Installing IIS

This topic describes the following methods for installing IIS:

- Using the Configure Your Server Wizard.

- Using Add or Remove Programs from Control Panel.

- Using unattended setup.

This topic also lists the directories created on install, describes the IIS initial configuration backup, and briefly describes IIS optional components.

◆ **Important** In order to take a more proactive stance against malicious users and attackers, IIS is not installed on members of the Microsoft® Windows® Server 2003 family by default. Furthermore, when you initially install IIS, the service is installed in a highly secure and "locked" mode. By default, IIS serves only static content -- meaning features like ASP, ASP.NET, Server-Side Includes, WebDAV publishing, and FrontPage® Server Extensions do not work unless enabled. If you do not enable this functionality after installing IIS, IIS returns a 404 error. You can serve dynamic content and enable these features through the Web Service Extensions node in IIS Manager. Also, if an application extension is not mapped in IIS, IIS returns a 404 error. To map an extension, see Setting Application Mappings. For more information on how to troubleshoot 404 errors, including 404.2 and 404.3; issues related to a new installation of IIS 6.0; or an upgrade from a previous version of IIS, see Troubleshooting.

Microsoft strongly recommends installing IIS on an NTFS-formatted drive. NTFS is a more powerful and secure file system than FAT and FAT32. For more information, see NTFS Permissions.

◆ **Important** You must be a member of the Administrators group on the local computer to perform the following procedure (or procedures), or you must have been delegated the appropriate authority. As a security best practice, log on to your computer using an account that is not in the Administrators group, and then use the Run as command to perform this procedure as an Administrator.

To install IIS using the Configure Your Server Wizard

1. From the **Start** menu, click **Manage Your Server**.

2. Under **Managing Your Server Roles**, click **Add or remove a role**.

3. Read the preliminary steps in the **Configure Your Server Wizard** and click **Next**.

4. Under **Server Role**, click **Application server (IIS, ASP.NET)** and then click **Next**.

5. Read the summary and click **Next**.

6. Complete the wizard, and then click **Finish**.

📝 **Note** The **Configure Your Server Wizard** enables ASP.NET by default, unlike the **Add/Remove Windows components** install method below.

For more information on the **Configure Your Server Wizard**, see Configuring Your Server Wizard in Windows Help.

To install IIS, add components, or remove components using Control Panel

1. From the **Start** menu, click **Control Panel**.

2. Double-click **Add or Remove Programs**.

3. Click **Add/Remove Windows Components**.

4. In the **Components** list box, click **Application Server**.

5. Click **Details**.

6. Click **Internet Information Services Manager**.

7. Click **Details** to view the list of IIS optional components. For a detailed description of IIS optional components, see Optional Components in this topic.

8. Select all optional components you wish to install.

   📝 **Note** The **World Wide Web Publishing Service** optional component includes important subcomponents like the **Active Server Pages** component and **Remote Administration (HTML)**. To view and select these subcomponents, click **World Wide Web Publishing Service** and then click **Details**.

9. Click **OK** until you are returned to the **Windows Component Wizard**.

10. Click **Next** and complete the **Windows Component Wizard**.

Unattended Setup

To simplify the process of setting up IIS on multiple computers running a a member of the Windows Server 2003 family, you can run setup unattended. To do this, create and use an answer file, which is a customized script that automatically answers the setup questions. Then, run Winnt32.exe with the appropriate options for unattended setup. The IIS 6.0 options for unattended setup are:

Component	Unattended .inf parameter
Application Server	n/a (A parent object in OCM)
ASP.NET #	aspnet = on/off
Enable network COM+ Access	complusnetwork = on/off
Enable network DTC Network Access	dtcnetwork = on/off
Internet Information Services	n/a (A parent object in OCM)
BITS Server Extensions	n/a (A parent object in OCM)
BITS Server Extensions ISAPI	bitsserverextensionsisapi = on/off
BITS Server Extensions Snap-in	bitsserverextensionsmanager = on/off
Common Files	iis_common = on/off
File Transport Protocol (FTP) Services	iis_ftp = on/off
FrontPage 2002 Server Extensions	fp_extensions = on/off
IIS Manager	iis_inetmgr = on/off
NNTP Service	iis_nntp = on/off
SMTP Service	iis_smtp = on/off
World Wide Web Publishing Service	n/a (A parent object in OCM)
Active Server Pages	iis_asp = on/off
Internet Data Connector	iis_internetdataconnector = on/off
Remote Administration (HTML) *#	sakit_web = on/off
Remote Desktop Web Connection	tswebclient = on/off
Server-Side Includes	iis_serversideincludes = on/off
WebDAV Publishing	iis_webdav = on/off
WWW Service	iis_www = on/off
Application Server Console #	appsrv_console = on/off

* Must be installed through the **Add/Remove Windows Components** item in Control Panel after

the operating system has been installed.

