

Peregrine ServiceCenter Installation

Release 6

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Getting Started

Welcome to the *ServiceCenter Installation Guide*. This guide has instructions to install the ServiceCenter 6 server and client and deploy ServiceCenter on a Web server. Follow the steps in this guide for a successful installation.

The *Installation Guide* has this information:

This section	Provides information about
<i>Chapter 1, Planning for a ServiceCenter Implementation</i>	The types of environments where you can install ServiceCenter, components of a production environment, and an implementation checklist.
<i>Chapter 2, Server Installation</i>	System requirements and steps you need to install the ServiceCenter server on a Windows or UNIX platform.
<i>Chapter 3, Client Installation</i>	System requirements and steps you need to install the ServiceCenter client on a Windows system.
<i>Chapter 4, Web Tier Installation</i>	Steps you need to deploy ServiceCenter on a Web application server.
<i>Chapter 5, Configuring the Server</i>	Modifying the <code>sc.ini</code> server configuration file.
<i>Chapter 6, Help Server</i>	System requirements and steps you need to install the ServiceCenter Help Server.

This section	Provides information about
<i>Chapter 7, Update Site Utility</i>	System requirements and steps you need to install the ServiceCenter Update Site Utility.
<i>Chapter 8, Client Packaging Utility</i>	System requirements and steps you need to install the ServiceCenter Client Packaging Tool.

Windows installation CD

The Windows Installation CD contents include:

- ServiceCenter Server installation files
- ServiceCenter Windows Client installation files:
 - Windows Client 6.0.0.0
 - ServiceCenter ODBC Driver 6.0.0.0
 - ReportCenter
 - Work Management
- ServiceCenter Help Server
- ServiceCenter Update Site Utility
 - ServiceCenter Update Site archive
- ServiceCenter Client Packaging Utility
- ServiceCenter Web Tier
 - ServiceCenter web application archive `sc.war`
- PDF of the *Installation Guide*

UNIX (AIX, HPUX, Linux, Solaris) installation CD

The UNIX (AIX, HPUX, Linux, Solaris) Installation CD contents include:

- ServiceCenter Server installation files
- ServiceCenter Web Tier
 - ServiceCenter web application archive `sc.war`
- PDF of the *Installation Guide*

Knowledge Requirements

The instructions in this guide assume a working knowledge of Peregrine Systems ServiceCenter and your installation platform.

- For information about a particular platform, see the appropriate platform documentation.
- For information about customizing your environment using parameters, search for *parameters* in the ServiceCenter online help.
- Before you run the ServiceCenter server, see *Using ServiceCenter* in the online help.
- For administration and configuration information, see the *Administering ServiceCenter* online help.
- For database configuration information, search for *database management* in the ServiceCenter online help.

Need further assistance?

For help with this release, you can contact customer support, download documentation or schedule training.

Customer Support

For further information and assistance with ServiceCenter in general, contact Peregrine Systems' Customer Support at the Peregrine CenterPoint web site.

To contact customer support:

- 1 In a browser, navigate to <http://support.peregrine.com>
- 2 Log in with your user name and password.
- 3 Follow the directions on the site to find the information you need.

The KnowledgeBase contains informational articles about all categories of Peregrine products. If the KnowledgeBase does not contain an article that addresses your concerns, you can search for information by product; search discussion forums; and search for product downloads.

Documentation web site

For a complete listing of current ServiceCenter documentation, see the Documentation pages of the Peregrine Customer Support web site.

To view the document listing:

- 1** In a browser, navigate to <http://support.peregrine.com>.
- 2** Log in with your login user name and password.
- 3** Click either **Documentation** or **Release Notes** at the top of the page.
- 4** Click the ServiceCenter link.
- 5** Click a product version link to display a list of documents that are available for that version of ServiceCenter.
- 6** Documents may be available in multiple languages. Click the Download button to download the PDF file in the language you prefer.

You can view PDF files using Acrobat Reader, which is available on the Customer Support Web site and through Adobe at <http://www.adobe.com>.

Education Services web site

Peregrine Systems offers classroom training anywhere in the world, as well as “at your desk” training via the Internet. For a complete listing of Peregrine’s training courses, refer to the following web site:

<http://www.peregrine.com/education>

You can also call Peregrine Education Services at +1 858.794.5009.

1 Planning for a ServiceCenter Implementation

This chapter describes the ways in which you can implement ServiceCenter in your organization.

Topics in this section include:

- *Types of installation environments* on page 12
- *Components of a production environment* on page 13
- *Implementation checklist* on page 18

Types of installation environments

You can install ServiceCenter in several types of environments:

- Production environment
- Non-production environments
 - Development environment
 - Test environment
 - Reporting environment

Production environment

Installing ServiceCenter in a production environment allows you to deploy your customizations and provide services to your intended user base. Most production environments run 24 hours a day and 7 days a week, support many simultaneous users, and process large numbers of transactions and requests. In a production environment, you typically install the various components of ServiceCenter on dedicated servers to maximize system performance.

Non-production environments

The following sections describe some of the common non-production purposes for which you can install ServiceCenter.

Development environment

Installing ServiceCenter in a development environment allows you to evaluate application features and customize your installation prior to deployment in a production environment. In a development environment, you typically install all ServiceCenter components on one test system with a limited number of users and data.

Test environment

A test environment is an installation that closely mirrors your production environment where you can use to test performance, upgrades, and backup and restore procedures. In a test environment, you typically install ServiceCenter in the same configuration as your production environment.

Reporting environment

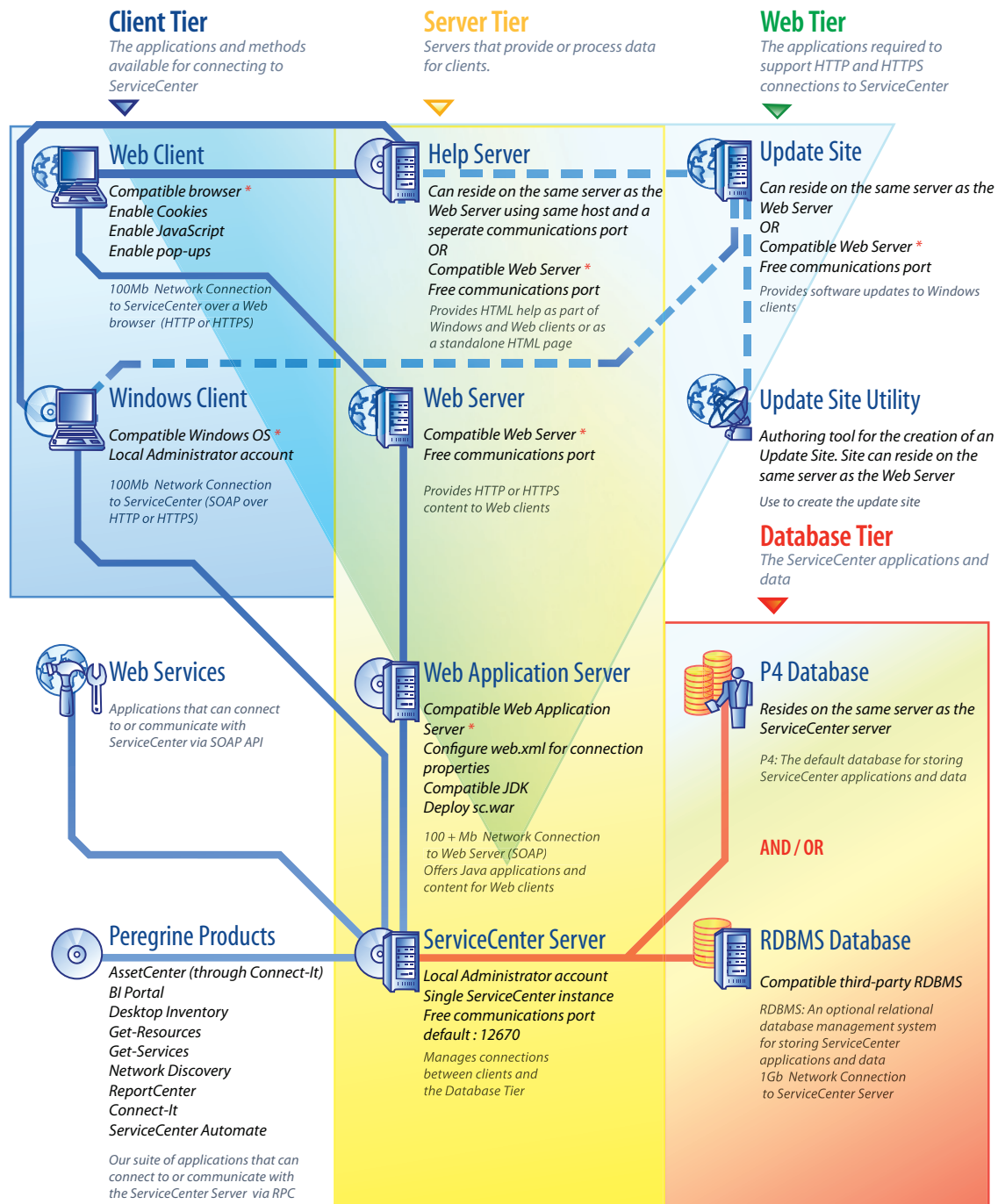
A reporting environment is an installation that mirrors the data from your production environment that you can use to generate and view reports. In a reporting environment, you typically install ServiceCenter to synchronize data with your production environment but limit the number of users that access the system.

Components of a production environment

A production environment consists of the following components:

- Client Tier (mandatory)
 - Web Clients (optional)
 - Windows clients
- Server Tier (mandatory)
 - ServiceCenter Server
- Database Tier (mandatory)
 - P4 Database files on ServiceCenter Server
 - RDBMS on separate server (optional)
- Web Tier (optional)
 - Web application server
 - Web server
 - ServiceCenter sc.war file
- Supporting servers (optional)
 - Help Server
 - Update Site
- Additional connections and integrations (optional)
 - Peregrine products
 - Web services

These components are logically connected as depicted in the following diagram.



* For compatible components see the compatibility matrix

— environment connections — database connections — update connections

Client tier

The Client tier consists of two components:

- Web client (optional)
- Windows client

The Web client allows users to connect to the ServiceCenter server via a Web browser. You must install the Web tier to support Web clients.

The Windows client allows users to connect to the ServiceCenter server via a dedicated client. You must install the Windows client separately on each system that you want to connect to ServiceCenter.

See the *What's New in ServiceCenter* online help for a list of differences between the Web and Windows clients.

Server tier

The Server tier consists of:

- ServiceCenter server

The ServiceCenter server runs the ServiceCenter applications and manages the connections between the Client and Web tiers to the Database tier.

See the *What's New in ServiceCenter* online help for a list of changes to the ServiceCenter server.

Database tier

The Database tier consists of two components:

- P4 file system (default)
- RDBMS server (optional)

By default, ServiceCenter stores application data in the P4 file system format on the same server as the ServiceCenter server.

You can also fully or partially convert ServiceCenter application data to an external RDBMS server.

See the [Database Conversion and RDBMS Support](#) guide for the differences between storing ServiceCenter application data on a P4 file system and an RDBMS.

Web tier

The Web tier is an optional feature that consists of the following components:

- Web application servers
- Web servers
- ServiceCenter `sc.war` file

The Web application servers are third-party server software that runs the `sc.war` file and supports connections from ServiceCenter Web clients. Some Web application servers also include built-in Web servers.

The Web servers are third-party server software that provide the HTTP or HTTPS content to ServiceCenter Web clients. Some Web application servers also include built-in Web servers.

The ServiceCenter `sc.war` file is a Web application that must be deployed to a compatible Web application server to support connections from ServiceCenter Web clients.

See the ServiceCenter compatibility matrix for a list of acceptable Web application servers and Web servers.

Supporting servers

The Supporting servers are optional features consisting of the following components:

- Help Server
- Update Site

The Help Server is a pre-configured Web server that provides HTML help to ServiceCenter clients and as a stand-alone Web page. See [Help Server](#) on page 99 for more information on this optional feature.

The Update Site is a Web site where ServiceCenter Windows clients can check for and download updates provided by Peregrine Systems. You can create an Update Site using the Update Site Utility. See [Update Site Utility](#) on page 109 for more information on this optional feature.

Additional connections and integrations

The additional connections and integrations are other Peregrine Products or Web services that can connect to the ServiceCenter server. These connections can include:

- Peregrine products
 - AssetCenter (through Connect-It)
 - Connect-It
 - Desktop Inventory
 - Get-Answers
 - Get-Resources
 - Get-Services
 - Network Discovery
 - ReportCenter
 - ServiceCenter Automate
- Web Services
 - SOAP API compliant Web services

See the ServiceCenter compatibility matrix for a list of possible connections and integrations.

Implementation checklist

The ServiceCenter 6 release offers a wide variety of significant new features. There are various configuration and deployment options that you should consider from the start to maximize the benefits of the product, ease its integration into your environment, and provide a foundation for future support and updates. The checklist list below provides a list of considerations and recommended steps that you can incorporate into your implementation and upgrade plans.

To implement ServiceCenter

- 1 Determine the hardware required for your ServiceCenter production environment.
For an estimate of the server hardware required, see the *Basic Server Sizing Worksheet* for instructions.
For a more accurate estimate of the server hardware required, see the *Advanced Server Sizing Worksheet* for instructions.
- 2 Are you upgrading from a previous version of ServiceCenter?
Yes. See the *Upgrade Utility* guide for instructions.
- 3 Are you going to convert ServiceCenter data residing on an existing RDBMS to the new ServiceCenter 6 UTF8/Unicode encoding?
Yes. See the *Upgrade Utility* guide for instructions and encoding considerations.
- 4 Are you going to use ServiceCenter with a third-party RDBMS?
Yes. See the *Database Conversion and RDBMS Support* guide for instructions.
- 5 Install ServiceCenter server in a development environment.
See *Server Installation* on page 21 for instructions.
- 6 Determine the clients (Windows and/or Web) that will connect to ServiceCenter.
See the *Choosing Clients Worksheet* for instructions.
- 7 Do you need to install Windows clients?
Yes. Review the Windows client installation requirements. See *Client Installation* on page 57 for instructions.
- 8 Do you need to support Web clients?
Yes. Install the ServiceCenter Web Tier in a development environment. See *Web Tier Installation* on page 85 for instructions.

- 9 Do you want to provide online help from a central server?
Yes. Install the Help Server. See [Help Server](#) on page 99 for instructions.
- 10 Do you want to provide automatic software updates from Peregrine to your Windows clients?
Yes. Install the Update Site Utility. See [Update Site Utility](#) on page 109 for instructions.
No. Go to step 12.
- 11 Create an update site with the Update Site Utility.
See [Update Site Utility](#) on page 109 for instructions.
- 12 Do you want to make customizations to your Windows clients such as changing the splash screen, adding custom images, adding company branding, saving default settings and connections, and configuring connections to a help server or update site?
Yes. Install the Client Packaging Utility. See [Client Packaging Utility](#) on page 121 for instructions.
No. Install Windows clients in your development environment, and then go to step 15.
- 13 Customize a Windows client with the Client Packaging Utility.
See [Client Packaging Utility](#) on page 121 for instructions.
- 14 Deploy the customized Windows client installer to your development environment.
- 15 Tailor the ServiceCenter applications in your development environment.
See the [Administering ServiceCenter](#) online help for instructions.
- 16 Add or update the operator records in your development environment with new capability words.
See the [Administering ServiceCenter](#) online help for instructions on adding new operators.
See the [What's New in ServiceCenter](#) online help for a list of new capability words.
- 17 Optimize the ServiceCenter interface in your development environment. For example, you can add public favorites and dashboards, tailor forms for viewing in the Web Tier, and tailor forms for accessible-assisted users.
See the [What's New in ServiceCenter](#) online help for instructions on adding new favorites and dashboards, tailoring forms for the Web tier, and addressing the needs of accessible-assisted users.

- 18 Configure the ServiceCenter server to accept connections and integrations from external data sources and applications such as Connect-It, Get-It, ODBC, and Web Services.

See the [Administering ServiceCenter](#) online help for instructions on enabling integrations to other applications.

See the ServiceCenter compatibility matrix for a list of applications that can connect to and share data with ServiceCenter.

- 19 Test your development environment.

Review your client and server customizations, client connections, and overall system performance. Correct any problems and retest the development environment.

- 20 Convert or push your development environment to your production environment.

To convert the development environment connect the ServiceCenter server to your production environment network and deploy necessary clients to the production environment.

To push the development environment to production environment, create an unload file of your application and operator customizations and load the file into your production environment system. See the [Administering ServiceCenter](#) online help for instructions.

2 Server Installation

CHAPTER

You can install ServiceCenter on a Windows or UNIX server. This section contains information about installation requirements and how to install the server. For information about starting and stopping servers, go to the *Administering ServiceCenter* online help.

Topics in this section include:

- *Installing the server on Windows* on page 22
- *Installing the server on UNIX* on page 46

Installing the server on Windows

You install the server using Microsoft Installer (MSI) technology. After installing the server, you can configure the server settings.

Installation requirements

- Windows 2000 or Windows 2003
- The most current Windows updates on your operating system
 - MSI 2.0 compliant
- 250 MB disk space
- 256 MB RAM minimum recommended
 - For testing purposes, 128 MB RAM is sufficient
 - For production purposes, RAM is based on the expected user load
- One local administrator account for each ServiceCenter instance that you want to install on the Windows server.
- A free communications port to listen for ServiceCenter connections requests. The default communications port is 12670.

ServiceCenter Server setup

Use the following steps to install ServiceCenter Server.

To install ServiceCenter server

- 1 Login to the Windows server as a user with local administrator privileges.
- 2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the server.

