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Curriculum

Module 8: Maintaining Software by Using Software Update Services

Contents

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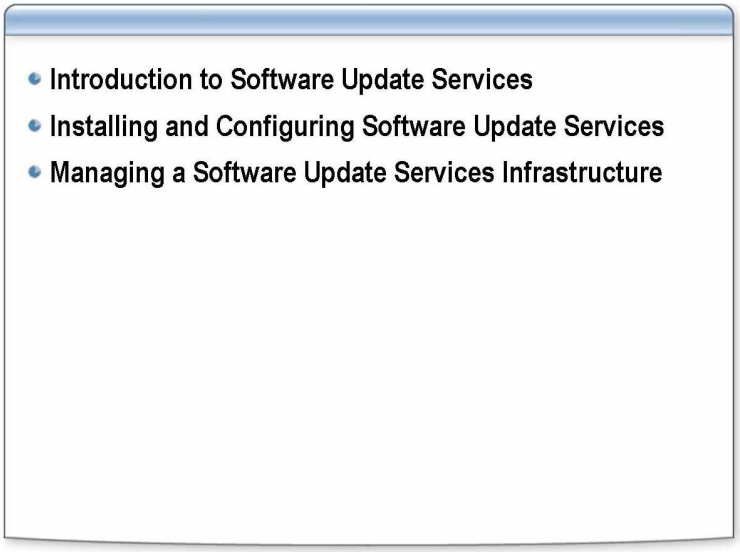
Overview



Introduction

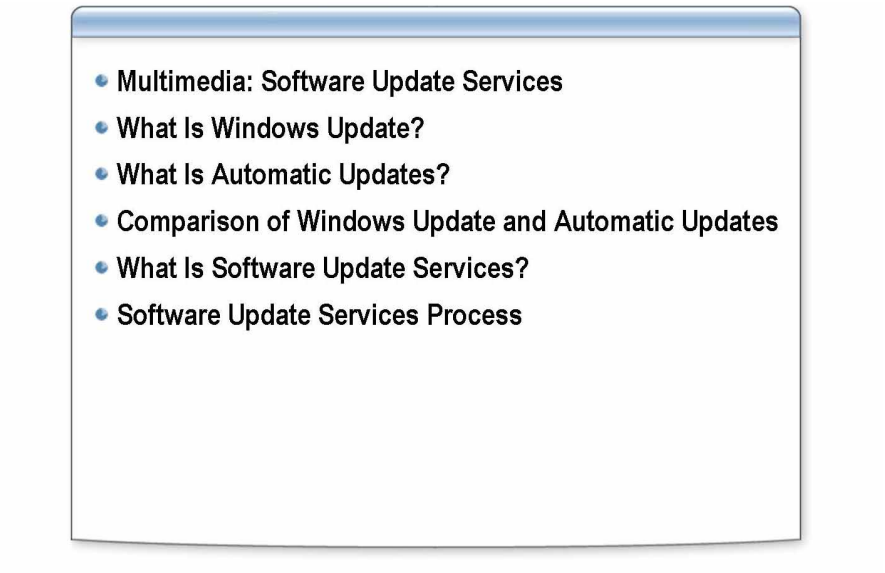
This module introduces Microsoft® Software Update Services, a tool for managing and distributing software updates that resolve known security vulnerabilities and other stability issues in Microsoft Windows® 2000, Windows XP, and Windows Server 2003 operating systems. This module also describes how to install the client and server components of Software Update Services. It also provides necessary information about managing the Software Update Services infrastructure.

Objectives

After completing this module, you will be able to:

- Explain Microsoft Software Update Services.
- Install and configure client computers to use Software Update Services.
- Install and configure servers to use Software Update Services.
- Manage the Software Update Services infrastructure.

Lesson: Introduction to Software Update Services



Introduction

Traditionally, systems administrators keep systems up-to-date by frequently checking the Windows Update Web site or the Microsoft Security Web site for software updates. Administrators manually download available updates, test the updates in their environment, and then distribute the updates manually or by using their traditional software-distribution tools.

By using Software Update Services, administrators can perform these tasks automatically.

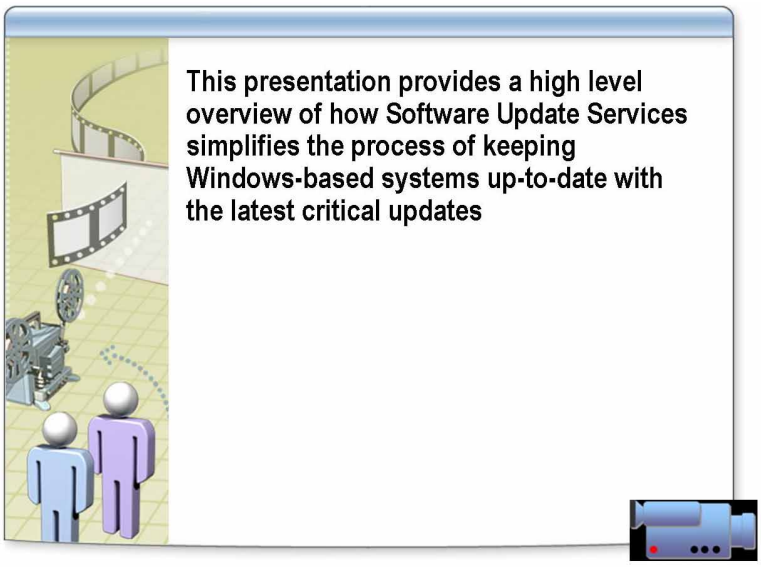
This lesson describes Software Update Services and explains how it works with Windows Update and Automatic Updates.

Lesson objectives

After completing this lesson, you will be able to:

- Describe Software Update Services.
- Describe Windows Update.
- Describe Automatic Updates.
- Compare Windows Update and Automatic Updates.
- Describe how Software Update Services is used.
- Explain the Software Update Services process.

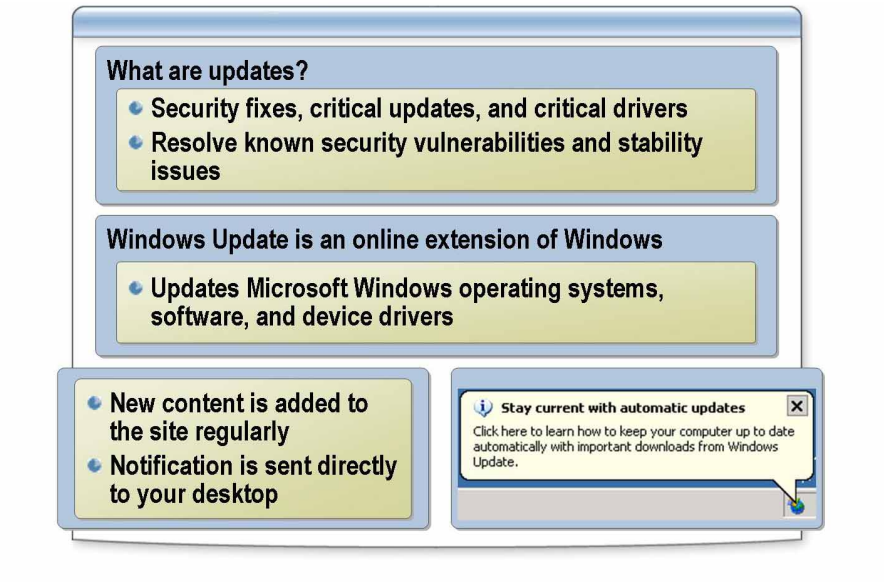
Multimedia: Software Update Services



File location

To view the *Software Update Services* presentation, open the Web page on the Student Materials compact disc, click **Multimedia**, and then click the title of the presentation.

What Is Windows Update?



Introduction

Windows Update is the online extension of Windows that helps keep your systems up-to-date. Use Windows Update to select updates for the operating systems, software, and device drivers on your network. New content is added to the site regularly, so you can always get the most recent updates to help protect your server and the client computers on your network.

What are updates?

Updates can include security fixes, critical updates, and critical drivers. These updates resolve known security vulnerabilities and stability issues in Microsoft Windows 2000, Windows XP, and Windows Server 2003 operating systems.

Update categories

The categories for the Windows operating system updates are:

- *Critical updates*. Security fixes and other important updates to keep computers current and networks secure.
- *Recommended downloads*. Latest Windows and Microsoft Internet Explorer service packs and other important updates.
- *Windows tools*. Utilities and other tools that are provided to enhance performance, facilitate upgrades, and ease the burden on systems administrators.
- *Internet and multimedia updates*. Latest Internet Explorer releases, upgrades to Microsoft Windows Media® player, and more.

- *Additional Windows downloads*. Updates for desktop settings and other Windows features.
- *Multilanguage features*. Menus and dialog boxes, language support, and Input Method Editors for a variety of languages.
- Deployment guides and other software-related documents are also available.

