



Software Delivery Center Version 1.1 Administrator's Guide



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Note: Before using this information and the product it supports, read the information in Appendix B, “Notices,” on page 59.

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About this guide

This guide provides information about the IBM® Software Delivery Center program, a Java™ technology-based, Web-enabled software-distribution solution.

This guide is organized as follows:

- Chapter 1, “About the Software Delivery Center program,” on page 1 is an introduction to the concepts, benefits, and functions.
- Chapter 2, “Installing the Software Delivery Center program on a server,” on page 5 provides information about installing the Software Delivery Center program on a server.
- Chapter 3, “Installing the Software Delivery Center client,” on page 13 provides information about installing the client portion of the Software Delivery Center program.
- Chapter 4, “Building your software library,” on page 19 provides an overview of the tasks required to create your software packages and bundles and add them to the Software Delivery Center library.
- Chapter 5, “Setting up your Software Delivery Center infrastructure,” on page 23 provides information about setting up the software-delivery method needed to support your company.
- Chapter 6, “Using the Software Delivery Center administrator’s console,” on page 25 provides step-by-step information about using the administrator’s console to prepare and deliver software packages and bundles.
- Chapter 7, “Troubleshooting,” on page 51 provides helpful information about solving problems discovered while installing and using the Software Delivery Center program.
- Chapter 8, “Getting help and support,” on page 53 contains instructions about getting help and support for the Software Delivery Center program from IBM.
- Appendix A, “Sample folder structure,” on page 55 contains sample folder structures for the Software Delivery Center server.
- Appendix B, “Notices,” on page 59 contains legal notices and trademark information.

Who should read this guide

This guide is intended for network administrators who are responsible for software distribution processes in their company.

Additional information

This guide provides Web addresses where you can obtain additional information. These Web addresses are subject to change. If you find that a Web address does not work, go to the home page of the Web site for the referenced company (for example, <http://www.ibm.com>) and then search for the appropriate term or phrase (for example, “Software Delivery Center”).

Chapter 1. About the Software Delivery Center program

The IBM Software Delivery Center program is a software-delivery solution that uses Web-based tools and technology to deliver software components to computers distributed throughout a corporate enterprise.

This chapter includes the following topics:

- “What is the Software Delivery Center program?”
- “Benefits and features of the Software Delivery Center program” on page 2
- “Software Delivery Center components” on page 3
- “Compatibility” on page 4

What is the Software Delivery Center program?

The Software Delivery Center program is a software-distribution product that is simple to manage and easily integrates into an existing customer network infrastructure. It is customizable and cost effective to implement and maintain. The Software Delivery Center program also can distribute software on CD for users who are not connected to the network or do not have access to the Software Delivery Center server.

The Software Delivery Center program helps the administrator deliver and manage software to a user, a group of users, or an entire organization through a single interface.

The Software Delivery Center program consists of two parts: the server and the client.

The server

The server is the control center that manages software packages, groups, users, logs, and schedules. The server consists of three components: server management component, client communication component, and data persistence layer.

- The server management component provides the group, user, packaging and bundling, and distribution management functions.
- The client communication component provides the following functions for clients to access the server:
 - Applet login check
 - Query for scheduled push packages
 - Log information sent back to the server
- The data persistence layer isolates data to provide independent database access.

The Software Delivery Center program installs software through a push process initiated by the administrator or a pull process initiated by the user.

The client

The Software Delivery Center program has two client components: the client agent and the client applet.

- The client agent runs as a service that checks the server periodically at specified intervals to find the next scheduled installation package. The client agent also

works as a local installer for the Software Delivery Center client applet if a software package needs secure installation.

Note: The Software Delivery Center client agent runs in the background. There is no administrator or user interface for the client agent. Because the client agent runs as a service, it can be disabled through the Administrator's Tools function of the Windows® Control Panel. By default, the client agent is set to start automatically. The client agent is listed as *SDCAgent* in the list of services.

- The client applet runs either from the browser as a Java application or as a stand-alone Java Web Start application.

The client applet enables users to select and install software packages from an online catalog. The client applet presents all software packages for which a particular user has access privileges. When the user selects a software package, the client applet shows detailed data about the software package. If the software package the user selected meets the user's needs, the user clicks the **Install** button. The install procedure starts automatically. If the user does not have the rights or privileges to install the software package on that computer, the client applet passes the software package to the client agent to be installed.

Benefits and features of the Software Delivery Center program

The program has many valuable features that work together to satisfy current customer requirements.

The Software Delivery Center program provides the following benefits:

- **Ease of integration into the enterprise environment:** The Software Delivery Center components (such as the Java Runtime Environment, Apache Tomcat server, and IBM HTTP Server) are reliable, industry-standard components and use cutting-edge Java and Web-based technologies.
- **Simple to manage:** The Software Delivery Center program is simple to implement, use, and manage. By using an Internet browser, the administrator can access the administrator's console to push software packages and updates to one or multiple Software Delivery Center clients.
- **Familiar interface:** The Software Delivery Center interface is viewable using Microsoft® Internet Explorer, Version 6.0 or higher. This familiar end-user interface helps enhance usability and shorten learning time.
- **Low cost and immediate return on investment:** The Software Delivery Center components are a cost-effective solution. Most other software delivery solutions require a large investment of time and money in order to plan, design, devise naming conventions, and purchase hardware and proprietary software.
- **Scalable solution:** The Software Delivery Center program can be used by small, medium, and large enterprise environments.

The Software Delivery Center program includes the following features:

- **Simple packaging requirements:** The Software Delivery Center process works with various industry-standard packaging tools and utilities, such as InstallShield, Wise InstallManager, WinZip Self-Extractor, and Microsoft Software Installer (MSI). Software and data files also can be distributed in an unpackaged format.
- **Incompatible installation prevention check:** You can restrict each software package to one or more operating-system environments. As you build each software package, you specify which platforms are supported and restrict the software package from being installed on computers with incompatible operating systems. If a software package has been designed only for installation

on a Microsoft Windows XP computer, a user with a Windows 2000 computer will not be permitted to install the software package.

- **Free-space checking:** Before a software package is installed on a client computer, adequate free space must exist. The Software Delivery Center program checks the amount of free space to help ensure enough storage is available before the software package is delivered to a user.
- **Locked-down desktop support:** The Software Delivery Center program enables software installation in an environment where the user does not have the necessary access rights or privileges to install software.
- **Checkpoint restart:** The Software Delivery Center program supports a byte-level checkpoint restart. If the delivery of a software package is interrupted because the network disconnects, only the missing data is sent when the network connection resumes.
- **Self-updating agent:** The Software Delivery Center client agent periodically checks the server for updates and automatically installs the required updates.
- **Detailed logging:** Detailed information about each software package installed through the Software Delivery Center process is available. If a problem occurs, the logs show which client had the error during a software-package installation.
- **Security and access control:** Managing access to software packages within the Software Delivery Center process is simple. Based on your requirements, you set up groups to see catalogs of different software packages. Access is based on the organization, job function, or any other criteria that is viable within your company.

Software Delivery Center components

The following components are provided as part of the Software Delivery Center product:

- Client components
 - Software Delivery Center client applet

A Java-based applet that presents a catalog of software packages to the user from which the user can select a software package for installation. The software package is downloaded to the client and automatically installed.
 - Software Delivery Center client agent

The Software Delivery Center client agent controls the installation of software pull packages that require administrative rights to install and schedule pushes of software.
 - IBM Java 2 Runtime Environment (JRE) Version 1.4.2

An industry-standard, platform-independent programming language.
 - Installation program: SDCSETUP.EXE

A software package that installs the JRE, the Software Delivery Center client agent, and the Software Delivery Center client applet on the client.
- Server components
 - Cloudscape

An embedded relational database-management system. This component allows the Software Delivery Center program to store and maintain the package metadata and log information.
 - Installation program: SDC-SRVINST.EXE

A software package that installs the Software Delivery Center components on the server.
 - Administrator's console

A browser-based interface used by administrators to manage the Software Delivery Center process. Administrators can manage multiple catalogs for different groups or business units. Through this interface, the administrators also add, delete, and modify software packages.

- IBM Java 2 SE SDK Version 1.4.2
An industry-standard, platform-independent programming language.
- IBM HTTP Server, Version 2.047
An HTTP server software application powered by industry-standard Apache Web Server Version 2.0.

The Software Delivery Center program also has provisions for downloading and installing Apache Tomcat Version 4.1.30 on the server. Apache Tomcat is a servlet container for Java servlet and JavaServer Pages technologies and is required by the Software Delivery Center program.

Note: Apache Tomcat Version 4.1.30 is the only version currently supported by the Software Delivery Center program and is required for installation. Although the Software Delivery Center installation process installs the Apache Tomcat program, you are responsible for downloading the Apache Tomcat Version 4.1.30 zipped file from <http://jakarta.apache.org/site/binindex.cgi> and copying the zipped file to a specific folder. See Chapter 2, “Installing the Software Delivery Center program on a server,” on page 5 for details.

Compatibility

The Software Delivery Center and Tivoli® NetView® Distribution Manager programs can co-exist on the same network. Also, the Software Delivery Center client and IBM Director Agent programs can co-exist. Based upon the size of the system and the administrator’s preference, you might want to have combinations of these programs installed on your system.

Chapter 2. Installing the Software Delivery Center program on a server

This chapter describes how to install and configure the server portion of the Software Delivery Center program on a Microsoft Windows Server platform. The process starts with the installation of the server operating system, including critical updates. The server portion of the Software Delivery Center program is a Java-based Web application. Instead of interacting directly with the operating system, the Software Delivery Center program instead interacts with components, such as Java, the Web server application, Apache Tomcat, and the Cloudscape database.

This chapter includes the following topics:

- “Installation considerations”
- “Installation requirements” on page 6
- “Installing a Windows operating system on the server” on page 6
- “Installing the IBM Software Delivery Center program” on page 8
- “Testing the Software Delivery Center server” on page 9
- “Providing security for the packages on the file server” on page 10

Installation considerations

You must consider several factors when designing and deploying a Software Delivery Center infrastructure. These factors include the number of packages you will be managing, average package size, number of distributions, hardware configurations, network topology, and network bandwidth. As with any software-distribution solution, give careful attention to the network topology. Place the Software Delivery Center server or servers as close to the clients as possible. The servers should be connected to the fastest backbone available, preferably 100 Mbps Ethernet or 1 Gbps Ethernet.

Small and medium environments

The typical architecture for small and medium environments that handle up to 1500 clients consists of a single server dedicated to the Software Delivery Center program. The Software Delivery Center server pushes out software packages to clients that have the Software Delivery Center client agent installed or allows clients to pull packages and install them through a client application.

Large environments

For larger environments, you can use multiple installations of the Software Delivery Center program by purchasing additional Distribution Point Proof of Entitlements (P/N 3788-16Z, sold separately). Segmented groups of users can be configured to use the server that is physically closest. The Software Delivery Center program provides export and import features to simplify the replication of the meta data associated with software packages and bundles from one server to another.

Installation requirements

The Software Delivery Center server must meet the following minimum system requirements before you install the Software Delivery Center program:

- Server computer:
 - Intel® Pentium® 3 processor
 - 512 MB of RAM
For the best performance, use 1 GB of RAM
 - CD-ROM drive
 - 200 MB of free hard disk space
- One of the following operating systems:
 - Windows 2000 Server with Service Pack 4 or higher
 - Windows Server 2003
- A network connection (for client access and remote administration)
- Internet access for downloading of files during installation
- Adobe Acrobat Reader 6.0 or higher (required to access the *Software Delivery Center Administrator's Guide* from the Help menu)

Information about installing and preparing the operating system is provided in this chapter.