If you are installing on a system that has autorun enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:

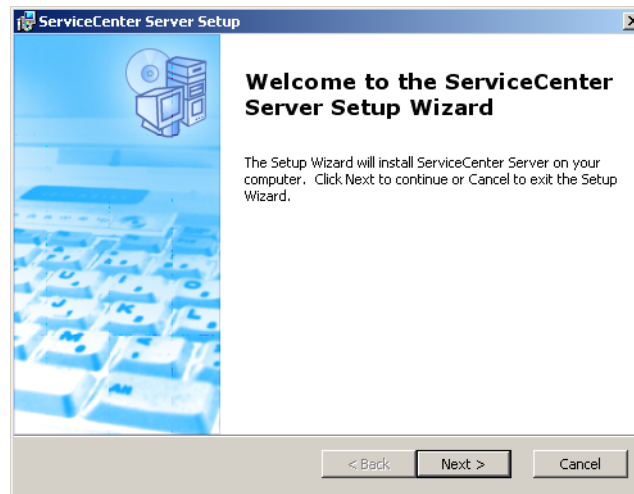
D:\>setup

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

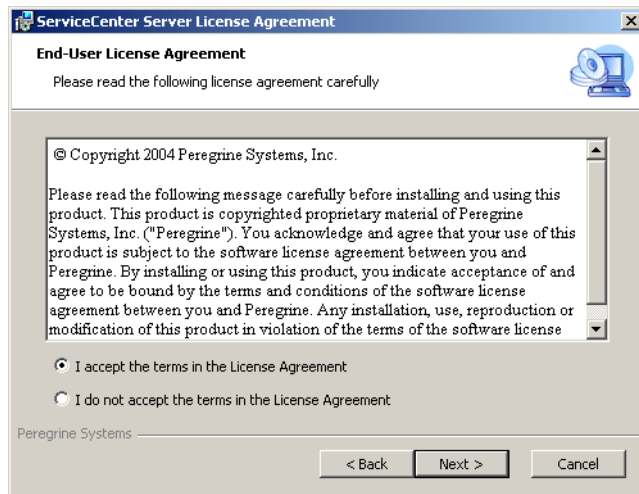


3 Click Install ServiceCenter Server.

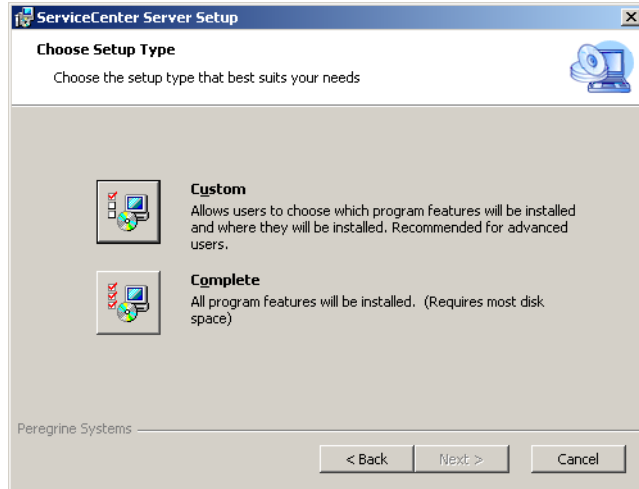
The ServiceCenter Server Setup wizard opens.



- 4 Click **Next** to read and accept the licensing agreement.



- 5 Select the **I accept the terms in the License Agreement** option.
The **Next** button becomes active.
- 6 Click **Next** to select the setup type.

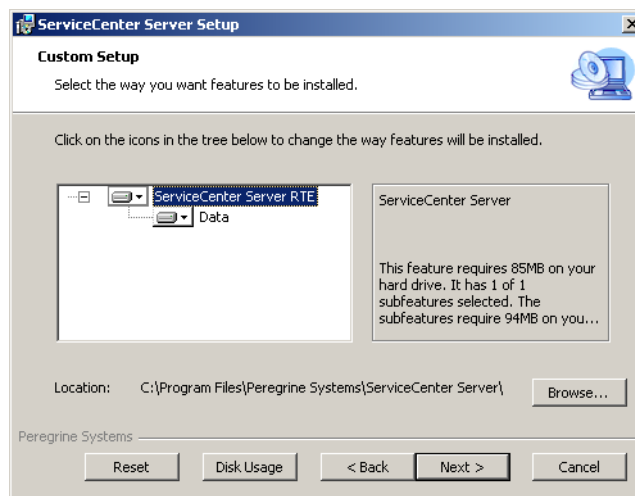


To choose the program features that you want to install, use the **Custom** installation option. See step 7.

To install all the program features, use the **Complete** installation option. See step 9.

7 Click Custom.

The Custom Setup page opens.



8 For each feature, select one of the following options:

- Will be installed on local hard drive – installs just the selected feature
- Entire feature will be installed on local hard drive – installs the selected feature and all subfeatures subordinate to this feature
- Entire feature will be unavailable – does not install the selected feature

Feature	Default option	Description
ServiceCenter Server RTE	Will be installed on local hard drive	This option installs the ServiceCenter Server run time environment. This is a <i>required</i> installation component.
Data	Will be installed on local hard drive	This options installs the P4 database files and sample data. This is an <i>optional</i> installation component.

Tip: You do not have to install the Data feature if you are upgrading from a previous version of ServiceCenter. See the [Upgrade Utility](#) guide for more information about upgrading from previous versions of ServiceCenter.

- a If needed, click **Browse** to change the location of your installation folder.
The default installation folder is:
C:\Program Files\Peregrine Systems\ServiceCenter Server\.
- b Click **Reset** to change your options while on this page of the wizard.
- c Click **Disk Usage** to view the amount of space required for each feature and your system space availability.
- d Click **Next** to continue the installation.

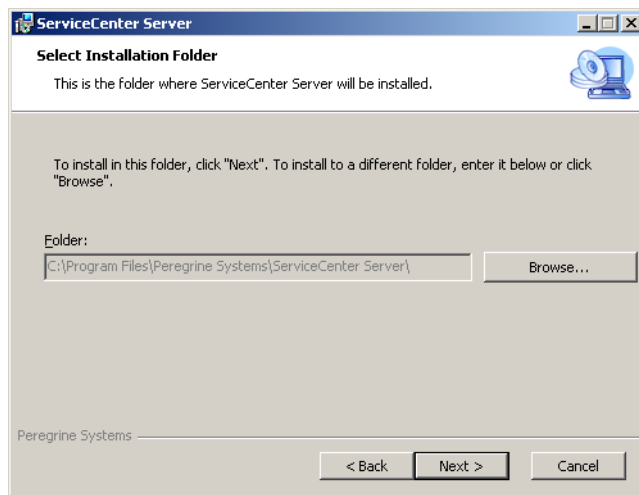
Go to step 11.

9 Click **Complete**.

The Select Installation Folder page opens.

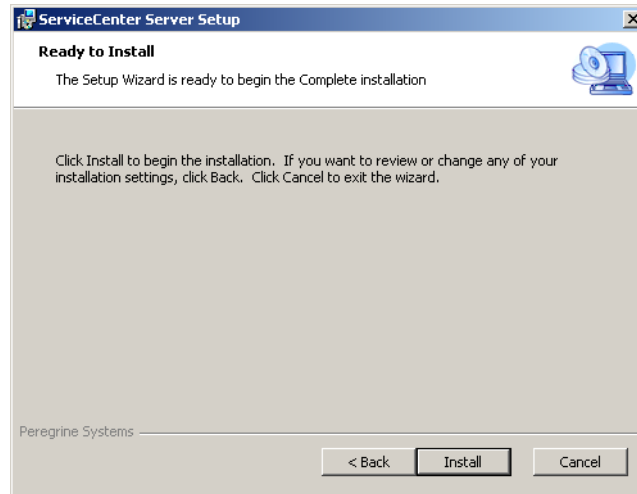
10 Do one of the following:

- Click **Next** to accept the default installation folder.
The default installation folder is:
C:\Program Files\Peregrine Systems\ServiceCenter Server
- Click **Browse** to choose a different installation location.

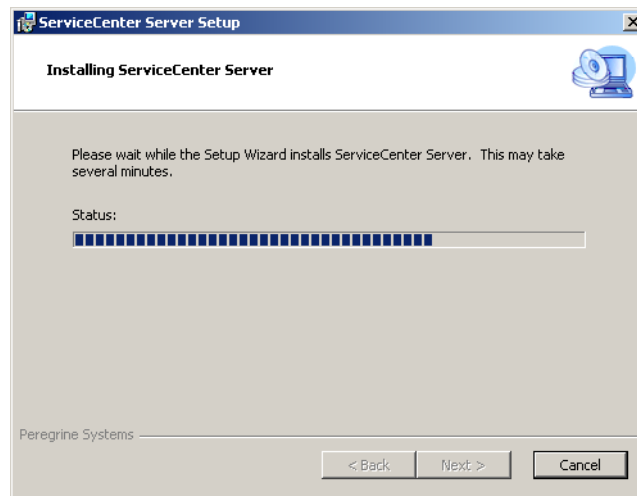


11 Click **Next** to prepare the installation process.

The Ready to Install page opens.

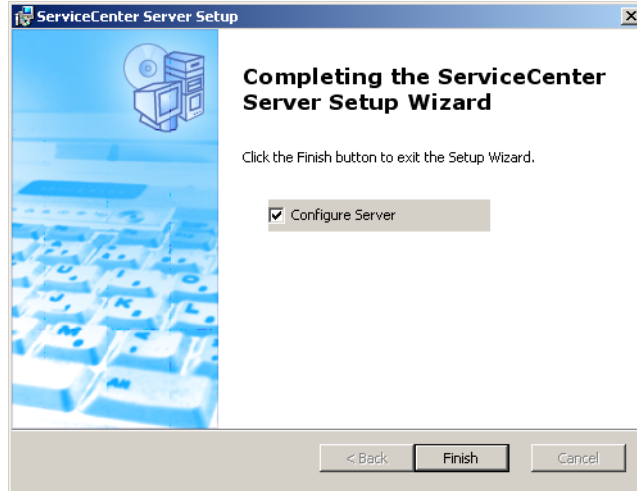


12 Click **Install** to begin copying the installation files.



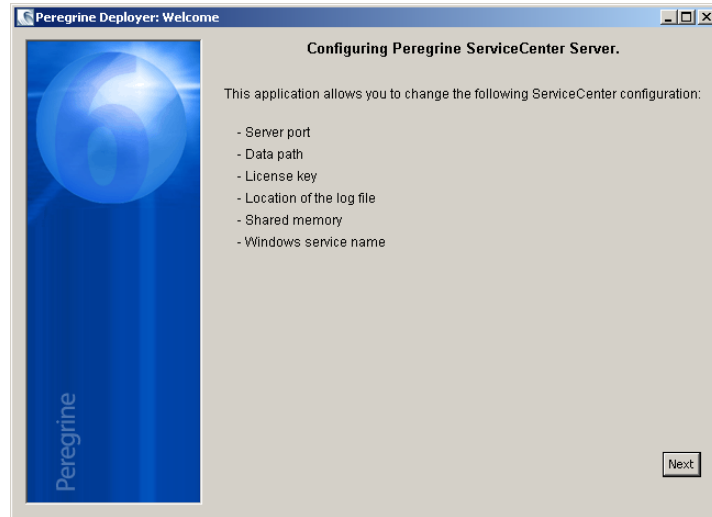
You can stop the installation by clicking **Cancel**.

The **Completing the ServiceCenter Server Setup Wizard** page opens when the installation is complete.

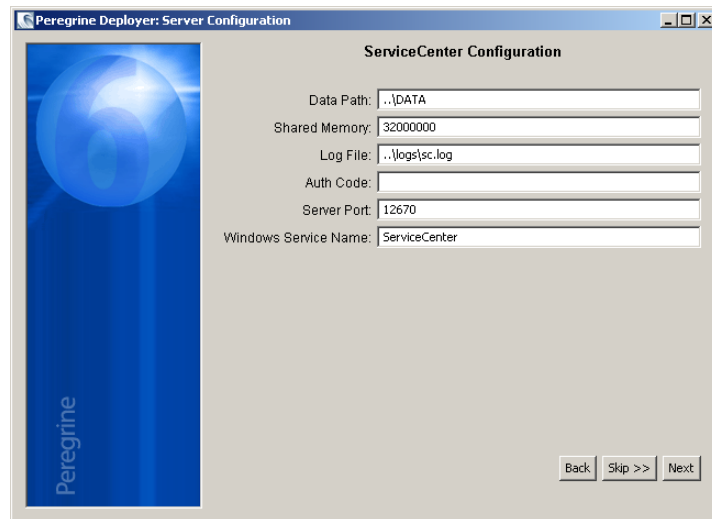


- 13 To automatically configure the server, select the **Configure Server** option.
Note: You can also configure the ServiceCenter server by editing the `sc.ini` configuration file.
- 14 Click **Finish** to exit the Setup Wizard.
The server installation is complete.

If you selected the Configure Server option, the Configuring Peregrine ServiceCenter Server wizard opens.



15 Click **Next** to view or change the default `sc.ini` configuration file.



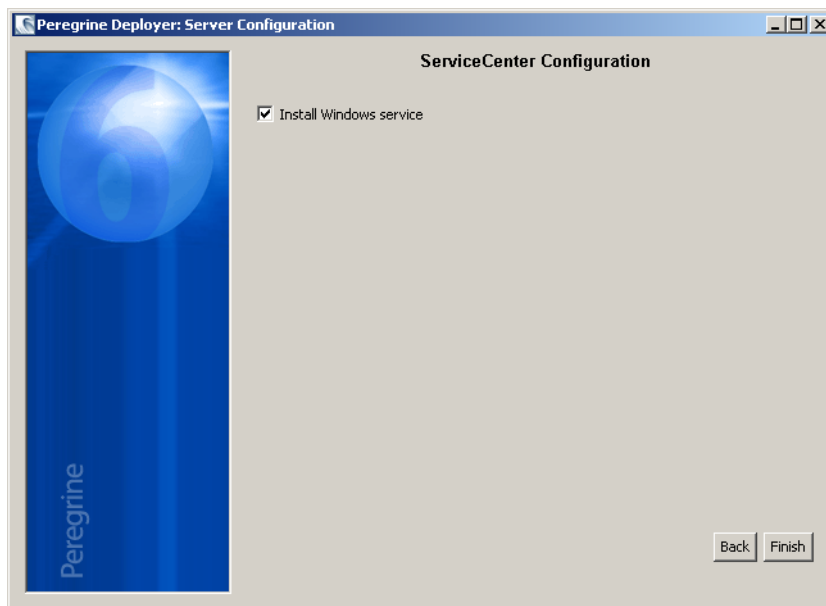
16 Update the following parameters as needed.

Parameter	Default	Description
Data path	\DATA	This is the local path where you want to save ServiceCenter database (application) files.
Shared memory	32000000	This is the amount of memory you want to allocate for managing resources and users.
Log File	\logs\sc.log	This is the location where you want to save ServiceCenter log files.
Auth Code		This is where you type the authorization code needed to start ServiceCenter. Contact Customer Support if you do not know your code.
Server Port	12670	This is the communication port number to which you want ServiceCenter to listen to client connection requests.
Windows Service Name	ServiceCenter	This is the name of the service that you want ServiceCenter to run as.

Important: You must change the ServiceCenter service name if you are installing multiple instances of ServiceCenter Server on the same machine. You must provide each ServiceCenter Server instance with a unique service name.

Note: A complete list of the parameters stored in the `sc.ini` file is available in the *Administering ServiceCenter* online help *System Parameters* section.

- 17 Click **Next** to install the Windows service.



Note: You can also install the Windows service later from the Start Menu shortcuts. See *Installing the Windows Service* on page 31.

- 18 Click **Finish** to complete the configuration.
 19 From the Setup CD Browser, click **Exit Install**.

You must start the server before users can access ServiceCenter. For information about starting the server, refer to the *Administering ServiceCenter* online help.

Installing the Windows Service

You can manually install the Windows service on any machine where you have already installed ServiceCenter Server.

To install the Windows service

- 1 Login to the ServiceCenter server with an administrator account.
- 2 Click **Start > Programs > ServiceCenter Server > Install Service**.
 A batch file installs the Windows service.

Installing multiple ServiceCenter instances on a single machine

In order to install the ServiceCenter server you must log in as a local administrator on Windows server. If you plan on installing multiple instances of the ServiceCenter server on a single Windows server, you must create multiple user accounts with local administrator privileges.

To install multiple instances of ServiceCenter on a single machine

- 1 Login to the Windows server as a user with local administrator privileges.
 - 2 Follow the installation instructions in *ServiceCenter Server setup* on page 22.
 - 3 Login as another user with local administrator privileges.
 - 4 Follow the installation instructions in *ServiceCenter Server setup* on page 22 except for the server configuration and Windows service installation.
 - a For the **Server Port** field, type a unique communications port for the additional ServiceCenter Server instance.
- Tip:** If you never plan to run the multiple ServiceCenter instances at the same time, each ServiceCenter instance can use the same communications port.
- b For the **Windows Service Name** field, type a unique Windows service name for the additional ServiceCenter Server instance.
- 5 Repeat step 3 through step 4 for each additional ServiceCenter instance you want to install.

Repairing the server installation

You can repair deleted or corrupted server files without reinstalling the server. You can repair the server in one of two ways:

- Repair the installation from Add/Remove Programs. See *Repairing with Add/Remove Programs* on page 33.
- Repair the installation from the ServiceCenter installation CD. See *Repairing with the installation CD* on page 34.

Note: The repair process does not affect your data files.

Repairing with Add/Remove Programs

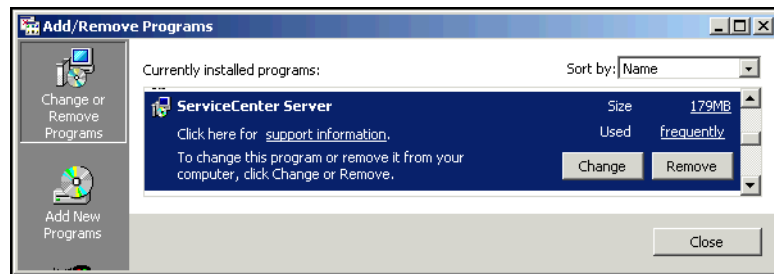
To repair the server installation from Add/Remove Programs

- 1 Stop the ServiceCenter service.

For information about stopping the server, refer to the *Administering ServiceCenter* online help.

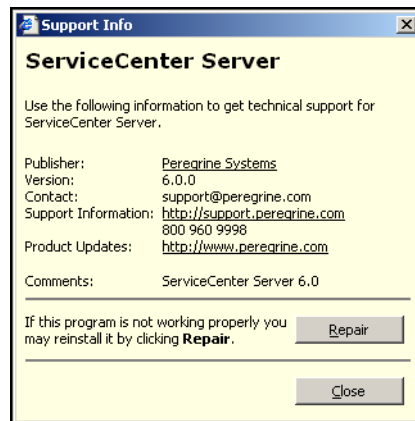
- 2 From the Windows main menu, click **Start > Settings > Control Panel > Add/Remove Programs**.

