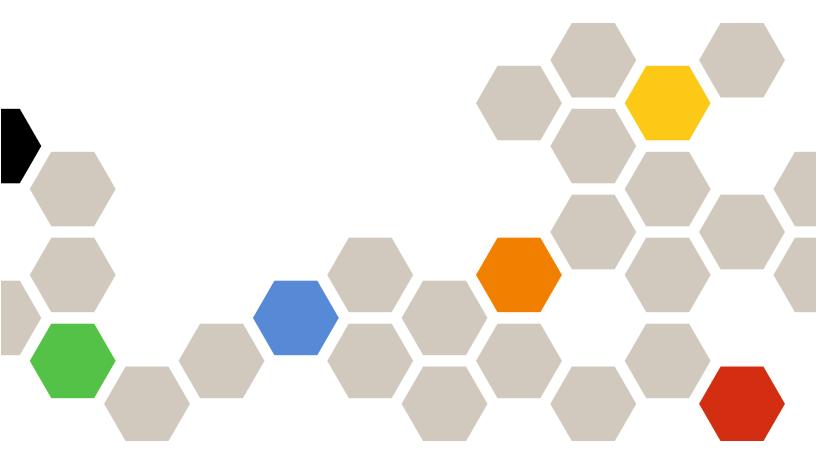
# Lenovo

Lenovo XClarity Integrator System Updates for Microsoft System Center Configuration Manager Installation and User Guide



**Version 7.11.0** 

Note
Before using this information and the product it supports, read the information in Appendix C "Notices" on page 31.
Eighth Edition (March 2021)
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# **About this publication**

This Users Guide provides the latest information for Lenovo XClarity Integrator System Updates for Microsoft System Center Configuration Manager. The Lenovo XClarity Integrator System Updates tool is used to acquire and publish Lenovo system updates in your environment.

# Conventions and terminology

Paragraphs that start with a bold **Note**, **Important**, or **Attention** are notices with specific meanings that highlight key information.

Note: These notices provide important tips, guidance, or advice.

**Important:** These notices provide information or advice that might help you avoid inconvenient or difficult situations.

**Attention:** These notices indicate possible damage to programs, devices, or data. An attention notice appears before the instruction or situation in which damage can occur.

The following table describes some of the terms, acronyms, and abbreviations used in this document.

Table 1. Frequently used terms and acronyms

Term/Acronym	Definition	
SCCM	System Center Configuration Manager	
SSL	Secure Sockets Layer	
wsus	Windows Server Update Services	
Lenovo XClarity Essentials OneCLI	A collection of command line applications which are used to manage Lenovo servers.	
UXSP	UpdateXpress System Pack A package of updates that have been verified to work well together and can be updated together.	

## Web resources

The following Web sites provide resources for understanding, using, and troubleshooting System  $x^{\otimes}$ , Flex System, BladeCenter servers, and systems-management tools.

# Lenovo Web site for Microsoft Systems Management Solutions for Lenovo servers

Locate the latest downloads for the System Center Configuration Manager:

Lenovo XClarity Integrator System Updates Web site

#### **System Management with Lenovo XClarity Solutions**

This Web site provides an overview of the Lenovo XClarity solutions that integrate System x and Flex System hardware to provide system management capability:

System Management with Lenovo XClarity Solution Web site

## Lenovo technical support portal

This Web site can assist you in locating support for hardware and software:

• Lenovo Support Portal Web site

## Lenovo ServerProven Web site

This Web site provide the information about hardware compatibility with Lenovo ThinkSystem, System x, BladeCenter, and Flex System servers:

• Lenovo ServerProven Compatibility Web site

# **Microsoft System Center Web site**

This Web site can assist you in locating Microsoft System Center products:

• Microsoft System Center Web site

# Chapter 1. Lenovo XClarity Integrator System Updates for Microsoft System Center Configuration Manager

The topics in this section provide an overview of Lenovo XClarity Integrator System Updates for Microsoft System Center Configuration Manager (hereinafter referred to as Lenovo XClarity Integrator System Updates) and product features.

Keeping computers up-to-date with firmware, driver, and hardware-related applications is a key activity for any IT administrator. It is complex and time-consuming for an IT administrator to determine the compliance, plan the updates, select the appropriate hardware updates, and deploy the updates to the right set of systems for keeping the environment stable and reliable.

Through its alliance with Microsoft System Center products, Microsoft System Center Configuration Manager (SCCM) and Windows Server Update Services (WSUS), Lenovo XClarity Integrator System Updates is making a commitment to reducing the time and effort of keeping an up-to-date IT environment.

# How Lenovo XClarity Integrator System Updates provides system support

Lenovo XClarity Integrator System Updates provides a machine-type based download mechanism that enables you to download the most recent Lenovo system updates software transparently, without the effort of searching for updates through the Lenovo Web site.

Lenovo XClarity Integrator System Updates allows you to apply the latest updates without using a catalog file, which may not provide the latest updates.

# **Chapter 2. System requirements**

The topics in the section provide a description of the hardware and software requirements for Lenovo XClarity Integrator System Updates.

#### Hardware requirements

The Lenovo XClarity Integrator System Updates has no specific hardware requirements. Lenovo XClarity Integrator System Updates can be run on either a Lenovo or a non-Lenovo server, workstation, or laptop that supports the Windows operating system.