Installing a Windows operating system on the server

This section describes how to install the Windows 2000 Server or Windows Server 2003 operating system. Start with one of the following:

- “Installing Windows 2000 Server”
- “Installing Windows Server 2003” on page 7

Installing Windows 2000 Server

Install the Windows 2000 Server operating system on the computer you intend to use as the Software Delivery Center server. During the installation, do the following tasks:

- Accept all of the default Windows component settings.
- When the Configure Your Server window opens, select the **I will configure this server later** option and remove the check mark from the **Show this service at startup** check box.

Note: Depending on the networking card, video controller, and other hardware devices installed in your computer, you might have to acquire and install updated device drivers. Ensure all devices are working correctly before you continue.

When the operating-system installation is complete, continue with “Obtaining Windows 2000 Server critical updates and service packs.”

Obtaining Windows 2000 Server critical updates and service packs

Go to:

www.microsoft.com

and then download and install all of the critical updates and Service Packs for Windows 2000 Server. After you have installed all critical updates and Service Packs, continue with “Disabling IIS.”

Disabling IIS

The Software Delivery Center program is designed to use port 80, which conflicts with the Internet Information Services (IIS) provided by the operating system.

To see whether IIS is installed:

1. Click **Start**, click **Settings**, and then click **Control Panel**. The Control Panel opens.
2. Double-click **Add/Remove Programs**. The Add/Remove Program window opens.
3. Click **Add/Remove Windows Components**. The Windows Components Wizard opens.
4. Locate the Internet Information Services (IIS) entry in the list of components.
 - If IIS is not installed, the **Internet Information Services (IIS)** check box is not selected. To complete the installation process, click **Next**, and then click **Finish**.
 - If IIS is already installed, the check box is selected. Disable IIS on your server to avoid this conflict. Disabling IIS also disables the DHCP and DNS servers (which interfere with Apache Tomcat). Disable the IIS service as follows:
 - a. Locate the **Internet Information Services (IIS)** check box and clear the check box; then click **Next**. The Completing the Windows Contents Wizard opens.
 - b. Click **Finish**.
5. Close all open windows.

This concludes installing Windows 2000 Server.

When the installation is complete, continue with “Installing the IBM Software Delivery Center program” on page 8.

Installing Windows Server 2003

Install the Windows Server 2003 operating system on the computer you intend to use as the Software Delivery Center server. During the installation, do the following tasks:

- Accept all of the default Windows component settings.
- When the Manage Your Server window opens, select the **Don't display this page at logon** check box.
- Close the window.

Note: Depending on the networking card, video controller, and other hardware devices installed in your computer, you might have to acquire and install updated device drivers. Ensure all devices are working correctly before you continue.

When the operating-system installation is complete, continue with “Obtaining Windows Server 2003 critical updates and service packs” on page 8.

Obtaining Windows Server 2003 critical updates and service packs

Go to:

www.microsoft.com

and then download and install all of the critical updates and Service Packs for Windows Server 2003. After you have installed all critical updates and Service Packs, continue with “Disabling IIS.”

Disabling IIS

The Software Delivery Center program is designed to use port 80, which conflicts with Internet Information Services (IIS) provided by the operating system.

To see whether IIS is installed:

1. Click **Start**, click **Settings**, and then click **Control Panel**. The Control Panel opens.
2. Double-click **Add/Remove Programs**. The Add/Remove Program windows opens.
3. Click **Add/Remove Windows Components**. The Windows Components Wizard opens.
4. Locate the Internet Information Services (IIS) entry in the list of components.
 - If IIS is not installed, the **Internet Information Services (IIS)** check box is not selected. To complete the installation process, click **Next**, and then click **Finish**.
 - If IIS is already installed, the check box is selected. Disable IIS on your server to avoid conflict. Disabling IIS also disables the DHCP and DNS servers (which interfere with Apache Tomcat). Disable the IIS service as follows:
 - a. Locate the **Internet Information Services (IIS)** check box and clear the check box; then click **Next**. The Completing the Windows Contents Wizard opens.
 - b. Click **Finish**.
5. Close all open windows.

This concludes installing Windows Server 2003.

When the installation is complete, continue with “Installing the IBM Software Delivery Center program.”

Installing the IBM Software Delivery Center program

After you have installed the Windows server operating system, obtained critical updates and service packs, and disabled IIS, you can install the IBM Software Delivery Center program from the installation CD. During this installation process several events take place:

- You will be prompted to download the Apache Tomcat 4.1.30 zipped file to the `c:\Tomcat4` folder.
- Apache Tomcat is installed.
- The IBM HTTP Server is installed.
- IBM JRE is installed.
- The Java home environment variable is created.
- The IBM Software Delivery Center Web application is installed, along with the IBM Cloudscape 5.1 database.

Complete the following procedure to install the IBM Software Delivery Center program:

1. Insert the IBM Software Delivery Center installation CD. The IBM Software Delivery Center Installation wizard starts. If the wizard does not start, do the following:
 - a. From the Windows desktop, click **Start**.
 - b. Click **Run**.
 - c. Type `d:\sdc-srvinst.exe`
(where *d* is the drive letter of the drive that contains the Software Delivery Center CD).
 - d. Click **OK**.
2. Click **Next**. The Apache Tomcat 4.1.30 Required window opens.

Note: The following steps require that you temporarily leave the Software Delivery Center Installation wizard.

3. Create a folder named `c:\Tomcat4`.
4. Using your Web browser, go to:
<http://jakarta.apache.org/site/binindex.cgi> and download the Tomcat 4.1.30 zipped file to `c:\Tomcat4`.
5. Return to the Software Delivery Center Installation wizard and click **Next**. The License Agreement window opens.
6. Read the license agreement and if you agree, select the **I accept the terms in the license agreement** option button, and then click **Next**. The Software Delivery Center URL or IP Address window opens.
7. Type the URL or the IP address that will be used to access the server.

Note: This URL will be used as the *server name*.
8. Type the webmaster e-mail address.
9. Click **Next**. The Destination Location window opens.
10. Either accept the default folder (`c:\ibmsdc`) or use the **Browse** button to select a different folder. Verify that the check boxes for all listed components are selected.
11. Click **Next**. The Start Installation window opens.
12. Click **Next**. The Setup Status window opens and the progress indicator displays the progress of the setup.
13. When the installation is complete, click **Finish**.
14. When prompted to restart your computer, close any open programs and remove any disks (CDs, diskettes, DVDs, and so on) from their drives; then, click **Yes**. Or, if you do not want to restart your computer at this time, you can click **No**; however, you must restart your computer before the Software Delivery Center program will be fully installed.

This concludes the installation of the Software Delivery Center program on a server.

Testing the Software Delivery Center server

To test the IBM Software Delivery Center server, do the following:

1. Start your browser and type `http://localhost` or `http://server_name` (where *server_name* is the name of the Software Delivery Center server) in the Address bar; then press Enter. The IBM Software Delivery Center home page is displayed.
2. Click each link to make sure all pages load without error.

To test access to the Software Delivery Center administrator's console:

1. Type `http://server_name:8080/sdc/Login.do`
(where *server_name* is the name of the server where the Software Delivery Center program resides).

Note: The Web address used to access the Software Delivery Center program is case sensitive.

2. Type the administrator's name and password.

Note: The default administrator user name is **sd**c and the default password is **sd**c.

3. Click **Submit**.

To find information about using the Software Delivery Center administrator's console or changing the default administrator user name and password, refer to "Accessing the Software Delivery Center administrator's console" on page 25.

Providing security for the packages on the file server

In order for the LogicalDrive(Secure) packages to work, the following registry key changes are needed on the server where the logical drive share is located.

1. Click **Start** and then click **Run**.
2. Type `regedt32` and click **OK**.
3. In the Registry Editor window, click **HKEY_LOCAL_MACHINE**.
4. Double-click **SYSTEM**.
5. Double-click **CurrentControlSet**.
6. Double-click **Services**.
7. Scroll down and double-click **lanmanserver**.
8. Double-click **parameters**.
9. Move your cursor to the right window.
10. Double-click **NullSessionShares: REG_MULTI_SZ:COMFG DFS\$**.
11. In the Edit Multi-String window, click on the empty row under DFS\$ and type the name of the share where the LogicalDrive(Secure) packages reside.

Note: The file share server is the server where your software packages reside. The following is an example using the Software Delivery Center server as your file share server:

`c:\IBMSDC\SDCServer\sd\temp`

(where *c* is the drive letter on which the software packages will be stored and *temp* is the logical drive share.)

12. Click **OK** to save the changes.
13. Navigate to:
`\HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\Lsa`
14. Ensure `restrictanonymous: REG_DWORD : 0` is there.

If this entry is missing, do the following to add the restrictanonymous entry:

- a. From the menu bar, click **Edit**.
 - b. Click **New**.
 - c. Click **DWORD Value**.
 - d. In the **Value Name** field, type **restrictanonymous** (Value Data=0).
 - e. Press **Enter**.
15. Close the Registry Editor window.
 16. Close all the windows and reboot the server.

Chapter 3. Installing the Software Delivery Center client

This chapter describes how to install the client portion of the Software Delivery Center program. The client installation program installs three components on the client:

- The client agent, which runs as a service granting software installation rights to the administrator, not to the user.
- The client applet, which gives users access to the Software Delivery Center catalogs.
- The JRE, which provides Java programming language support.

This chapter includes the following topics:

- “Prerequisite software”
- “Supported types of installations”
- “Testing the Software Delivery Center client” on page 17

Prerequisite software

The client portion of the Software Delivery Center program can be installed on any client computer that meets the following prerequisites:

- One of the following operating systems:
 - Windows 2000 Professional with Service Pack 4 or higher
 - Windows XP with Service Pack 1 or higher
- A Web browser (Internet Explorer 6.0 or higher)
- A network connection (for registration on the Software Delivery Center server)

Note: The client portion of the Software Delivery Center program may be installed on authorized client systems only. Any computer on which this agent code is installed, or any computer that otherwise accesses or uses the Software Delivery Center program must have a separate Software Delivery Center Agent Proof of Entitlement, which is the client authorization for this Program. All IBM PCs automatically include such an authorization. Your IBM PC invoice constitutes your Proof of Entitlement for that computer. In special circumstances, IBM may make client licenses available for use with non-IBM PCs through special bid. Contact your IBM representative for further details. For additional information, refer to the License Information included with the IBM International License Agreement for Non-Warranted Programs. You will be given an opportunity to view this license and agree to its terms during the installation process. You also can view this license from the Help menu of the administrator’s console.

Supported types of installations

The client portion of the Software Delivery Center program can be installed in either of the following ways:

- **Attended installation:** This is the default method of installation from the IBM Software Delivery Center CD. The person installing the program is prompted to provide information during the installation process. See “Performing an attended installation of the client SDCSETUP.EXE” on page 14 for details.

- Unattended installation: This method of installation requires the administrator to make some customizations so that no user interaction is required during the installation process. This method is very useful if you want to include the client portion as part of an image or if you intend to distribute it to non-technical users. See “Customizing the client SDCSETUP.EXE for an unattended installation” on page 15 for details.

Performing an attended installation of the client SDCSETUP.EXE

The attended installation requires the user to provide information as part of the installation process. Before beginning the installation, make sure the user has the following information:

- The Software Delivery Center server name or IP address
- Whether or not a desktop icon should be created on the client desktop to access the Software Delivery Center server

Note: Before you begin, make sure the installer is provided with the Software Delivery Center server name or IP address.