Notification is sent to your desktop

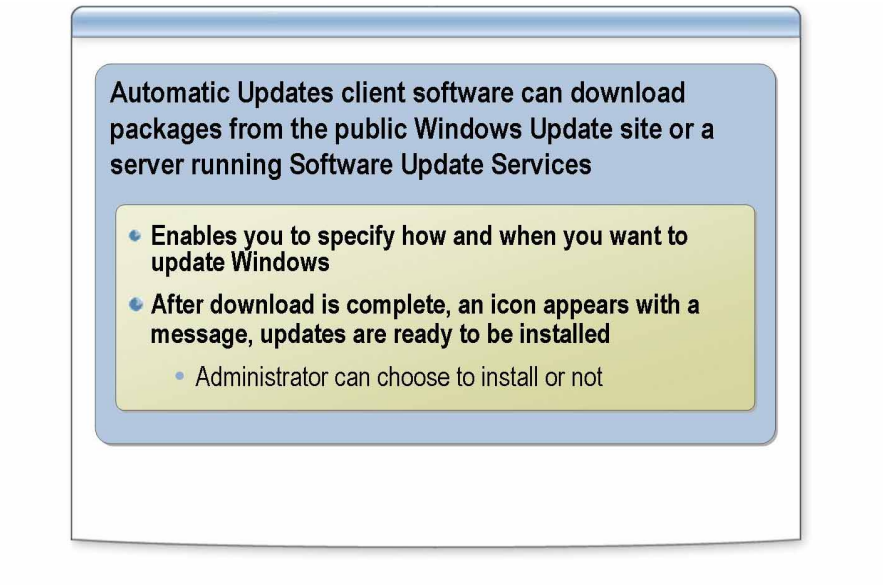
When an update is available for your computer, Windows Update notifies you by displaying a balloon in the lower right corner of your screen when you first log on. You can then download the update, postpone updating your computer, or go to the Windows Update Web site to read about the available update.

Software Licensing

The update method that you use for your network depends on the size of your network, number of users, and computer locations. Before you determine which option to use, however, you are required to license the Microsoft software that you are using. Microsoft has volume software product licenses that grant you the legal right to run or access a software program.

Note To learn more about Microsoft Volume Licensing agreements, go to the Microsoft Licensing Web site at http://www.microsoft.com/licensing.

What Is Automatic Updates?



Introduction

By using Automatic Updates, you can specify how and when you want to update Windows. These updates include everything from critical updates to enhancements.

Includes a range of options

Automatic Updates includes a range of options for downloading updates. For example, you can set up Windows to automatically download and install updates on a schedule that you specify. Or you can choose to be notified when updates are available for your computer and then download the updates in the background so that you can continue to work uninterrupted.

Notification of available updates

After the download is complete, an icon appears in the notification area with a message that the updates are ready to be installed. When you click the icon or message, Automatic Updates quickly guides you through the installation process.

If you choose not to install a specific update that has been downloaded, Windows deletes its files from your computer. If you change your mind later, you can download it again by opening the **System Properties** dialog box, clicking the **Automatic Updates** tab, and then clicking **Declined Updates**. If any of the updates that you previously declined still apply to your computer, they appear the next time that Windows notifies you of available updates.

Exercise caution

Exercise caution whenever you download programs from the Internet. Some attackers disguise attacks as harmless programs to compromise security on your computer. To assure you that the programs you download from Windows Update are from Microsoft, all files are digitally signed. The purpose of digital signatures is to ensure the authenticity and integrity of the signed files. Automatic Updates installs a file only if it contains this digital signature.

Automatic Updates client deployment

You can install the updated Automatic Updates client on your client computers by using one of the following methods:

- Install Automatic Updates client by using the Windows Installer package (.msi file).
- Install Windows 2000 Service Pack 3 (SP3).
- Install Windows XP SP1.
- Install Windows Server 2003.

Note For more information about deploying Software Update Services, see the white paper, *Deploying Software Update Services*, under **Additional Reading** on the Web page on the Student Materials compact disc.

Comparison of Windows Update and Automatic Updates

Update Type	Description	Location
Windows Update	Microsoft Web site where Windows users can download critical and non-critical software	Microsoft Windows Update http://v4.windowsupdate.microsoft.com/en/default.asp
Automatic Updates	With Software Update Services, automatically interacts with Windows Update	

Introduction

Keeping Windows-based systems current with the latest updates can be a complicated task for systems administrators. Using Windows Update or Automatic Updates can make this task easier to perform.

Service packs

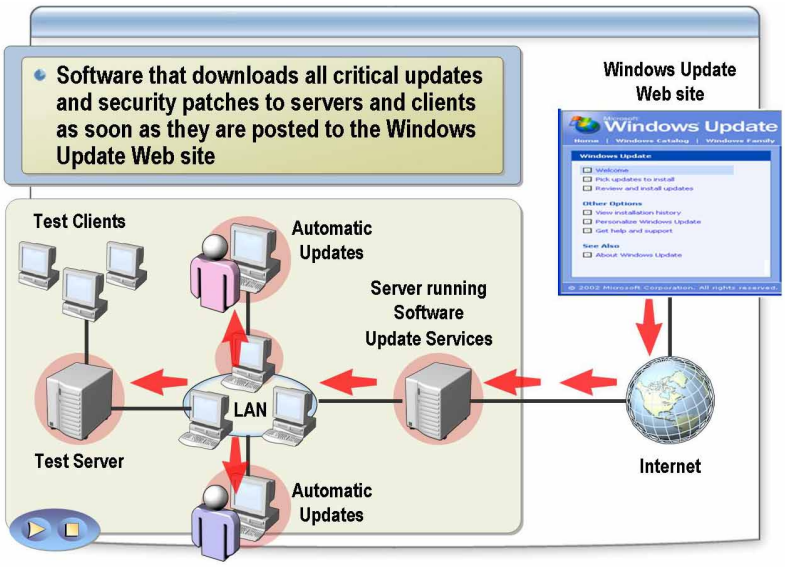
Windows Update and Automatic Updates send notices to Windows users about available service packs. Service packs are the means by which product updates are distributed. Service packs may contain updates for system reliability, program compatibility, security, and more.

Windows Update and Automatic Updates

Windows Update and Automatic Updates are two separate components that are designed to work together to keep Windows operating systems secure.

- Windows Update is a Microsoft Web site from which Windows users can download critical and non-critical software.
- Automatic Updates enables you to automatically interact with the Windows Update Web site to obtain the critical software updates. As a systems administrator, you have full control over the level of this interaction with Automatic Updates by using Software Update Services.

What Is Software Update Services?



Definition

You can use Software Update Services to download all critical updates to servers and clients as soon as they are posted to the Windows Update Web site.

Server component

You install the server component of Software Update Services on a server running Windows 2000 Server, Windows XP, or Windows Server 2003 inside your corporate firewall. A corporate service allows your internal server to synchronize content with the Windows Update Web site whenever critical updates for Windows are available. The synchronization can be automatic or the administrator can perform it manually.

By synchronizing with the Windows Update Web site, your internal server that is running Software Update Services can pull the update packages and store them until an administrator decides which ones to publish. Then, all the clients that are configured to use the server running Software Update Services will install those updates.

Client component

You can control which server each client computer connects to and then schedule when the client performs all installations of critical updates either manually by means of the registry or by using Group Policy from the Active Directory® directory service.

Synchronizes content from Windows Update

You can configure servers running Software Update Services to synchronize content from the Windows Update Web site. You can also configure these servers to download content from a content distribution point that you create manually. Second-tier servers running Software Update Services can synchronize both content and the list of approved packages. By using this method, you can simplify the update management process by managing updates from a central location.

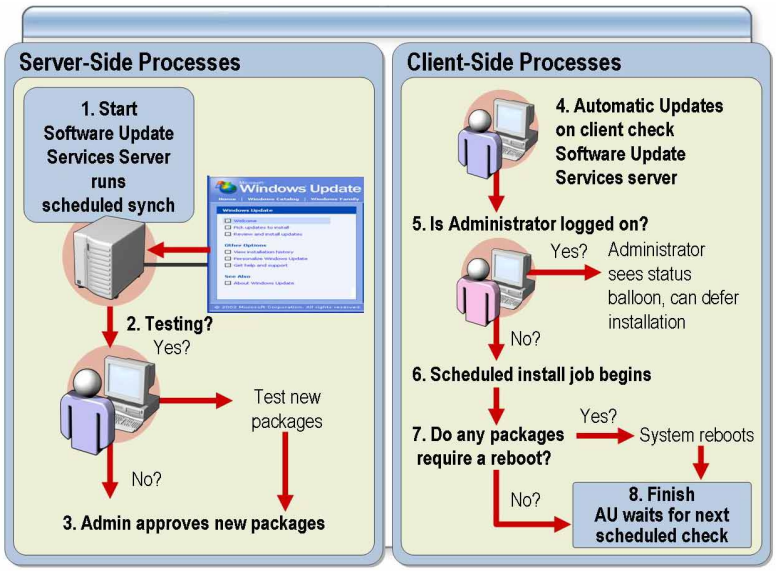
Deployment of staged updates

You can stage update deployment by using multiple servers running Software Update Services. You can set up one server in your test lab to publish the updates to lab client computers first. If these updates are installed correctly on these computers, you can then configure your other servers running Software Update Services to publish their updates to the rest of your organization. By using this method, you can ensure that these changes do not harm your standard desktop operating environment.