The Add/Remove Programs dialog box opens.



- 3 Scroll to the ServiceCenter Server program and click **support information**.

The ServiceCenter Server Support Info page opens.



- 4 Click **Repair** to reinstall the program.

The ServiceCenter Server Setup Wizard reinstalls ServiceCenter Server.

- 5 Click **Close**.

Repairing with the installation CD

To repair the server installation from the Installation CD

- 1 Stop the ServiceCenter service.
For information about stopping the server, refer to the *Administering ServiceCenter* online help.
- 2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the server.

If you are installing on a system that has autorun enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:

```
D:\>setup
```

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.



- 3 Click **Install ServiceCenter Server**.

The ServiceCenterServer Setup Wizard opens.

- 4 Click **Next** to repair the installation.
- 5 Click **Repair**.
The Repair ServiceCenter server page opens.
- 6 Click **Repair**.
The ServiceCenter Server Setup Wizard reinstalls ServiceCenter Server.
- 7 Click **Finish** to close the wizard.
- 8 Click **Exit Install** to close the CD browser.

Modifying the server installation

You can add or remove components from your custom installation at any time. You can modify the installation in one of two ways:

- Modify the installation from Add/Remove Programs. See *Modifying with Add/Remove Programs* on page 35.
- Modify the installation from the ServiceCenter installation CD. See *Modifying with the installation CD* on page 38.

Modifying with Add/Remove Programs

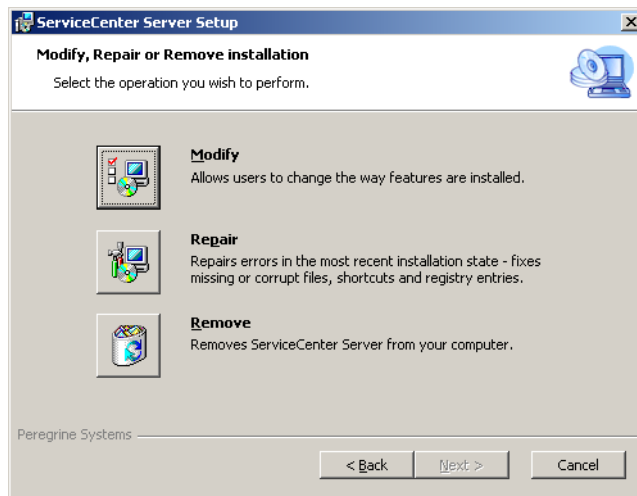
To modify the server installation from Add/Remove Programs

- 1 Stop the ServiceCenter service.
For information about stopping the server, refer to the *Administering ServiceCenter* online help.
- 2 From the Windows main menu, click **Start > Settings > Control Panel > Add/Remove Programs**.
The Add/Remove Programs dialog box opens.
- 3 Scroll to the **ServiceCenter Server** program and click **Change**.

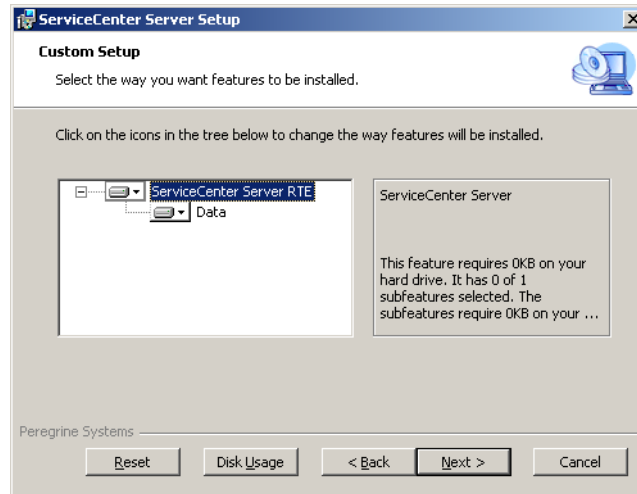
The Setup Wizard opens.



- 4 Click Next to open the Modify, Repair or Remove installation dialog box.

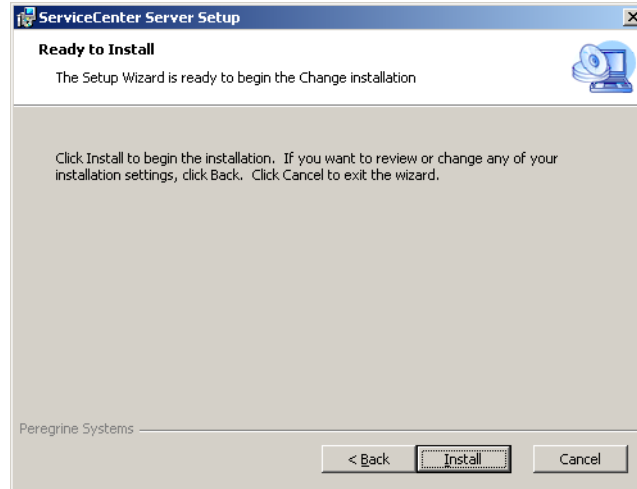


- 5 Click **Modify** to open the Custom Setup dialog box.



You can add or remove the data feature.

- 6 Select the features you want to change and click **Next**.
The Ready to Install page opens.



- 7 Click **Install** to change the current server installation.
The ServiceCenter Server Setup wizard installs the new features.
- 8 Click **Finish** to exit the Setup Wizard.

Modifying with the installation CD

To modify the server installation from the installation CD

- 1 Stop the ServiceCenter service.
For information about stopping the server, refer to the *Administering ServiceCenter* online help.
- 2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the server.

If you are installing on a system that has autorun enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:

```
D:\>setup
```

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

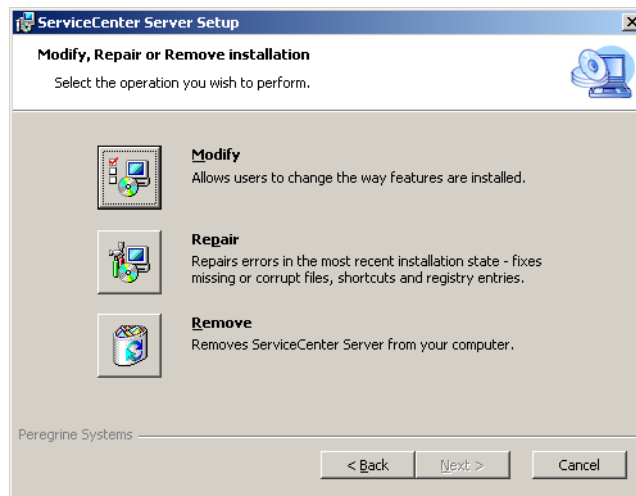


- 3 Click **Install ServiceCenter Server**.

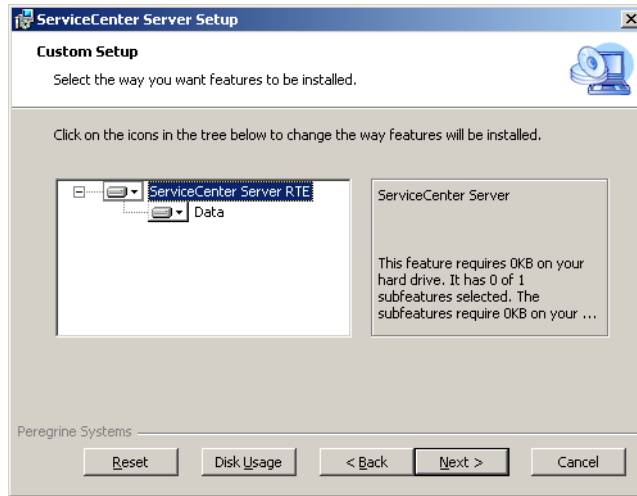
The ServiceCenterServer Setup Wizard opens.



- 4 Click **Next** to open the Modify, Repair or Remove installation dialog box.

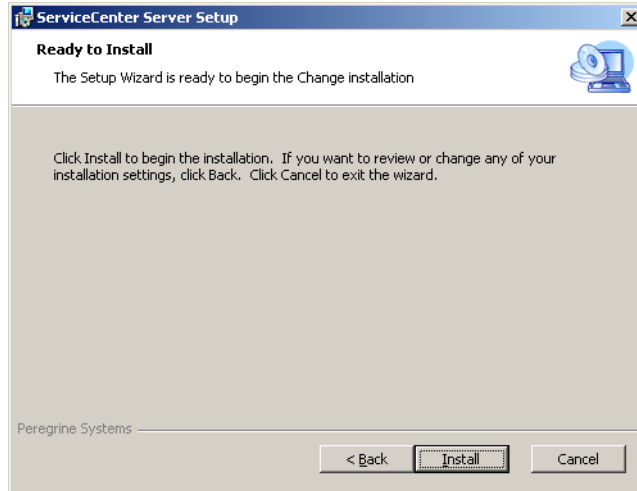


- 5 Click **Modify** to open the Custom Setup dialog box.



You can add or remove the data feature.

- 6 Select the features you want to change and click **Next**.
The Ready to Install page opens.



- 7 Click **Install** to change the current server installation.
The ServiceCenter Server Setup wizard installs the new features.
- 8 Click **Finish** to exit the Setup Wizard.

- 9 Click **Exit Install** to close the CD browser.

Uninstalling the Windows Service

You can manually remove the Windows service on any machine where you have already installed ServiceCenter Server.

To uninstall the Windows service

- 1 Login to the ServiceCenter server with an administrator account.
- 2 Click **Start > Programs > ServiceCenter Server > Remove Service**.

A batch file removes the Windows service.

Uninstalling the server

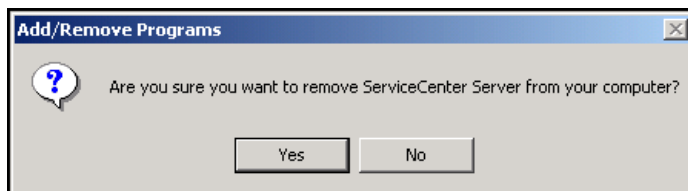
You uninstall the server using Microsoft Installer (MSI) technology. You can uninstall the server in one of two ways:

- Uninstall the server from Add/Remove Programs. See *Uninstalling from Add/Remove Programs* on page 41.
- Uninstall the server from the ServiceCenter installation CD. See *Uninstalling from the installation CD* on page 42.

Uninstalling from Add/Remove Programs

To uninstall the server from Add/Remove Programs

- 1 Stop the ServiceCenter service.
For information about stopping the server, refer to the *Administering ServiceCenter* online help.
- 2 From the Windows main menu, click **Start > Settings > Control Panel > Add/Remove Programs**.
The Add/Remove Programs dialog box opens.
- 3 Scroll to the **ServiceCenter Server** program and click **Remove**.
A message prompts you to verify removing the program.



4 Click Yes.

The process takes several minutes. Additional messages provide the progress of the uninstall.

When you complete the uninstall, you return to the Add/Remove Programs dialog box.

5 Click Close.

Uninstalling from the installation CD

To uninstall the server from the installation CD

1 Stop the ServiceCenter service.

For information about stopping the server, refer to the *Administering ServiceCenter* online help.

2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the server.

If you are installing on a system that has autorun enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory.
Double-click `setup.exe`.
- Start the ServiceCenter installation from the Windows command prompt.
Type the following:

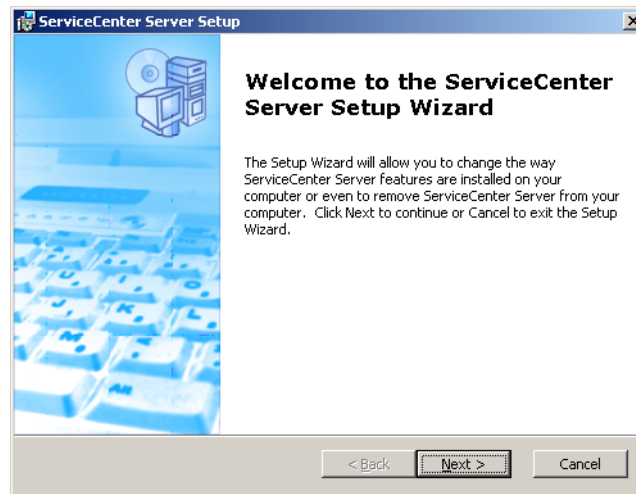
D:\>setup

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

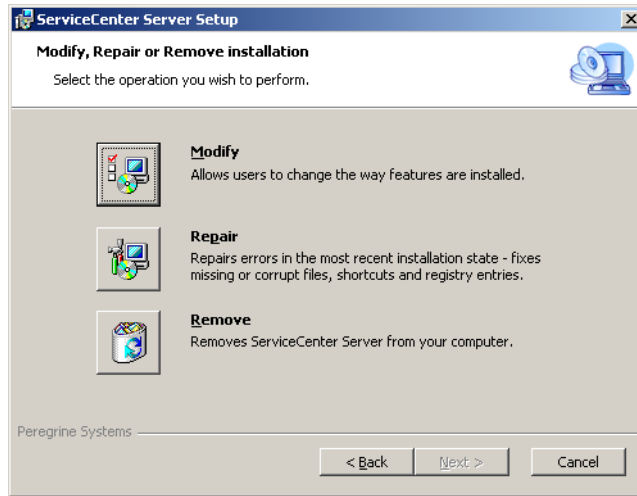


3 Click Install Server.

The ServiceCenterServer Setup Wizard opens.

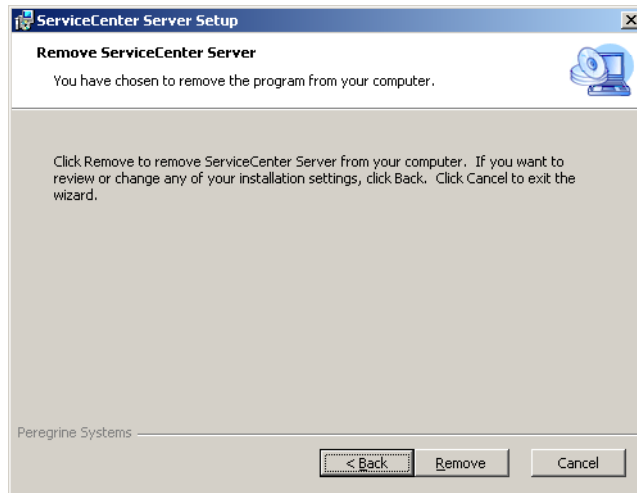


- 4 Click **Next** to open the Modify, Repair or Remove installation dialog box.

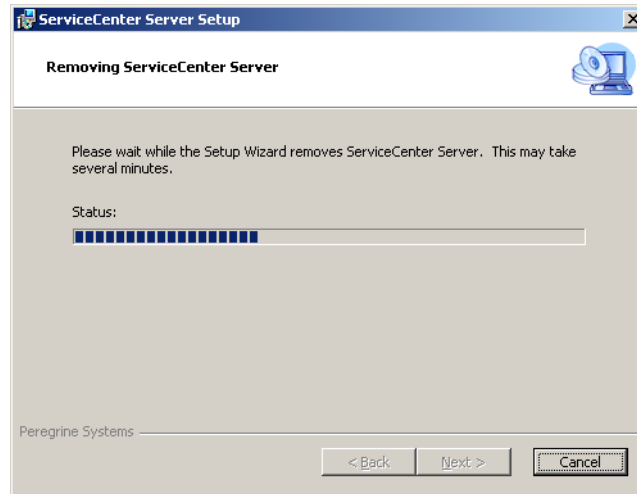


- 5 Click **Remove**.

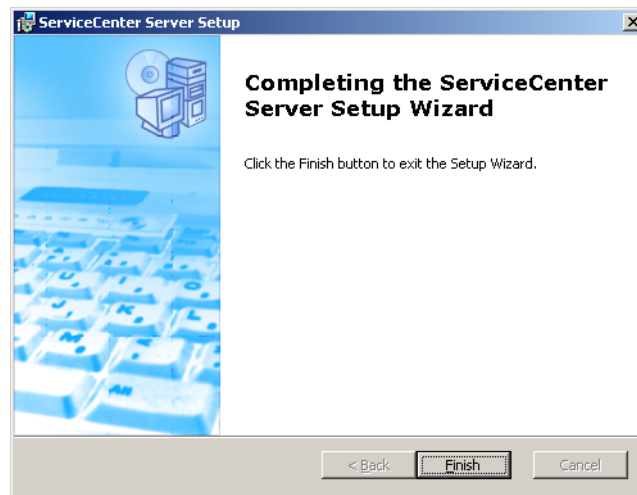
The Remove ServiceCenter Server page opens.



6 Click Remove.



The process takes several minutes. Additional messages provide the progress of the uninstall. When complete the Completing the ServiceCenter Server Setup Wizard page opens.



7 Click Finish.

8 Click Exit Install to close the CD browser.

Installing the server on UNIX

Installing on UNIX includes the following topics:

- *System requirements* on page 46
- *Preliminary steps* on page 49
- *Installing the server* on page 50
- *Kernel resource requirements* on page 51

For complete information about current platform requirements and compatibility, go to the Customer Support Web site at <http://support.peregrine.com>.

System requirements

Ensure that your system meets the following requirements before installing ServiceCenter.

- Disk space
 - 400 MB for server installation
- User and group ID
 - Before installing ServiceCenter, create a new UNIX user name and group ID exclusively for administrators who install, run, and maintain ServiceCenter. ServiceCenter uses the `setuid` feature of the UNIX operating system to maintain the security of the file system and UNIX resources.
 - Create a user name that is different from the names of ServiceCenter executables. For example, `scenter` is inappropriate. Use the new administrative user name to install ServiceCenter.

Warning: Do not install ServiceCenter as root. You cannot run the ServiceCenter service if you installed the system from a root account.

■ IP Address

ServiceCenter uses a service called **getmyip** to look at the IP address of the workstation where it is running. For workstations with multiple IP addresses, the **getmyip** service always returns the lowest IP address. In some cases, this is not acceptable. For example, adding a new IP address that is lower than any of the existing addresses causes the authorization code to fail.