Continue with one of the following tasks:

- “Performing a default installation from CD”
- “Performing an interactive installation from the command line”
- “Performing an interactive installation from Windows” on page 15
- “Installing the client portion from the server” on page 15

Performing a default installation from CD

If you are installing directly from the IBM Software Delivery Center CD, perform the following procedure:

1. Insert the Software Delivery Center CD.
2. If the installation program starts automatically, close it. This installation program is for the server portion only.
3. From the Windows desktop, click **Start**.
4. Click **Run**.
5. Type `d:\client\sdsetup.exe`
(where *d* is the drive letter of the drive that contains the Software Delivery Center CD).
6. Click **OK**.
7. Follow the instructions on the screen.

Performing an interactive installation from the command line

If you copied the client SDCSETUP.EXE file to a network drive or portable media, you can use the following procedure to perform an interactive installation from the command line:

1. Open a command prompt window.
2. Change to the folder containing the client SDCSETUP.EXE file. If you are installing directly from the Software Delivery Center CD, the client SDCSETUP.EXE file is in the `\client` folder.
3. Run the following command:
`SDCSETUP.EXE`
4. Follow the instructions on the screen.

Performing an interactive installation from Windows

If you copied the client SDCSETUP.EXE file to a network drive or portable media, you can use the following procedure to perform an interactive installation from Windows Explorer or My Computer:

1. Open Windows Explorer or My Computer.
2. Change to the folder containing the client SDCSETUP.EXE file. If you are installing directly from the Software Delivery Center CD, the client SDCSETUP.EXE file is in the \client folder.
3. Double-click the SDCSETUP.EXE file.
4. Follow the instructions on the screen.

Installing the client portion from the server

The following procedure describes how to install the client portion of the Software Delivery Center program from the Software Delivery Center server. This method is useful for client computers at remote locations that do not have access to the Software Delivery Center CD. To install the client portion from the server, do the following steps from the client computer:

1. Open a Web browser.
2. In the Address bar, type one of the following:
 - `http://server_name`

(where *server_name* is the name of the Software Delivery Center Server)
 - `http://server_IP_address`

(where *server_IP_address* is the IP address of the Software Delivery Center Server)
3. Press **Enter**. The Software Delivery Center home page opens.
4. In the Access Software Catalog section, click **Click here**. A File Download - Security Warning window opens.
5. Click **Run**.

Note: If an Internet Explorer - Security Warning window opens, click **Run**. The Software Delivery Center installation wizard opens.

6. Click **Next**.
7. Follow the instructions on the screen.

Customizing the client SDCSETUP.EXE for an unattended installation

You can customize the client SDCSETUP.EXE file to perform an unattended installation on a client computer, meaning no direct user intervention is required. The SDCSETUP.EXE file was created in a Microsoft Software Installer (MSI) format, which enables the administrator to perform or set up an unattended installation using command-line options.

Command-line options available include:

- `/s` Installs the application silently (unattended). To use this option, at a minimum, you also must include the `/ip:xxxxxx` option.
- `/?` Displays the command-line options only. This command-line option does not install the application.
- `/ip:xxxxxx` (where *xxxxxx* specifies the Software Delivery Center server name or IP address). This command-line option is required for an unattended installation.

- `/serverport:xxxxxx` (where `xxxxxx` specifies the Software Delivery Center server TCP/IP port). This command-line option overrides the default setting of 8080.
- `/refreshinterval:xxxxxx` (where `xxxxxx` specifies the interval (0 - 99999 minutes) at which the Software Delivery Center program will poll the Software Delivery Center server for available push packages). (Example: `/refreshinterval:120`). This command-line option overrides the default setting of 60.
- `/createdesktopicon:xxx` (where `xxx` specifies whether to create or not create a desktop icon to the Software Delivery Center server. (**Y** or **Yes** indicates to create a desktop icon; **No**, any value other than **Y** or **Yes**, or no value indicates not to create a desktop icon.) This command-line option is required for an unattended installation.

If no command-line options are specified other than the `/ip:xxxxxx` option, the installation uses the defaults for a silent installation. Any options specified on the command line override the defaults for a silent installation. Any command-line options specified for an attended installation merely become the default value and the user can manually override the value during the installation.

No spaces are allowed within a command-line option; however, spaces must be used to separate the individual command-line options.

For example:

```
sdcsetup.exe /s /ip:www.myserver.com
```

Setting up an unattended installation from a shortcut

You can create a shortcut that enables users to perform an unattended installation from a network drive. To create an unattended-installation shortcut, complete the following procedure:

1. Create a folder on a network drive or CD for the client SDCSETUP.EXE file; then, copy the client SDCSETUP.EXE file to that folder.
2. Create a shortcut to the SDCSETUP.EXE file.
3. Rename the shortcut to something easily understood by the user. In these instructions **Software Delivery Center Client Install** is used.
4. Modify the properties of the shortcut as follows:
 - a. Right-click the **Software Delivery Center Install** shortcut file and then click **Properties**. The Properties window is displayed.
 - b. In the Target field, add the following to the end of the command:

```
/s /cmd_line_option /cmd_line_option
```

(where `cmd_line_option` is one of the command-line options supported by the client SDCSETUP.EXE file).

Example: If the client SDCSETUP.EXE file is in the `x:\IBM\SDC` folder, the Software Delivery Center server has an IP address of 123.456.789, and a desktop icon is to be created, the target field would look like this:

```
x:\IBM\SDC\SDCSETUP.EXE /s /ip:123.456.789 /createdesktopicon:yes
```

- c. Click **OK**.

Note: For more information about the command-line options supported by the client SDCSETUP.EXE file, see “Customizing the client SDCSETUP.EXE for an unattended installation” on page 15.

5. Instruct your users to map this location and to select the **Software Delivery Center Install** shortcut.

Performing an unattended installation of the client SDCSETUP.EXE from a command line

To perform an unattended installation of the client SDCSETUP.EXE file from a command line, complete the following procedure:

1. Open a command prompt window.
2. Change to the folder containing the client SDCSETUP.EXE.
3. Run the following command:

```
SDCSETUP.EXE /s /cmd_line_option /cmd_line_option
```

(where *cmd_line_option* is one of the command-line options supported by the client SDCSETUP.EXE file).

Note: For more information about the command-line options supported by the client SDCSETUP.EXE file, see “Customizing the client SDCSETUP.EXE for an unattended installation” on page 15.

This concludes the installation of the Software Delivery Center client.

Testing the Software Delivery Center client

The following procedure guides you through the steps necessary to gain access to a Software Delivery Center catalog.

1. Do one of the following:
 - If you have the Software Delivery Center Catalog desktop icon, double-click it. The Software Delivery Center home page opens.
 - If you do not have the Software Delivery Center Catalog desktop icon, do the following:
 - a. Open a Web browser.
 - b. In the Address bar, type one of the following:
 - `http://server_name`

(where *server_name* is the name of the Software Delivery Center server)

- `http://server_IP_address`

(where *server_IP_address* is the IP address of the Software Delivery Center server)

Note: You can save the Software Delivery Center home page as one of your browser favorites for future use.

- c. Press Enter. The Software Delivery Center home page opens.
2. Click **Access Catalog**. The Software Delivery Center Login window opens.
 3. Do one of the following:
 - If the administrator has provided you with a user name and password for a Software Delivery Center catalog, type the user name and password in the fields provided and then click **Login**. A catalog opens listing all of the software packages and bundles that you are permitted to install.
 - If the administrator has instructed you to create your own user name and password, do the following:
 - a. Click **Create New User**.
 - b. In the User field, type the user name you want to use.
 - c. In the Password field, type the password you want to use.

- d. In the Confirm Password field, type your password again. You must type the password exactly as you typed it in the Password field.
- e. In the EMail field, type your e-mail address.
- f. Click **Create**. A catalog opens. Catalogs for new users might not have any software packages or bundles listed. In most cases, the administrator must assign a new user to a specific group before the user can install software from a catalog.

Chapter 4. Building your software library

This chapter provides an overview of the tasks required to create a software package or bundle and check it into your Software Delivery Center library. The Software Delivery Center library is the main repository for software packages and bundles. Software packages and bundles referenced in the library are not made available to users until the administrator creates catalogs for the pull software-delivery method or schedules a push software delivery. See Chapter 5, “Setting up your Software Delivery Center infrastructure,” on page 23 for details.

This chapter includes the following topics:

- “Creating a folder structure for your library”
- “Creating a software package”
- “Creating a software bundle” on page 21
- “Creating a portable catalog” on page 21
- “Using a portable catalog” on page 21
- “Importing files from another server” on page 22

Creating a folder structure for your library

Any package, folder, and file intended for distribution that is stored on the Software Delivery Center server must be stored under the document root. The default document root is `c:\IBMSDC\SDCSERVER\SDC`. Your document root might be different depending on the options you selected during installation.

In most cases, it is beneficial to use the `\PACKAGES` folder under the document root to help you organize the files associated with your packages. Under the `\PACKAGES` folder, you might want to organize your packages by operating system, type of application, or any other characteristic that meets the needs of your organization. It is a good idea to plan for your long-term organizational needs before designing your folder structure. Appendix A, “Sample folder structure,” on page 55 provides several samples to help you create your folder structure.

Creating a software package

Creating a software package involves the following tasks:

1. Creating the source files. See “Creating the source files” for details.
2. Determining where you will store the source files for distribution. See “Determining where to store the source files” on page 20 for details.
3. Adding the software packages to the Software Delivery Center library through the administrator’s console. See “Adding the software package to the Software Delivery Center library” on page 21 for details.

Creating the source files

The first step in creating a software package is creating the source files. The following are the source files associated with each package:

- The source software package (required): This file typically is created using a third-party packaging tool. The Software Delivery Center program supports any software package created by the following packaging tools:

- InstallShield
- Wise InstallManager
- WinZip Self-Extractor
- Microsoft Software Installer (MSI)

Note: For best results, the source package should be developed so it installs silently (without user intervention).

For information about using these tools, refer to the documentation provided by the packaging tools.

Optionally, the source software package can be in an unpacked format consisting of a folder structure containing all the files required for installation or data files for distribution.

- The icon file (optional): When a user selects a package from a catalog, the Software Delivery Center program displays basic information about the program, such as the file size and amount of disk space required. If an icon file is provided, the icon is displayed next to the basic information. The icon image can be either a .gif or .jpg file. Icons are displayed as 32 pixels by 32 pixels.
- The details file (optional): When a user selects a package from the catalog and wants more information than the basic information that is typically displayed, the user can click a Details button in the catalog to view the information in the details file. The details file must be in .TXT format and can contain any information deemed useful by the administrator. For example, if a README.TXT file is provided by the software vendor, the administrator might choose to use the README.TXT file as the details file.

Determining where to store the source files

After you have created your source files, you need to determine where you will store them for distribution. You can store the source files on either of the following:

- On the Software Delivery Center server under the document root. The default document root is c:\IBMSDC\SDCSERVER\SDC. Your document root might be different depending on the options you selected during installation. Packages stored on the Software Delivery Center server always are downloaded to the client before being installed. When you add these packages to the library through the administrator's console, you will have to assign one of the following package types:
 - Download(Open): A package created by a third-party packaging tool that is not identified by a digital signature.
 - Download(Secure): A package created by a third-party packaging tool that is identified by a digital signature.
 - DirectoryDownload: An unpackaged set of files and folders. When this type of package is added to the library, the Software Delivery Center program automatically creates a compressed file containing these files and folders. It is important to note that unpackaged files and folders intended for distribution must reside on the Software Delivery Center server.
- On a shared network drive outside of the Software Delivery Center server. Throughout the remainder of this document, the term "logical drive" is used to describe this storage location. Packages stored on a logical drive are not downloaded to the client; they are installed directly from the logical drive. When you add these packages to the library through the administrator's console, you will have to assign one of the following package types:
 - LogicalDrive(Open): A package created by a third-party packaging tool that is not identified by a digital signature.