Note For more information about Microsoft Software Update Services, see the white paper, *Software Update Services Overview*, under **Additional Reading** on the Student Materials compact disc.

Note Software Update Services is not intended to serve as a replacement for your enterprise software-distribution solution, such as Microsoft Systems Management Server (SMS) or Microsoft Group Policy-based software distribution. Many customers use solutions such as SMS for complete software management, including responding to security and virus issues, and these customers should continue using these solutions. Advanced solutions such as SMS provide the ability to deploy all software throughout an enterprise, in addition to providing administrative controls that are critical for medium and large organizations.

Software Update Services Process



Introduction

The process for using Software Update Services involves both the server running Software Update Services and the client computers on a network. If both are configured, the administrator can review the update packages and approve them for installation.

Server-side processes

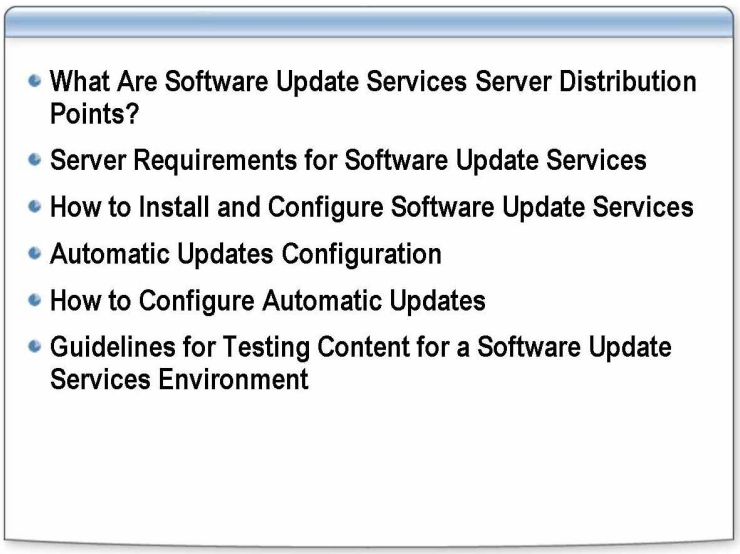
1. The server running Software Update Services runs a scheduled synchronization with Windows Update and receives new packages of updates.
2. The systems administrator reviews the new packages and determines whether testing is required.
   a. If testing is required, the administrator sends the new packages to be tested.
   b. If testing is not required, the administrator proceeds to step 3.
3. Administrator approves the new packages of updates.

Client-side processes

1. Automatic Updates on client computers check the server running Software Update Services server daily and download new approved updates packages from either the server running Software Update Services or the Windows Update Web site.
2. At the scheduled update time, Software Update Services checks whether the administrator is logged on.
   a. If logged on, the administrator sees a status balloon on the desktop and decides whether to defer or run the installation.
   b. If the administrator is not logged on, step 6 is performed.
3. The scheduled installation job begins, and Automatic Updates installs new or changed packages.

4. Automatic Updates checks whether the new packages require a restart of the server or client.
   a. If a restart is required, the system restarts after all the packages are installed.
   b. If no restart is required, the installation is completed.
5. Automatic Updates waits for the next scheduled check.

Lesson: Installing and Configuring Software Update Services



Introduction

Software Update Services consists of both client-side and server-side components to provide a basic solution to critical patch management.

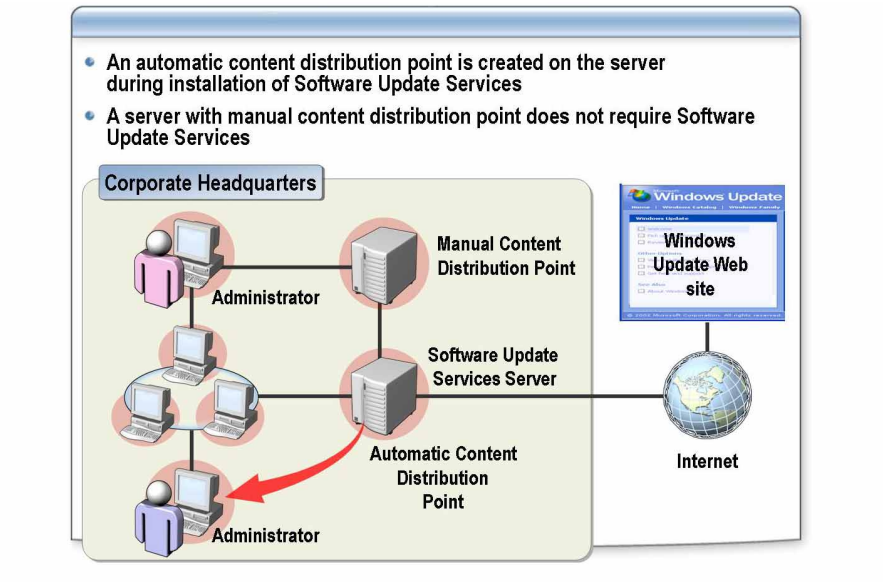
This lesson explains how to install and configure the client-side and server-side components of Software Update Services.

Lesson objectives

After completing this lesson, you will be able to:

- Explain server distribution points for Software Update Services.
- Describe server hardware and software requirements for Software Update Services.
- Install and configure Software Update Services on the server.
- Explain Automatic Updates configuration.
- Configure Automatic Updates.

What Are Software Update Services Server Distribution Points?



Introduction

The server that is running Software Update Services controls content distribution. That server can distribute the updates automatically, or the administrator can overrule the default and manually distribute the updates by using a content distribution point.

Content distribution points

There are two ways to create a content distribution point:

- *Automatic.* When you install Software Update Services on a server, an automatic content distribution point is created on that server. When the server is synchronized, its content is updated from the Windows Update Web site.

  The content distribution point is located on the Web site in a virtual root (v-root) named /Content on the server running Internet Information Services (IIS). If you choose to maintain content on Microsoft.com, this automatic content distribution point is empty.

- *Manual.* You can also manually create a content distribution point on a server running IIS version 5.0 or later. The server with the manual content distribution point does not require Software Update Services.

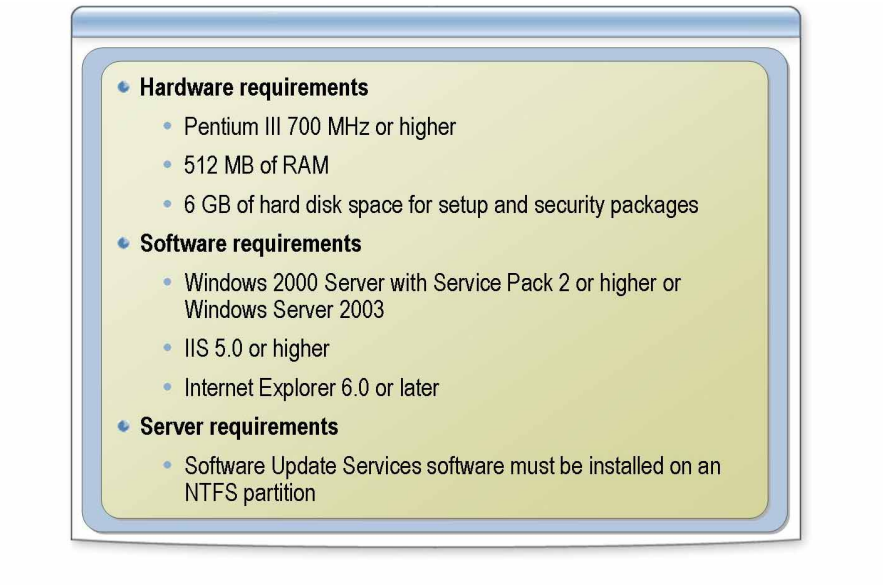
Why set up a manual content distribution point?

You may want to set up a manually configured content distribution point in any of the following situations:

- Multiple servers in your organization are running Software Update Services and you do not want all of the servers to access the Internet to synchronize content.
- Some sites on your network do not have Internet access.
- You want to test content in a test environment and then push the tested content to your production environment.

Note To set up and configure a manual content distribution server, see the white paper, *Deploying Software Update Services*, under **Additional Reading** on the Student Materials compact disc.

Server Requirements for Software Update Services



Introduction

You install the server component of Software Update Services by using a Windows Installer package that installs the necessary server files and configures Internet Information Services. To ensure that your server can support Software Update Services, check the hardware and software capabilities of your server. Setup will not allow you to install the software if your computer does not meet the following requirements.

Hardware server requirements

A server running Software Update Services requires the following hardware:

- Pentium III 700 megahertz (MHz) or later
- 512 megabytes (MB) of RAM
- 6 gigabytes (GB) of hard disk space for setup and security packages

A server with the preceding hardware running Software Update Services can support approximately 15,000 clients.