If you do not want the ServiceCenter server license to verify against the lowest IP address, you can use the initialization parameter set in the `sc.ini` file:

```
-ip_address:<address>
```

where *address* is the actual IP address to use. The system does not start if the address you specify is not a valid IP address on the computer.

■ Base directory for ServiceCenter

When you begin an installation, the first step is to create the base directory for ServiceCenter. You must create this base directory on a volume with sufficient disk space. The installation script stores all files associated with ServiceCenter in subdirectories of this directory. The ServiceCenter administrator must have read, write, and execute authority to this directory structure.

■ TCP/IP service name

During the ServiceCenter installation, the system prompts you for a valid TCP/IP service name. Establish this TCP/IP service name before you begin to install ServiceCenter by defining the new service in the `etc/services` file. Only a UNIX administrator can update this file. The port number you choose for ServiceCenter must be greater than 1024. The installation program checks the `etc/services` file for this information at the appropriate time.

If you use only a numeric port number, such as 12670 (the default port) instead of `scenter1`, you do not need to include it in the `etc/services` file; define it only in the `sc.ini` file using the system parameter. In the following example, the entry in the `sc.ini` file is:

```
system:12670
```


Server resources

The ServiceCenter server uses the following resources.

Resource	Definition
Shared Memory	A server uses approximately 8192 K of base shared memory plus 110 K for each logged-on user. For example, if you have 50 users, the shared memory requirement is $8192K + (110K * \text{Background Processes}) + (\text{Users} * 4000) = 13692 K$. The <code>shared_memory</code> parameter in the <code>sc.ini</code> file specifies the amount of shared memory that ServiceCenter allocates.
Processes	A process starts for each ServiceCenter user. In addition, a process starts for each background scheduler. For a 50-user system, where all users are client/server, and assuming there are 17 background schedulers, the number of ServiceCenter processes on the server is $50 + 17 = 67$.
Semaphores	ServiceCenter uses 14 semaphores, regardless of the number of users logged on to the system.

Other information

Review the following information before you install ServiceCenter.

Topic	Description
ANSI Terminal	The installation scripts assume that you are running on an ANSI terminal. If the scripts run on a non-ANSI terminal (such as the <code>hpterm</code>), the results may be undesirable.
Root Access	These installation procedures may require root access for system kernel modifications or for initially mounting the ServiceCenter CD-ROM, but not for installing the software.
HACMP Clustering	If an AIX server set up for High Availability Cluster Multi-Processing (HACMP) fails, a second server assumes the IP address. ServiceCenter does not accept the authorization code in the <code>sc.ini</code> file because of the new server, and may cease functioning. To avoid this, add the <code>clustername</code> parameter to the <code>sc.ini</code> file and recycle the ServiceCenter server. To specify a cluster IP address, add the <code>clustername</code> parameter to the <code>sc.ini</code> file. For example: <code>clustername: <IP address></code>

Preliminary steps

The following convention identifies variables that may change depending on your particular installation:

<variable>

As you go through the installation steps and see a variable in brackets, remember that you can assign a different value to the variable. Do not type the brackets (< >) as part of the command.

Warning: Do not install ServiceCenter as root. You cannot run the ServiceCenter service if you install the system from a root account unless you give ownership and permissions to the ServiceCenter administrative user. Create a user ID that will own ServiceCenter.

Prior to installation

- Determine where to install ServiceCenter. Do one of the following:
 - Create a directory for the ServiceCenter installation.
For example, at a command prompt, type `mkdir <sc>` where <sc> is the base directory of the ServiceCenter installation.
 - Let the installation script create the directory for you. The user running the installation script must have sufficient permissions to create the new directory.
- Add an environment variable to an appropriate shell script, such as `login.profile`.

You can start a ServiceCenter server with the `scstart` shell script provided in the RUN folder, but only after adding an environment variable to the script.

OS	Environmental variable to set
Linux and Solaris	LD_LIBRARY_PATH
AIX	LIBPATH
HP-UX	SHLIB_PATH

For example:

- `export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:.`
- `export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:<sc>/RUN`
- `set LD_LIBRARY_PATH $LD_LIBRARY_PATH:.`

- set LD_LIBRARY_PATH \$LD_LIBRARY_PATH:<sc>/RUN

In these examples <sc> is the base directory of the ServiceCenter installation.

Note: Consult your operating system documentation for the specific commands to set environmental variables.

Installing the server

If the server runs with a default language other than English, you must modify the ServiceCenter initialization file. See *Setting up the server for languages other than English* on page 98. Refer to the *Administering ServiceCenter Technical Reference* online help for more information about National Language Support (NLS).

To install the ServiceCenter server

- 1 Insert the ServiceCenter CD-ROM in the drive.
- 2 Mount the CD-ROM drive.
- 3 Run the executable script:

```
./install.sh
```

The install script detects the operating system you are running.

Note: The install script is at the root of the CD.
- 4 At the installation script prompt, type **yes** to agree to the license agreement.
- 5 At the installation script prompt, type the installation directory where you want to install ServiceCenter.

Note: The system validates any directory name that you specify. If you specify an invalid directory, the installation generates an error message. If the installation cannot validate the directory name after three attempts, the installation script exits and generates an error message.
- 6 Do one of the following:
 - Type 1 to select Evaluation or new install.
 - Type 2 to select Binary upgrade.

The system takes several minutes to read the contents of the CD-ROM, uncompress the files, and create a **logs** directory.
- 7 Type a TCP/IP port number or a named service, then press **Enter**.

You can use the named service only if you specified the service name in your system **services** file. This value must be greater than 1024.

If you specify a port number instead of a named service, an error message states that the service name cannot be found. If this happens:

- To use the port you specified, type **y** and press **Enter**.
- To select a new port, type **n** and press **Enter**. Specify a new port and press **Enter**.

8 Type your authorization code and press **Enter**.

You receive an authorization code when you purchase the product. For more information, see [Updating the ServiceCenter authorization code](#) on page 98. For information about obtaining your authorization code, contact Customer Support.

The installation script runs and generates a sample **sc.ini** file.

9 Press **Enter**.

The installation script gathers the kernel setup data and stores the information in a file called **kernel.data**. The **kernel.data** file resides in the ServiceCenter **install** subdirectory.

10 Press **Enter**.

The server installation completes.

Kernel resource requirements

ServiceCenter Server requires both shared memory and semaphores to run. On most UNIX systems, you can configure these resources through kernel configuration parameters.

The kernel configuration is in support of ServiceCenter's use of Unix IPC (interprocess communication) functions. Each new connection spawns a new **scenter** process. All these processes then use IPC to talk to each other and to manage shared resources.

Important: The following kernel resource requirements are the minimum values required for running ServiceCenter Server. Add these values to the current or default settings to run ServiceCenter concurrently with other programs or products on your system.

Note: For all platforms, shared memory maximum units are expressed in megabytes (MB). For example, the **shmmax** value for an HP-UX server with 30 users is 11534336 bytes (11 MB).

AIX server You do not need to adjust your kernel configuration on AIX systems because they are self-adjusting.

HP-UX server **Shared Memory**

shmem:	1 byte	
shmmax:	11 MB	8 MB for each ServiceCenter system + 3 MB per 30 users
shmmni:	1 byte	per ServiceCenter system

Processes

maxuprc:	calculated as 5 bytes + 1 byte per background scheduler + 1 byte per ServiceCenter user
nproc:	same as maxuprc

IPC parameters

Use the SAM utility to configure kernel IPC parameters on HP-UX.

Note: You need to be a root user or have superuser capabilities before you start the SAM utility.

Before you start SAM, define the **DISPLAY** environment variable. For example, if the name of your host (or X terminal) is **eagle**, type the following command at your shell prompt.

If you use the Bourne or Korn shell:

```
DISPLAY=eagle:0 #
export DISPLAY
```

If you use the C Shell:

```
setenv DISPLAY eagle:0
```

To configure kernel IPC parameters

- 1 Start SAM.
- 2 Select the **Kernel Configuration** option from the main menu.
- 3 Select the **Configurable Parameters** option.

- 4 Modify the kernel parameters as specified in *IPC parameters* on page 52.

When you finish modifying the necessary parameters, the SAM utility guides you through the steps to restart the system. Restarting is necessary to activate the changes.

Maxdsiz parameter

The HP-UX **maxdsiz** parameter sets the maximum data segment size for each process. This data segment can consist of virtual memory (swap space) and real memory. The system attempts to meet your requirements with real memory. It uses swap space to make up the difference until it reaches the **maxdsiz** limit.

Each ServiceCenter user requires approximately 1 MB of physical memory (resident set size on UNIX). You must set the server platform memory size to support the maximum number of users that log in to ServiceCenter concurrently. For example, if you have 100 ServiceCenter users, set the **maxdsiz** parameter to 100 MB or more.

You do not need to increase the value of the **maxdsiz** parameter above the number of users on the system unless you have processes that use large amounts of static data storage space. Do not set the **maxdsiz** value to the maximum size of 944 MB because private memory-mapped files and shared-library data also occupy space in the dynamic storage region.

The following values are acceptable.

Default:	0x4000000 (64 MB)
Minimum:	0x400000 (4 MB)
Maximum:	0x3B03100 (944 MB)

The system returns an error to the calling process if the **maxdsiz** value is too low for the number of users and running processes. A setting that is too low may cause the process to terminate.

You can change the **maxdsiz** parameter using the SAM utility process described in *IPC parameters* on page 52.

Linux server

The default shared memory limit (both SHMMAX and SHMALL) is 32 MB, but it can be changed in the proc file system without restarting the system. For example, to specify 128 MB:

```
# echo 134217728 >/proc/sys/kernel/shmall
# echo 134217728 >/proc/sys/kernel/shmmax
```

You can use **sysctl.conf** to control these parameters. Add the following lines to the **/etc/sysctl.conf** file:

```
kernel.shmall = 134217728
kernel.shmmax = 134217728
```

This file is usually processed at startup, but **sysctl.conf** can be called later.

Solaris server**Shared memory**

forceload:sys/shmsys

shmsys:shminfo_shmmax	11 MB	8 MB for each ServiceCenter system plus 3 MB for each 30 users
-----------------------	-------	---

shmsys:shminfo_shmmni	1 byte	for each ServiceCenter system
-----------------------	--------	-------------------------------

Processes

maxuprc:	5 bytes + 1 byte per background scheduler + 1 byte per ServiceCenter user
----------	--

max_nprocs:	maxuprc
-------------	---------

IPC parameters

You can control kernel parameters with the **/etc/system** file. The operating system reads the **/etc/system** file at initialization time to define the initial kernel parameters.

To configure kernel IPC parameters

- 1 Modify the `/etc/system` file to alter any kernel parameters. By default, the IPC system is not enabled. Append the following statements to the end of the file:

```
* /etc/system sample file
* Customize kernel parameters
* These statements initialize the IPC subsystem
forceload: sys/shmsys
forceload: sys/semsys
forceload: sys/msgsys
*
* SEM
set semsys:seminfo_semmap=60
set semsys:seminfo_semmni=100
set semsys:seminfo_semmns=1000
set semsys:seminfo_semmnu=30
set semsys:seminfo_semmns1=50
set semsys:seminfo_semopm=10
set semsys:seminfo_semume=15
set semsys:seminfo_sevmx=32767
set semsys:seminfo_semaem=16384
*
* SHM
set shmsys:shminfo_shmmax=67108864
set shmsys:shminfo_shmmni=100
set shmsys:shminfo_shmmin=1
set shmsys:shminfo_shmseg=10
*
set max_nprocs=1200
set maxusers=64
set maxuprc=800
```

- 2 Restart the system to activate the changes. Type:

```
cd /
usr/sbin/shutdown -i6 -y -g0
```

AIX server data set size

The default upper limit data set size is 1 GB. You must increase this value to accommodate `scdb` files that exceed that limit.

To increase the upper limit

- 1 Login to the AIX server.
- 2 Run `ulimit -a`:

```
$/home/gtakahas(AIX): ulimit -a
time(seconds)          unlimited
file(blocks)           2097151
data(kbytes)           2000000
stack(kbytes)          32768
memory(kbytes)         32768
coredump(blocks)       2097151
nofiles(descriptors) 2000
```

If the result for **data (kbytes)** is **2000000** (blocks), and each block contains 512 bytes, the maximum data file size for this UNIX user is 2,000,000 blocks multiplied by 512 bytes. The result is 1 GB, which is the default upper limit.

- 3 To increase this value, to 2GB, type this command:
\$ `ulimit -f 4005000`

To specify an unlimited amount of space for a data set

- Type this command:
\$ `ulimit -f unlimited`

Uninstalling the UNIX server

To uninstall the ServiceCenter server

- 1 Stop the ServiceCenter server.
- 2 Delete all the ServiceCenter server directories and subdirectories.

3 Client Installation

CHAPTER

You can only install a ServiceCenter Windows client on a Windows workstation. You can support clients running on other operating systems by installing the ServiceCenter Web tier. This section contains information about installation requirements and how to install the Windows client.

Topics in this section include:

- *Installing the ServiceCenter Windows client* on page 58
- *Installing the ServiceCenter client in silent mode* on page 68
- *Installing the ServiceCenter ODBC driver* on page 69
- *Installing ReportCenter* on page 73
- *Installing Work Management* on page 79
- *Uninstalling the ServiceCenter client or its components* on page 84

Installing the ServiceCenter Windows client

You install the client using Microsoft Installer (MSI) technology. After installing the Windows client, you can configure connections to ServiceCenter servers.

Upgrading to the Windows client

You cannot upgrade previous ServiceCenter clients to the ServiceCenter 6 Windows client. You must install the ServiceCenter 6 Windows client in a new folder. It is recommended that you remove previous ServiceCenter clients, but is not required.

In certain cases, you may be able to use earlier ServiceCenter clients to connect to a ServiceCenter 6 server. See the ServiceCenter 6 compatibility matrix for a list of valid client connections.

Installation requirements

Requirement	Minimum	Recommended
OS	Windows 2000	Windows 2000 or XP
CPU	Pentium III 650Mhz	Pentium IV or Celeron 2.4 Ghz
RAM	256 MB	384 MB
HD	100 MB with basic documentation or Help Server installed	100 MB with Help Server 150 MB with advanced documentation installed
Resolution	800 x 600 (16 colors)	1280 x 1024 (256 colors)
Network	100 Megabit	100+ Megabit
Login account	Local administrator account	Local administrator account

ServiceCenter client setup

Use the following steps to install ServiceCenter Windows client.

Note: The ServiceCenter Windows client setup displays in the same language as the operating system.

To install the client

- 1 Login to the Windows system as a user with local administrator privileges.
- 2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the Windows system.

If you are installing on a system that has **autorun** enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:

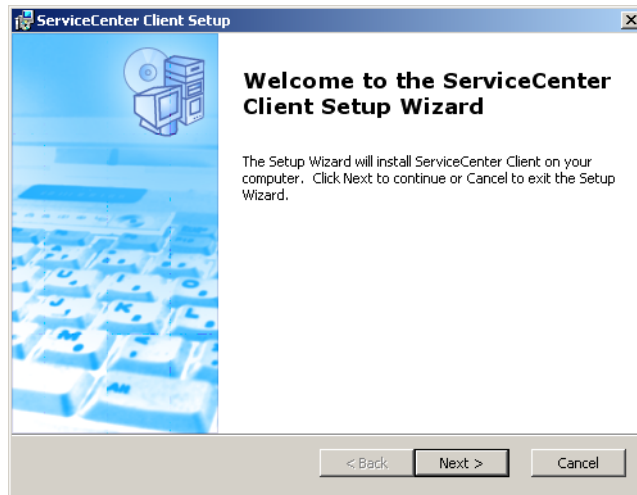
```
D:\>setup
```

where **D** identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

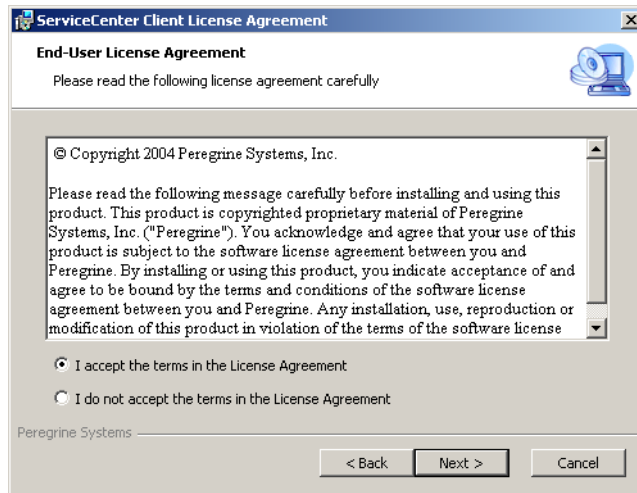


3 Click Install Windows Client.

The ServiceCenter Client Setup wizard opens.



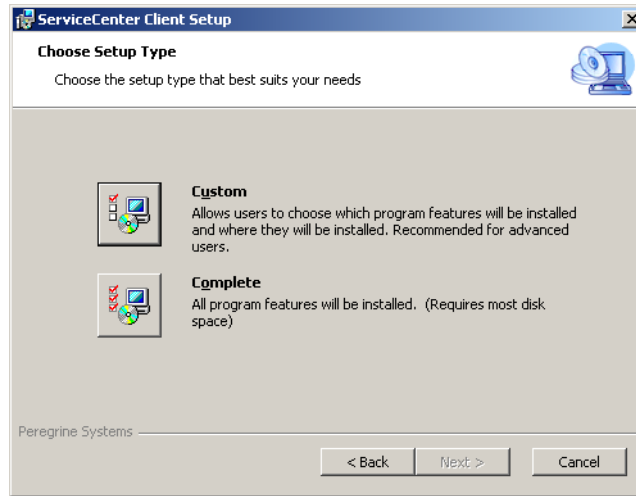
4 Click Next to read and accept the licensing agreement.



5 Select the I accept the terms in the License Agreement option.

The Next button becomes active.

