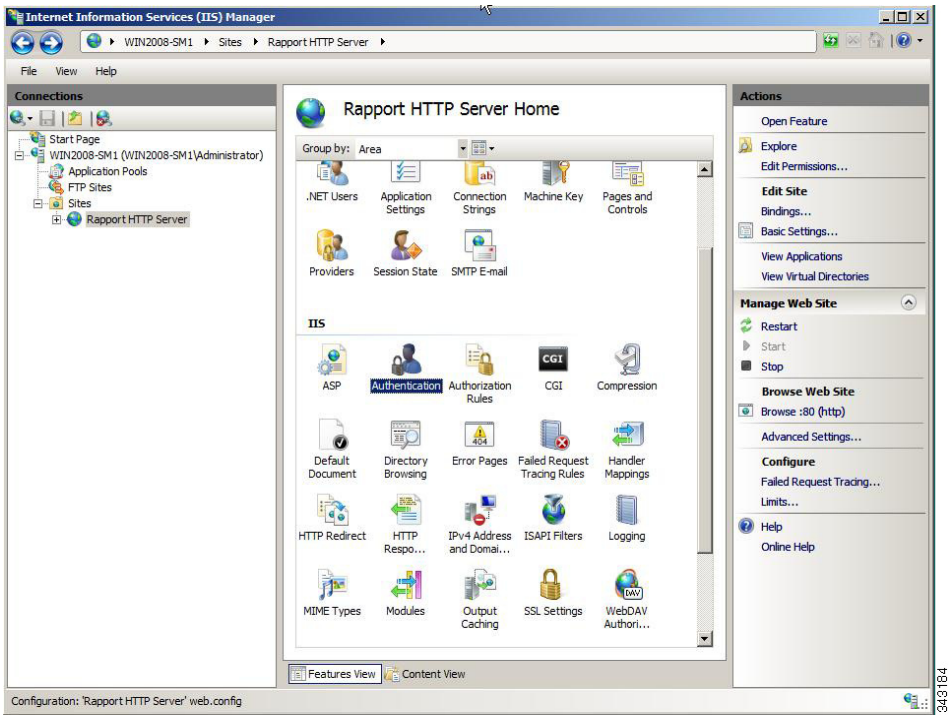
Solution:

Procedure

Step 1 Ensure that WebDAV is enabled. To verify WebDAV status:

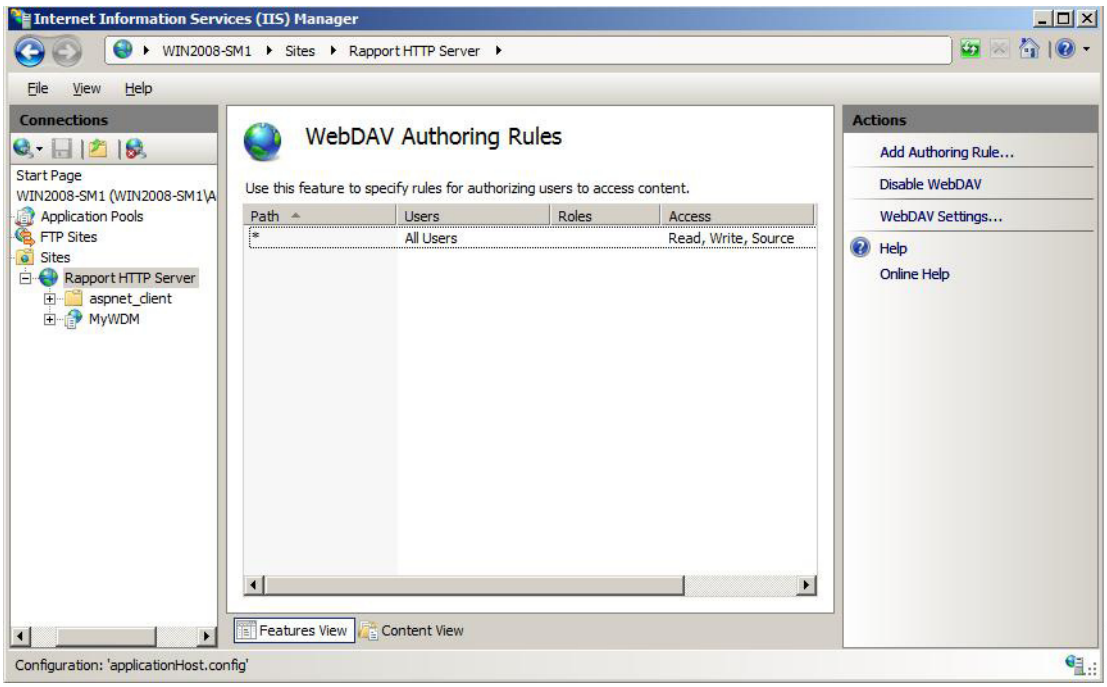
- Navigate to **Start > Administrative Tools > Internet Information Services (IIS) Manager** to open the IIS Manager window.
- Expand the server node (shown with the name of the server).
- Expand the **Sites** node and choose **Rapport HTTP Server**.

Figure E-5 IIS Manager



- Choose WebDAV Authoring Rules for the Rapport HTTP Server in the far right pane.
- Verify that WebDAV is enabled.

Figure E-6 Enable and Disable WebDAV



Step 2 Ensure that the Rapport user is part of the Administrator group.

Step 3 Ensure that WebClient service is running on your system.

Problem with Merlin Imaging in Windows Server 2008

Note This section is not applicable to Cisco VXC clients. It is applicable only for the management of third-party clients.

Problem: Merlin imaging fails in Windows Server 2008 because either:

- The size of the file being uploaded is greater than 30 MB.
- The URL and query string size is not adequate.