Software server requirements

Each server running Software Update Services requires the following software:

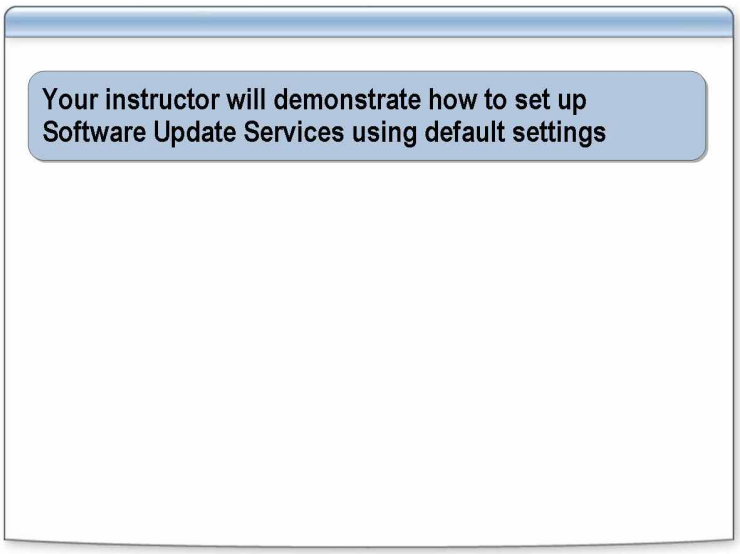
- Windows 2000 Server with Service Pack 2 or later, or Windows Server 2003
- IIS 5.0 or later
- Internet Explorer 6.0 or later

Disk requirements

In addition to the preceding hardware and software requirements, the Software Update Services software must be installed on an NTFS partition on the server. The system partition on your server must also use NTFS, because FAT32 does not offer security.

Note For more information about server requirements for Software Update Services, see the white paper, *Deploying Software Update Services*, under **Additional Reading** on the Web page on the Student Materials compact disc.

How to Install and Configure Software Update Services



Introduction

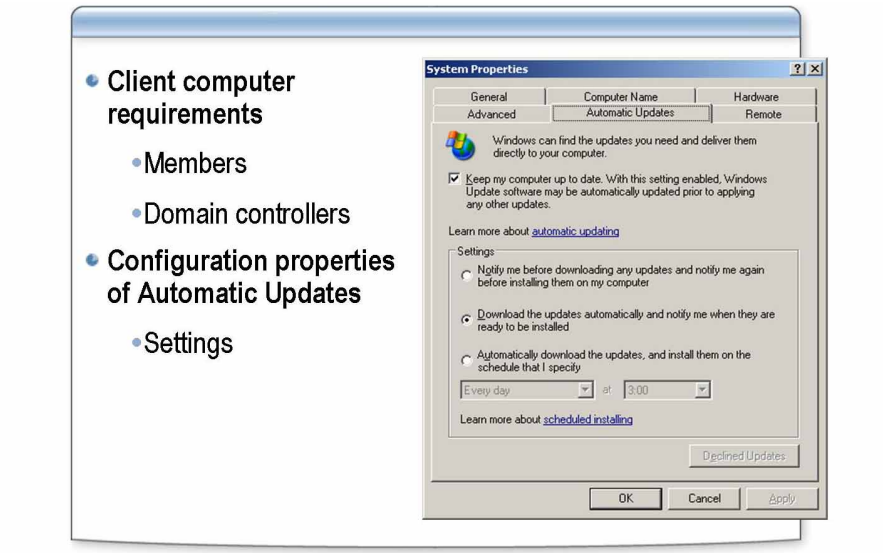
A systems administrator is responsible for installing and setting up Software Update Services. You can install the software using the default configuration by downloading the software from the Microsoft Software Update Services Web site.

Procedure for setting up Software Update Services using default settings

To set up Software Update Services:

1. Download Software Update Services from http://www.microsoft.com/windows2000/windowsupdate/sus/default.asp.
2. Double-click the **SUS101SP1.exe** file to begin the installation process.
3. In the Setup Wizard, on the **Welcome** page, click **Next**.
4. Read and accept the **End User License Agreement**.
5. Select the **Typical** check box.
6. Click **Install**, and then click **Finish** in the Setup Wizard to open the Software Update Services administration Web site in Internet Explorer.

Automatic Updates Configuration



Introduction

You can choose from several options in Automatic Updates to control how to update clients. Choose the option that provides most appropriate update method for your organization.

Automatic Updates settings

By using the following settings, the local administrator can control how updates are downloaded and installed:

- The administrator is notified before updates are downloaded and before the downloaded updates are installed.
- Updates are automatically downloaded, and an administrator is notified before updates are installed.
- Updates are automatically downloaded and installed based upon a specified schedule.

The administrator is notified by means of an icon and a balloon in the notification area to the right of the taskbar buttons. The download notification is similar to the installation notification. All notification events are logged in the system event log.

Automatic Updates setting configurations

The Group Policy object (GPO) that is located in the Computer Configuration\ Administrative Templates\Windows Components\Windows Update folder specifies whether the computer receives security updates and other important downloads through Automatic Updates. When enabled, it also specifies the download and installation behavior.

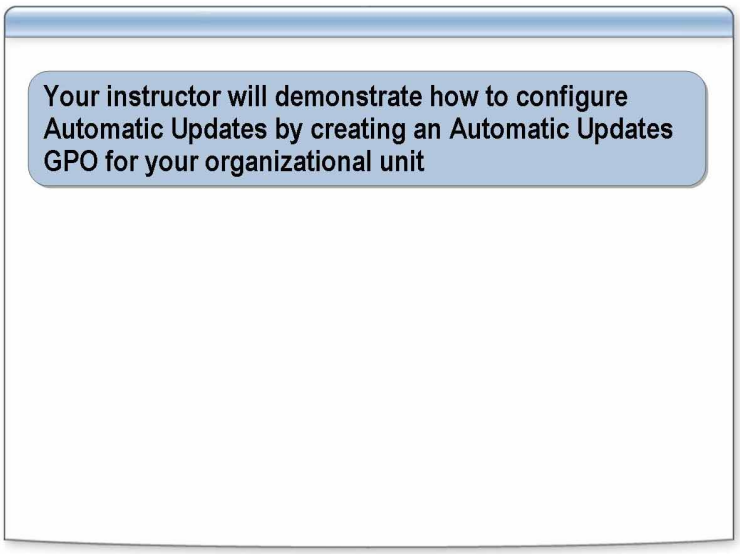
Administrator control using policies

You can control the behavior of Automatic Updates by configuring Group Policy objects in an Active Directory environment. Administrator-defined configuration options that are driven by Group Policy always take precedence over user-defined options. Also, Automatic Updates Control Panel options are disabled on the target computer when administrative policies are set.

Requirements for the client computer

Client computers must be running the updated Automatic Updates client and Windows 2000 (Service Pack 3), Windows XP (Service Pack 1), or Window Server 2003.

How to Configure Automatic Updates



Introduction

Use the following procedure to configure client-side Automatic Updates by using Group Policy. Using Group Policy to configure Automatic Updates for your client computers saves time. After you configure your client computers, specify from which server each client will receive its updates.

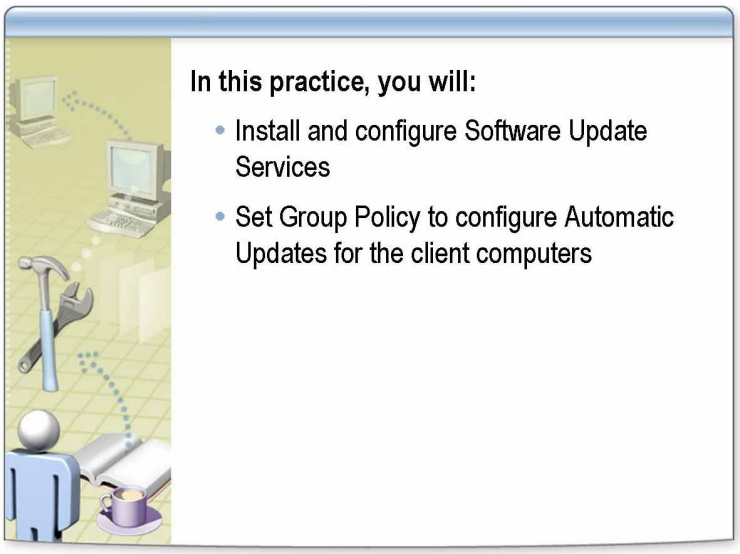
Procedure

To create an Automatic Updates Group Policy object for an organizational unit, using the name of your classroom computer as an example:

1. On the **Start** menu, point to **Administrative Tools**, and then click **Group Policy Management**.
2. In the Group Policy Management window, expand **Group Policy Management**, expand **Forest: nwtraders.msft**, expand **Domains**, expand **nwtraders.msft**, expand **Locations**, and then click **London**.
3. Right-click **London**, and then click **Create and Link a GPO Here**.
4. In the **New GPO** dialog box, type **London SUS Automatic Updates** and then click **OK**.
5. Right-click **London SUS Automatic Updates**, and then click **Edit**.
6. Under **Computer Configuration**, expand **Administrative Templates**, expand **Windows Components**, and then click **Windows Update**.
7. In the details pane, double-click **Configure Automatic Updates**.
8. In the **Configure Automatic Updates Properties** dialog box, click **Enabled**, and then click **Next Setting**.
9. In the **Specify intranet Microsoft update service location Properties** dialog box, click **Enabled**.