6 Click **Next** to select the setup type.

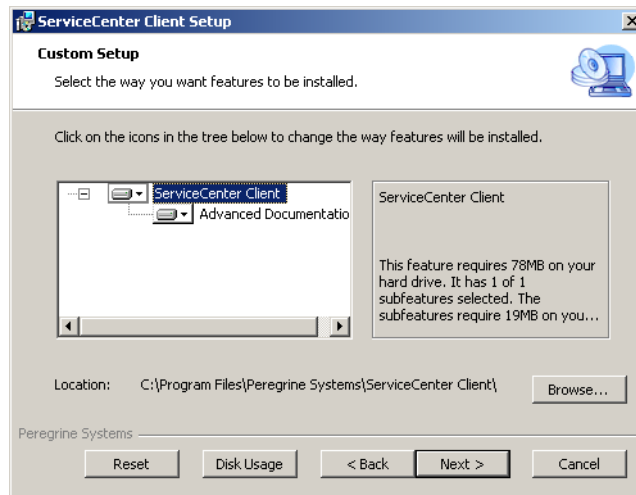


To choose specific program features that you want to install, use the **Custom** installation option. See step 7.

To install all the program features, use the **Complete** installation option. See step 9.

7 Click **Custom**.

The Custom Setup page opens.



8 For each feature, select one of the following options:

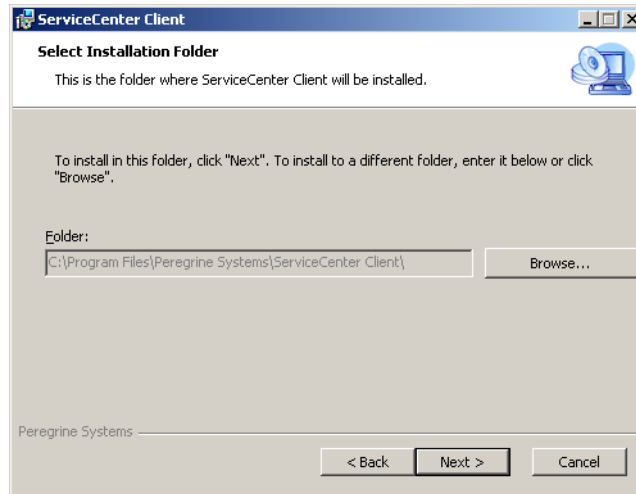
- Will be installed on local hard drive – installs just the selected feature
- Entire feature will be installed on local hard drive – installs the selected feature and all subfeatures subordinate to this feature
- Entire feature will be unavailable – does not install the selected feature

Feature	Default option	Description
ServiceCenter Client	Will be installed on local hard drive	This option installs the ServiceCenter client and the basic ServiceCenter documentation. This is a <i>required</i> installation component.
Advanced Documentation	Will be installed on local hard drive	This options installs the ServiceCenter documentation intended for administrators. This is an <i>optional</i> installation component.

Tip: You can provide on-line help from a central location by installing the Help Server. See the Help Server chapter of this guide for more information.

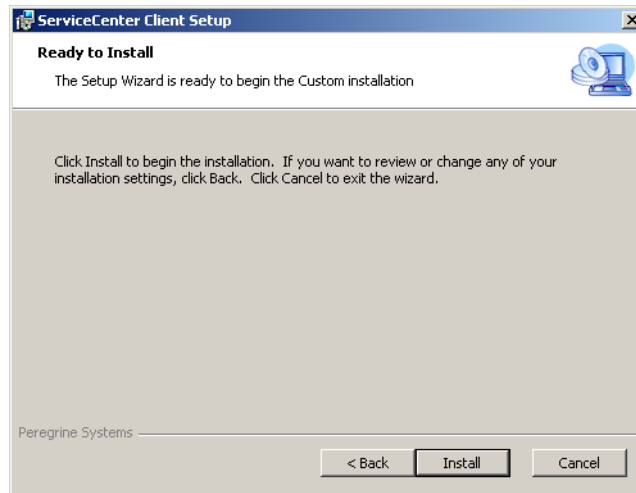
- a If needed, click **Browse** to change the location of your installation folder.
The default installation is:
C:\Program Files\Peregrine Systems\ServiceCenter Client\.
- b Click **Reset** to change your options while on this page of the wizard.
- c Click **Disk Usage** to view the amount of space required for each feature and your system space availability.
- d Click **Next** to continue the installation.
Go to step 11 to continue the installation.
- 9 Click **Complete**.
The Select Installation Folder page opens.
- 10 Do one of the following:
 - Click **Next** to accept the default installation folder.
The default installation folder is:
C:\Program Files\Peregrine Systems\ServiceCenter Client

- Click **Browse** to choose a different installation location.

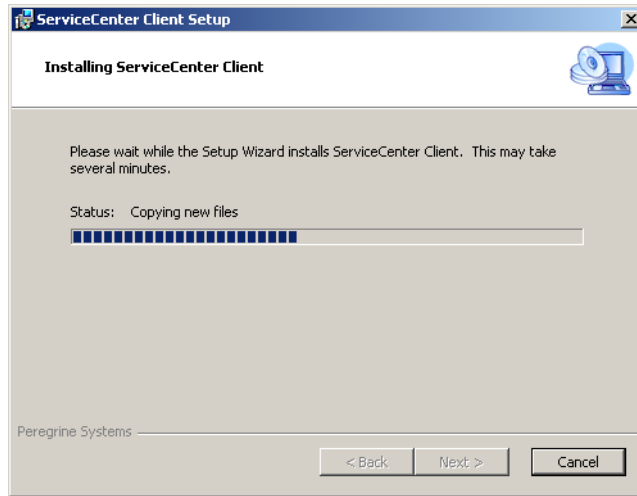


- 11 Click **Next** to prepare the installation process.

The Ready to Install page opens.

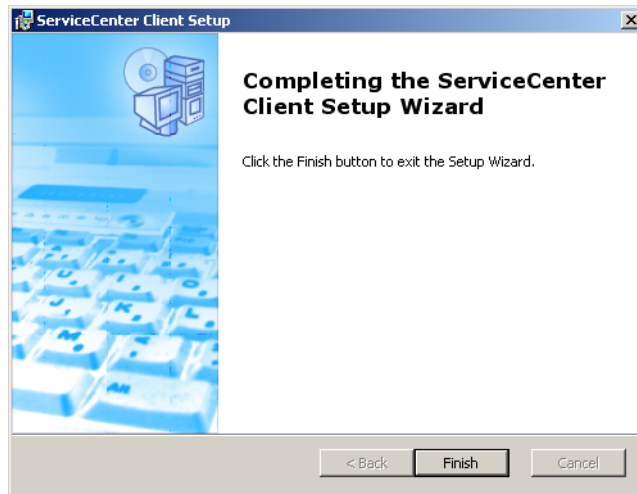


- 12 Click **Install** to begin copying the installation files.



You can stop the installation by clicking **Cancel**.

The **Completing the ServiceCenter Client Setup Wizard** dialog box opens when the installation is complete.



- 13 Click **Finish** to exit the Setup Wizard.

The client installation is complete.

- 14 From the Setup CD Browser, click **Exit Install**.

Defining a new client connection

The first time you access the client, the Connections window opens letting you define a connection to a ServiceCenter host server. You can add and save multiple connection settings from the Connections window.

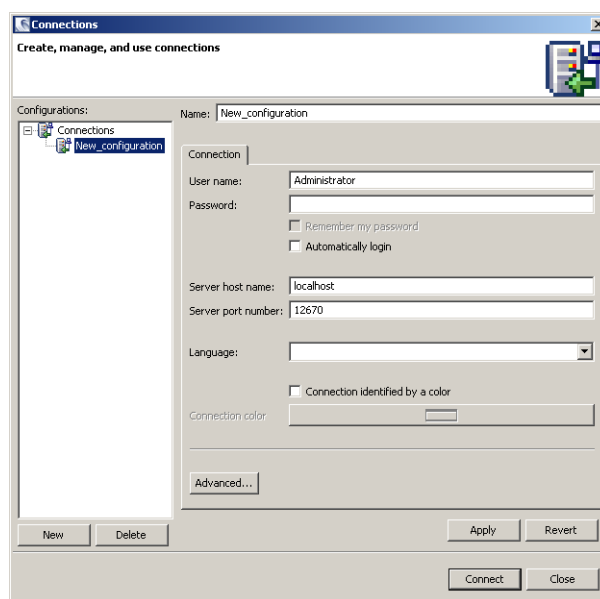
To define a new client connection

- 1 From the Windows main menu, click **Start > Programs > ServiceCenter Client > ServiceCenter Client**.

The Connections window opens.

- 2 Click **New**.

The Connections window displays a new node in the Connections pane.

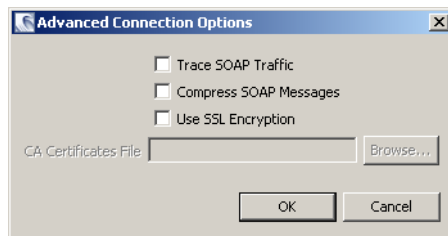


- 3 Type or select the Connection parameters.

Parameter	Default option	Description
Name	New_configuration	The name of this configuration.
User name	User name of the Windows user currently logged on.	The name that you use to log on to the server.

Parameter	Default option	Description
Password	blank	The password that you use to log on to the server.
Remember my password	False	An option for the system store your password.
Automatically login	False	An option to log on automatically when you start the ServiceCenter client.
Server host name	localhost	The name of the server that hosts the ServiceCenter service.
Server port number	12670	The port number that your computer uses to connect with the server.
Language	blank	The language to use for this session (can differ from the language set on the computer).
Connection identified by a color	blank	An option to change the background color of your connection.

4 Click **Advanced** to set other connection options.



The advanced features are optional.

Parameter	Description
Trace SOAP traffic	An option that logs SOAP messages for debugging.
Compress SOAP messages	An option that compresses SOAP messages using GNU zip (gzip) encoding. This can reduce the amount of data transmittal to and from the server.

Parameter	Description
Use SSL Encryption	An option that uses a Secure Socket Layer (SSL) encryption tool to protect your data when transmitting it over the network.
CA Certificates File	A list of trustworthy certificate authorities. You can use the same file for each connection.

Important: You must define a valid CA certificates file to enable SLL encryption. A sample CA certificate file called `cacerts` is included in the following path:
 <Install path>\ServiceCenter Client\plugins\
 com.peregrine.common_6.0.0.0<build>

- 5 Click **OK** to add advanced features.
- 6 Click **Apply** to add the connection.
- 7 To add additional connections, repeat step 2 through step 6.

Note: For additional information about configuring the Windows client, see the ServiceCenter online help.

Connecting to a ServiceCenter server

You can connect to multiple servers from one ServiceCenter client. Each connection opens in its own window.

To connect to a ServiceCenter server

- 1 From the Windows main menu, click **Start > Programs > ServiceCenter Client > ServiceCenter Client**.
 The Connections window opens.
- 2 Do one of the following:
 - Double-click a connection.
 - Click a connection and then click **Connect**.

Installing the ServiceCenter client in silent mode

You can install the ServiceCenter client in silent mode from the Windows command prompt. Running the installation in silent mode is the same as accepting all the default options from the ServiceCenter Client Setup wizard.

To install the ServiceCenter client in silent mode

- 1 Click Start > Programs > Accessories > Command Prompt.
The Windows command prompt opens.
- 2 Type one of the following commands:

Command	Description
<code>msiexec /i D:\ServiceCenter_Client\client.msi /q</code>	Installs the ServiceCenter client without displaying the ServiceCenter Client Setup wizard.
<code>msiexec /i D:\ServiceCenter_Client\client.msi /qn+</code>	Installs the ServiceCenter client displaying only the Installation Complete page of the ServiceCenter Client Setup wizard.
<code>msiexec /i D:\ServiceCenter_Client\client.msi /q /L* "C:\msi.log"</code>	Installs the ServiceCenter client without displaying the ServiceCenter Client Setup wizard. Creates a log file using the most verbose level of logging.

Note: For D:\, type the drive letter of your disc drive. For C:\msi.log, type the path and name of the log file you want to use to save installation information.

- 3 Press ENTER.

The ServiceCenter Client Setup wizard installs the ServiceCenter client in silent mode.

Installing the ServiceCenter ODBC driver

ServiceCenter ReportCenter requires the ServiceCenter ODBC driver.

To install the ServiceCenter ODBC driver

- 1 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the Windows system.

If you are installing on a system that has **autorun** enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:

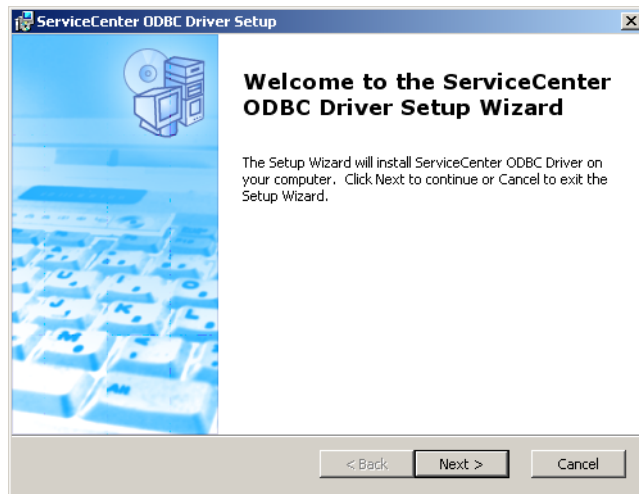
```
D:\>setup
```

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

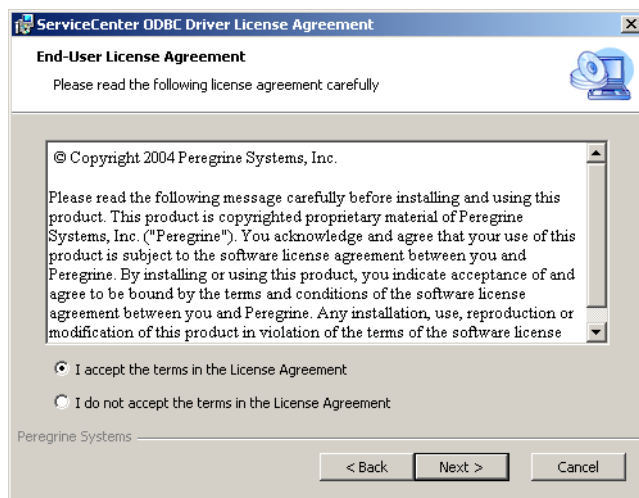


- 2 Click **Install ODBC Driver**.

The ServiceCenter ODBC Setup wizard opens.

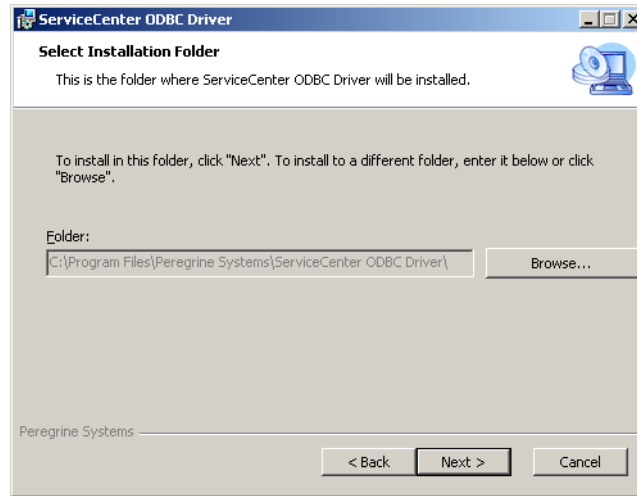


- 3 Click Next to read and accept the licensing agreement.



- 4 Select the I accept the terms in the License Agreement option.
The Next button becomes active.

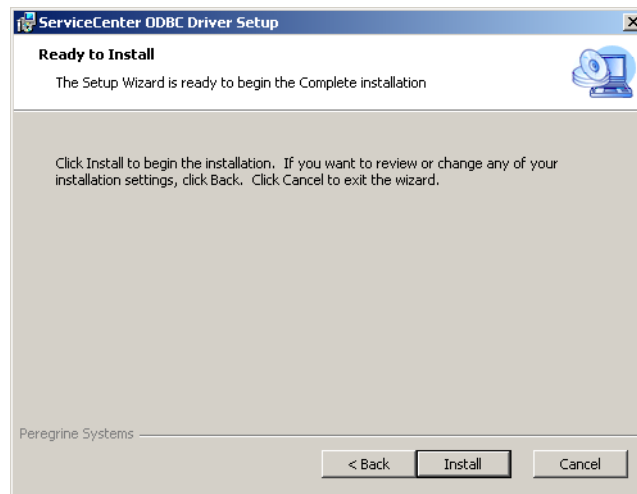
- 5 Click **Next** to select your installation folder.



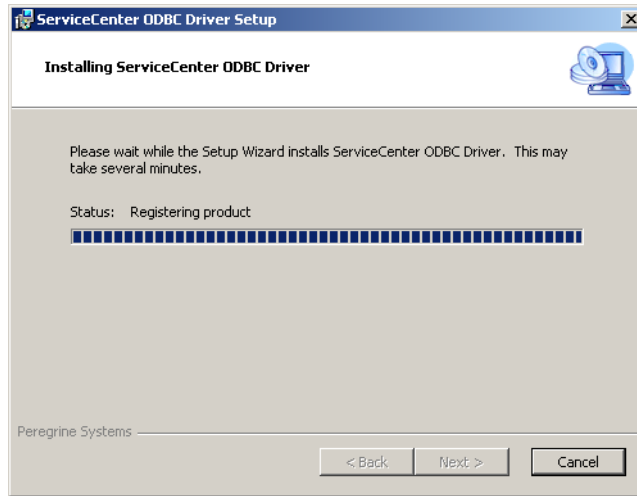
The default installation is:

C:\Program Files\Peregrine Systems\ServiceCenter ODBC Driver

- 6 If necessary, click **Browse** to choose a different location.
- 7 Click **Next** to prepare the installation process.

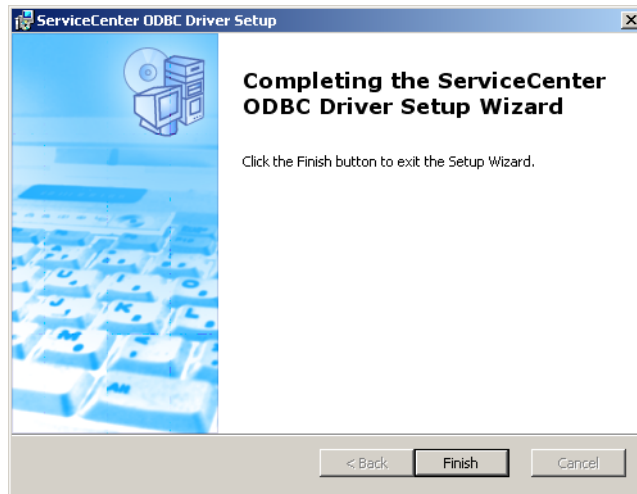


- Click **Install** to begin copying the installation files.