- LogicalDrive(Secure): A package created by a third-party packaging tool that is identified by a digital signature.

For more information about adding packages to the library, see “Adding the software package to the Software Delivery Center library.”

Adding the software package to the Software Delivery Center library

After the source package has been created, it must be added to the Software Delivery Center library through the administrator’s console. This process adds information in a database including a pointer to the source files and the text that appears in a catalog. This process does not physically copy any source files into the library; it simply creates database entries. If the source files need to be copied to the Software Delivery Center server, the administrator must copy the files before the packages are added to the library database. If the source files are deleted or moved from their original location after the entries have been added to the database, the administrator must modify the software package information in the library to update the database. For details about adding a package to the library, see “Adding a new software package to the library” on page 29.

Creating a software bundle

A software bundle is a collection of software packages that is either made available for users to pull through a single catalog entry or pushed to users. After you have created the individual software packages, you can use the Software Delivery Center administrator’s console to create a software bundle. Software bundles are optional. For details on creating a software bundle, see “Adding a new software bundle to the library” on page 29.

Creating a portable catalog

The Software Delivery Center program provides the capability of creating a portable catalog that can be run from a network drive, CD, or other portable media. This feature is useful for computers that are not connected to the network or computers that do not have access to the Software Delivery Center server. The portable catalog contains software packages and bundles along with a Java-based application that displays the catalog and allows a user to select which software packages to install.

Creating a portable catalog is a two-step operation. First, you create an export group and select which software packages or bundles to include in the export group catalog. See “Creating an XML output file for an export group” on page 40 for details. Then, you invoke an export process that creates the portable catalog files and copies them to a folder. See “Exporting a portable catalog” on page 40 for details.

Using a portable catalog

The portable catalog is an application; therefore, the operating system must be running before you can start the portable catalog.

If the portable catalog is on CD, in most cases it starts automatically when the CD is inserted into the drive. If the portable catalog does not start automatically or if the portable catalog is on a different type of media (such as network drive and USB memory key), you must use the following procedure:

1. Open Windows Explorer or My Computer and navigate to the folder where the portable catalog resides.
2. Double-click the SETUP.bat file.

Note: If a message is displayed asking if you want to install the Build CD and Verify program, click **Start**. You will see this message the first time you start a portable catalog on a computer. If you receive a message asking if you want to create a desktop icon, click **No**. This message is typically displayed the second time you start a portable catalog. When the portable catalog opens, make your selections from the **Packages** and **Bundles** tabs, then click **Install**.

Importing files from another server

Importing files from another Software Delivery Center server is a three-phase process.

1. The first phase involves creating an export group, defining the packages and bundles to be exported, and exporting an XML output file from the source Software Delivery Center server. See “Creating an XML output file for an export group” on page 40.
2. The second phase adds the package entries to the target Software Delivery Center library database. This is accomplished by importing the XML output file that was exported by the source Software Delivery Center server. See “Importing Software Delivery Center files from another server” on page 41.
3. The third phase involves copying the software packages from the source Software Delivery Center server to the target Software Delivery Center server. Software packages residing on logical drives (shared network drives outside of the source Software Delivery Center server) do not have to be copied. See “Importing Software Delivery Center files from another server” on page 41.

Chapter 5. Setting up your Software Delivery Center infrastructure

Once you have installed the server portion of the Software Delivery Center program and created your software library, you need to set up an infrastructure to support the type of software delivery method you want to support:

- A pull software delivery method enables a user to select one or more software packages or bundles from an online catalog and initiate the installation process. To set up an infrastructure to support a pull software delivery method, see “Setting up a pull infrastructure.”
- A push software delivery method enables an administrator to remotely schedule, deliver, and install one or more software packages or bundles. If the software packages are configured for an unattended installation, the push operation can be achieved without any user intervention. To set up an infrastructure to support a push software delivery method, see “Setting up a push infrastructure” on page 24.

If you intend to support both methods of software delivery, follow the instructions in both of these topics.

This chapter includes the following topics:

- “Setting up a pull infrastructure”
- “Setting up a push infrastructure” on page 24

Setting up a pull infrastructure

Setting up a pull infrastructure involves creating groups, assigning users to groups, and building software catalogs for each group. The packages that are displayed to the user through the pull process are determined by the group to which the user is assigned.

For example, an administrator might establish separate groups based on department needs, such as a Finance group, Development group, Human Resources group, and Marketing group. Each of these groups would have its own software catalog. When a user assigned to the Finance group opens the Software Delivery Center program from a client computer, that user will be able to install any of the software listed in the Finance group catalog. If the software needs of all users in a company are similar, the administrator can simply set up a single group and assign all of the users to that group. Or, the administrator can set up different groups for management and non-management personnel if access to certain applications is to be restricted to management only. The number of groups you choose to implement and the granularity of groups is determined by the needs of your company.

To set up a pull infrastructure, perform the following tasks:

1. Evaluate the software needs of your company.
2. Set up groups. See “Adding a new group” on page 26 for details.
3. Assign users to each group. See “Adding a new user” on page 27 for details.
4. Build a software catalog for each group. See “Adding or deleting a software package or bundle for a specific group” on page 27 for details.

Setting up a push infrastructure

Setting up a push infrastructure involves creating distribution groups, assigning computer names to the distribution groups, and setting up a schedule. A distribution group is a distribution list of the computers to which the push packages or bundles will be made available. Each computer is identified by the computer name and its associated host name and IP address. The Software Delivery Center program maintains a list of all registered Software Delivery Center clients installed. Client registration automatically takes place when the client agent is installed. When you create a distribution group, you make selections from the registered clients list.

Note: Distribution groups used by the push process are different from the groups used by the pull process. User and group names used by the pull process are not used by any functions of the push process. Instead, the push process uses computer names and identifies the target computers by host name and IP address. There is no relationship between user names and machine names or between groups and distribution lists.

The schedule defines which software packages or bundles are to be installed as well as when and how long the software packages or bundles will be made available to the client computers defined in the distribution group.

Each client computer queries the server at scheduled time intervals to determine if push packages or bundles have been made available. If push packages or bundles are available, the client agent automatically begins the installation process, if the packages are configured for unattended installation or if the user is logged on. If the packages require user intervention during the installation process and the user is not logged on, the client agent delays installation until the user logs on. The intervals at which the client queries the server is controlled by the client agent and is set when the client agent is installed. Therefore, the installation of the push package does not begin as soon as the push package is made available; it is dependent upon when the client queries the server.

Note: The default interval for client queries is 60 minutes. If you want to change the interval length, edit the SDC.CONF file at the client computer using a text editor like Notepad. Change the numeric value (to any value in the range 0 to 99999).

Upon the successful installation of the push package, an entry is logged that prevents the client computer from installing the same push package again the next time it queries the server.

To set up a push infrastructure, perform the following tasks:

1. Evaluate the software needs of your company.
2. Compile a list of computer names and their respective users. You will need this information later when you assign machines to the distribution groups.
3. Set up distribution groups. See “Adding a distribution group” on page 42 for details.
4. Assign machines to the distribution groups. See “Adding or deleting machines for a specific distribution group” on page 43 for details.
5. Set up a schedule. See “Adding a schedule” on page 45 for details.

Chapter 6. Using the Software Delivery Center administrator's console

You can perform various administration tasks, such as managing software packages and bundles, creating schedules, and viewing error logs from the Software Delivery Center administrator's console.

This chapter provides the following topics:

- "Accessing the Software Delivery Center administrator's console"
- "Managing groups"
- "Managing users" on page 27
- "Managing software packages and bundles" on page 29
- "Exporting and importing software packages and bundles" on page 38
- "Managing distribution" on page 42
- "Managing machines" on page 44
- "Managing schedules" on page 45
- "Using the Software Delivery Center logs" on page 47
- "Finding help" on page 48
- "Logging out of the Software Delivery Center administrator's console" on page 49

Accessing the Software Delivery Center administrator's console

With the administrator's console, you manage the Software Delivery Center process using a Web browser. Only authorized users who belong to the SDCAdmin group can access the Software Delivery Center administrator's console. To create a new user name and password for a Software Delivery Center administrator, an administrator must create a new user and assign the user name to the SDCAdmin group. See "Adding a new user" on page 27 for details.

To access the Administration Login panel:

1. Type `http://server_name:8080/` (where *server_name* is the name of the Software Delivery Center server). The Administration Login window opens.
2. Type your user name and password.

Note: The default administrator user name is **sdc** and the default password is **sdc**. If you want to change the user name and password, see "Managing users" on page 27.

3. Click **Submit**. When you log in, the Group Management window opens.

Managing groups

Groups are used to categorize users. A group is a set of users that are given access to a particular collection of software packages and bundles. The Group Management screen shows a list of group names and their associated descriptions (List Groups table).

Adding a new group

To add a new group:

1. Click **Groups**.
2. Click **New**. The Add Group window opens.
3. In the Name field, type the group name you want to add.

Note: To access the administrator's console, the user must belong to the SDCAdmin group. To create a new user name and password for a Software Delivery Center administrator, an administrator must create a new user and assign the user name to the SDCAdmin group. For more information about creating a new user name, refer to "Adding a new user" on page 27.

4. In the Description field, type the associated short description.
5. Click **Add**.

Note: You cannot create multiple groups with the same name.

Deleting a group

To delete an existing group:

1. Click **Groups**.
2. Click **All Groups**. The List Groups table is displayed.
3. Select the check box beside the group name you want to delete.
4. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
5. Click **OK** to delete the group or click **Cancel** to return without making any changes to the database.

Searching for a group

To search for a specific group name:

1. Click **Groups**.
2. Click **All Groups**. The List Groups table is displayed.
3. Click **Search**. The Search window opens.
4. In the Name field, type the group name.
The group name is case sensitive. Type the name exactly as the name is listed in the group list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.
5. In the Page Size field, type the maximum number of entries per page to display.
6. Click **Search**. The selected group name and description is displayed in the List Groups table.

Changing the group description

To change the group description:

1. Click **Groups**.
2. Click **All Groups**. The List Groups table is displayed.
3. Click the group name. The Update Group window opens.
4. Make the changes to the description.
5. Click **Update**.

Adding or deleting a software package or bundle for a specific group

To add or delete a defined software package or bundle for a specific group:

1. Click **Groups**.
2. Click **All Groups**. The List Groups table is displayed.
3. Click the group name. The Update Group window opens.
4. Click **Package** or click **Bundle** depending on which you want to add or delete. The Package Access List or the Bundle Access List for a specific group name table is displayed.
5. Select or clear the check box for the software package or bundle that you want to add to or delete from the group.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

6. Click **Update**.

Updating user information in a specific group

To update user information for a specific group:

1. Click **Groups**.
2. Click **All Groups**. The List Groups table is displayed.
3. Click the group name. The Update Group window opens.
4. Click **Users**. The User List for a specific group is displayed.
5. Click the user name. The Update User window opens.
6. Make the changes to the user information. See “User information” on page 28 for details.
7. Click **Update**.

Managing users

Each user is required to obtain a user name and password before accessing the catalog. The User Management screen shows a list of user names, the group assignment, and the date that the user information was last updated.

Adding a new user

To add a new user:

1. Click **Users**.
2. Click **New**. The Add User window opens.
3. In the Name field, type the name of the user.
4. In the Password field, type the password.
5. In the Confirm field, type the password again to ensure that you have entered it as intended.
6. In the Group field, select the group to which you want the user to belong.
7. In the EMail field, type the user e-mail address. (optional)
8. Click **Add**.

Deleting a user

To delete a user:

1. Click **Users**.

2. Click **All Users**. The List Users table is displayed.
3. Select the check box beside the user name you want to delete.
4. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
5. Click **OK** to delete the user name or click **Cancel** for no action.