10. In the **Set the intranet update service for detecting updates** box, type **http://***ComputerName* (where *ComputerName* is the name of your computer).
11. In the **Set the intranet statistics server** box, type **http://***ComputerName* (where *ComputerName* is the name of your computer) and then click **OK**.
12. Close the **Group Policy Object Editor** dialog box, and then close the Group Policy Management window.

Practice: Installing and Configuring Software Update Services



Objective

In this practice, you will install and configure Software Update Services, and you will set Group Policy to configure Automatic Updates for the client computers.

Scenario

You are the systems administrator for an organizational unit on a large network. The network environment includes computers based on Windows 2000, Windows Server 2003, and Windows XP. You must ensure that the latest service packs and critical updates are installed on all the computers. You also need to automate the updates by installing Software Update Services and setting Group Policy to configure the Automatic Updates client software on all computers. Because this practice requires you to do extensive work as an administrator, you will log on as an administrator for efficiency reasons.

Practice: Installing Internet Information Services

► **Install Internet Information Services**

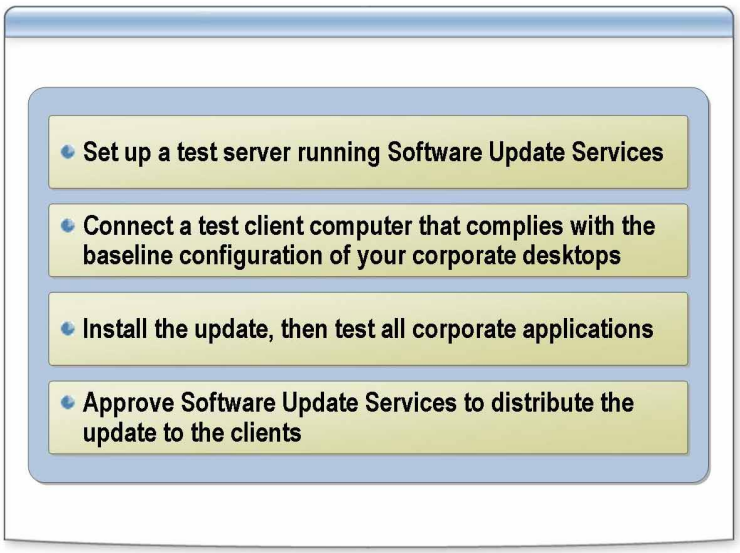
1. Log on to the domain as Administrator with a password of **P@ssw0rd**.
2. Insert the Microsoft Windows Server 2003, Enterprise Edition compact disc into the CD-ROM drive.
3. When the Microsoft Windows Server 2003 Family window appears, click **Exit**.
4. In Control Panel, open **Add or Remove Programs**, and then open **Add/Remove Windows Components**.
5. In the Windows Components Wizard, select the **Application Server** check box, and then follow the on-screen directions to install it.
6. Close all windows.

Practice: Installing Microsoft Software Update Services

► **Install Microsoft Software Update Services**

1. Open Windows Explorer.
2. Browse to C:\MOC\2275\Practices\Mod08.
3. Open SUS10SP1.exe.
4. Follow the on-screen directions to perform a custom installation with the following parameters.
   a. Save the Microsoft Software Update Services Web site files to D:\SUS\Content.
   b. Support English language.
   c. Manually approve new versions of approved updates.
5. Notice that the Software Update Services administration Web site is located at http://*ComputerName*/SUSAdmin.
6. Close all windows and log off.

Guidelines for Testing Content for a Software Update Services Environment



Introduction

Although Software Update Services does not include a specific test option, you can perform some basic testing before you approve installation of the update.

Guidelines for testing content

Use the following test plan to install updates on the client computers on your network:

- In a test lab, set up a test server running Software Update Services.

  Use the server running Software Update Services to download the new updates. During testing, you can read the details about the new updates and decide which ones to accept.

- On a test client computer running your standard operating environment, download the Automatic Updates client component, and then install the packages that you want to test.

  Connect the test client computer to the Windows Update site on the Internet by using your browser and the following URL: http://windowsupdate.microsoft.com.

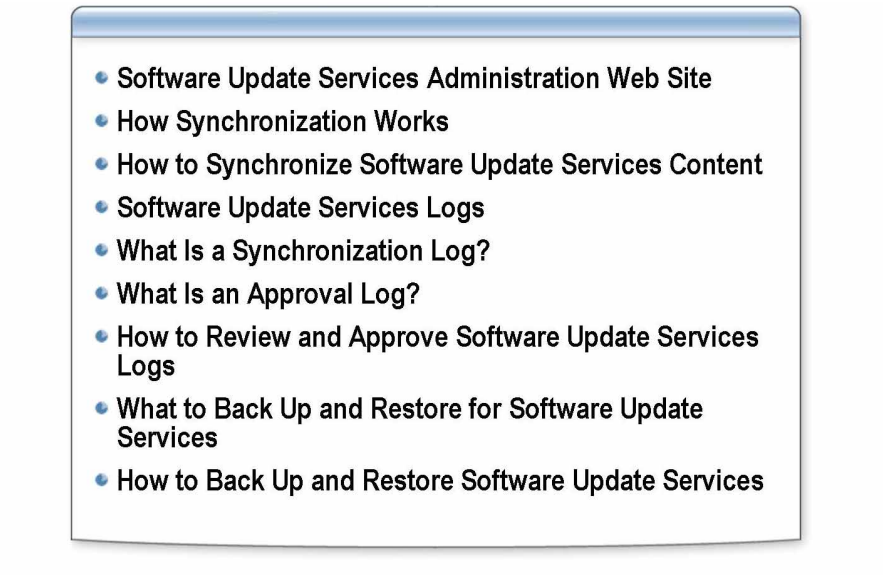
- Install the update, and then test all corporate applications.

  You can apply the packages that you want to test on that client. Remember that you will see only the updates that are applicable to the test computer.

- Approve the updates from Software Update Services to distribute the updates to the clients.

  Approval is the final step in completing the updates from Software Update Services. Systems administrators can schedule the update to begin after hours, if Automatic Updates for the client computers is configured to do so.

Lesson: Managing a Software Update Services Infrastructure



Introduction

As an administrator, you decide whether to install updates immediately after they are downloaded, or to test the updates first. This lesson discusses how to view the synchronized content, as well as how to approve and install the updates.

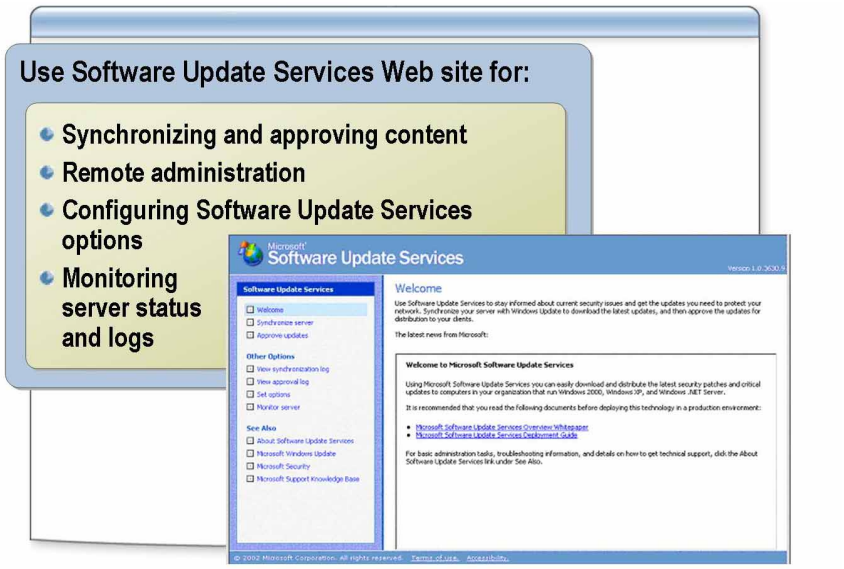
It is important to have your Software Update Services configuration backed up and ready to restore in the event of a disaster. This lesson also describes how to be ready to update your network even in the case of a network disaster.

Lesson objectives

After completing this lesson, you will be able to:

- Explain the features and function of the Software Update Services Web site.
- Describe how synchronization works.
- Synchronize Software Update Services content.
- Describe Software Update Services logs.
- Explain the synchronization log.
- Explain the approval log.
- Review and approve Software Update Services logs.
- Describe what to back up and restore for Software Update Services.
- Back up and restore Software Update Services.

Software Update Services Administration Web Site



Introduction

To manage Software Update Services, you perform the following four main administrative tasks:

- Configure the server after initial installation.
- Manually or automatically synchronize content between the Windows Update Web site and the server running Software Update Services.
- Select and approve synchronized content to be published to computers running the Automatic Updates client.
- Monitor server status and logs.