You can stop the installation by clicking **Cancel**.

The **Completing the ServiceCenter ODBC Setup Wizard** dialog box opens when the installation is complete.



- Click **Finish** to exit the Setup Wizard.
- From the Setup CD Browser, click **Exit Install**.

Installing ReportCenter

ServiceCenter ReportCenter displays and prints reports interactively using a graphical user interface. For more information about ReportCenter, see the *ReportCenter Guide* in the **ServiceCenter PDF Guides** section of the ServiceCenter online help.

Important: You must first install the ServiceCenter ODBC driver to use ReportCenter.

To install ReportCenter

- 1 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the Windows system.

If you are installing on a system that has **autorun** enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:
`D:\>setup`

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

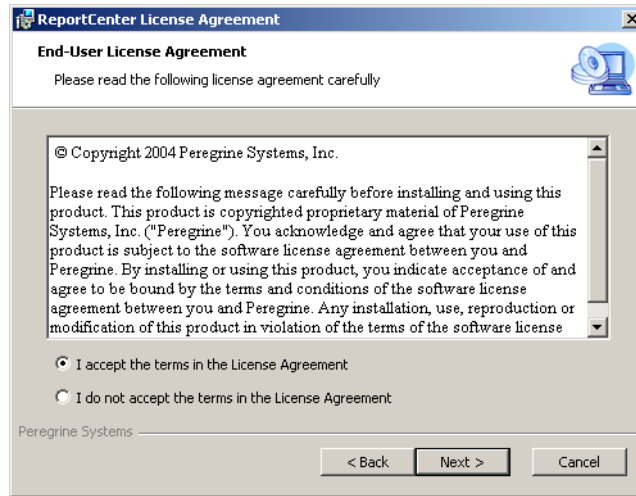


2 Click Install ReportCenter.

The ReportCenter Setup wizard opens.



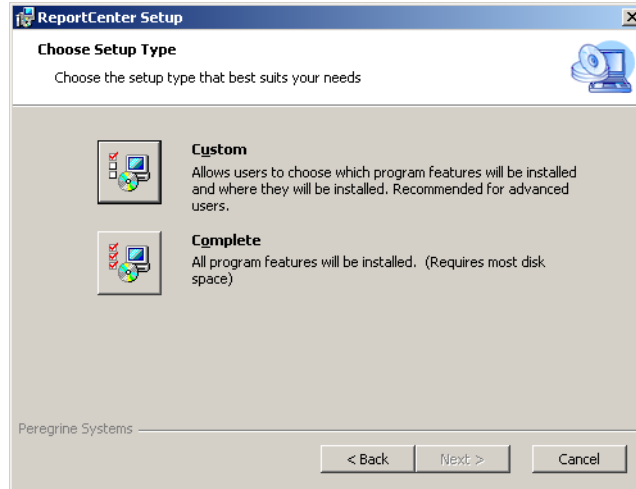
3 Click **Next** to read and accept the licensing agreement.



4 Select the **I accept the terms in the License Agreement** option.

The **Next** button becomes active.

5 Click **Next** to select the setup type.

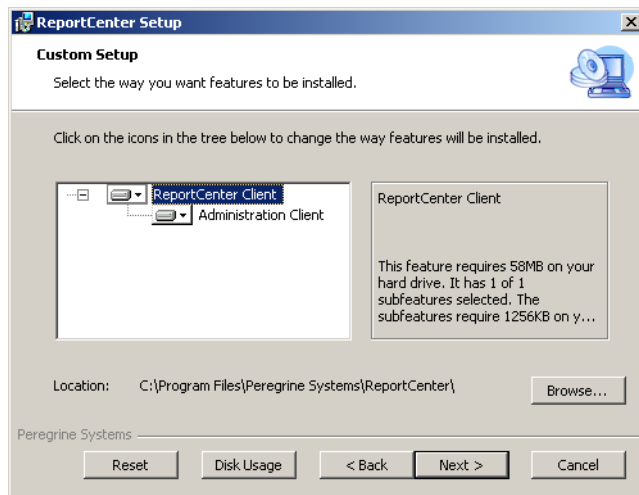


To choose specific program features that you want to install, use the **Custom** installation option. See step 7.

To install all the program features, use the **Complete** installation option. See step 8.

6 Click Custom.

The Custom Setup page opens.



7 For each feature, select one of the following options:

- Will be installed on local hard drive – installs just the selected feature
- Entire feature will be installed on local hard drive – installs the selected feature and all subfeatures subordinate to this feature
- Entire feature will be unavailable – does not install the selected feature

Feature	Default option	Description
ReportCenter Client	Will be installed on local hard drive	This option installs the ReportCenter client. This is a <i>required</i> installation component.
Administration Client	Will be installed on local hard drive	This options installs the Administration client. This is an <i>optional</i> installation component.

- a If needed, click **Browse** to change the location of your installation folder.
The default installation is:
C:\Program Files\Peregrine Systems\ReportCenter
- b Click **Reset** to change your options while on this page of the wizard.

- c Click **Disk Usage** to view the amount of space required for each feature and your system space availability.
 - d Click **Next** to continue the installation.
- Go to step 10 to continue the installation.

8 Click Complete.

The Select Installation Folder page opens.

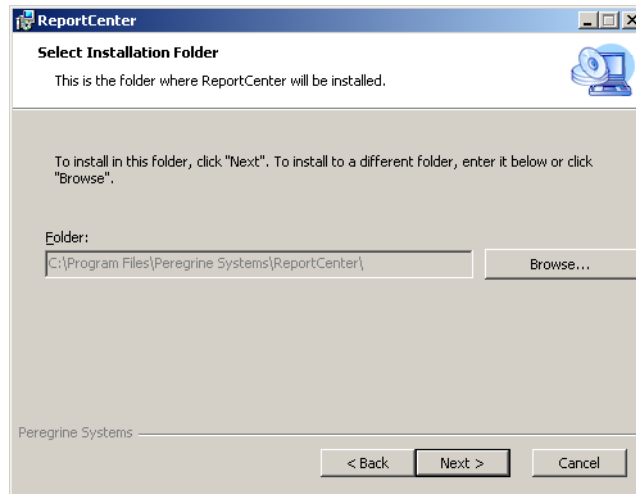
9 Do one of the following:

- Click **Next** to accept the default installation folder.

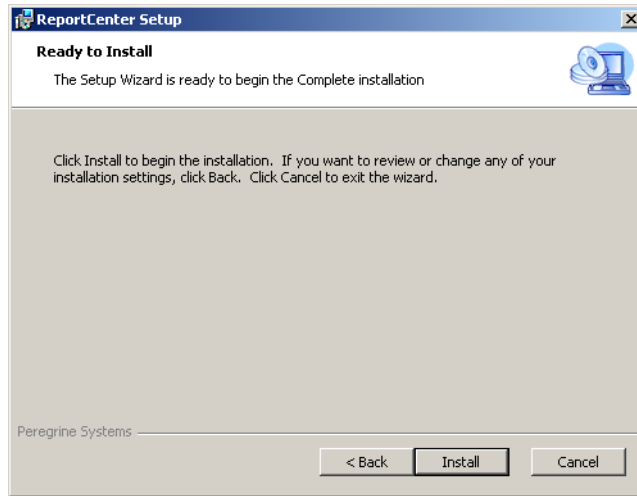
The default installation folder is:

C:\Program Files\Peregrine Systems\ReportCenter

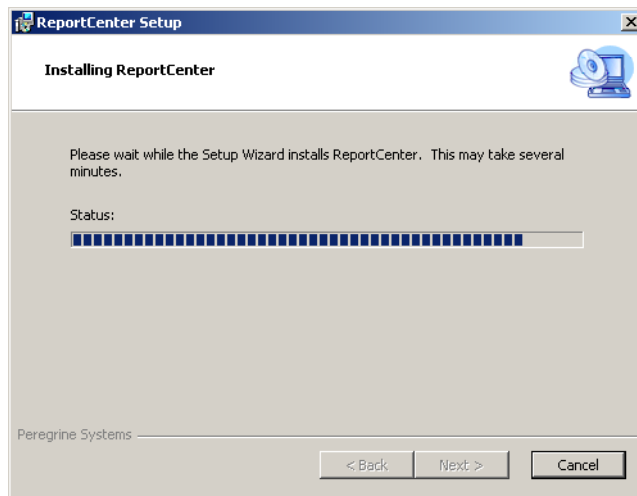
- Click **Browse** to choose a different installation location.



- 10 Click **Next** to prepare the installation process.

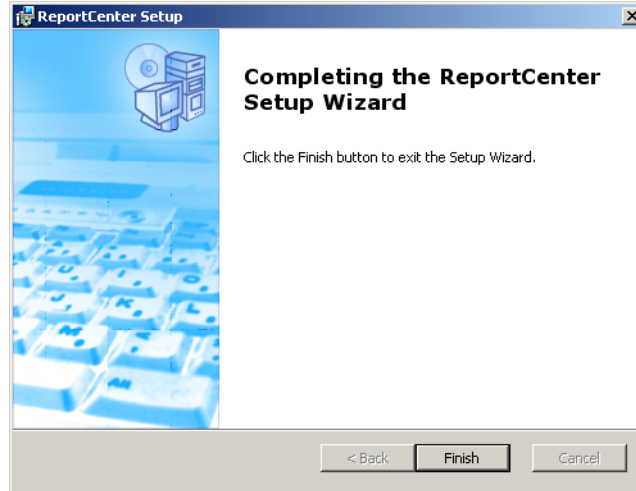


- 11 Click **Install** to begin copying the installation files.



You can stop the installation by clicking **Cancel**.

The **Completing the ReportCenter Setup Wizard** dialog box opens when the installation is complete.



- 12 Click **Finish** to exit the Setup Wizard.
- 13 From the Setup CD Browser, click **Exit Install**.

Installing Work Management

ServiceCenter Work Management manages a Help Desk system through comprehensive scheduling, tracking, and reporting functions. Work Management can assist organizational productivity by decreasing downtime, improving operator utilization, and enhancing Help Desk efficiency.

For more information about Work Management, see the [Work Management Guide](#) in the **ServiceCenter PDF Guides** section of the ServiceCenter online help.

To install Work Management

- 1 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the Windows system.

If you are installing on a system that has **autorun** enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory. Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt. Type the following:

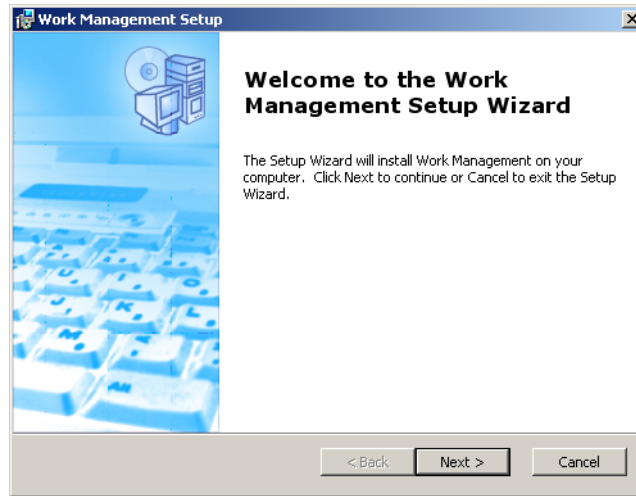
D:\>setup

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

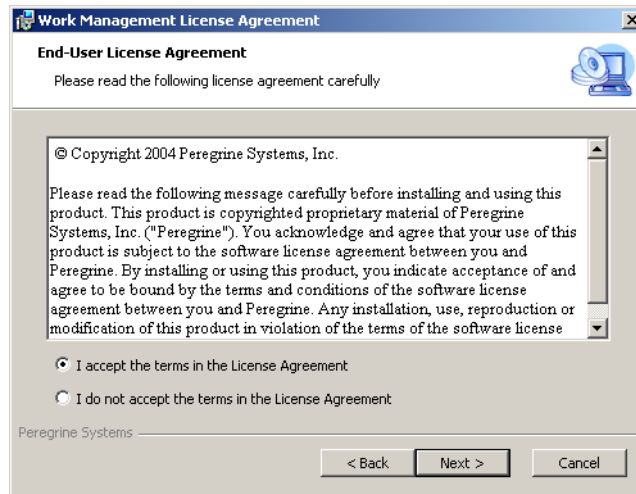


- 2 Click **Install Work Management**.

The Work Management Setup wizard opens.

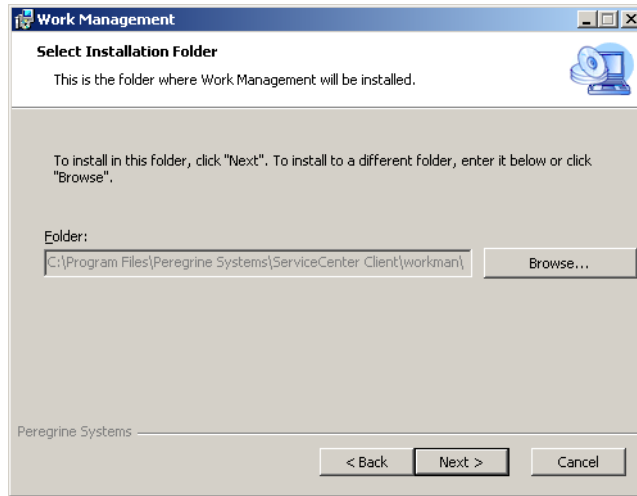


- 3 Click **Next** to read and accept the licensing agreement.



- 4 Select the **I accept the terms in the License Agreement** option.
The **Next** button becomes active.

- 5 Click **Next** to select your installation folder.



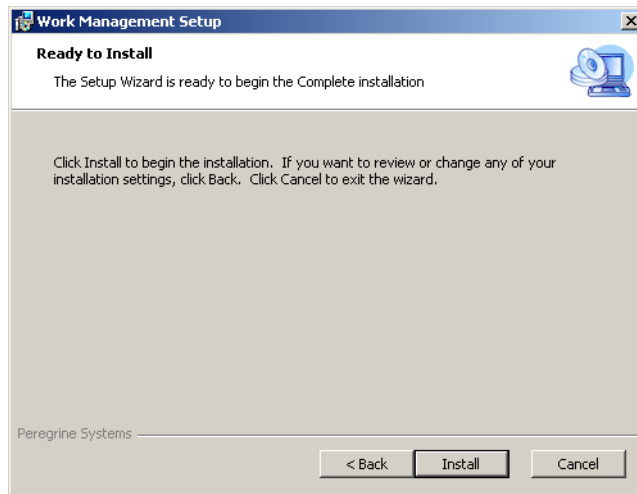
The default installation is:

C:\Program Files\Peregrine Systems\ServiceCenter Client\workman

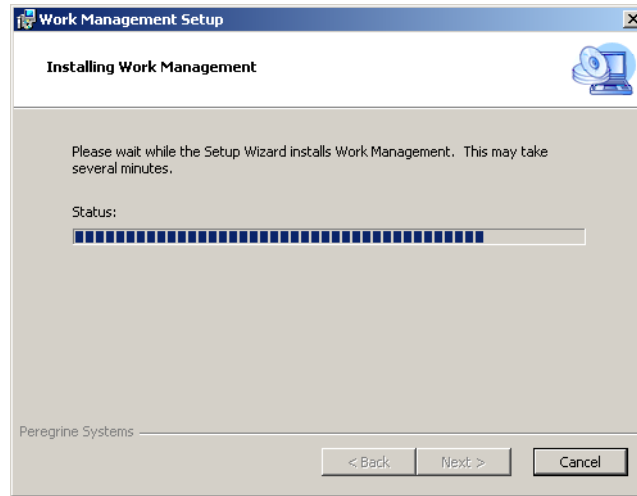
- 6 If necessary, click **Browse** to choose a different location.

Important: You must install Work Management in a subfolder of the ServiceCenter client installation called **workman**.

- 7 Click **Next** to prepare the installation process.

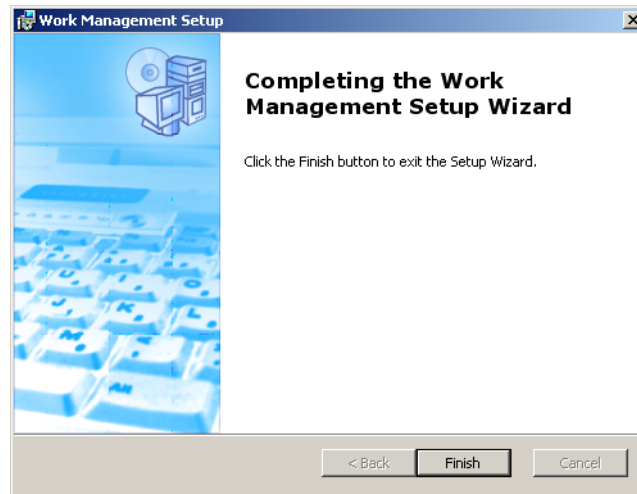


- 8 Click **Install** to begin copying the installation files.



You can stop the installation by clicking **Cancel**.

The **Completing the Work Management Setup Wizard** dialog box opens when the installation is complete.



- 9 Click **Finish** to exit the Setup Wizard.
- 10 From the Setup CD Browser, click **Exit Install**.

Uninstalling the ServiceCenter client or its components

You can uninstall the ServiceCenter client, the ODBC driver, ReportCenter, or Work Management using Windows Add/Remove Programs.

To uninstall the ServiceCenter client or components

- 1 From the Windows main menu, click **Start > Settings > Control Panel > Add/Remove Programs**.

The Add/Remove Programs window opens.

- 2 Scroll to **ServiceCenter Client** and click **Remove**.

A message prompts you to verify removing the program.

- 3 Click **Yes**.

The uninstall process takes several minutes. Additional messages provide the progress of the uninstall.

When you complete the uninstall, you return to the Add/Remove Programs dialog box.

- 4 Repeat steps 1 through 4 for ODBC Driver, ReportCenter, and Work Management.
- 5 Click **Close**.

4 Web Tier Installation

CHAPTER

The Web tier installation allows clients to use a Web interface to access the ServiceCenter server.