Solution: Modify the web.config file located in the inetpub\wwwroot folder by adding the following contents:

```
<security>
    <requestFiltering>
        <requestLimitsmaxAllowedContentLength="4294967296"
        maxUrl="8000"maxQueryString="8000" />
    </requestFiltering>
</security>
```

Recovering Dead Devices

Problem: How do I recover a dead device?

Solution: You can re-image a dead device to recover it.

Use the following guidelines:

- Prepare an image to use by doing one of the following:
  - Obtain the image firmware and register this image in Cisco VXC Manager as described in Managing Cisco VXC Manager Packages, page 3-31.
  - Use an existing image which has already been registered from a device in your installation.
- Add a new Device (as described in Adding and Automatically Discovering Devices, page 2-13) or choose an existing device, and then assign the image you prepared to the device using the Package Manager as described in Managing Cisco VXC Manager Packages, page 3-31.
- Schedule the Cisco VXC Manager package deployment for the Next Time Device Boots (this requires PXE).
- Expand **Update Manager** in the tree pane to find the scheduled device.
- Right-click the scheduled Cisco VXC Manager package entry and choose **Roll to boot**.
- Power on the dead device to allow the device to be re-imaged.

Converting a WISard Image to Merlin

Note This section is not applicable to Cisco VXC clients. It is applicable only for the management of third-party clients.

Problem: How do I convert a WISard image to a Merlin image?

Solution: Merlin enables FTP/ HTTP/and HTTPS-based imaging, as well as better performance when deploying large images. If a WISard image is registered in Cisco VXC Manager, it can be converted into the Merlin format (if you do not want to convert an already registered WISard Image in Cisco VXC Manager, you can convert the WISard Image directly using the conversion utility, and then after converting the image, you can register it in Cisco VXC Manager for distribution).

Cisco VXC Manager provides a conversion utility that converts existing i2d images (WISard images) to the Merlin image format when the image package is registered in WISard mode using the Administrator Console.

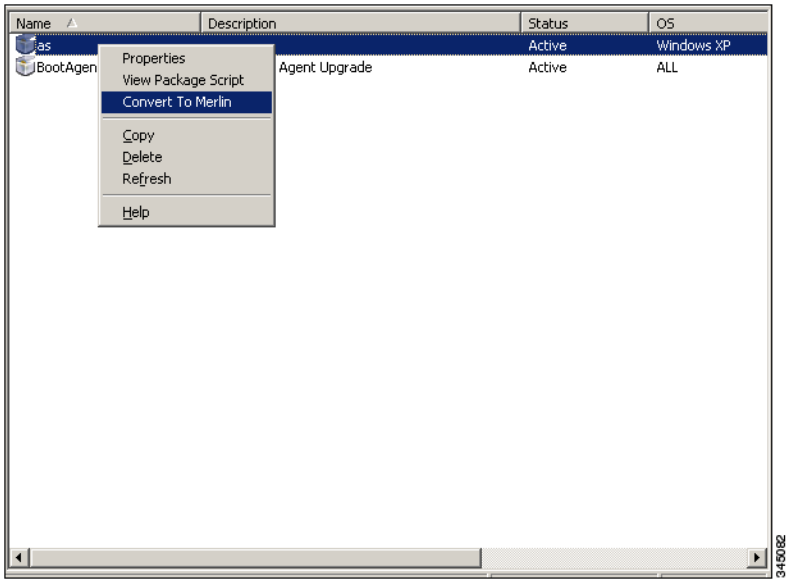
To convert an existing WIsard Image to Merlin:

Procedure

Step 1 In the Administrator Console, navigate to **Package Manager > Images** and choose a registered WISard image.

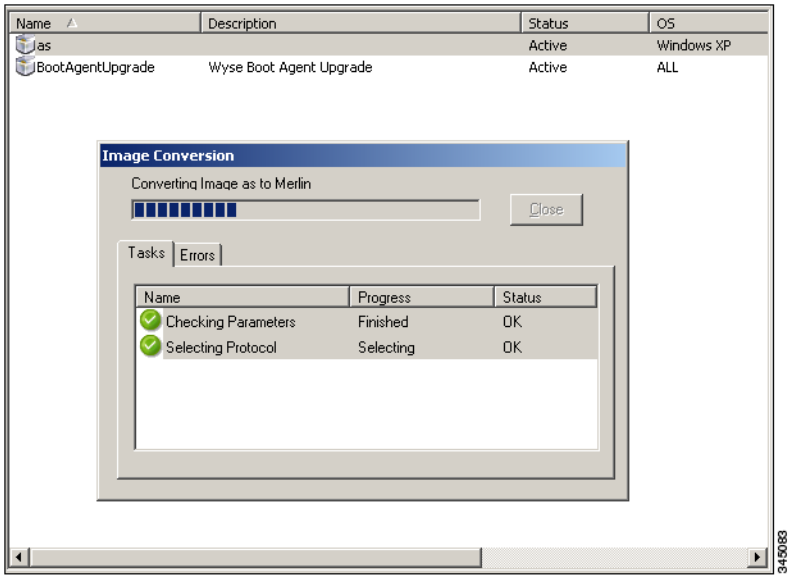
Step 2 Right-click the WISard Image and choose **Convert to Merlin**.

Figure E-7 Convert to Merlin



Step 3 The Image Conversion window appears and shows the progress of the conversion.

Figure E-8 Image Conversion Progress



Step 4 After the conversion is successfully completed, the progress window closes.

Step 5 If any of the tasks in the progress window fails, click the **Errors** tab to see the problem. Click **Close** to close the window.