Administrative tasks

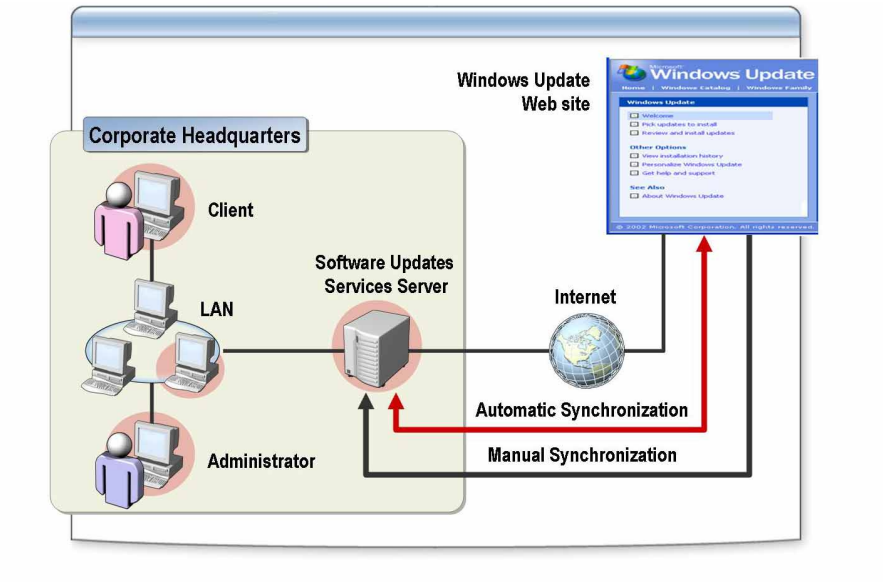
You perform these administrative tasks by using Web pages that are hosted on the server running Software Update Services.

You can access these pages on a corporate intranet by using Internet Explorer 5.5 or later. If you try to connect to the administration Web site with a version of Internet Explorer earlier than version 5.5, an error page appears, reminding you to upgrade Internet Explorer.

Note You must be a local administrator on the computer running Software Update Services to view this Web site.

Note If you try to browse to the administration Web site and "http 500-12: Application Restarting Error" appears, press F5 to refresh your browser.

How Synchronization Works



Introduction

Synchronization is the method by which updates are pulled from the Windows Update Web site and are then sent to the network server running Software Update Services. As an administrator, you synchronize updates either manually or automatically.

Automatic synchronization

If a Software Update Services server is configured to accept updates automatically, the systems administrator can review the updates on the Software Update Services Web site before the updates are downloaded. After reviewing the updates, the systems administrator can decide whether to approve the updates. After the updates are approved, they are updated at the next scheduled time for clients using Automatic Updates.

Manual synchronization

If a server is configured for Software Update Services, but requires a systems administrator to manually synchronize the updates, the updates remain on the Windows Update Web site until the administrator reviews and approve them.

Select your content source

You can synchronize content on your server running Software Update Services from the Internet-based Windows Update Web site from another installation of Software Update Services, or from a manually configured content distribution point.

You can configure your content source on the **Set options** page under **Select which server to synchronize content from**.

To synchronize content from the servers using Windows Update on Microsoft.com, click **Synchronize directly from the Microsoft Windows Update servers**.

To synchronize content from another server running Software Update Services or a manually configured content distribution point, click **Synchronize from a local Software Update Services server**. In the text box, enter the name of the server from which to synchronize.

Handling updated content

As new updates are released, they are posted to the servers that are using Windows Update so that you can download them and host them locally on your server running Software Update Services.

During synchronization, updated content is marked on the Approve updates page as "Updated."

The administrator can customize the behavior for updates that are approved by the administrator, but whose content is updated during synchronization:

- *Option 1.* An approved item continues to be approved even if it is updated during synchronization.

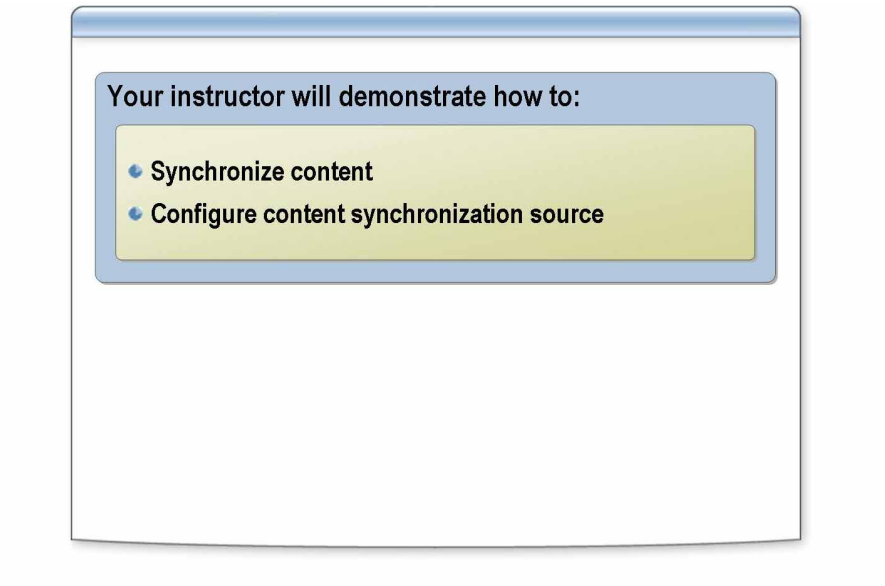
  To select this option for handling updated content, on the **Set options** page, click **Automatically approve new versions of previously approved updates**.

- *Option 2.* An approved item is automatically unapproved if it is updated during synchronization.

  To select this option for handling updated content, on the **Set Options** page, click **Do not automatically approve new versions of previously approved updates. I will manually approve these later**.

  Select this second option if you want to test the updates package before your client computers download and install it.

How to Synchronize Software Update Services Content



Introduction

You can configure your content source for updates from the Software Update Services Web site. By using this method, you can synchronize content directly from the Windows Update Web site or synchronize content from another server running Software Update Services.

After viewing the synchronized updates, you can approve the update. Go to the Software Update Services Web site to view the updates that have been synchronized from the Software Update Services server.

Procedure for synchronizing Software Update Services content

To synchronize Software Update Services content:

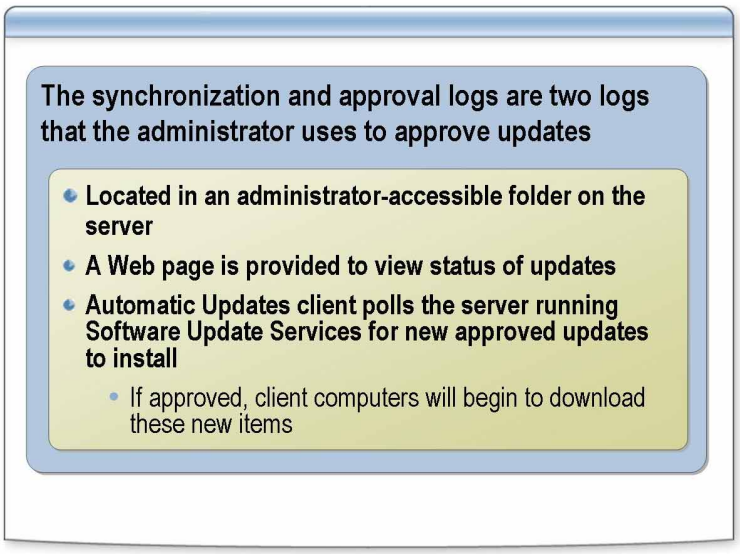
1. On the Software Update Services administration Web site, in the navigation bar, click **Synchronize server**.
2. Click **Synchronize Now**.
3. You are notified when the synchronization is complete.

Procedure for configuring content source

To configure the content synchronization source:

- On the Software Update Services Web site, click **Set options page**.
  a. To synchronize content from servers using Windows Update Web site, under **Select which server to synchronize content from**, click **Synchronize directly from the Microsoft Windows Update servers**.
  b. To synchronize content from another server running Software Update Services or a manually configured content distribution point, under **Select which server to synchronize content from**, click **Synchronize from a local Software Update Services server**. In the text box, enter the name of the server from which to synchronize.

Software Update Services Logs



Introduction

Every 22 hours, minus a random offset, your Automatic Updates client computers poll the server running Software Update Services for approved updates to install. If there are new updates to be installed, the client computers begin to download these new approved updates.

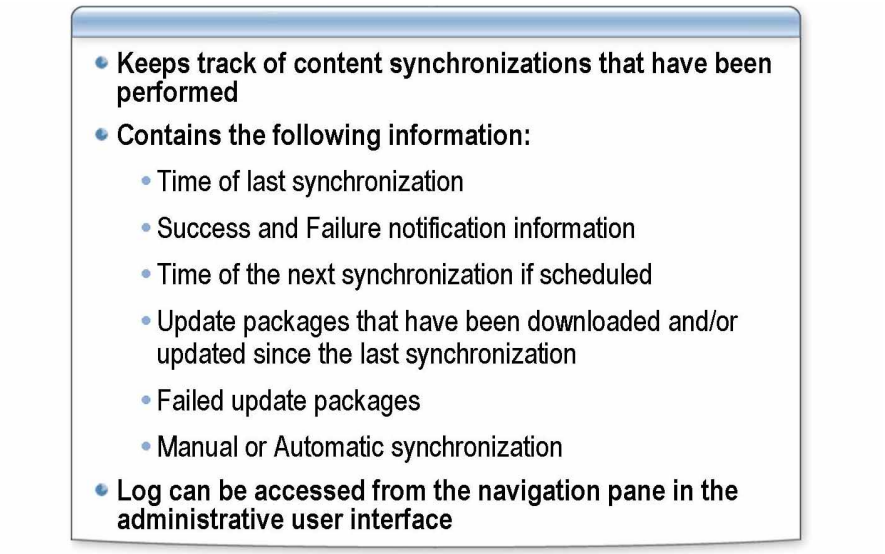
Note After an approved update is installed, Software Update Services does not uninstall it if it becomes unapproved.