This chapter covers the following topics:

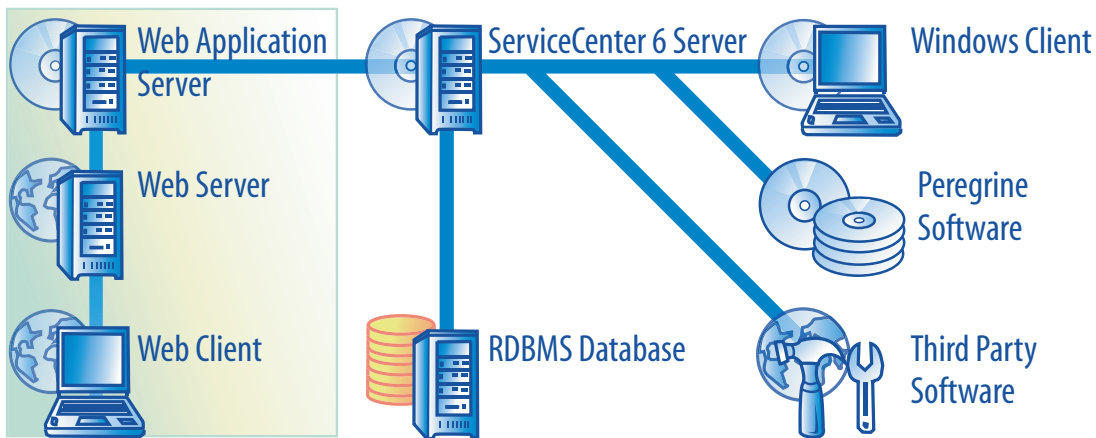
- *Web Tier architecture* on page 86
- *Browser requirements for the Web client* on page 86
- *Installing the Web Tier* on page 87
- *Accessing ServiceCenter from the Web client* on page 95

Web Tier architecture

The ServiceCenter Web Tier uses both a Web server and a Web application server to allow access ServiceCenter forms through a Web browser. The Web server handles incoming HTTP requests while the Web application server runs the Java and JSP necessary for connecting to ServiceCenter.

Note: Some Web application servers such as Tomcat and WebSphere include built in Web servers.

Web Tier



You install the Web tier on Windows or UNIX platforms by deploying the `sc.war` file to your Web application server. Most Web application servers also require you install the Sun J2SE Java Development Kit (JDK). See *Installing a compatible JDK* on page 88.

Browser requirements for the Web client

In order for users to access the Web client through a browser, the following settings and options must be enabled:

- Enable Cookies
- Enable Java

- Enable JavaScript
- Enable pop-ups. You can add the ServiceCenter server URL to the pop-up exception list.

To view the workflow graphical view, install one of the following Java components:

OS	Java component to install
Windows XP	Java Virtual Machine (JVM) plug-in
All other operating systems	Sun's Java Runtime Environment (JRE)

Installing the Web Tier

To install the ServiceCenter Web Tier you must complete the following steps:

- Step 1** Install a compatible Java Development Kit (JDK). See *Installing a compatible JDK* on page 88.
- Step 2** Install a compatible Web application server. See *Installing a compatible Web application server* on page 88
- Step 3** Install a compatible Web server. See *Installing a compatible Web server* on page 91.
- Step 4** Deploy the `sc.war` file to your Web application server. See *Deploying the sc.war file* on page 91.
- Step 5** Install any additional JAR files needed for your Web application server. See *Installing additional JAR files for your Web application server* on page 92.
- Step 6** Set your Web application server memory settings for your production environment. See *Setting the Web application server heap size* on page 93.
- Step 7** Set global Web client preferences in the `web.xml` file. See *Setting Web client preferences from the web.xml configuration file* on page 93.

Installing a compatible JDK

You must install a Java Development Kit (JDK) to run your Web application server. See your Web application server documentation to determine what version of the JDK is compatible with your Web application server. The following instructions are for installing Sun's J2SE 1.4.2 SDK, which you can use with Tomcat 4.1.29.

To install Sun's J2SE 1.4.2 SDK

- 1 Go to the www.java.sun.com/downloads Web site.
- 2 Click the J2SE 1.4.2. SDK link and locate the latest build.
- 3 Navigate to your operating system (for example, Solaris), and download the latest SDK for your operating system.

Important: Be sure to download the SDK and not the Java Runtime Environment (JRE).

Installing a compatible Web application server

You can install either Tomcat or WebSphere as your Web application server. See the ServiceCenter compatibility matrix for a complete listing of supported components for the Web Tier.

To install the Tomcat application server

- 1 Go to the <http://jakarta.apache.org> Web site.
- 2 Click the **Binaries** link and scroll to the latest version of Tomcat 4.1.
- 3 Download the appropriate file for your operating system.
- 4 Define the JAVA_HOME environment variable.
See *Defining the JAVA_HOME environment variable* on page 89.
- 5 Install additional or more current JAR files as needed.
See *Installing additional JAR files for your Web application server* on page 92.

To use WebSphere

- 1 Purchase and install IBM WebSphere 4.0.2 or 5.0.
Your version of WebSphere includes the IBM HTTP Server.
- 2 Define the WAS_HOME environment variable.
See your WebSphere documentation for instructions.

- 3 Install additional or more current JAR files as needed.

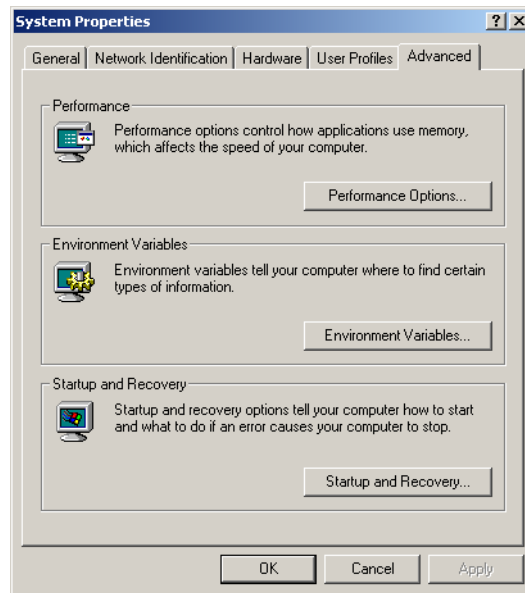
See *Installing additional JAR files for your Web application server* on page 92.

Defining the JAVA_HOME environment variable

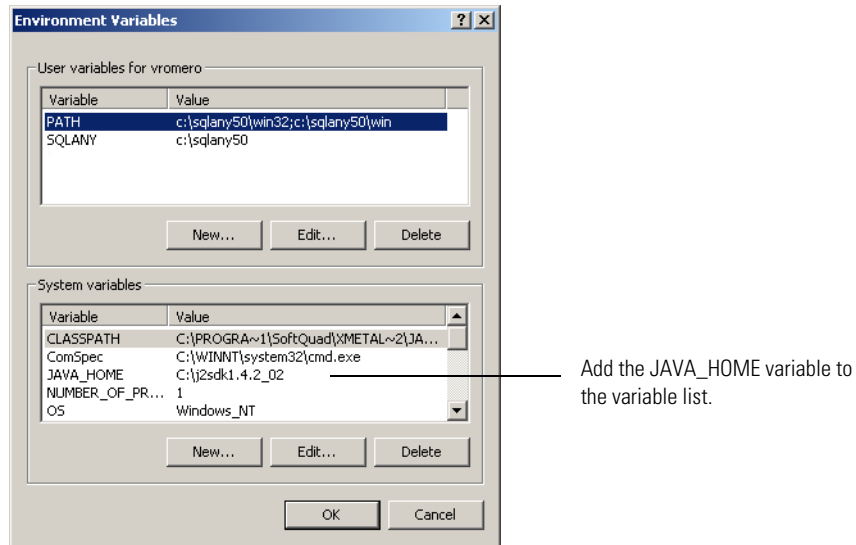
If you use Tomcat as your application server, you must manually define a `JAVA_HOME` environment variable before starting the server for the first time. This variable specifies the location of your Java Development Kit (JDK) files.

To add the `JAVA_HOME` environment variable

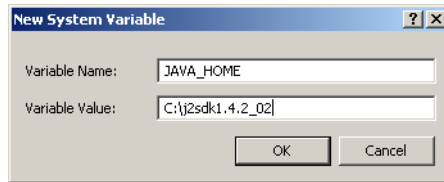
- 1 From the desktop, right-click **My Computer** and select **Properties** to open the System Properties dialog box.



2 Click **Advanced > Environment Variables**.



3 In **System variables**, click **New** to open the dialog box



- a Type **JAVA_HOME** in the **Variable Name** field.
 - b Type the path to your Java Development Kit (JDK) files in the **Variable Value** field. For example, **C:\j2sdk1.4.2_02**.
- 4 Click **OK** three times to exit the dialog box.

For information about how to start and stop the servers, go to the [Administering ServiceCenter](#) online help.

Installing a compatible Web server

Your Web application server may or may not include a built-in Web server. In a development environment, you may configure your Web application server to also run as the Web server to process HTTP requests. In a production environment, you will get better performance if you use a production level Web server such as Apache or IBM HTTP Server. See the ServiceCenter compatibility matrix for a complete list of Web Tier components.

To install the Apache Web server

- 1 Go to the <http://httpd.apache.org/> Web site.
- 2 Click the links to download the Apache HTTP Server 2.0.48.

To install the IBM HTTP server

- The IBM HTTP Server is included with the WebSphere Application Server.

Deploying the sc.war file

The `sc.war` file contains a J2EE compliant Web application that runs on your Web application server. Each Web application server has its own method of deploying Web applications. See your Web application server documentation for instructions on deploying a Web archive (WAR) file. You can also consult the following Knowledgebase articles for information.

For this Web application server See the following knowledge article

Tomcat 4.1.29	Deploying the ServiceCenter 6 Web Tier to Tomcat 4.1.29
WebSphere 4.0.2	Deploying the ServiceCenter 6 Web Tier to WebSphere 4.0.2
WebSphere 5.0	Deploying the ServiceCenter 6 Web Tier to WebSphere 5.0

Installing additional JAR files for your Web application server

Your Web application server may require additional or more up to date JAR files to run the Web Tier. The following table lists the JAR files required for various Web application servers and JDKs.

JAR file	Update for	Place in	Available from
activation.jar	Tomcat 5.0.x	\$CATALINA_HOME/ common/lib	http://java.sun.com/products/javamail/
mail.jar	Tomcat 5.0.x	\$CATALINA_HOME/ common/lib	http://java.sun.com/products/javamail/
jaas.jar	WebSphere Application Server 4.0.x	\$JAVA_HOME/jre/lib/ext	http://java.sun.com/products/jaas/
jsse.jar	Tomcat 4.1.x on JDK 1.3	\$JAVA_HOME/jre/lib/ext	http://java.sun.com/products/jsse/
xercesImpl.jar	Tomcat 4.1.x on JDK 1.4	\$CATALINA_HOME/ common/endorsed	http://xml.apache.org/ distributed with Xalan-J 2.6.0 or 2.5.1
	WebSphere Application Server 4.0.x	\$WAS_HOME/lib/app	
xml-apis.jar	Tomcat 4.1.x on JDK 1.4	\$CATALINA_HOME/ common/endorsed	http://xml.apache.org/ distributed with Xalan-J 2.6.0 or 2.5.1
	WebSphere Application Server 4.0.x	\$WAS_HOME/lib/app	
xalan.jar	Tomcat 4.1.x on JDK 1.4	\$CATALINA_HOME/ common/endorsed	http://xml.apache.org/
	WebSphere Application Server 4.0.x	\$WAS_HOME/lib/app	
	WebSphere Application Server 5.1.0	\$WAS_HOME/java/jre/ lib/endorsed	

Setting the Web application server heap size

The Web application server heap size directly determines how many connections each Web application server can handle. Most application servers require a heap size of at least 256 MB for optimal performance. If you experience poor performance from your Web client connections, try increasing the Web application server heap size. See your Web application server documentation for instructions on setting the heap size.

Setting Web client preferences from the web.xml configuration file

You can define global Web client preferences from the `web.xml` file on the Web Tier server. The settings you define in this file determine the client preferences for all Web clients. See the [Administering ServiceCenter](#) online help for a complete list and more detailed explanation of each parameter

To set client preferences from the web.xml file:

- 1 Open the `sc.war` file in an archive management program.
You can download this file from the ServiceCenter installation CD.
- 2 Extract the `web.xml` file from the Web archive to your local system.
Tip: Extract this file into its default path of `WEB-INF\` so that you can preserve the path information when you archive it again.
- 3 Open the `web.xml` file in a text editor.
- 4 Add or edit the preferences in the file.

At a minimum, you must set the `sc.host` and `sc.port` parameters.

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE web-app PUBLIC "-//Sun Microsystems, Inc.//DTD Web
Application 2.2//EN" "http://java.sun.com/j2ee/dtds/web-app_2_2.dtd">
<web-app>
  <display-name>ServiceCenter</display-name>
  <description>Peregrine ServiceCenter</description>