## Supported operating systems

The Lenovo XClarity Integrator System Updates supports the following Windows operating systems:

- Windows Server 2019
- Windows Server 2016
- Windows Server 2012
- Windows Server 2012 R2

## Required software

Windows Server Update Services 3.0 SP1 or a later version of the Administration Console is required. If Windows Server Update Services 3.0 SP1 or a later version is not already installed on the local computer, Windows Server Update Services 3.0 SP1 or later version of the Administration Console must be installed prior to running the Updates Publisher Setup.

If the WSUS version is an earlier version than 4.0, a WSUS patch is required and can be downloaded from the An update for Windows Server Update Services 3.0 Service Pack 2 is available webpage.

Ensure that the account used to install the Lenovo XClarity Integrator System Updates on the host computer has the Windows Server Update Services Administrator privilege.

# Chapter 3. Supported hardware and software

The topics in this section describe the hardware and software that is supported by Lenovo XClarity Integrator System Updates.

# **Supported Microsoft System Center products**

Lenovo XClarity Integrator System Updates supports the following Microsoft System Center products:

- Microsoft Endpoint Configuration Manager 2002
- Microsoft System Center Configuration Manager 1902
- Microsoft System Center Configuration Manager 2016
- Microsoft System Center Configuration Manager 2012
- Microsoft System Center Configuration Manager 2012 R2
- Microsoft System Center Configuration Manager 2012 SP1

# Supported server models

Lenovo XClarity Integrator System Updates supports the following server models.

Table 2. Supported Lenovo servers

System	Server models	
ThinkSystem	<ul> <li>SD530 (7X20, 7X21, 7X22)</li> <li>SE350 (7D1X, 7D27, 7Z46)</li> <li>SN550 (7X16)</li> <li>SN850 (7X15)</li> <li>SR150 (7Y54)</li> <li>SR158 (7Y55)</li> <li>SR250 (7Y51, 7Y52, 7Y72, 7Y73)</li> <li>SR258 (7Y53)</li> <li>SR530 (7X07, 7X08)</li> <li>SR550 (7X03, 7X04)</li> <li>SR570 (7Y02, 7Y03)</li> <li>SR590 (7X98, 7X99)</li> <li>SR630 (7X01, 7X02)</li> </ul>	<ul> <li>SR645 (7D2X, 7D2Y)</li> <li>SR650 (7X05, 7X06)</li> <li>SR665 (7D2V, 7D2W)</li> <li>SR850 (7X18, 7X19)</li> <li>SR850 V2 (7D31,7D32,7D33)</li> <li>SR850P (7D2F, 7D2G, 7D2H)</li> <li>SR860 (7X69, 7X70)</li> <li>SR860 V2 (7Z59, 7Z60, 7D42)</li> <li>SR950 (7X11, 7X12, 7X13)</li> <li>ST250 (7Y45, 7Y46)</li> <li>ST258 (7Y47)</li> <li>ST550 (7X09, 7X10)</li> <li>ST558 (7Y15, 7Y16)</li> </ul>
ThinkAgile	<ul> <li>HX1020 (7D2T)</li> <li>HX1021 (7D1Z, 7D20, 7D29)</li> <li>HX1310/2310/3310 (8693)</li> <li>HX1320/2320/3320 (7X83)</li> <li>HX1321/2321/3321/7321 (7Y89, 7Z04)</li> <li>HX1520/3520/5520/7520 (7X84)</li> <li>HX1521/3521/5521/7521 (7Y90, 7Z05)</li> <li>HX2710/3710 (8689)</li> </ul>	<ul> <li>HX2720/3720 (7X82)</li> <li>HX3510/5510/7510 (8695)</li> <li>HX3721/7721 (7Y88, 7Z03)</li> <li>HX7520 (7Z44)</li> <li>HX7521 (7Z45)</li> <li>HX7820 (7Y95, 7Z08)</li> <li>HX7821 (7Y96, 7Z09)</li> <li>MX1020 (7D5S,7D5T)</li> <li>MX3520 (7D5R)</li> </ul>
System x	<ul> <li>nx360 M5 (5465)</li> <li>nx360 M5 DWC (5467, 5468, 5469)</li> <li>x240 Compute Node (2588, 7162)</li> <li>x240 M5 Compute Node (2591, 9532)</li> <li>x280, x480, x880 X6 Compute Node (4258, 7196)</li> <li>x440 Compute Node (2590, 7167)</li> <li>x3250 M6 (3633, 3943)</li> <li>x3500 M5 (5464)</li> </ul>	<ul> <li>x3550 M4 (7914)</li> <li>x3550 M5 (5463, 8869)</li> <li>x3630 M4 (7158, 8103)</li> <li>x3650 M4 (7915)</li> <li>x3650 M5 (5462, 8871)</li> <li>x3750 M4 (8753)</li> <li>x3850 X6 / x3950 X6 (6241)</li> </ul>

# Supported operating systems for client machines

The following Windows operating systems are supported on client machines:

- Windows Server 2019
- Windows Server 2016
- Windows Server 2012 R2
- Windows Server 2012 SP1

# Required software for client and server machines

Microsoft .NET Framework Version 4.0 or later version must be installed on both server and client machines.

# Chapter 4. Lenovo XClarity Integrator System Updates installation

The topics in this section describe how to install and uninstall Lenovo XClarity Integrator System Updates.

# **Installing Lenovo XClarity Integrator System Updates**

The following procedure describes how to install the Lenovo XClarity Integrator System Updates.