Searching for a user

To search for a specific user name:

1. Click **Users**.
2. Click **All Users**. The List Users table is displayed.
3. Click **Search**. The Search window opens.
4. You can search by user name or group. Do one or both of the following:
 - a. In the Name field, type the user name.
The user name is case sensitive. Type the name exactly as the name is listed in the user list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.
 - b. In the Group field, select the group name to which the user belongs.
5. In the Page Size field, type the maximum number of entries per page to display.
6. Click **Search**. The selected user name and the description is displayed in the List Users table.

Changing a user to a different group

To change a user to a different group:

1. Click **Users**.
2. Click **All Users**. The List Users table is displayed.
3. Click the user name. The Update User window opens.
4. In the Group field, select the group name to which you want the user to belong.
5. Click **Update**.

Updating user information

To update user information:

1. Click **Users**.
2. Click **All Users**. The List Users table is displayed.
3. Click the user name. The Update User window opens.
4. Make the changes to the user information. See "User information" for details.
5. Click **Update**.

User information

The following are the fields and descriptions used to update user information:

- **Name:** The user name.
- **Reset Password:** If the check box is selected, the password will be reset.
- **New Password:** The new password is entered.
- **Confirm:** The password is entered again.

- **Expired:** If the check box is selected, the user cannot log in to the Software Delivery Center server.
- **EMail:** An e-mail address.
- **Group:** The group name.
- **Created:** The date the user account was created (system generated).
- **Last Updated:** The date the user account was last updated (system generated).

Managing software packages and bundles

Software packages are software files used to install a specific software application. Software bundles are groups of software packages. The Package Management screen and the Bundle Management screen show lists of software packages and bundles and their associated descriptions.

Adding a new software package to the library

If a software package file is stored on the Software Delivery Center server it must be placed in a folder under the document root. For example,
`c:\ibmsdc\sdserver\sd\packages`

(where `c:\ibmsdc\sdserver\sd` is the document root).

If you have not already set up a folder structure for your library, see “Creating a folder structure for your library” on page 19. For information about the source files (package file, details file, and icon file) referenced in this procedure, see “Creating a software package” on page 19.

To add a new software package to the library:

1. Create your package file, details file, and icon file.
2. If you intend to store your package file, details file, and icon file on the Software Delivery Center server, create the folder structure for these files; then copy these files to the appropriate folder.
3. Open the administrator’s console and then click **Packages**.
4. Click **Packages**.
5. Click **New**. The Add Package window opens.
6. Complete the software package definition information. See “Software package definition information” on page 31 for details.
7. Click **Add**.

Note: If the package you added is of the type Download(Open); LogicalDrive(Open); or DirectoryDrive, no further action is required. If the package you added is of the type Download(Secure) or LogicalDrive(Secure), you must create a digital certificate after you have granted the appropriate access. See “Creating a digital signature for a secure package” on page 38 for details.

Adding a new software bundle to the library

To create a new software bundle:

1. Click **Packages**.
2. Click **Bundles**.
3. Click **New**. The Add Bundle window opens.
4. Complete the software bundle definition information. See “Software bundle definition information” on page 37 for details.

5. Click **Add**.
6. Click **Next** or the **Packages** to display the list of available packages.
7. Select the check box beside the software package name you want to add to the bundle.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

8. When all packages to be added to the bundle have been checked, click **Update**. You will be prompted to select the order of installation for the packages in the bundle.
9. Select a software package name, and then click **UP** or **DOWN** to move the packages into the desired order.
10. Click **OK** to add the bundle.

Note: Packages that require a reboot should be the last package in the installation sequence.

Deleting a software package or bundle from the library

To delete a software package or bundle:

1. Click **Packages**.
2. Click **Packages** or click **Bundles** depending on which you want to delete.
3. Click **All Packages** or click **All Bundles**. The List Packages or the List Bundles table is displayed.
4. Select the check box beside the software package or bundle name you want to delete.
5. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
6. Click **OK** to delete a software package or bundle name or click **Cancel** for no action.

Note: A software package can be deleted even if there are groups currently authorized to access the software package.

Searching the library for a software package or bundle

To search for a specific software package or bundle name:

1. Click **Packages**.
2. Click **Packages** or click **Bundles** depending on which you want to locate.
3. Click **All Packages** or click **All Bundles**. The List Packages or List Bundles table is displayed.
4. Click **Search**. The Search window opens.
5. You can search by name, type or operating system. Do one or any combination of the following:
 - a. In the Name field, type the software package or bundle name.
The software package or bundle name is case sensitive. Type the name exactly as the name is listed in the package or bundle list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.
 - b. In the Type field, select the file type.
 - c. In the OS field, select the operating system.

6. In the Page Size field, type the maximum number of entries per page to display.
7. Click **Search**. The selected software package or bundle name is displayed in the List Packages or List Bundles table.

Updating software package information in the library

To update a software package:

1. Click **Packages**.
2. Click **Packages**.
3. Click **All Packages**. The List Packages table is displayed.
4. Click the software package name. The Update Package window opens.
5. Make the changes to the software package definition information. See “Software package definition information” for details.
6. Click **Update**.

Updating software bundle information in the library

To update a software bundle:

1. Click **Packages**.
2. Click **Bundles**.
3. Click **All Bundles**. The List Bundles table is displayed.
4. Click the software bundle name. The Update Bundle window opens.
5. Make the changes to the software bundle definition information. See “Software bundle definition information” on page 37 for details.
6. Click **Update**.
7. Click **Next** or the **Packages** to display the list of available packages.
8. Select the check box beside the software package name you want to add to the bundle.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

9. When all packages to be added to the bundle have been checked, click **Update**. You will be prompted to select the order of installation for the packages in the bundle.
10. Select a software package name, click **UP** or **DOWN** to move the packages into the desired order.
11. Click **OK** to update the bundle.

Note: Packages that require a reboot should be the last package in the installation sequence

Software package definition information

The following are the fields and descriptions required to create and edit software packages:

- **General tab**
 - **Name:** Unique name of the software package.
 - **Version:** Version number of the application.
 - **Family:** Critical patch management information.
 - **Details:** The path to the details file that displays when the user clicks the Details button in the Software Delivery Center catalog.

All warnings and relevant information about the software package should be placed in this file.

Note: The path name to the details file must be relative to the document root of the server. The default document root is `c:\ibmsdc\sdserver\sd`. Your document root might be different depending on the options you chose during installation.

- **Icon Path:** The path to the software package icon that displays in the Software Delivery Center catalog.

The icon must be a .gif or .jpg file. The use of an icon is optional.

Note: The path name to the file must be relative to the document root of the server. The default document root is `c:\ibmsdc\sdserver\sd`. Your document root might be different depending on the options you chose during installation.

- **Max Install Time (Min.):** The maximum amount of time in minutes the software package should take to install.

The software package installation will terminate if the installation does not complete within the specified time.

Note: Specify a large enough value to account for network congestion, slow processors, or both.

- **Silent:** Indication that the software package will install unattended.

Select this check box if the installation package is configured to install silently with no user intervention. The Software Delivery Center program uses this field to take action during a scheduled push operation.

- If the software package is of the silent type, the Software Delivery Center program will install the software package, even if the user is not logged on to the client.

- If the software package is of the non-silent type (requires user interaction) and the user is not logged on to the client, any scheduled push of a non-silent installation package will be delivered, but installation will be delayed until the user logs on to the client.

- **Reboot:** Indication that the software package requires a restart at the end of the installation.

- **Install tab**

- **Type:**

- **Download(Open)** - This type of package consists of a single executable file that resides on the Software Delivery Center server and requires no administrator rights to run or install. When a package of the type Download(Open) is pushed or pulled, the complete package is downloaded to the client before the installation begins. Download(Open) is the default package type.

Note: When a pull process is used for a Download(Open) package type, the client agent is not involved with the installation process. The packages will install even if the client agent is disabled.

- **Download(Secure)** - This type of package consists of a single executable file that resides on the Software Delivery Center server and requires administrator rights to run or install. When a package of the type Download(Secure) is pushed or pulled, the complete package is downloaded to the client before the installation begins.

This software package requires a digital signature. To create the digital signature, see “Creating a digital signature for a secure package” on page 38.

- LogicalDrive (Open) - This type of package consists of one or more files that are stored on a logical drive (a shared network drive outside of the Software Delivery Center server) and requires no administrator rights to install. When a package of the type LogicalDrive(Open) is pushed or pulled, the installation takes place directly from the logical drive without downloading the package first.

Notes:

1. The Software Delivery Center process does not do the actual mapping of the drive. The client must be mapped to the logical drive that contains the software package before the installation process is initiated.
 2. When a pull process is used for a LogicalDrive(Open) package type, the client agent is not involved in the installation process. The software packages will install even if the client agent is disabled.
- LogicalDrive(Secure) - This type of package consists of one or more files that are stored on a logical drive (a shared network drive outside of the Software Delivery Center server) and requires administrator rights to install. When a package of the type LogicalDrive(Secure) is pushed or pulled, the installation takes place directly from the logical drive without downloading the package first.

This software package requires a digital signature. To create the digital signature, see “Creating a digital signature for a secure package” on page 38.

Note: The Software Delivery Center process does not do the actual mapping of the logical drive. The client must be mapped to the logical drive that contains the software package before the installation process is initiated.

- DirectoryDownload - This type of package consists of an unpackaged application or a set of data files. These files must reside on the Software Delivery Center server under the document root. When this type of package is created, the Software Delivery Center program creates a compressed package that contains the complete set of files in the original folder structure. During a push or pull operation, the compressed package is downloaded to the client where the client application decompresses the package and restores the files and folders to their original condition.
 - If an installation command is defined in the Parameters field, an installation process takes place after the package is decompressed and the directory which was delivered is removed after the installation is completed.
 - If a parameter is not defined, no action is taken after the package is decompressed. This type of package is useful for distributing data files and templates.

Note: If you make changes to the content of the DirectoryDownload package, you must delete the _IGS.SDC zipped file located in the source directory as specified in the **Remote File** field.

- **Remote File:** The definition of this field depends on the type of package you are defining.

When used with a package type of DirectoryDownload, this is the relative path to the root folder of the application or data files stored on the Software

Delivery Center server. Relative paths are relative to the document root. For example, if the full path to the root folder of a set of data files located on the Software Delivery Center server is:

```
c:\IBMSDC\SDCServer\sdc\packages\FILES\TEMPLATES
```

the relative path would be:

```
/sdc/packages/FILES/TEMPLATES
```

It is also important to understand that the last folder in the relative path is the starting point of the directory structure that will be extracted to the client. For example, if you specify `\sdc\packages\FILES\TEMPLATES` the `TEMPLATES` folder, all files in the `TEMPLATES` folder, and all subfolders under the `TEMPLATES` folder will be extracted to the client.

When used in conjunction with a package type of `Download(Open)` or `Download(Secure)`, this is the relative path to the software package executable file. This path must be relative to the document root of the Software Delivery Center server. For example, if the full path is:

```
c:\IBMSDC\SDCServer\sdc\packages\XP\My_Package\SETUP.EXE
```

the relative path would be:

```
/sdc/packages/XP/My_Package/SETUP.EXE
```

Note: Path names are case sensitive. Make sure the path name you use matches exactly the actual path name on your Software Delivery Center server.

Supported extensions for the remote files are:

- .CMD
- .EXE
- .MSI
- .RPM
- .TAR
- .VBS
- Null (no extension)

This field is not used for package types `LogicalDrive(Open)` and `LogicalDrive(Secure)`.

- **Install Command:** The command line is used to start the installation of the software package.

This field is required for package types `LogicalDrive(Open)` and `LogicalDrive(Secure)`.

This field is not used for package types of `Download(Open)`, `Download(Secure)`, and `DirectoryDownload`.