Synchronization and approval of updates

Because most Software Update Services tasks involve the synchronization and approval of updates, a synchronization log and an approval log are provided to the administrator. These logs are stored as XML files in an administrator-accessible folder on the server.

A server-monitoring Web page is provided so you can view the status of updates for target computers, because these are stored in the server's memory and might occasionally need to be refreshed.

What Is a Synchronization Log?



Introduction

During synchronization, all content from the Windows Update Web site is sent to the servers running Software Update Services that you have configured on your network. As an administrator, you can view the synchronization information on the administration Web site.

Synchronization log

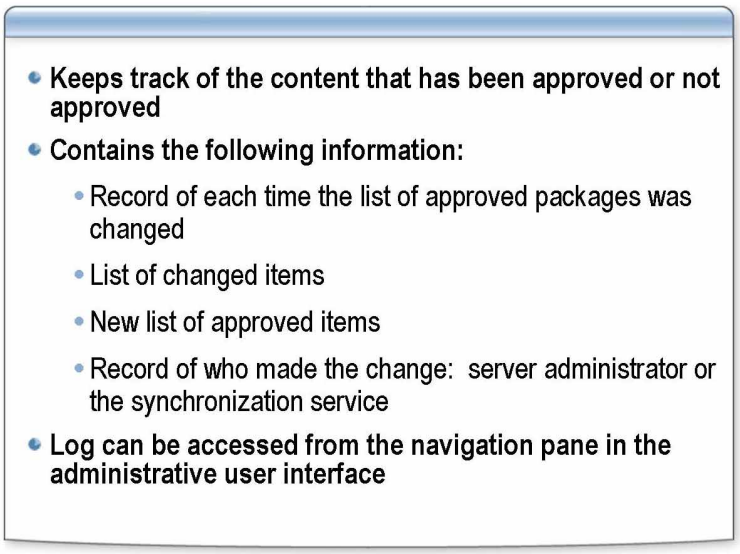
To keep track of the content synchronizations that it performs, each server running Software Update Services maintains a synchronization log that contains the following information:

- Time that the last synchronization was performed.
- Success and failure notification information for the overall synchronization operation.
- Time of the next synchronization, if scheduled synchronization is enabled.
- The update packages that have been downloaded and/or updated since the last synchronization.
- The update packages that failed synchronization.
- The type of synchronization that was performed (Manual or Automatic).

How to access the log

You can open the log from the navigation pane of the Software Update Services administration Web site. You can also access this file by using a text editor. The log file, History-Sync.xml, is located in the \AutoUpdate\Administration subfolder in the folder that contains the Software Update Services Web site.

What Is an Approval Log?



Introduction

An approval log is maintained on each server running Software Update Services to keep track of the content that has been approved or not approved.

Approval log information

An approval log contains the following information:

- A record of each time the list of approved packages was changed.
- The list of items that changed.
- The new list of approved items.
- A record of who made this change: the server administrator or the synchronization service.

How to access the log

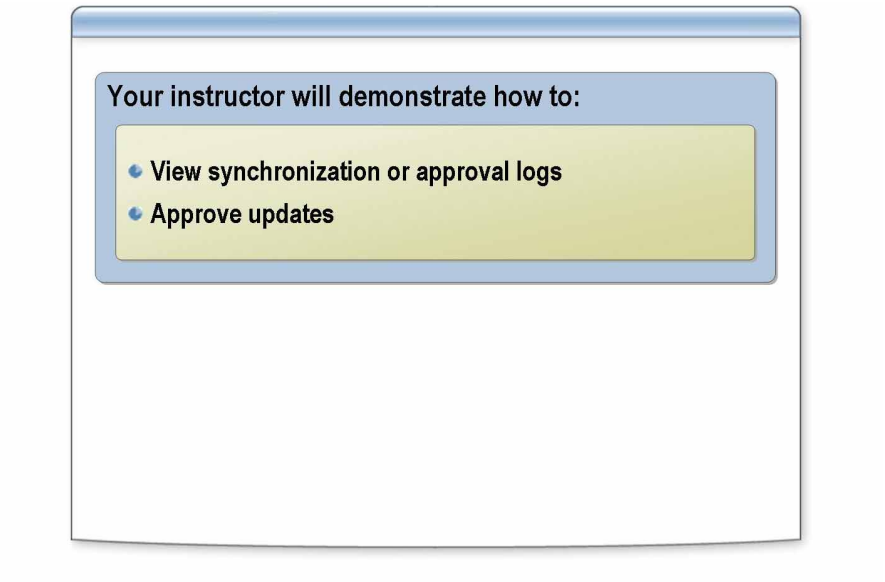
You can open the log from the navigation pane of the Software Update Services administration Web site. You can also access this file by using a text editor. The log file, History_Approve.xml, is stored in the \AutoUpdate\Administration subfolder in the folder that contains the Software Update Services Web site.

Note If you do not want any packages to be available to your client computers, clear all check boxes, and then click **Approve**.

For more information about which updates you have approved, click **View approval log** in the navigation bar.

Note The updates that you approved are downloaded only by client computers that have the updated Automatic Updates client installed and configured.

How to Review and Approve Software Update Services Logs



Introduction

As an administrator, you are responsible for managing and installing the updates that you configure for your network. Use the following steps to view the synchronization log and approve the updates, so they can be installed.

Procedure for viewing logs

To view the synchronization or approval logs:

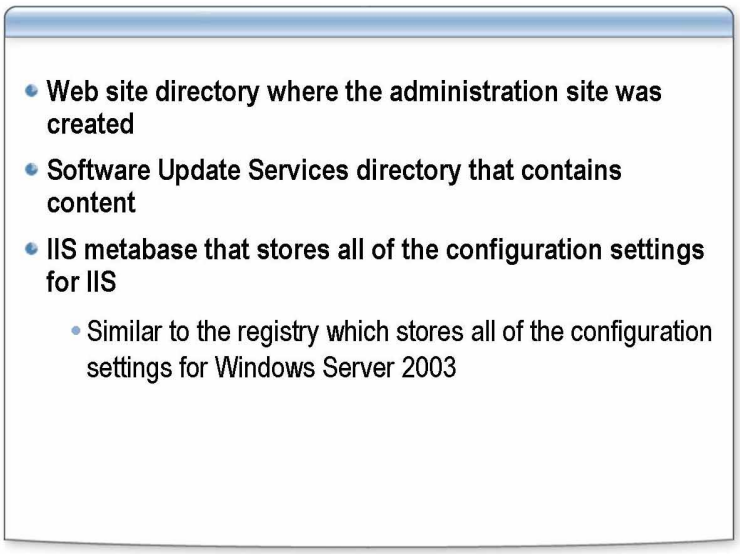
- On the **Software Update Services Administrator** page, click **View Synchronization Log** or **View Approval Log**.

Procedure for approving updates

To approve updates:

1. On the **Software Update Services Administrator** page, click **Approve Updates**.
2. If approved, the updates are installed.

What to Back Up and Restore for Software Update Services



Introduction

If the server running Software Update Services encounters a startup failure, or any other situation that requires reinstallation of the operating system and/or the Software Update Services, it is a good idea to have a recovery plan in place.

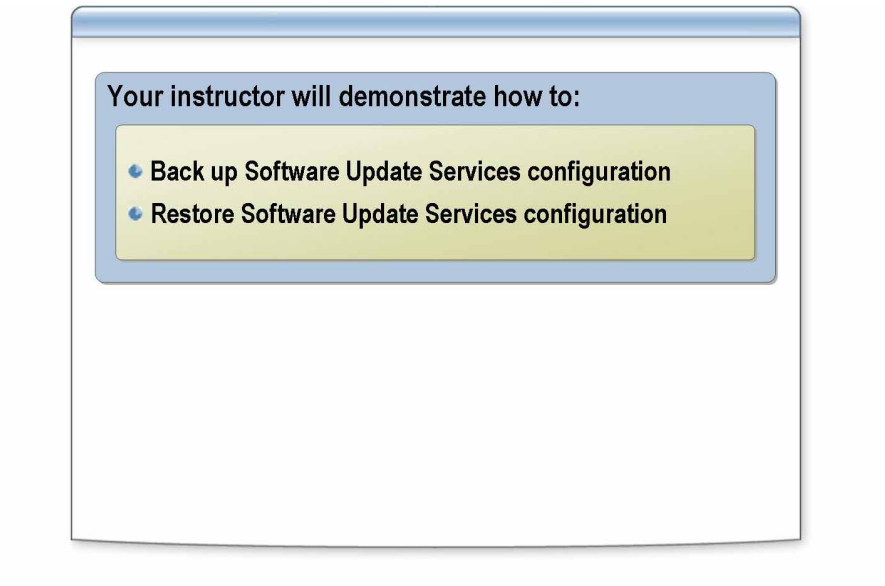
Back up Web site, directory, IIS metabase

To have a fully functional server running Software Update Services after a disaster, you must back up the Web site directory that the administration site was created in, the Software Update Services directory that contains the content, and the IIS metabase.