#### About this task

Uses the Lenovo XClarity Integrator System Updates for Microsoft System Center Configuration Manager setup package (EXE file) to install the application.

#### **Procedure**

- Step 1. Go to Lenovo XClarity Integrator System Updates Web site.
- Step 2. Download the latest version of Lenovo XClarity Integrator System Updates.
- Step 3. Follow the wizard to install Lenovo XClarity Integrator System Updates.
  - When the program starts, the Preparing to Install page for the Lenovo XClarity Integrator System Updates is displayed.
- Step 4. Click **Next** and the InstallShield Wizard starts.If it is necessary to stop the installation, click **Cancel**.
- Step 5. Click Next to continue the installation and proceed to the License Agreement page.
- Step 6. On the Destination Folder page, either click **Next** to accept the default installation directory or click **Change** and enter a new location.
  - The Ready to Install the Program page opens.
- Step 7. Click **Install** to start the installation.
  - The Installation progress page is displayed.
  - When the installation is finished, the InstallShield Wizard Completed page opens.
- Step 8. Select one of the following options:
  - Click **Finish** to finish the installation operation.

Select Launch the Post Action of Lenovo System Updates for Microsoft System Center Configuration Manager to start the Setup wizard for Lenovo XClarity Integrator System Updates.

**Note:** You can also start the Setup Wizard from the home page of the application.

# **Uninstalling Lenovo XClarity Integrator System Updates**

To uninstall Lenovo XClarity Integrator System Updates, do the following:

Uninstall by using the **Add or Remove Programs** option. For the Windows Server 2008 operating system, you can use **Programs and features** to uninstall.

**Note:** The log files and update repository folders are not deleted in the uninstallation process. You can delete them manually if necessary.

# Chapter 5. Working with Lenovo XClarity Integrator System Updates and Microsoft System Center Configuration Manager

The topics in this section describe how Lenovo XClarity Integrator System Updates and Microsoft System Center Configuration Manager work together.

# **Lenovo XClarity Integrator System Updates**

Lenovo XClarity Integrator System Updates provides the functions to acquire updates from the Lenovo Web site and publish the updates to the WSUS server.

Lenovo XClarity Integrator System Updates allows you to easily configure settings, maintain a machine list, and manage updates for your specific machine types.

The navigation pane consists of the following views:

- Home
- Product Catalog

# **Using the Home view**

The Home view provides three options to assist you in getting started with Lenovo XClarity Integrator System Updates.

## **Setup Wizard**

Use the Setup Wizard option to guide you through the steps for configuring the Lenovo XClarity Integrator System Updates settings.

## **Getting Started**

Use the Getting Started option to update your system by creating a machine types list to work with the Lenovo XClarity Integrator System Updates.

# **Setup Wizard**

The Setup Wizard guides you through the steps for completing the setup of the configuration settings for Lenovo XClarity Integrator System Updates.

When you finish the setup of the configuration settings, you can view and edit them by clicking **File** → **Preferences**.

## Configuring a WSUS server

The following procedure describes how to configure the WSUS server. The WSUS server is used for publishing. Administrative privileges are required to successfully publish updates.

#### **Procedure**

Step 1. Select one of the following WSUS server options:

To use the same server for WSUS that Lenovo XClarity Integrator System Updates is installed on, click **Connect to a local update server**.

To publish the updates to the WSUS server through the network, click **Connect to a remote update server** and specify the name of the WSUS update server and the port used to connect to that server. You can use the hostname or the IP address as the name of the WSUS update server.

This option allows you to use the Secure Sockets Layer by selecting Use Secure Sockets Layer (SSL). For more information about Secure Sockets Layer, refer to "Using the Secure Sockets Layer for a WSUS server (Optional)" on page 10.

Step 2. Click **Next** to proceed with WSUS configuration.

## Using the Secure Sockets Layer for a WSUS server (Optional)

Lenovo XClarity Integrator System Updates supports publishing updates to the WSUS server by using Secure Sockets Layer (SSL). SSL can secure the connection and encrypt the data transferred between Lenovo XClarity Integrator System Updates and the WSUS server.

#### About this task

If you selected SSL for the remote WSUS server, complete the following procedure to configure the environment.

For more information about how to configure SSL on the WSUS server, see "Using SSL with WSUS" in the WSUS help document. Also refer to "Secure Sockets Layer" in the Internet Information Services (IIS) help document. These help documents are available when the WSUS and IIS tool is installed.

- Step 1. Add the SSL certificate file to your Lenovo XClarity Integrator System Updates computer. Import the SSL certificate to the following locations:
  - Trusted Publishers
  - Trusted Root Certification Authorities

- Step 2. To enable **SSL support for this WSUS server** using the Lenovo XClarity Integrator System Updates, complete the following steps:
  - 1. Connect to the local server the same way you connect to a remote server.
  - 2. Enable SSL support in the SCCM console.
  - 3. Select the appropriate version of Microsoft System Center Configuration Manager: Launch the SCCM console, and select Administration → Site Configuration → Sites → %Site Name% → Configure Site Components. The following page is displayed.