\# Not available on Itanium-based computers running Windows XP 64-Bit Edition, the 64-bit version of Windows Server 2003, Enterprise Edition, or the 64-bit version of Windows Server 2003, Datacenter Edition.

Also note the following:

[InternetServer]

- SvcManualStart = www and/or ftp

- PathFTPRoot = path to FTProot

- PathWWWRoot = path to WWWroot

- ApplicationDependency = ApplicationName, GroupID, GroupID

- ExtensionFile = access, path, UI deleteable, short description, long description

- DisableWebServiceOnUpgrade = True/False; The default for this parameter is true. In order to reduce the attack surface, IIS is turned off after an upgrade. This unattended setup parameter can be used to keep IIS on after an upgrade.

To use an x86-based computer to view the command options available for Winnt32.exe

1. On a computer running Windows 95, Windows 98, Windows?Millennium?Edition, Windows NT, Windows 2000, Windows XP, or a member of the Windows Server 2003 family, insert the Setup CD for a member of the Windows Server 2003 family in the CD-ROM drive.

2. From the **Start** menu, click **Run**.

3. In the **Open** box, type **cmd**, and click **OK**.

4. At the command prompt, change to the CD-ROM drive, change to the I386 directory, type **winnt32 /?**, and press **ENTER**.

To use an Itanium-based computer to view the command options available for Winnt32.exe

1. On an Itanium-based computer running Windows XP 64-Bit Edition, the 64-bit version of Windows Server 2003, Enterprise Edition, or the 64-bit version of Windows Server 2003, Datacenter Edition insert the Setup CD for the 64-bit version of the product into the CD-ROM drive.

2. From the **Start** menu, click **Run**

3. In the **Open** box, type **cmd**, and click **OK**.

4. At the command prompt, change to the CD-ROM drive, change to the IA64 directory, type **winnt32 /?**, and press **ENTER**.

To install IIS using scripts after you have installed and set up a member of the Windows Server 2003 family, use Sysocmgr.exe with an unattended setup file and the unattended setup options listed above.

To install IIS using scripts after the operating system has already been installed

1. From the **Start** menu, click **Run**.

2. In the **Open** box, type **cmd**, and click **OK**.

3. At the command prompt, type **Sysocmgr.exe /i:sysoc.inf /u:% path_to_unattend_file%**, and press **ENTER**.

4. At the command prompt, type **Sysocmgr.exe/?**, and press **ENTER** to view Sysocmgr.exe

Help.

IIS Directories

IIS installs the following directories:

- \InetPub

- *systemroot*\Help\IISHelp

- *systemroot*\System32\InetSrv

- *systemroot*\System32\InetSrv\MetaBack

These directories contain user content and cannot be moved. You can, however, select the location of your Wwwroot and Ftproot directories at installation by using a script during unattended setup. If you uninstall IIS, the IISHelp directory is removed. The InetPub and InetSrv directories remain on your computer.

IIS Initial Configuration Backup

When you first install IIS, a backup of the initial metabase configuration is automatically created in the *systemroot*\System32\InetSrv\MetaBack directory. This backup can be used to restore the IIS configuration to its state immediately following IIS installation. This is a useful tool for solving metabase corruption or configuration problems, and can help you recover a known good configuration without needing to reinstall IIS. This backup is not password protected, and can only be used to restore settings on the system on which it was created. SeeBacking Up and Restoring the Metabase for information about restoring the initial IIS configuration backup.

It is strongly recommended that following IIS installation, and before any configuration changes are made, you create a password-protected backup of the IIS configuration. Unlike the automatic initial configuration backup, a password-protected backup is system independent, and can be used to restore settings on other systems running IIS 6.0. SeeBacking Up and Restoring the Metabase for information about creating a password-protected backup of the IIS configuration.

Optional Components

IIS includes optional components that you can enable or disable at anytime through the **Add or Remove Programs** item in Control Panel, or using unattended setup. Descriptions of these components and the impact to your current IIS settings are described below.

Files for Active Server Pages (ASP), Internet Data Connector, server-side includes, and WebDav are installed, but disabled by default on a clean installation. All IIS functionality is enabled by default on an upgrade. When one of these components is selected or cleared from the **Windows Components Wizard** or by using an unattended file, the component is enabled or disabled in the WebSvcExtRestrictionList metabase property.