IIS metabase stores configuration settings

The IIS metabase is a database that stores all of the configuration settings for IIS. The metabase is similar to the registry that stores all of the configuration settings for Windows 2003.

How to Back Up and Restore Software Update Services



Introduction

Back up Software Update Services by using the **ntbackup** command.

Procedure for backing up Software Update Services

To back up Software Update Services using **ntbackup**:

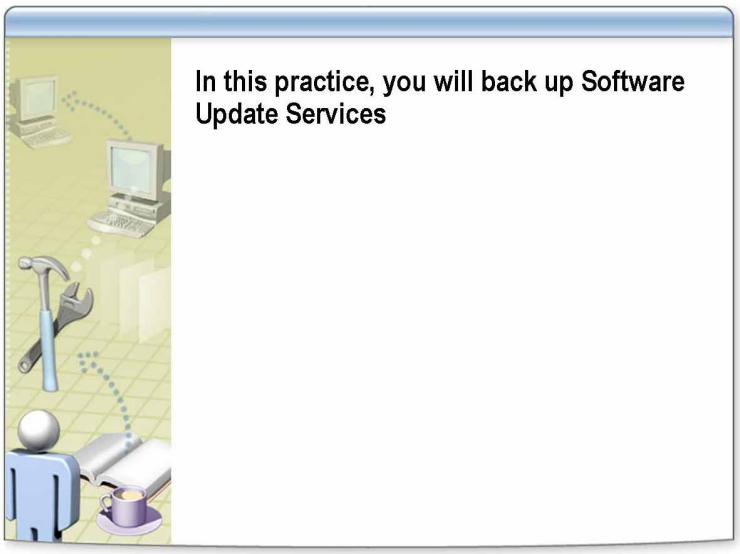
1. In the **Run** dialog box, type **ntbackup** and then click **OK**.
2. On the **Welcome to the Backup or Restore Wizard** page, click **Advanced Mode**.
3. In the Backup Utility – [Untitled] window, click the **Backup** tab.
4. Expand **Local Disk (C:)**, and then select the **Inetpub** check box.
5. Expand **Windows**, expand **system32**, expand **inetsrv**, and then select the **MetaBack** check box.
6. In the **Backup media or file name** box, specify the name of the backup file, and then click **Start Backup**.
7. In the **Backup Job Information** dialog box, click **Start Backup**.
8. When the backup is complete, click **Close**.

Procedure for restoring Software Update Services

To restore Software Update Services after a failure:

1. Uninstall Software Update Services and IIS.
2. Physically disconnect the server from the network.
3. Reinstall Software Update Services and IIS.
4. Restore the backup file by using **ntbackup**.
5. Reconnect the server to the network.

Practice: Managing Software Update Services



Objective

In this practice, you will back up Software Update Services.

Scenario

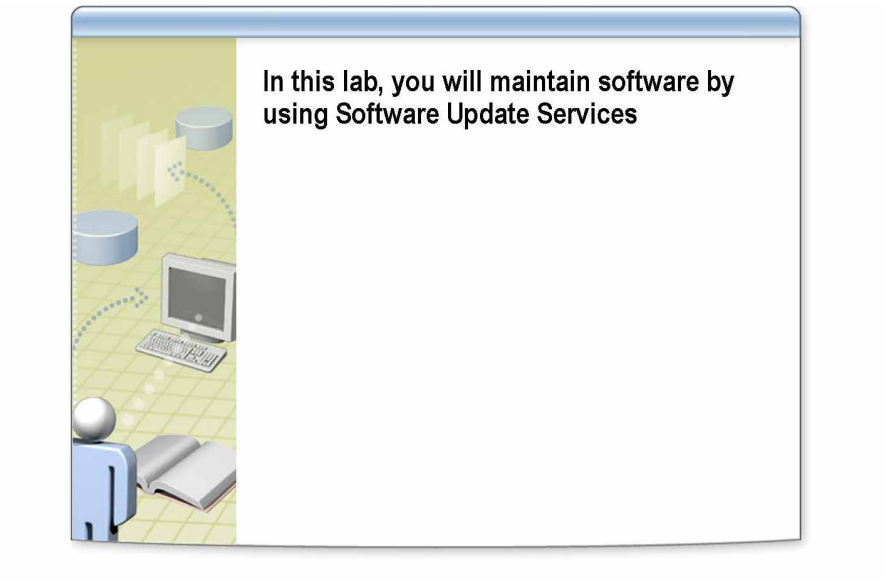
You are the systems administrator for a large network that is using Software Update Services. You need to back up your Software Update Services installation.

Practice

► **Back up Microsoft Software Update Services, the Administration site, and the IIS metabase**

1. Log on to the domain as *Computer***User** with a password of **P@ssw0rd**.
2. In the **Run** dialog box, type **runas /user:nwtraders\administrator ntbackup**
3. When prompted for the password, type **P@ssw0rd**
4. On the **Welcome to the Backup or Restore Wizard** page, click **Advanced Mode**.
5. On the **Backup** tab, expand **Local Disk (C:)**, and then select the **Inetpub** check box.
6. Expand **Windows**, expand **system32**, expand **inetsrv**, and then select the **MetaBack** check box.
7. Save the backup file in C:\MOC\2275\Practices\Mod08\MSUS01.bkf.
8. Start the back up.
9. When back up is complete, close all windows, and then log off.

Lab A: Maintaining Software by Using Software Update Services



Objectives

After completing this lab, you will be able to:

- Create a Group Policy object to configure Automatic Updates.
- Use Software Update Services to distribute software update packages.

Estimated time to complete this lab: 30 minutes

Exercise 0
Install Sample Test Packs

In this exercise, you will install sample test packs for the lab.

Tasks	Specific instructions
1. Prepare to install sample test packs.	▪ Log on to the domain as administrator.
2. Install sample test packs.	**a.** Open Windows Explorer. **b.** Browse to C:\MOC\2275\Labfiles\Lab08. **c.** Run the installation file.

Exercise 1
Create a Group Policy Object to Configure Automatic Updates

In this exercise, you will use Group Policy Management to create a Group Policy object to configure automatic updates for the client.

Tasks	Specific instructions
▪ Create an Automatic Updates GPO for your organizational unit.	**a.** Open Administrative Tools and start Group Policy Management. **b.** In Group Policy Management, expand **Forest: nwtraders.msf**t, expand **Domains**, expand **nwtraders.msft**, expand **Locations**, and then expand *ComputerName* (where *ComputerName* is the name of your computer). **c.** Right-click *ComputerName*, select the option to create a new GPO link, and name it *ComputerName* **SUS Automatic Updates**. **d.** Right-click *ComputerName* **SUS Automatic Updates**, and then click **Edit**. **e.** Under **Computer Configuration**, expand **Administrative Templates**, expand **Windows Components**, and then open Windows Update. **f.** Open Configure Automatic Updates. **g.** Enable **Configure Automatic Updates**, and then go to the next setting. **h.** Enable the intranet Microsoft update service location. **i.** Set the intranet update service for detecting updates by typing **http://***ComputerName* (where *ComputerName* is the name of your computer). **j.** In the **Set the intranet statistics server** box, type **http://***ComputerName* (where *ComputerName* is the name of your computer). **k.** Apply the settings and then close all windows.

Exercise 2
Prepare Sample Software Update Packages for Your Clients

In this exercise, you will prepare sample software update packages for your clients.

Tasks	Specific instructions
▪ Prepare sample software update packages for your clients.	**a.** Open a **Run** dialog box, and type **http://localhost/SUSAdmin** **b.** On the Microsoft Software Update Services Web page, click **Set options**. **c.** Under **Select which server to synchronize content from**, select **Synchronize from a local Software Update Services server**. **d.** In the **Synchronize from a local Software Update Services server** box, type **http://***ComputerName***/TestContents** as the Software Update Services server. **e.** Click **Apply**, and then click **OK**. **f.** Click **Synchronize server**, and then click **Synchronize now**. **g.** Click **OK** to close the message box. **h.** Select and approve the first two updates. **i.** Accept the License Agreement. **j.** A message box appears informing you that the updates are available for distribution to your clients.

Exercise 3
Verify the Updates are Available to the Clients

In this exercise, you will verify that the updates are available for the clients.

Tasks	Specific instructions
▪ Verify that the updates are available for the clients.	**a.** Wait for five minutes, and then click the new updates icon in the lower right hand corner. **b.** In the **Automatic Updates** dialog box, click **Details**. **c.** Read the detail information, close all windows, and then log off.

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