- **Parameters:** The parameters that are passed to the software package executable.

They are required for the `DirectoryDownload` package type, if an installation process is required.

Examples of parameters are:

- `/s` for a silent installation of InstallShield and Wise InstallSystem
- `/qn` for a silent installation of Microsoft Software Installer packages (.msi file extension)

The actual parameters depend on the tool that was used to create the package. Refer to the documentation provided with the packaging tool for more information.

- **Windows RegKey:** The appropriate string that matches the program name displayed in the Add/Remove Programs dialog. For example, to view the string in Windows 2000, click **Start**, click **Settings**, click **Control Panel** and then click **Add/Remove Programs**. You must use the program name exactly as shown in the Add/Remove Programs dialog.

This field is used by the Software Delivery Center program to determine if a particular software package is already installed on the client. The Software Delivery Center program queries the Windows registry to determine what programs have been installed and also listed in the Add/Remove Programs dialog.

In some cases, when you look in the Add/Remove Programs dialog box, it might not be obvious if there is an extra space at the end of the string or between words. The following method ensures that the value you place in the **Windows RegKey** field matches the value in the Add/Remove Programs dialog box.

1. Install the application on a test computer or go to a computer where the application is already installed.
2. From the Windows desktop, click **Start** and then click **Run**. The Run window opens.
3. In the Open field, type `regedit`; then, click **OK**. The Registry Editor window opens.
4. In the Registry Editor window, navigate to the `HKEY_LOCAL_MACHINE/SOFTWARE/Microsoft/Windows/CurrentVersion/Uninstall` folder.
5. In the left pane, click the appropriate application name.
6. In the right pane, double-click **DisplayName**. The Edit String window opens.
7. The string highlighted in the Value data field is the exact string you need to use in the **Windows RegKey** field. Copy and paste the string into a TXT file.
8. Return to the Edit String Window and click **Cancel**. Then, close the Registry Editor window.
9. Open the Software Delivery Center administrator's console. Then, copy the complete string from the TXT file and paste it into the **Windows RegKey** field.

Note: The administrator can specify either the **Stamp File** field or **Windows RegKey** field. The **Windows RegKey** field should be used, unless this software package does not register itself in the Add/Remove Programs dialog.

- **Stamp File:** The stamp file indicates that the software package installed successfully on the client.

The Software Delivery Center process checks for the existence of the stamp file after the completion of the software package installation. The stamp file is used as a means of getting a return code from the software package. The software package itself must create the stamp file after the software package has successfully installed. The software package must not create the stamp file if the application does not successfully install. The software package is responsible for writing the stamp file because there is no agreed upon

standard among software vendors that indicates a particular installation was successful. Often, the installation program will return with a return code of zero for a successful installation, but this is not always the case. Therefore, each individual package must determine if the software installed successfully, and if so, create the software package stamp file. For this field specify the full path for the stamp file for which to check.

Note: The administrator can specify either the **Stamp File** field or **Windows RegKey** field. The **Windows RegKey** field should be used, unless the software package does not register in the Add/Remove Programs dialog.

- **Stamp Mode:** The stamp file mode.

The stamp file mode must be set to one of the following types:

- **Auto:** The Software Delivery Center client applet automatically creates the stamp file after the installation program completes. Auto stamp file mode is provided for development and testing of software packages.
- **Package:** The software package itself creates the stamp file after the software package has successfully installed.
- **Dated:** Dated time stamp mode is used to instruct the Software Delivery Center process to check the time stamp of the stamp file in addition to the existence of the file.

- **Stamp File Date:** The time stamp (date and time of the target stamp file).

When a **Stamp Mode** of “Dated” is selected, the software package passes the stamp file check only if the last modified date of the stamp file matches the date specified. The date is specified in Java-epoch milliseconds, the number of milliseconds since the Java epoch, defined as midnight, January 1, 1970 GMT. These are the number of milliseconds that have elapsed since January 1, 1970 00:00.

To generate the stamp file time stamp, run the following command from a Windows command prompt:

```
:java -jar printstamp.jar filename
```

where *filename* is the stamp file name.

Note: The printstamp.jar file is provided as part of the Software Delivery Center server software in the `c:\ibmsdc\sdserver\sd\apps\printstamp.jar` folder

(where `c:\ibmsdc\sdserver\sd` is the default document root). Your document root might be different depending on the options you choose during installation.

- **Target tab**

- **Temp. Space Required (MB):** The amount of temporary disk space in megabytes required to install the software package.

This is usually the temporary space required to unpack a software package prior to installation. The drive that is checked is the same drive that the Java Runtime Environment on the client uses for temporary space and is usually specified by the environment variable “tmp” or “temp”.

Note: If the drive letter used by the Java runtime environment for temporary space is the same drive letter specified in the **Target Directory** field, then the values in the **Temp. Space Required (MB)** field and **Target Space Required (MB)** field are added together before the free space check is performed; otherwise, two separate free space checks are performed.

- **Target Space Required (MB):** The amount of disk space in megabytes required to install the software package.
The drive letter or logical volume on which to perform the free space check is specified by the entry in the **Target Directory** field.
- **Target Directory:** The definition of the this field depends on the type of package you are defining.
When used with a package type of DirectoryDownload, this is the path to the folder under which the files in the package will be extracted. Example:
c:\Documents and Settings\All Users

When used with package types of Download(Open), Download(Secure), LogicalDrive(Open), or LogicalDrive(Secure), this is the drive letter on which the software package will be installed. Example:
c:\\
This folder will be checked for the required amount of free disk space prior to the installation of the software package.
- **Prerequisite Program:** The path name of the prerequisite program that is run prior to installing the software package.
Example:
/sdc/packages/sametime30/ifinstall.exe

If this program returns with a return code of zero, the Software Delivery Center program assumes that all of the prerequisites for this software package have been met. A non-zero return code indicates to the Software Delivery Center program that the prerequisites have not been met and the software package will not install.
- **Preinstall Program:** A program or script that runs before the installation of the software package.
Example:
/sdc/packages/sametime30/checknote.exe
- **Postinstall Program:** A program or script that runs after the installation of the software package. If the software package is run from a software bundle, a non-zero return code causes subsequent software packages in the software bundle not to run.
Example:
/sdc/packages/sametime30/verifyinstall.exe
- **Platform tag**
 - **Target Platforms:** The operating-system platforms on which this software package can be installed.
The Software Delivery Center program checks for the presence of the specified operating systems to determine if the software package should be displayed in the catalog. One or more operating systems can be specified by clicking the appropriate check box.

Software bundle definition information

The following are the fields and descriptions required to create and edit software bundles:

- **Name:** Unique name of the software bundle
- **Description:** The description of the software bundle.
- **Stamp File:** The stamp file indicates that the software bundle installed successfully on the client.

The Software Delivery Center process checks for the existence of the stamp file after the software bundle has been installed. The stamp file is used as a means of getting a return code from the software bundle. The software bundle itself must create the stamp file after all of the software packages in the bundle have successfully installed. The software bundle must not create the stamp file if any of the software packages do not successfully install. The software bundle is responsible for writing the stamp file because there is no agreed upon standard among software vendors that indicates a particular installation was successful. Often the installation program will return with a return code of zero for a successful installation, but this is not always the case. Therefore, each individual software bundle must determine if the software installed successfully, and if so, create the stamp file. For this field, specify the full path of the stamp file for which to check.

- **Selectable:** Indication that the software bundle can be selected.
- **Supported OS:** The operating systems on which a software bundle can be installed.

The Software Delivery Center program checks for the presence of the specified operating systems to determine if the software package should be displayed in the catalog. One or more operating systems can be specified by clicking the appropriate check box.

Creating a digital signature for a secure package

You can create a digital certificate for software packages of type Download(Secure) and LogicalDrive(Secure) by doing the following steps:

1. Open a Command Prompt window.
2. Change to the \signatures folder located under the document root of the server.
3. Run the following command:

```
java -jar ..\apps\sdcsigner.jar executable
```

where *executable* is the relative path name to the software package executable.

Example:

```
java -jar ..\apps\sdcsigner.jar ..\packages\win32\winzip90\WinZip90M.exe
```

Exporting and importing software packages and bundles

You use the Export/Import function to do the following:

- Create a portable catalog containing software packages and bundles that can be distributed on CD or a network drive.
- Export an XML file from a source Software Delivery Center server that can be imported on a target Software Delivery Center server to update the library database.

For a more detailed description of the Export/Import function, see “Creating a portable catalog” on page 21 and “Importing files from another server” on page 22.

Adding a new export group

To create a new export group:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **New**. The Add Export window opens.
4. In the Name field, type the export group name.

5. In the Description field, type the associated export group name description.
6. Click **OK**.

Deleting an export group

To delete an export group:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **All Exports**. The List Exports table is displayed.
4. Select the check box beside the export group name you want to delete.
5. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
6. Click **OK** to delete an export group or click **Cancel** for no action.

Searching for an export group

To search for a specific export group name:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **All Exports**. The List Exports table is displayed.
4. Click **Search**. The Search window opens.
5. In the Name field, type the group name.
The export group name is case sensitive. Type the name exactly as the name is listed in the export group list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.
6. In the Page Search field, type the maximum number of entries per page to display.
7. Click **Search**. The selected export group name and description is displayed in the List Exports table.

Changing the export name and description

To change the export name and description:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **All Exports**. The List Exports table is displayed.
4. Click the export group name. The Edit Export window opens.
5. Make changes to the export group name, or description, or both.
6. Click **OK** to update the information or click **Cancel** for no action.

Adding or deleting a software package or bundle in a specific export group

To add or delete a software package or bundle in a specific export group:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **All Exports**. The List Exports table is displayed.
4. Click the export group name.
5. Click **Packages** or click **Bundles**. The Package List or Bundle List table for a specific export group is displayed.

6. Select or clear the check box beside the software package or bundle name you want to include or delete.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

7. Click **OK**.

Creating an XML output file for an export group

This procedure creates XML output from the packages and bundles contained in the export group. It can be imported to another Software Delivery Center server to provide additional entries in a Software Delivery Center library. To create XML output from packages and bundles in a specific group:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **New**. The Add Export window opens.
4. In the Name field, type the export group name.
5. In the Description field, type the associated export group name description.
6. Click **Apply**.
7. Click **Packages**. The Package List for Export window is displayed.
8. Select the check box beside the packages you want to add.
9. Click **Apply**.
10. Click **Bundles**. The Bundle List for Export window is displayed.
11. Select the check box beside the bundles you want to add.
12. Click **Apply**.
13. Click **Output XML**. The XML output file opens.
14. Click **File**.
15. Click **Save As** to save the XML output file to the appropriate media, server, drive, or file.
16. Close the browser window containing the XML output.

Exporting a portable catalog

A portable catalog can reside on a CD, DVD, network drive, or other portable media.

Note: When exporting a portable catalog containing package types of LogicalDrive(Open) or LogicalDrive(Secure), the Software Delivery Center server must be mapped to the logical drive before the export operation is initiated.

This is useful for distributing software to computers that do not have network access or access to the Software Delivery Center server. To export the portable catalog:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **CD Export**. The Java-based Import/Export Utility window opens.
4. In the Export Group field, click an export name.
5. In the Image Location field, type in the file name or use **Browse** to select the folder where the portable catalog files and folders can be stored.

Note: The folder must be new or empty.

6. If the software packages should be installed only from the Software Delivery Center Client catalog, click **Reversibly Corrupt** (optional). These package executables have to be installed through the Software Delivery Center Client and cannot be installed outside of the client catalog.
7. If this is a one-time run of the client catalog, click **Delete Image After Install** (optional). All files and directories in the Image Location area are deleted after the client catalog is exited.
8. Click **Export**. When the export process is complete, **done** is displayed at the bottom of the window.
9. If you want to put the portable catalog on CD or DVD, use the CD/DVD recording software of your choice to copy the portable catalog files and folders to the CD or DVD. If you want to put the portable catalog on a network drive or other media, copy the files to the appropriate drive or media.