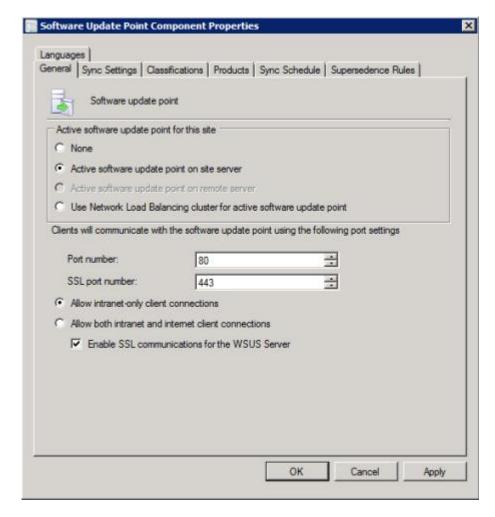


Figure 1. Software Update Point Component Properties

4. Open **Software Update Point Component** and enable **SSL support**.

Note: The WSUS server name must be the same as the Issued to name in the SSL certificate.

- Step 3. Add the SSL certificate file to the client computer.
- Step 4. Import the SSL certificate to these locations: **Trusted Publishers** and **Trusted Root Certification Authorities**.

### Configuring a WSUS server certificate

The topics in this section describe how to configure a digital certificate for a WSUSserver.

## About this task

On the WSUS Server Certificate page, you can configure a digital certificate for the WSUS server.

#### **Procedure**

Step 1. Select one of the following options to select or create a certificate:

Click **Browse** to navigate to and select a third-party certificate.

Click **Create** to generate a new, self-signed certificate.

Note: WSUS in the Windows Server 2012 R2 version and later versions, no longer issue selfsigned certificates. You can create certificates by installing the certification authority. For more information, see Microsoft System Center - Install the Certification Authority webpage.

Step 2. Click Next.

#### What to do next

A digital certificate is used to sign the updates. The certificate must be added, by copying it to the appropriate certificate folders on the System Center Configuration Manager update server, before the Lenovo updates can be published to the SCCM server. The certificate must also be copied to the Lenovo XClarity Integrator System Updates computer to ensure that the update server has the same certificate.

If there is no certificate on the WSUS server, Lenovo XClarity Integrator System Updates prompts you to generate a self-signed certificate on the WSUS server.

Note: Lenovo XClarity Integrator System Updates also supports importing a third-party certificate. To import a third-party certificate, click **Browse** and select the **third-party certificate**.

### Adding certificates

The following procedure describes how to add certificates to the appropriate certificate folders.

- Step 1. Click Start → Run.
- Step 2. Enter MMC on the command line and click **OK** to open the Microsoft Management Console (MMC).
- Step 3. To add a certificate, click File → Add/Remove Snap-in and click Add.
- Step 4. Click Certificates and click Add.
- Step 5. Select Computer account and click Next. To select another computer, enter the name of the update server or click Browse to find the update server computer. If the update server is on the same server, select **Local computer** in this window.
- Step 6. Click **OK** to close the Add/Remove Snap-in wizard.
- Step 7. Expand Certificates and WSUS, and then click Certificates.

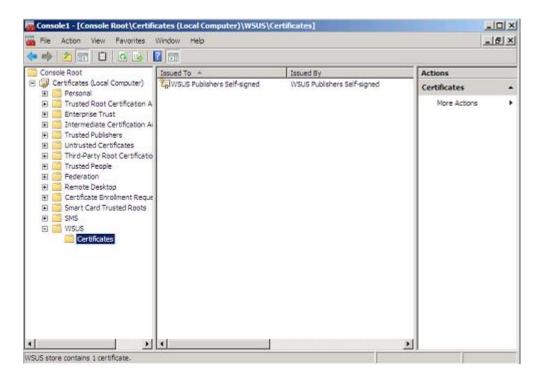


Figure 2. Console 1 - WSUS Certificates

- Step 8. In the middle pane, right-click the **certificate name**, select **All Tasks**, and then click **Export**. The Certificate Export Wizard starts.
- Step 9. Use the default settings to create an export file with the name and location specified in the wizard. This file must be available to the update server before proceeding to the next step.
- Step 10. Right-click **Trusted Publishers**, select **All Tasks** and click **Import**. Complete the Certificate Import Wizard using the exported file from step 6.
- Step 11. If a self-signed certificate is being used, such as WSUS Publishers Self-signed, right-click **Trusted Root Certification Authorities**, select **All Tasks**, and then select **Import**. Complete the Certificate
  Import Wizard using the exported file from step 6.
- Step 12. If the Updates Publisher computer is a remote computer to the update server, repeat steps 7 and 8 to import the certificate to the certificate folder on the Updates Publisher computer.

On client computers, the Windows Update Agent scans for updates.

**Important:** The first installation action will fail if it cannot locate the digital certificate in the Trusted Publishers folder on the local computer. If a self-signed certificate was used when publishing the updates catalog, such as WSUS Publishers Self-signed, the certificate must also be in the **Trusted Root Certification Authorities certificate** folder on the local computer to verify the validity of the certificate.

## Configuring and signing certificates

The following procedure describes how to configure and sign certificates.

# About this task

There are two methods for configuring and signing a certificate on client computers:

 Using Group Policy and the Certificate Import Wizard: Perform the steps described in "Adding certificates" on page 12. • Using the certificate utility and software distribution: Perform the steps in the following procedure.

#### **Procedure**

- Step 1. To open the Microsoft Management Console (MMC), click Start → Run, enter MMC in the text box, and then click OK.
- Step 2. Click **File**, and select **Add/Remove Snap-in**. The Add/Remove Snap-in dialog box opens.
- Step 3. Click **Add**, select **Certificates**, and then click **Add**. The Certificates Snap-in dialog box opens.
- Step 4. Select Computer account, and then click Next. The Select Computer dialog box opens.
- Step 5. Select one of the following server options:

Another: Enter the name of the update server or click Browse to locate the update server.