BITS Server Extensions

The Background Intelligent Transfer Service (BITS) is a background file transfer mechanism and queue manager, also known as a drizzle service. BITS throttles file requests to minimize bandwidth consumption and enhance the end-user experience. Enable BITS with IIS to maintain Web server quality of service. From the Windows Components Wizard, click **Details** to enable the following BITS Server components:

- **BITS Server Extensions ISAPI**: Enable this option to drizzle IIS requests with the help of the BITS server.

- **BITS Server Extensions Snap-in**: Enable this option to access and view the BITS graphical user interface (GUI).

Common Files

For the sake of added security in your server environment, you may choose to deselect some of the common files. However, if you deselect the Common Files option, all of the common files are subsequently deselected and IIS will not be installed on your machine. Therefore, if you want to install IIS on your computer, leave this option selected. If you want to limit the services and components installed with IIS, deselect the individual components that are listed below the Common Files component.

File Transfer Protocol (FTP) Server

The File Transfer Protocol (FTP) is used to copy files to and from remote computer systems on a network that uses Transmission Control Protocol/Internet Protocol (TCP/IP).

FrontPage 2002 Server Extensions

FrontPage 2002 Server Extensions allow you to view and manage a Web site in a graphical user interface using FrontPage as the authoring environment. FrontPage allows you to quickly create Web sites on your server, as well as, create, edit, and post Web pages to IIS remotely. While you are creating your site, FrontPage keeps a connection open to IIS, saving and changing the Web files so you can view your site. If you choose not to install the FrontPage Server Extensions, you will have to manually copy all of your Web content, configure your settings, and in some cases, manually register applications already registered in FrontPage. Microsoft FrontPage Server Extensions are not supported for resources in Microsoft Clustering.

Internet Information Services Manager

IIS Manager is a graphical user interface to administer your Web site. In previous releases of IIS, this tool was called the Internet Service Manager. Without IIS Manager, you can still manage your server, but you must use coded scripts that call on the IIS APIs to create sites, applications, virtual directories, and security settings.

NNTP Service

Use Network News Transfer Protocol (NNTP) to distribute network news messages to NNTP servers and to NNTP clients (news readers) on the Internet. NNTP provides for the distribution, inquiry, retrieval, and posting of news articles by using a reliable stream-based transmission of news on the Internet. NNTP is designed so that news articles are stored on a server in a central database, thus users can select specific items to read. Indexing, cross-referencing, and expiration of aged messages are also provided.

If you have NNTP installed, you can view Microsoft News (NNTP) Service Help by typing **file:\\% systemroot%\help\news.chm** in your browser address bar and pressing **ENTER**.

SMTP Service

Use Simple Mail Transfer Protocol (SMTP) to set up intranet mail services that work in conjunction with IIS. SMTP is a TCP/IP protocol for sending messages from one computer to another on a network. This protocol is used on the Internet to route e-mail.

If you have SMTP installed, you can view Microsoft Mail (SMTP) Service Help by typing **file:\\% systemroot%\help\mail.chm** in your browser address bar and pressing **ENTER**.

World Wide Web Publishing Service

IIS serves pages to the Internet and the World Wide Web. This component must be installed for IIS to perform its primary service. If you do not select this option, you disable IIS.

The World Wide Web Publishing Service (WWW service) includes the following subcomponents:

- Active Server Pages: Select to enable ASP on your server. If this option is not selected, all .asp requests return a 404 error.

- **Internet Data Connector**: Select to enable Internet Data Connector on your server. If this

option is not selected, all .idc requests return a 404 error.

- Remote Administration (HTML): Select to enable remote Web administration of your IIS Web server from any Web browser on your intranet. Once you install IIS and view your Web sites through IIS Manager, IIS creates a site called **Administration**.

- **Remote Desktop Web Connection**: Select to enable connectivity to a computer?s desktop from a remote location and run applications as if you were sitting at the console.

- Server-side includes: Select to enable server-side include files on your server. If this option is not selected, all .shtm, .shtml, and .stm requests return a 404 error.

- WebDAV Publishing: Select to allow Web Distributed Authoring and Versioning (WebDAV) on your server. WebDAV is similar to File Transfer Protocol, with the exception being that WebDAV allows any WebDAV client to publish and change content in a WebDAV directory using HTTP.

- Web Site Administration: Select to install the World Wide Web Publishing Service. If this option is not selected, IIS does not run on your server.

Related Topics

- For information on unattended setup, see Planning for Unattended Setup.