Note: Make sure you maintain the folder structure and include all of the files and folders.

Previewing a portable catalog

This procedure enables you to view the list of software packages contained in a portable catalog, the space required for each package, the total space required for the packages, and the names of any missing files. To preview the portable catalog:

1. Click **Packages**.
2. Click **Export/Import**.
3. Click **CD Export**. The Java-based Import/Export Utility window opens.
4. In the Export Group field, click an export group name.
5. In the Image Location field, type the file name or use **Browse** to select the folder where the portable catalog files and folders are stored.
6. Click **Preview**. The space per package, a list of packages, the total space required, and the names of any missing files are displayed.
7. If you want to put the portable catalog on CD or DVD, use the CD/DVD recording software of your choice to copy the portable catalog files and folders to the CD or DVD. If you want to put the portable catalog on a network drive or other media, copy the files to the appropriate drive or media.

Note: Make sure you maintain the directory structure and include all of the files and folders.

Importing Software Delivery Center files from another server

The following procedure assumes you have already created the XML output file from the source Software Delivery Center server. If you have not, export the XML file now before you start this procedure. See “Creating an XML output file for an export group” on page 40.

Throughout the following procedure, the term *source server* is used to identify the Software Delivery Center server that currently contains the XML source file and software packages to be exported. The term *target server* is used to identify the Software Delivery Center server to which the files will be imported.

1. Copy the XML output file to the target server using one of the following methods:
 - From the target server map to the source server. Then, copy the XML output file from the source server to the target server.

- At the source server, copy the XML output file to a portable media. Then, bring the portable media to the target server and copy the XML source file anywhere on the target server.
2. At the target server, open the Software Delivery Center administrator's console and do the following:
 - a. Click **Packages**.
 - b. Click **Export/Import**.
 - c. Click **Import XML**. The Select the XML File for Import window opens.
 - d. In the File Name field, type in the XML source file name or click **Browse** to select the XML output file.
 - e. Click **OK**. The Import Package window opens.
 - f. Click **OK** to accept each package. Click **Skip** to bypass any package you do not want to import. After all packages and bundles contained in the output XML have been added, you will be prompted to add the export definition used to create the export output XML file.
 - g. Click **OK** to finish importing the XML output file.
 3. If the physical package files, detail files, and icon files are on a logical drive (a shared network drive outside of the source server), no further action is required. If the physical package files, details files, and icon files are stored on the source server, copy the files to the target server using one of the following methods:
 - From the target server, map to the source server. Then, copy the appropriate package files, detail files, and icon files to the target server.
 - At the source server, copy the appropriate package files, detail files, and icon files to portable media (such as CD or DVD). Then, bring the portable media to the target server and copy the files on the target server.

Note: The folder structure for the package files, detail files, and icon files must be the same on the target server as the source server. Otherwise, you will have to update the package information for each imported package at the target server to specify the changed paths. The affected fields are the Details field and Icon Path field on the General tab and the Remote file on the Install tab.

Managing distribution

To schedule a software package for a push distribution, you must first create a distribution group and then add a distribution list of target machines. The Distribution Management screen shows a list of distribution groups (Distribution List table).

Adding a distribution group

To add a distribution group:

1. Click **Distributions**.
2. Click **Distributions**.
3. Click **New**. The Add Distribution window opens.
4. In the Name field, type the name of the distribution group.
5. In the Description field, type the associated distribution group description.
6. Click **Add**.

You can add as many new distribution groups as you need.

Deleting a distribution group

To delete the distribution group:

1. Click **Distributions**.
2. Click **Distributions**.
3. Click **All Distributions**. The List Distributions table is displayed.
4. Select the check box beside the distribution group you want to delete.
5. Click **Delete**. A dialog box displays:
"Do you really want to remove the selected entries?"
6. Click **OK** to delete the distribution definition or click **Cancel** for no action.

Searching for a distribution group

To search for a specific distribution group name:

1. Click **Distributions**.
2. Click **Distributions**.
3. Click **All Distributions**. The List Distributions table is displayed.
4. Click **Search**. The Search window opens.
5. Type the distribution group name.
The distribution group name is case sensitive. Type the name exactly as the name is listed in the distribution group list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.
6. In the Page Size field, type the maximum number of entries per page to display.
7. Click **Search**. The selected distribution group name displays in the distribution group list.

Changing the distribution group description

To change a distribution group description:

1. Click **Distributions**.
2. Click **Distributions**.
3. Click **All Distributions**. The List Distributions table is displayed.
4. Click the name of the distribution group. The Edit Distribution window opens.
5. Type the changes to the distribution description.
6. Click **Update**.

Adding or deleting machines for a specific distribution group

To add or delete a target machine for a specific distribution group:

1. Click **Distributions**.
2. Click **Distributions**.
3. Click **All Distributions**. The List Distributions table is displayed.
4. Click the distribution group name.
5. Click **Machines**. The Machine List for Distribution window opens.
6. Do one of the following:
 - To add a machine, select the check box beside the machines you want to add.
 - To delete a machine, clear the check box beside the machines you want to delete.
7. Click **Update**.

Note: When adding machines from multiple pages, you must select **Apply** to save your changes before selecting the << arrow or >> arrow.

When the administrator performs a push operation to a specific distribution group, all machines defined for that group will receive the push packages.

Searching for a machine in a specific distribution group

To search for a machine in a specific distribution group:

1. Click **Distributions**.
2. Click **Distributions**.
3. Click **All Distributions**. The List Distributions table is displayed.
4. Click the distribution group name.
5. Click **Search**. The Search window opens.
6. You can search by machine name, operating system, IP address, or selected machines. Do one or any combination of the following:
 - a. In the Name field, type the machine name.

Note: The machine name is case sensitive. Type the name exactly as the name is listed in the machine list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.

- b. In the OS field, select the operating system.
 - c. In the IP field, type the IP address.
 - d. Select the Selected Only check box to restrict the search to selected machines only.
7. In the Page Size field, type the maximum number of entries per page to display.
8. Click **Search**. The selected software package or bundle name displays in the software package or bundle list.

The user has access to each machine with a mark in the check box in the machine distribution list.

Managing machines

All machines that are self-registered with the Software Delivery Center server are listed. In the Software Delivery Center database, self-registration occurs the first time the machine is started after the Software Delivery Center client agent has been installed.

Deleting a machine

To delete a machine:

1. Click **Distributions**.
2. Click **All Machines**. The List Machines table is displayed.
3. Select the check box beside the machine you want to delete.
4. Click **Delete**. A dialog box displays:

"Do you really want to remove the selected entries?"
5. Click **OK** to delete the machine name or click **Cancel** for no action.

Searching for a machine

To search for a specific machine:

1. Click **Distributions**.
2. Click **All Machines**. The List Machines table is displayed.
3. Click **Search**. The Search window opens.
4. You can search by machine name, operating system, start date, or end date. Do one or of any combination of the following:
 - a. In the Name field, type the machine name.

Note: The machine name is case sensitive. Type the name exactly as the name is listed in the machine list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.

- b. In the OS field, select the operating system.
 - c. In the Start Date field, select the schedule start date and time.
 - d. If the End Date field, select the schedule end date and time.
5. In the Page Size field, type the maximum number of entries per page to display.
 6. Click **Search** button. The selected machine name and associated information (IP address, operating system, and date machine was registered) display in the machine list.

Managing schedules

A schedule is a time window for when a software package will be pushed to a set of clients. The Schedule Management screen shows a list of schedules, distribution names, start dates, and end dates, and if each schedule is enabled for distribution.

Adding a schedule

To add a schedule:

1. Click **Distributions**.
2. Click **Schedules**.
3. Click **New**. The Add Schedule window opens.
4. Complete the schedule information fields. Refer to "Schedule information" on page 46 for details.
5. Click **Add**.

Deleting a schedule

To delete the schedule:

1. Click **Distributions**.
2. Click **Schedules**.
3. Click **All Schedules**. The List Schedules table is displayed.
4. Select the check box beside the schedule you want to delete.
5. Click **Delete**. A dialog box displays:

"Do you really want to remove the selected entries?"
6. Click **OK** to delete the schedule name or click **Cancel** for no action.

Searching for a specific schedule

To search for a specific schedule:

1. Click **Distributions**.
2. Click **Schedules**.
3. Click **All Schedules**.
4. Click **Search**. The Search window opens.
5. You can search by schedule name, distribution name, start date, or end date. Do one or of any combination of the following:
 - a. In the Schedule Name field, type the schedule name.

Note: The schedule name is case sensitive. Type the name exactly as the name is listed in the schedule list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.

- b. In the Distribution Name field, select the distribution group name to which the schedule belongs.
 - c. In the Start Date field, select the schedule date and time designated to start a search for a schedule installation.
 - d. If the End Date field, select the schedule date and time designated to end a search for a schedule installation.
6. In the Page Size field, type the maximum number of entries per page to display.
 7. Click **Search**. The selected schedule name displays in the schedule list.

Updating a schedule for a software package or a software bundle to be pushed

To update a schedule:

1. Click **Distributions**.
2. Click **Schedules**.
3. Click **All Schedules**. The List Schedules table is displayed.
4. Click the schedule name. The Update Schedule window opens.
5. Make the changes to the schedule information fields.
6. Click **Update**.

Schedule information

The following are descriptions of the fields displayed in the Add Schedule list:

General tab

- **Schedule:** The name of the schedule.
- **Description:** The short description of the scheduled distribution.
- **Enable:** If the check box is selected, the schedule is enabled for distribution.
- **Distribution Name:** This field is used to select the distribution group assigned to this schedule.
- **Daily Start Time:** The start time for software package distribution. The format is **HH MM** (using the 24-hour format, 9:00 p.m. is 21 00).
- **Daily End Time:** The end time for software package distribution. The format is **HH MM** (using the 24-hour format, 9:00 p.m. is 21 00).

- **Start Date:** The start date for software package distribution. The format is YYYY-MM-DD.
- **End Date:** The end date for software package distribution. The format is YYYY-MM-DD.

Package/Bundle tab

- **Query Packages:** This query is used to filter available software packages by:
 - **Package Name:** The software package that is pushed to the machines identified in the distribution group.
 - **Name:** The name of a software application.
 - **Type:** The software package type:
 - Download(Open)
 - Download(Secure)
 - LogicalDrive(Open)
 - LogicalDrive(Secure)
 - DirectoryDownload
 - **Operating system:** The operating systems on which this software package can be installed.
- **Query Bundles:** This query is used to filter available software bundles by:
 - **Bundle Name:** The software bundle that is pushed to the set of machines identified in the distribution group.
 - **Name:** The name of a software application.
 - **Operating system:** The operating systems on which this software bundle can be installed.

Using the Software Delivery Center logs

The Software Delivery Center program logs significant event information.

Viewing a log

To view a log:

1. Click **Logs**.
2. Click **View Logs**. The List Logs table is displayed.
3. Click **TimeStamp**. The Log Details window opens.
4. View the details of each log entry.

Deleting a log

To delete the log:

1. Click **Logs**.
2. Click **Delete**. The Delete Logs window opens.
3. Select the date range, host name, user name, or a combination for the logs you want to delete.
4. Click **Delete**. A dialog box displays:

"Do you really want to remove the selected entries?"
5. Click **OK** to delete the log or click **Cancel** for no action.