**Local Computer**: Use this option if the update server is on the same server.

- Step 6. Click **Finish** to return to the Add Standalone Snap-in dialog box.
- Step 7. Click Close to return to the Add/Remove Snap-in dialog box.
- Step 8. Click OK.
- Step 9. On the MMC console, expand Certificates (update server name), expand WSUS, and then select Certificates.
- Step 10. In the results pane, right-click certificate, select All Tasks, and then select Export. To create an export certificate file with the name and location specified in the Certificate Export Wizard, use the default settings.
- Step 11. Select one of the following methods to add the certificate used to sign the updates catalog for each client computer that will use Windows Update Agent to scan for the updates in the catalog:

For self-signed certificates: Add the certificate to the Trusted Root Certification Authorities and Trusted Publishers certificate folders.

For certification authority (CA) issued certificates: Add the certificate to the Trusted Publishers certificate folder.

Note: Windows Update Agent verifies whether the Group Policy setting is enabled on the local computer. The Group Policy setting must be enabled for the Windows Update Agent to scan for the updates that were created and published with Updates Publisher. For more information, see the Microsoft Windows Update Agent webpage.

## Configuring outbound connectivity

The following procedure describes how to configure outbound connectivity.

#### About this task

There are three options for configuring outbound connectivity, which are shown in the following figures:

# The local machine can access the Internet directly

If you select this option, no additional network configuration for outbound connectivity is required.

## The local machine requires an HTTP proxy to access the Internet

If you select this option, you will need to set up an HTTP Proxy for Lenovo XClarity Integrator System Updates for access to the Internet.

#### The local machine will not have access to the Internet

If you select this option, you can update from the local repository where updates were previously saved.

**Note:** Internet connectivity is required for obtaining the latest updates from the Lenovo Web site. If you have not chosen automatic updates, you will need to manually place the updates into the local repository.

#### **Procedure**

Step 1. Select one of the Outbound Connectivity options:

#### Notes:

- If you select the **The local machine requires an HTTP proxy to access the Internet** option, enter the following information:
  - Host
  - Port
- If you select the Authenticate using the following credentials option, enter the following information:
  - User name
  - Password

#### Step 2. Click Next.

The Configuring the local repository page opens. See "Configuring the local repository" on page 15 and complete the steps listed in that topic.

## Configuring the local repository

The following procedure describes how to configure the local repository for updates.

#### **Procedure**

- Step 1. Accept the current folder or click **Browse** to locate a different folder in the local repository.
- Step 2. Click Next. The Confirm Setup page opens.
- Step 3. Click **Confirm** to confirm the previous settings. The Setup Finished dialog box opens.
- Step 4. Click Finish to complete the Setup Wizard.

# **Using the Product Catalog view**

The **Product Catalog** view provides a list of current machines in the navigation pane.

## About this task

To use the **Product Catalog** view, perform the following procedure.

- Step 1. In the Home view, expand **Product Catalog** to view the status of updates for each machine.
- Step 2. Click **Product Catalog** to add or remove the machine list.
- Step 3. Select a machine listed under **Product Catalog** to view the detailed update information. The update information is displayed in the right pane.
- Step 4. Click **Actions**, and select the actions based on your needs.
- Step 5. Select an update in the upper-right pane to view the detailed information of the update.

# Adding and removing machine types from Lenovo Machines view

The **Lenovo Machines** view provides a list of machines that can work with Lenovo XClarity Integrator System Updates. Users can add or remove one or several machine types from the support list.

#### **Procedure**

- Step 1. In the left navigation pane, click **Product Catalog**. A list of machine types to be managed by using Lenovo XClarity Integrator System Updates will be displayed.
- Step 2. Do one of the following based on your needs:
  - To add machine types, click Add to open the Add New Machine Types window, select one or several machine types, and click OK.
  - To remove machine types, select one or several machine types, and click Remove.

# Retrieving update metadata from the Lenovo Web site

The following procedure describes how to retrieve the update metadata for a specific machine type from the Lenovo Web site.

### Before you begin

This task requires a network connection to the Internet. You can use an HTTP Proxy to access the Internet or directly connect to the Internet.

There are two options for retrieving update metadata from the Lenovo Web site:

- To retrieve the latest update metadata from Lenovo, click Retrieve metadata from Lenovo Latest version.
- To retrieve all available update metadata from Lenovo, click Retrieve metadata from Lenovo All versions.

## **Procedure**

- Step 1. Click the Actions menu, and select Retrieve metadata from Lenovo Latest version or Retrieve metadata from Lenovo - All versions. This action retrieves the update metadata related to the specific machine type on the Lenovo Web site. This process may take several minutes to finish.
- Step 2. After the Retrieve Metadata process is finished, the updates will be listed in the update view. If the payload is not downloaded, "Not downloaded" will be displayed in the status column.

Note: UXSP will be displayed under category "Update Bundle" automatically.

# Downloading selected updates from the Lenovo Web site

This topic describes how to download the payload file of the selected updates from the Lenovo Web site.

#### Before you begin

This task requires a network connection to the Internet and a license. You can use an HTTP Proxy to access the Internet or directly connect to the Internet.

#### **Procedure**

- Step 1. Select one or several updates.
- Step 2. From the Actions list, select Download Selected updates from Lenovo. The Download Wizard opens.
- Step 3. After the process is finished, the download status will be displayed on the summary page.

**Note:** If UXSP is selected, all the child updates will be downloaded.

# Importing updates from local site

Users can import the updates from a local directory or a shared network location by using Import Wizard.

## Before you begin

Before importing updates:

- If the update package is downloaded from the Lenovo Web site in a ZIP file, extract the update package first.
- Each update package contains a payload file and a metadata file (XML), both of which are required in the update process of XClarity Integrator System Updates.

## **Procedure**

- Step 1. To start Import Wizard, click the machine name in the navigation pane and select **Import updates from local site** from the Actions list. The Import Wizard Welcome page is displayed.
- Step 2. Click **Next**. The Select Updates Source page is displayed.
- Step 3. Click **Browse**, select the updates source folder, and click **Next**.

**Note:** Lenovo XClarity Integrator System Updates imports the updates to the root path. The updates located in subdirectories will not be imported. To import these updates, run Import Wizard again and select the subdirectory on the Select Updates page.

- Step 4. On the Select Updates page, select individual updates or select all available updates by selecting **Select All**. Click **Next** to import the updates to Lenovo XClarity Integrator System Updates Local Repository. The import progress will be displayed on the Importing Updates page.
- Step 5. After importing the updates, click **Next** to view a summary of the imported updates. On the Import Finished page, the import information is displayed, including the number of imported updates and the list of these updates.
- Step 6. Click Finish.

## Creating an update bundle

An update bundle contains one or several updates. It can be published to WSUS with OneCLI and deployed to the client machine.

To publish the updates to WSUS through client machine, create an update bundle for these updates first.

## **Procedure**

- Step 1. Select one or several updates with payload downloaded.
- Step 2. Select Create update bundle from the Actions list. Create Update Bundle Wizard is displayed.
- Step 3. Input the bundle name, and click **Confirm**. The update bundle is created and displayed in the update view under the **Update Bundle** category.

## Publishing update bundles to the WSUS server

The following procedure describes how to publish the update bundles to the WSUS server directly.

## Before you begin

Before publishing Lenovo updates, do the following:

- Verify that the WSUS server and certificate are configured correctly. For more information, refer to "Configuring a WSUS server" on page 9.
- Prepare the update bundles.

Note: Only the update bundles and UXSP in downloaded status can be published to the WSUS server.

#### **Procedure**

- Step 1. Select one or several update bundles.
- Step 2. From the Actions list, select Publish selected bundles to WSUS. Publish Wizard is displayed.
- Step 3. Select I accept the terms in the license agreement.
- Step 4. Click **Next** to enter into the confirmation page. Verify that all update bundles listed are ready to be published to the WSUS server.
- Step 5. Select the following options:

Create a pre-check bundle. The form of the pre-check bundle is "bundle name (pre-check)". It can be deployed to check how many client systems should be updated. It has the metadata for version comparison but does not contain any update payload. You should deploy the pre-check bundle to client machine, and then deploy the update bundle.

Allow force update. Try to install updates on client system forcefully even if the update version is earlier than the one currently installed. Make sure all updates can be installed on the client system.

**Note:** Only one option can be selected at the same time.

Step 6. Click **Confirm** to start the publishing progress.

The Publishing Updates page is displayed. This operation may take several minutes to finish.

The "Publishing operation is complete" page provides the publishing results and indicates how many updates were published to the WSUS server successfully. Any updates that were not published are listed.

Step 7. Click Finish.

# Checking update bundle state on the WSUS server

This section describes how to check the updates from the WSUS server.

#### About this task

This task requires a network connection to the WSUS server.

## **Procedure**

- Step 1. From the Actions list, select Check bundle state on WSUS. While the Check all update bundles from WSUS server operation is being performed, the progress windows is displayed. This operation may take several minutes to finish.
- Step 2. After checking the state of the update bundles on the WSUS server, the state of the update bundles will be updated to "Published" or "Not published".

# Expiring selected update bundles on the WSUS server

This topic describes how to expire the selected update bundles on the WSUS server.

#### About this task

This task requires a network connection to the WSUS server.

**Important:** The expire update bundle option cannot be reverted.

- Step 1. Select one or several update bundles.
- Step 2. From the **Actions** list, select **Expire Selected bundles on WSUS**. Expire Wizard is displayed.

After the expire operation finishes, the state of the selected update bundles will be changed to "Expired".

# **Deleting selected updates**

You can delete selected updates and the update bundles from the Lenovo Updates repository. However, the update bundles you deleted from Lenovo Updates repository will not be deleted from WSUS.

- Step 1. Select one or several updates or update bundles.
- Step 2. From the **Actions** list, select **Delete Selected updates**. The selected updates or update bundles are deleted.

# **Chapter 6. Working with Microsoft System Center Configuration Manager**

The topics in this section describe how to manage and deploy updates using Microsoft System Center Configuration Manager.

Note: Before deploying updates, ensure that Software Update Point role is added and configured correctly.

# Synchronizing Lenovo update bundles from WSUS to SCCM

The following procedure describes how to synchronize Lenovo update bundles from WSUS to SCCM.

# Before you begin

Ensure that the Software Update Point role is set up and configured in the SCCM server.

#### **Procedure**

- Step 1. Click Start → All Programs → Microsoft System Center → Configuration Manager → Configuration Manager Console to launch the Configuration Manager Console.
- Step 2. In the navigation pane, expand **Software Library** → **Overview** → **Software Updates**.