Searching for a log

To search for a specific log:

1. Click **Logs**.
2. Click **View Logs**. The List Logs table is displayed
3. Click **Search**. The Search window opens.
4. You can search by start date, end date, user name, or host name. Do one or of any combination of the following:
 - a. In the Start Date field, select the schedule date and time designated to start a search for a schedule installation.
 - b. If the End Date field, select the schedule date and time designated to end a search for a schedule installation.
 - c. In the UserID field, type the user name.
 - d. In the HostName field, type in the host name.

Note: The user name and host name are case sensitive. Type the name exactly as the name is listed in the log list you are searching. If you are not sure of the spelling, you can use the percent symbol (%) as a wild card in place of one or more characters.

5. In the Page Size field, type the maximum number of entries per page to display.
6. Click **Search**. The selected log entry displays in the log list.

Log entry details

The following are the fields and descriptions displayed in the logs:

- **TimeStamp:** The date and time of the log entry
- **UserID:** The Software Delivery Center user name used to access the catalog
- **Client:** The client type
- **HostName:** The host name of the client
- **ClientIP Address:** The IP address of the host name that generated the log entry
- **Operating System:** The operating system of the client
- **OS Version:** The version number of the operating system of the client
- **Java Vendor:** The Java vendor of the JRE used by the client
- **Java Version:** The Java version of the JRE used by the client
- **Login:** The Windows user account used to log in to the Windows operating system on the client computer
- **Package** The name of the software package involved
- **Install Type:** The software package installation type
- **Status:** 0 (Ended) or 1 (Started)

Finding help

Help is available in two formats:

- The online help system
- The *Software Delivery Center Administrator's Guide*

Help is available from the administrator's console. To get help do one of the following:

- To access the *Software Delivery Center Administrator's Guide*, click **Help** and then click **Administrator's Guide (PDF)**. The *Software Delivery Center Administrator's Guide* PDF opens.
- To access the online help system, click the question mark (?) beside the field to get an explanation.

Note: The Software Delivery Center program uses Adobe Reader 6.0 or higher to view or print the file. Adobe Reader is available at no charge from:

<http://www.adobe.com/products/acrobat/readermain.html>

Logging out of the Software Delivery Center administrator's console

To log out, click **Logoff**. The Administration Login window opens.

Chapter 7. Troubleshooting

This chapter provides several methods of troubleshooting the Software Delivery Center program.

This chapter includes the following topics:

- “IBM HTTP Server logs and manual”
- “Apache Tomcat logs and manual”
- “Controlling the Apache Tomcat service”
- “Enabling and disabling the client agent”
- “Setting up the Trusted Sites zone” on page 52

IBM HTTP Server logs and manual

The IBM HTTP Server provides comprehensive and flexible logging capabilities that can be very useful for troubleshooting Web site problems. These logs are located in the `c:\IBMSDC\IHS20\logs` directory.

In addition, you can view the IBM HTTP Server manual by pointing a browser to the following URL:

<http://www.ibm.com/software/webservers/httpservers/doc/v20/manual>

Apache Tomcat logs and manual

The Apache Tomcat program also provides an extensive logging capabilities that can be very useful for troubleshooting Web site problems. These logs are located in the `c:\IBMSDC\tomcat413\logs` directory.

In addition, you can view the Apache Tomcat manual by pointing a browser to the following URL:

<http://jakarta.apache.org/tomcat/tomcat-4.1-doc/index.html>

Controlling the Apache Tomcat service

To control the Apache Tomcat service, right-click **My Computer** and select **Manage**. Double-click **Services and Applications**, then double-click **Services**. Find Apache Tomcat in the list of services and click on it once using the left mouse button to select it. Under the **Actions** menu, click the appropriate menu item to perform the desired action.

Enabling and disabling the client agent

The Software Delivery Center client agent runs as a service. By default it is set to start automatically when the operating system starts. You can change the startup type if needed.

1. From your Windows desktop, click **Start**.
2. Click **Settings**.
3. Click **Control Panel**.
4. Double-click **Administrative Tools**.
5. Double-click **Services**.

6. Double-click **SDC agent**.
7. In the Startup Type field, select the startup type you want to use.
8. Click **OK**.

Setting up the Trusted Sites zone

If you encounter problems loading the Software Delivery Center administrator's console Web pages while running Windows XP with Service Pack 2, you may need to add your Software Delivery Center server address to your Trusted Sites list. To add the Software Delivery Center program, perform the following steps:

1. In Internet Explorer, click **Tools** in the menu bar and click **Internet Options**.
2. Click the **Security** tab.
3. Click **Trusted sites**.
4. Click the **Sites...** button.
5. Clear the check box beside "Require server verification (https:) for all sites in this zone".
6. Type the server address in the "Add this Web site to the zone:" field.
7. Click **Add**.
8. Click **OK** and then load or reload the Software Delivery Center Administration Login panel.

Chapter 8. Getting help and support

The Software Delivery Center program is supported by IBM. If you have a problem with the Software Delivery Center program or have questions about a specific feature, a variety of sources are available to help you including documentation, an integrated help system, Web pages, and IBM technical support.

Refer to your Software Delivery Center license for a full explanation of IBM support, terms, and duration. To access the license, complete the following procedure:

1. Start the Software Delivery Center administrator's console.
2. Click **Help**, and then click **View the license**.

Be sure to retain your proof of purchase.

Note: The Software Delivery Center program is not a warranted product. IBM will provide assistance to resolve problems and answer questions about the Software Delivery Center program, but IBM is not obligated to update this version of the code, to enhance its functionality, to resolve problems, or to make future versions of this product available at no charge. Any decision to make updates available or to charge fees for updates is solely at the discretion of IBM.

This chapter includes the following topics:

- "Using the documentation"
- "Using the help system"
- "Using the Web"
- "Contacting a Software Delivery Center technical expert" on page 54
- "Obtaining support" on page 54

Using the documentation

Many problems can be solved without contacting IBM for assistance. If you experience a problem or have a question about the operation or functionality of the Software Delivery Center program, begin with this publication, the *Software Delivery Center Administrator's Guide*.

To access the *Software Delivery Center Administrator's Guide*, click **Help** from the administrator's console; then click **Administrators Guide (PDF)**.

Using the help system

You can access the help system from the administrator's console. To access the help system, click the question mark (?) beside the field to get an explanation of that field.

Using the Web

The Software Delivery Center site provides the latest technical information and downloadable updates that IBM chooses to distribute. To visit the Software Delivery Center Web site, go to:

<http://www.ibm.com/pc/support/site.wss/document.do?lndocid=TVAN-SDC>

Contacting a Software Delivery Center technical expert

Technical assistance for the Software Delivery Center program is available from IBM. You can get support information from the following sources:

- From the Software Delivery Center Web site at:
<http://www.ibm.com/pc/support/site.wss/document.do?lndocid=TVAN-SDC>
- By telephone:
To get the telephone number for your country or region, complete the following steps:
 1. Go to:
<http://www.ibm.com/pc/support>
 2. Click **Support phone list**.
 3. Click **ThinkVantage Technologies**.

Obtaining support

Charges for the Software Delivery Center program apply as follows:

- Server code installed on IBM or non-IBM computers: All telephone support is provided on a fee-per-incident basis (regardless of the brand of computer on which the program is installed).
- Client code installed on IBM computers: During the first 30 days after the program has been installed, IBM provides free telephone support. After this period, telephone support is provided on a fee-per-incident basis.
- Client code installed on non-IBM computers: Telephone support is provided on a fee-per-incident basis.

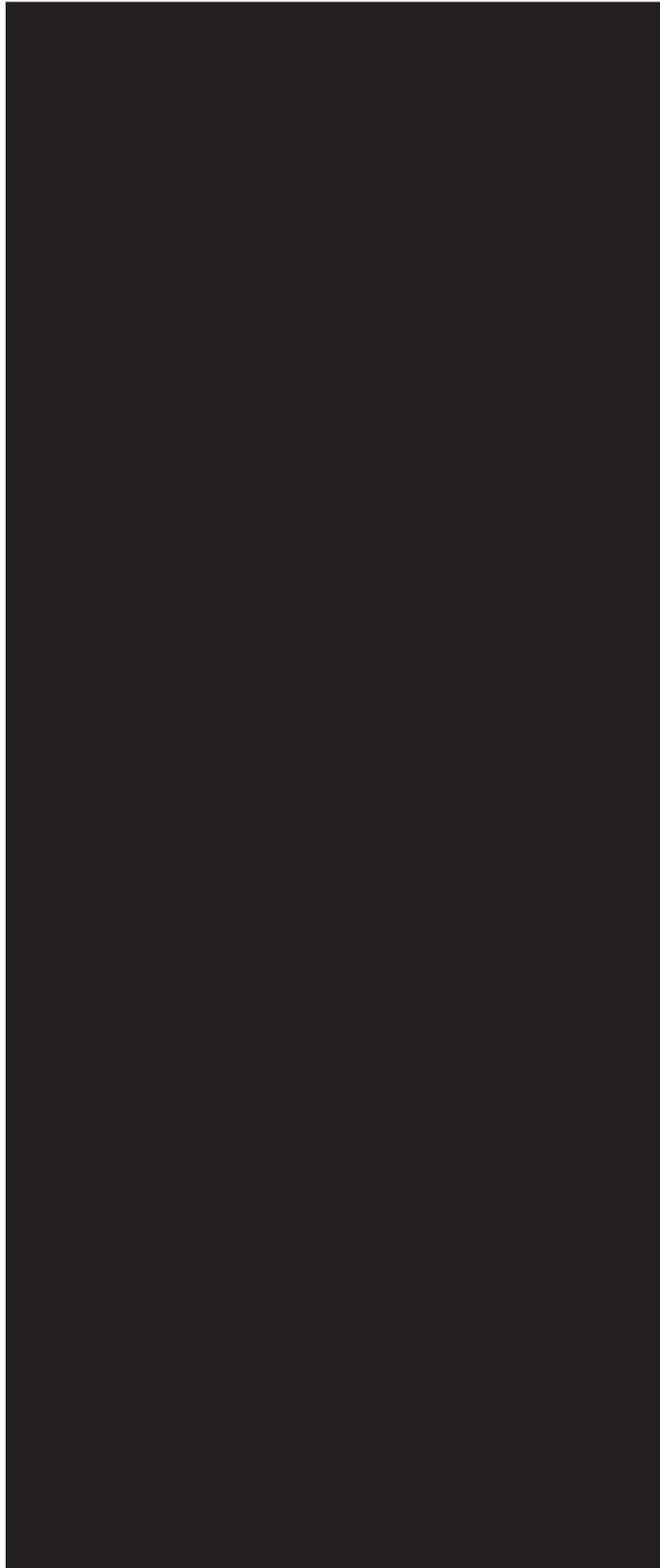
The prices associated with fee-based support vary depending on your geographic location. For more information, contact IBM. See “Contacting a Software Delivery Center technical expert” for details.

Appendix A. Sample folder structure

This appendix provides three folder structures as samples that you can use as a reference to set up a folder structure on your Software Delivery Center server. All software packages, detail files, and icon files stored on the Software Delivery Center server must be stored under the document root, which by default is `c:\IBMSDC\SDCSERVER\SDC`. The document root on your server might be different depending on the options you chose during installation. All sample folder structures in this appendix show the default document root.

The folder structure you implement is entirely up to you as long as it resides under the document root. You can organize your files by operating system, type of application, or any other characteristic that meets the needs of your organization.

The following sample shows the use of separate folders for software packages, detail files, and icon files.



The following sample shows a folder for each software package, each containing the package file, the details file, and the icon file.



The following sample shows separate folders for each operating system, under which are folders for each software package to be used for that operating system. The COMMON folder shown in this example contains folders for software

packages that can be installed on either Windows XP or Windows 2000.



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