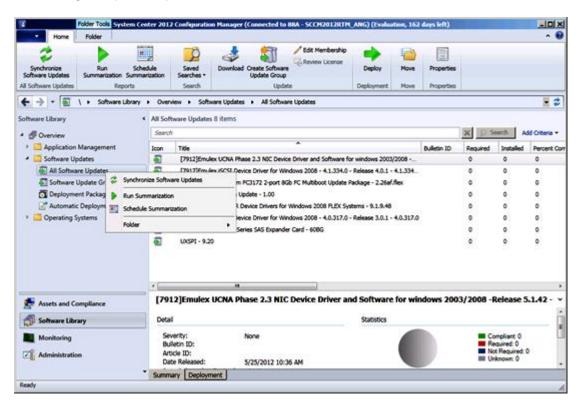


Figure 3. Synchronizing the Update Repository

Step 3. Expand Software Updates, right-click **All Software Updates**, and select **Synchronize Software Updates**.

- Step 4. Click Yes to initiate a site-wide software update synchronization. The synchronization process may take a few minutes to finish. There is no visual indication that the process has completed.
- Step 5. Complete the following steps to check whether the synchronization process completed successfully:
  - a. In the navigation pane, expand Monitoring → System Status → Site Status.
  - b. Expand site server and click Component Status. The list of SCCM server components and their status is displayed in the results pane.
  - In the results pane, right-click SMS\_WSUS\_SYNC\_MANAGER and select Show Messages →

The SMS Status Message Viewer for the site server window opens with the status messages for the WSUS Sync Manager. Note the most recent message which indicates when the synchronization process started, when it was in progress, and whether it completed.

- Step 6. After synchronization has successfully finished, refresh updates.
- Step 7. The update bundles published from Lenovo XClarity Integrator System Updates are displayed in the update list. If the update bundles are not displayed, check the following settings on the Software Update Point role:
  - Click Administration → Site Configuration → Overview → Sites, right click your site, and select Configure Site Components → Software Update Point. The Software Update Point **Component Properties** window is displayed.
  - b. In the **Classifications** tab, ensure that "Updates" is selected.
  - c. In the **Products** tab, ensure that "Lenovo" and related machine types are selected.
  - d. Synchronize the software update again.

# Configure Maximum Run Time for Lenovo update bundle

This topic describes how to configure the Maximum Run Time for Lenovo update bundle on SCCM.

## About this task

By default, the maximum run time of software update is 10 minutes. However, the firmware update may take more time to finish. The maximum run time increases with the number of updates in one update bundle.

If there is one update in an update bundle, it is recommended to change the Maximum Run Time to 30 minutes. If there are more than one update in an update bundle, add 10 minutes for each update.

## **Procedure**

- Step 1. In the Software Library pane, click **Overview** → **Software Updates** → **All Software Updates**.
- Step 2. Right click a Lenovo update bundle. The Properties window is displayed.
- Step 3. Select **Maximum Run Time**, and change the maximum run time.

# Viewing Lenovo update bundles state in SCCM

The following procedure describes how to view the update bundle state in SCCM.

#### About this task

This task is performed on the SCCM console.

To view Lenovo update bundles state in SCCM, expand Overview → All Software Updates, and right-click All Software Updates in the Software Library pane.

After the updates are deployed to their corresponding clients, on the next software update scan, the site database will receive the report from clients on the client systems, indicating whether the update is applicable or installed on each client. The administrator will see the data report and decide which updates should be distributed based on the following information:

#### Installed

Indicates the clients installed with the update.

#### Required

Indicates the clients installed with the update, reporting that either the update is applicable but not yet installed, or the installation status is not synchronized to the site server database.

## **Not Required**

Shows the number of clients with inapplicable updates.

#### Unknown

Shows the number of clients with inapplicable updates. The scan for the software update compliance is not performed, or the scan results is not synchronized to the site server.

**Notes:** By default, the update bundles of the client system with the same machine type are "Required". After the update bundles are deployed to the client, the status will be updated to the following:

- Installed: At least one update in the bundle is installed on the client.
- Not Required: No update in the bundle is required and installed on the client.

# **Deploying Lenovo update bundles in SCCM**

After you determine which updates should be distributed, the administrator selects the Lenovo update bundles and distributes them to the client systems by creating deployment packages.

When clients of the targeted collections receive a new deployment package 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 is reported to the site server.

Before deploying Lenovo update bundles to client machine, ensure that your SCCM server and client machine are configured correctly.

# Configuring a client system

To receive updates, users should configure the client system.

- Step 1. Discover the client systems and install the management agent through the SCCM server.
- Step 2. Configure the WSUS certificate on the client systems. Ensure that the SCCM managed client system has the WSUS Publishers Certificate in its Trusted Root Certification Authorities folder.
- Step 3. Check **Allow Signed Content from the intranet Microsoft update service location** on the client system using the Windows Group Policy Editor.
- Step 4. Perform the following steps to configure the group policy on client computers.
  - a. On the client system, click Start, select Run, type GPEDIT.MSC, and click OK.
  - b. Expand Computer Configuration → Administrative Templates → Windows Components
     → Windows Update.

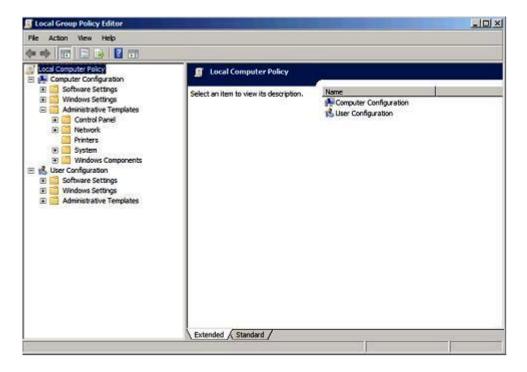


Figure 4. Local Computer Policy configuration

c. Double-click Allow signed content from intranet Microsoft update service location.

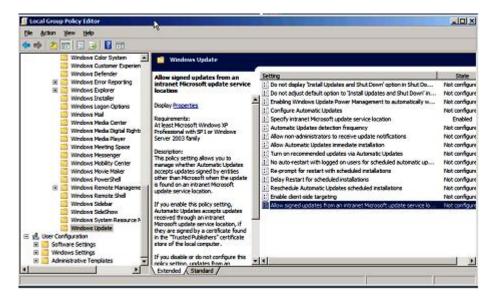


Figure 5. Allowing signed updates from an intranet Microsoft update service location

- Select Enabled and click OK.
- e. Close the Group Policy editor.

## What to do next

Verify that Microsoft .NET Framework Version 4.0 or later version is installed on the client system before deploying Lenovo update bundles to the client machine.

# Deploying Lenovo update bundles to the client system

The following procedure describes how to deploy Lenovo update bundles from the SCCM server to the client system.

#### About this task

This task is performed from the SCCM console.

#### **Procedure**

- Step 1. In the Software Library pane, expand Overview → Software Update → All Software Updates.
- Step 2. In the right pane, right-click the update bundles for deployment and select **Deploy**.
- Step 3. Deploy the Lenovo update bundles as other normal software updates.

**Note:** For more information about the update deployment in SCCM, refer to <a href="https://docs.microsoft.com/en-us/configmgr/sum/deploy-use/deploy-software-updates">https://docs.microsoft.com/en-us/configmgr/sum/deploy-use/deploy-software-updates</a>.

# Deploying Lenovo update bundles (with supplement bundle) to the client system

This topic describes how to deploy Lenovo update bundles (with supplement bundle) from the SCCM server to the client system.

If you select to generate a supplement bundle when publishing Lenovo update bundle from XClarity Integrator System Update to WSUS, you should deploy the supplement bundle to client system first, and then deploy the Lenovo update bundle.

You can deploy the supplement bundle and the update bundle in SCCM as other normal software updates.

# Appendix A. Troubleshooting

The topics in this section will assist you with troubleshooting issues that you may have with Lenovo XClarity Integrator System Updates.

# How to configure the XClarity Integrator System Updates log file

You can change the value of the log level on the XClarity Integrator System Updates host machine and the client systems.

The XClarity Integrator System Updates uses the following registry key to record the log level:

- [HKEY LOCAL MACHINE\SOFTWARE\Lenovo\Systems Management Integrations\Log]
- LogLevel=Info

The available LogLevel values are: Debug, Info, Warning, Error, and Fatal.

By default, the Info value is used.

# Updates fail to be published to WSUS

#### Issue

Updates fail to be published from the XClarity Integrator System Updates to WSUS.

## Possible solution

To determine what occurred, check the log file in %SystemDrive%\Program Files (x86)\Lenovo\Lenovo System Updates\Log.

# Updates fail to be published to WSUS due to a verification of the file signature failed error

#### Issue

The XClarity Integrator System Updates failed to publish the updates to WSUS due to a verification of file signature failed error.

#### Possible solution

Ensure that the WSUS Publishers Certificate is copied to the Trusted Root Certification Authorities as described in "Setup Wizard" on page 9.

# Changing the log level value in the registry does not take effect while the XClarity Integrator System Updates is running

#### Issue

If the log level value is changed while XClarity Integrator System Updates is running, the new value will not take effect immediately.

## Possible solution

Close the XClarity Integrator System Updates, and launch it again for the changes to take effect.

# Appendix B. Accessibility features

Accessibility features help users who have a physical disability, such as restricted mobility or limited vision, to use information technology products successfully.

Lenovo strives to provide products with usable access for everyone, regardless of age or ability.

Lenovo XClarity Integrator System Updates supports the accessibility features of the system-management software in which they are integrated. Refer to your system-management software documentation for specific information about accessibility features and keyboard navigation.

The Lenovo XClarity Integrator System Updates topic collection and its related publications are accessibilityenabled for the Lenovo Home Page Reader. You can operate all features using the keyboard instead of the mouse.

You can view the publications for Lenovo XClarity Integrator System Updates in Adobe Portable Document Format (PDF) using the Adobe Acrobat Reader. You can access the PDFs from the Lenovo XClarity Integrator System Updates download site.

## Lenovo and accessibility

See the <u>Lenovo Accessibility Web site</u> for more information about the commitment that Lenovo has to accessibility.

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# Important notes

Processor speed indicates the internal clock speed of the microprocessor; other factors also affect application performance.

When referring to processor storage, real and virtual storage, or channel volume, KB stands for 1 024 bytes, MB stands for 1 048 576 bytes, and GB stands for 1 073 741 824 bytes.

When referring to hard disk drive capacity or communications volume, MB stands for 1 000 000 bytes, and GB stands for 1 000 000 000 bytes. Total user-accessible capacity can vary depending on operating environments.

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