  <servlet>
    ...
    <init-param>
      <param-name>sc.host</param-name>
      <param-value>localhost</param-value>
    </init-param>
    <init-param>
      <param-name>sc.port</param-name>
      <param-value>12670</param-value>
    </init-param>
    ...
  </servlet>
</web-app>
```

Set `sc.host` to the ServiceCenter server ———

Set `sc.port` to the communications port ———

For a list of the most commonly set Web parameters, see *Commonly set Web parameters* on page 94.

- 5 Save the file.
- 6 Add the updated `web.xml` file back into the `sc.war` archive.

Important: The `web.xml` file must include the `WEB-INF\` path.

Web clients will now use the client preferences you defined in the `web.xml` file when you deploy the `sc.war` to the Web Tier.

Web Tier log files

The ServiceCenter Web Tier writes logs files to the default log file and location used by your Web application server. See your Web application server documentation for the name and location of the log file.

Commonly set Web parameters.

Parameter	Default value	Description
<code>sc.host</code>	<code>localhost</code>	This parameter specifies the name of the ServiceCenter host server.
<code>sc.port</code>	<code>12670</code>	This parameter specifies the communications port number to which the ServiceCenter server listens.
<code>sc.formcache</code>	<code>true</code>	<p>The Web client stores a copy of the forms accessed in memory, not on the hard drive. If the form changes, the Web client gets a new copy from the server.</p> <p>When set to true, the Web client does not access the server every time you open a form, saving load on the network and server. When set to false, you reduce memory use on the Web client system.</p>
<code>sc.refreshmessages</code>	<code>false</code>	This parameter determines whether the browser checks for new messages from the application server.

Parameter	Default value	Description
sc.refreshmessinterval	15000	This parameter determines how often (in milliseconds) the browser checks for new messages from the application server.
sc.viewactivenotes	false	This parameter determines whether you see a popup message when the server sends a message.
sc.helpserverhost	localhost	This parameter specifies the name of the ServiceCenter help server.
sc.helpserverport	80	This parameter specifies the communications port number to which the ServiceCenter help server listens.
sc.compress	false	This parameter specifies if you want to use data compression between Web clients and the ServiceCenter Web tier.
sc.SSL	false	This parameter determines if the ServiceCenter Web tier uses the secure socket layer (SSL) communications protocol with Web clients.
sc.cacerts		This parameter lists the path to the CA certificates required for SSL support.

Accessing ServiceCenter from the Web client

The default URL to access the ServiceCenter from the Web Tier is <http://<server>:<port>/sc/frames.do>, where *<server>* is the name of the Web server running the Web Tier and *<port>* is the communications port number used to connect to the Web Tier.

Tip: You do not need to specify the communications port in the Web Tier URL if you use the default Web server port (port 80). See you Web server documentation for instructions on setting the communications port.

5 Configuring the Server

CHAPTER

You can customize your Windows and UNIX server installation by modifying the ServiceCenter initialization file (`sc.ini` or `SCINI` file). You can use a text editor to open and modify the file. If your ServiceCenter server is on a Windows platform, you have the added option of using the configuration wizard to modify the file (from the Windows main menu, click **Start > Programs > ServiceCenter Server > Configure Server**).

Modify the ServiceCenter initialization file when:

- *Setting up the server for languages other than English* on page 98.
- *Updating the ServiceCenter authorization code* on page 98.

Setting up the server for languages other than English

You can change the default display language from English by editing the ServiceCenter initialization file in a text editor.

To change the default language

- 1 Using a text editor, open the ServiceCenter initialization file from the ServiceCenter RUN directory.
- 2 Look for the language: parameter, and replace the ISO-code for English with a new language code.
- 3 Save the changes and close the file.

For a list of supported languages, refer to the Compatibility Matrix on the Customer Support Web site at <http://support.peregrine.com>.

Updating the ServiceCenter authorization code

You must have an authorization code to run ServiceCenter. If you are running a trial copy of ServiceCenter, then the authorization code is temporary and expires at a given date. Specify your new authorization code by editing the sc.ini file or running the Configure Server wizard. If you do not have an authorization code, contact Customer Support.

To change the ServiceCenter authorization code

- 1 Using a text editor, open the ServiceCenter initialization file from the ServiceCenter RUN directory.
- 2 Look for the auth parameter, and type the authorization code that Customer Support supplies.
- 3 If you are using Named Users licenses, enable named users with one of the following methods. If you are using a Floating Users License, skip to step 4.
 - Flag each individual operator record as named user as described in the *How do I make an individual operator a named user?* topic in the *System Administrator's* online help.
 - Create a complete list of named users as in the *How do I create an authorization file of named users?* topic in the *System Administrator's* online help.
- 4 Save the changes and close the file.

6 Help Server

CHAPTER

You can install the ServiceCenter Help Server on a Windows system. This section contains information about installation requirements and how to install the Help Server. For information about starting and stopping the Help Server, go to the [Administering ServiceCenter](#) online help.

Topics in this section include:

- *Overview of the ServiceCenter Help Server* on page 100
- *Installing the Help Server on Windows* on page 101
- *Accessing the Help Server* on page 107

Overview of the ServiceCenter Help Server

The ServiceCenter Help Server is an optional server component that provides a centralized location to access and store all help files. The ServiceCenter Help Server includes an integrated Web server that allows end users to access documentation from either the Windows or Web clients as well as directly from a Web browser.

Installation considerations

You may want to install the ServiceCenter Help Server for the following reasons:

- To reduce the size of Windows Client installations. By default, Windows Client installations copy all the documentation onto the client system. You can reduce the size of the client installation using the redeployment tool to pre-configure the Windows client to use a Help Server.
- To deploy tailored versions of ServiceCenter documentation. You can edit the help stored on the Help Server and deploy it with the integrated Web server. All clients that connect to the Help Server automatically see the tailored help files.
- To reduce the number of update steps. If you use a centralized Help Server then you only need to update the documentation in one place to deploy changes.

Known Issues

The ServiceCenter Help Server has the following known issues:

- The Help Server can only deploy documentation in the existing plug-ins. You must add or edit topics in the existing plug-ins.
- You cannot configure a Windows Client to use the Help Server if it is running on the same machine as the Help Server. To test the Help Server from the server machine use a direct browser connection to:
<http://localhost/help/>

Installing the Help Server on Windows

You install the Help Server using Microsoft Installer (MSI) technology. After installing the Help Server, you can customize the server settings in the Help Server Configuration Wizard.

Installation requirements

- Windows 2000 or Windows 2003
- The most current Windows updates on your operating system
- 210 MB disk space
- 256 MB RAM minimum recommended
 - For testing purposes, 128 MB RAM is sufficient
 - For production purposes, RAM is based on the expected user load
- A free communications port to listen for HTTP connections requests. The default communications port is 80.
- One of the following Java components:

OS	Java component to install
Windows XP	Java Virtual Machine (JVM) plug-in
All other operating systems	Sun's Java Runtime Environment (JRE)

ServiceCenter Help Server Setup

Use the following steps to install ServiceCenter Help Server.

To install the Help Server

- 1 Login to the Windows server as a user with local administrator privileges.
- 2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the server.

If you are installing on a system that has **autorun** enabled, the CD browser starts automatically. If **autorun** is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory.
Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt.
Type the following:

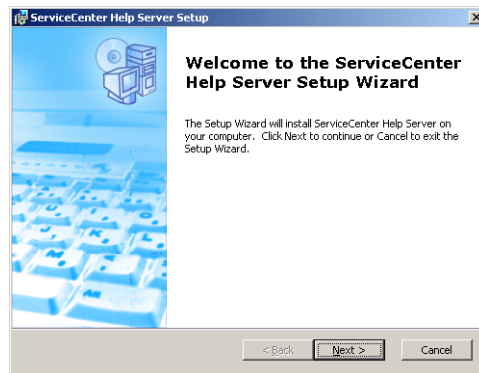
D:\>setup

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

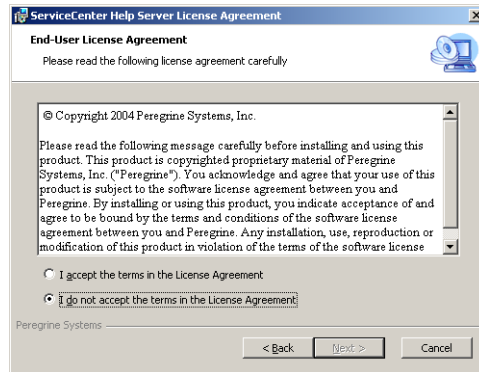


3 Click Install Help Server.

The ServiceCenter Help Server Setup Wizard opens.



- 4 Click **Next** to read and accept the licensing agreement.

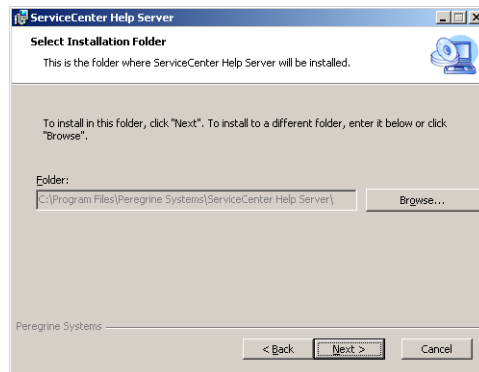


- 5 Select the **I accept the terms in the License Agreement** option.

The **Next** button becomes active.

- 6 Click **Next** to continue.

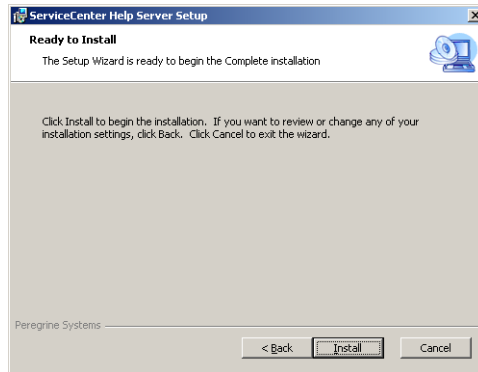
The **Select Installation Folder** page opens.



- 7 Type or select the path where you want to install the Help Server.

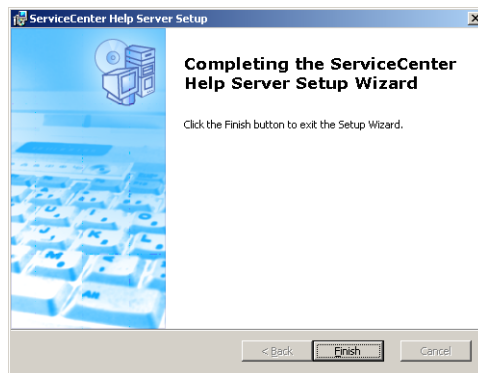
- 8 Click **Next** to continue.

The Ready to Install page opens.



9 Click Install.

The wizard installs the Help Server on the system.



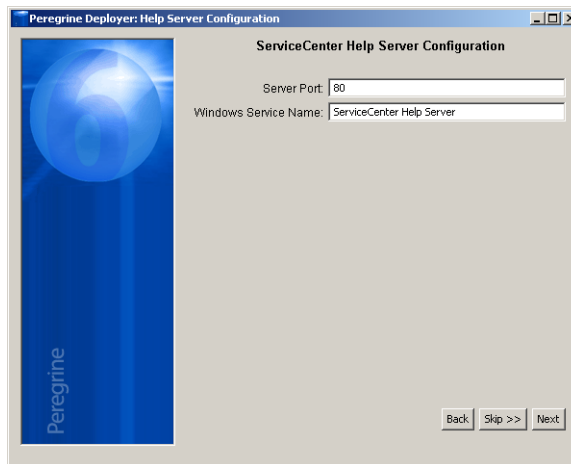
10 Click Finish.

The Configure Peregrine Help Server wizard opens.



- 11 Click **Next** to continue.

The ServiceCenter Help Server Configuration page opens.



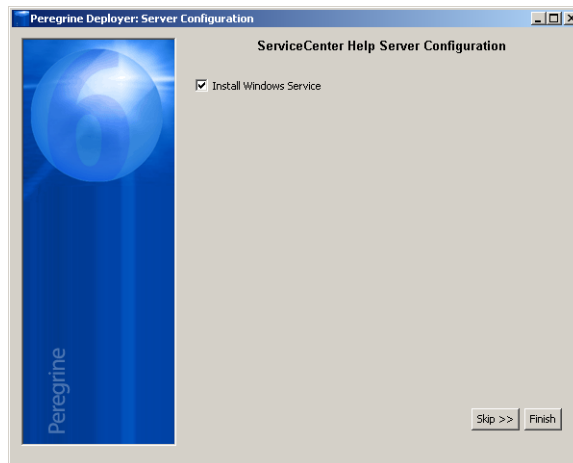
- 12 Do one of the following:
- a Click **Skip** to use the default configuration settings.

- b Update the following parameters as needed.

Parameter	Default value	Description
Server port	80	This parameter specifies the communications port to which you want the Help Server to listen for HTTP requests.
Windows Service Name	ServiceCenter Help Server	This parameter specifies the name of the Windows service you want the Help Server to use.

- 13 Click **Next** to continue.

The ServiceCenter Help Server Configuration page opens.



- 14 Select the **Install Windows Service** option.

- 15 Click **Finish**.

The wizard configures the Help Server and installs the Windows service.

Accessing the Help Server

You can access the Help Server from the following interfaces:

- The Windows client
- The Web client
- Web browser

Accessing the Help Server from the Windows client

By default, Windows clients display the online help that is installed locally on the Windows client machine. To have Windows clients display online help from the Help Server, you must configure the Windows client preferences and define the Help Server host name and communications port.

To configure a Windows client to display online help from the Help Server

- 1 Log in to the Windows client.
- 2 Click **Window > Preferences**.
The Preferences window opens.
- 3 Click the **Help** node to expand it.
- 4 Click **Help Server**.
- 5 Type the following information:
 - Host name or IP address of the Help Server
 - Communication port of the Help Server
- 6 Click **OK**.

The Windows client displays the online help from the Help Server.

Accessing the Help Server from the Web client

By default, Web clients do not display online help. To have Web clients display online help from the Help Server, you must configure the Web client **web.xml** file and define the Help Server host name and communications port.

To configure a Web client to display online help from the Help Server

- 1 Log onto the server where you installed the Web Tier.

- 2 Open the **web.xml** file from the **sc/WEB-INF** folder of your application server installation.
- 3 Type the following information:
 - **sc.helpserverhost** – Host name or IP address of the Help Server
 - **sc.helpserverport** – Communication port of the Help Server
- 4 Save the **web.xml** file.

The Web client displays the online help from the Help Server.

Accessing the Help Server from a browser

You can view the online help from Help Server by typing the following URL into a compatible Web browser:

http://<helpserverhost>:<helpserverport>/help/

For *<helpserverport>*, type the name or IP address of the Help Server you want to connect to.

For *<helpserverport>*, type the communications port used to connect to the Help Server. You may omit the port number if you use the default port 80 HTML port.

7 Update Site Utility

CHAPTER

You can install the Update Site Utility on a Windows system and create an update site on either a Windows or a UNIX system. This section contains information about installation requirements and how to install the Update Site Utility.

Topics in this section include:

- *Overview of the Update Site Utility* on page 110
- *Installing the Update Site Utility on Windows* on page 110
- *Creating an update site* on page 115

Overview of the Update Site Utility

The Update Site Utility is an optional component that enables you to create an update site where ServiceCenter Windows clients can check for software updates at startup.

Important: In order for your Windows clients to use the update site, you must have first run the Client Packaging Utility. See *Client Packaging Utility* on page 121.

Installing the Update Site Utility on Windows

You install the Update Site Utility using Microsoft Installer (MSI) technology. After installation, you can customize the update site settings using the Update Site Utility.

Installation requirements

- Windows 2000 or Windows 2003
- The most current Windows updates on your operating system
- 40 MB disk space
- 256 MB RAM minimum recommended
 - For testing purposes, 128 MB RAM is sufficient
 - For production purposes, add RAM to match the expected user load
- Repackaged Windows clients with the following option selected
 - Enable Dynamic Update
- Access to a Web server with
 - A valid virtual directory
 - Network access to your ServiceCenter Windows clients
 - CA certificate (optional component for connections over https)

Tip: Install the Update Site Utility on the same Windows server as you installed the ServiceCenter Web Tier since it already requires a Web server.

Update Site Utility Setup

Use the following steps to install the Update Site Utility.

To install the Update Site Utility

- 1 Log on to the Windows server as a user with local administrator privileges.
- 2 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the server.

If you are installing on a system that has **autorun** enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory.
Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt.
Type the following:

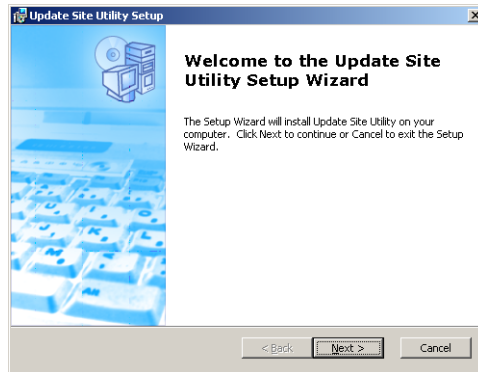
```
D:\>setup
```

where **D** identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

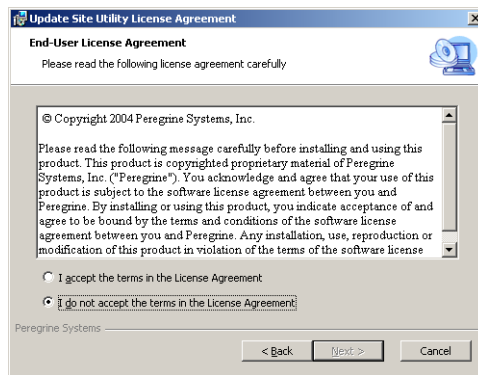


- 3 Click **Install Update Site Utility**.

The ServiceCenter Update Site Utility Setup Wizard opens.

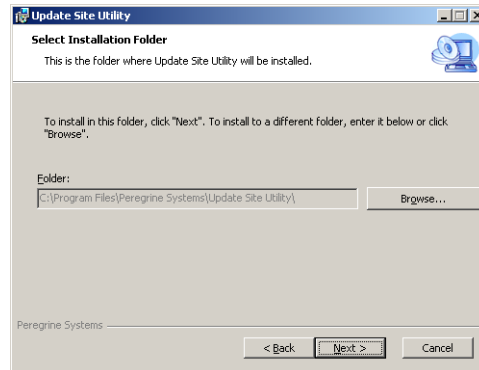


- 4 Click **Next** to read and accept the licensing agreement.



- 5 Select the **I accept the terms in the License Agreement** option.
The **Next** button becomes active.
- 6 Click **Next** to continue.

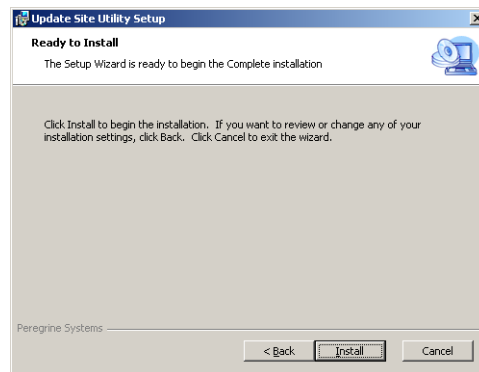
The Select Installation Folder page opens.



7 Select the path where you want to install the Update Site Utility.

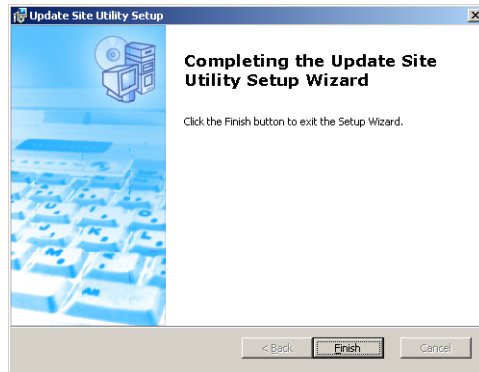
8 Click **Next** to continue.

The Ready to Install page opens.



9 Click **Install**.

The wizard installs the Update Site Utility on the system.



10 Click **Finish**.

Creating an update site

To create an update site you must download the Windows client updates from Peregrine customer support and then configure a local Web server to deploy the updates to your Windows clients.

Acquiring Windows client updates

You can find ServiceCenter Windows client update archives at the following locations:

- The ServiceCenter installation CD
This archive contains the released version of the Windows client. You can use this archive to create an update site in advance of any actual updates.
- The Peregrine customer support web site
This site contains an archive with the latest updates and changes to the Windows client.

Each update is an archive file in ZIP format that you can download and then deploy with Update Site Utility configuration wizard.

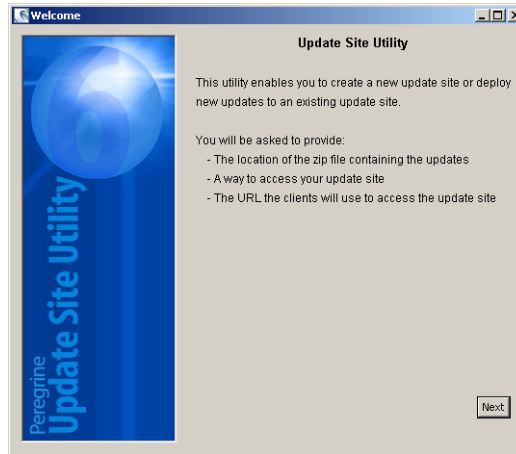
Update site configuration

Use the following steps to create an update site for Windows clients.

To create an update site

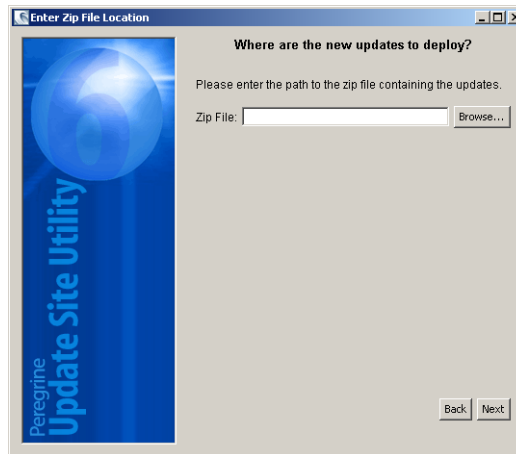
- 1 Click **Start > Programs > Update Site Utility > Update Site Utility**.

The Configure Peregrine Update Site Utility wizard opens.



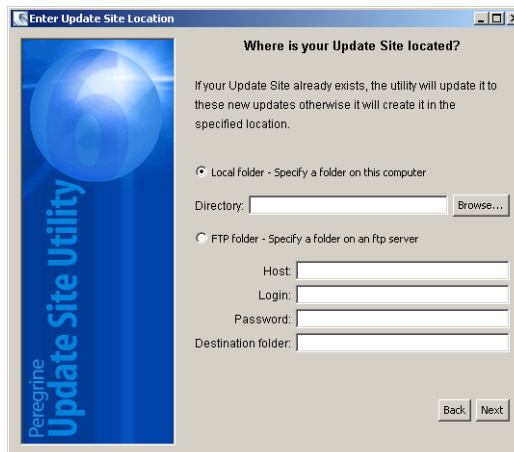
- 2 Click **Next** to continue.

The Where are the new updates to deploy? page opens.



- 3 Type or select the path to the ServiceCenter Windows client update archive.
- 4 Click **Next** to continue.

The Where is your update site located? page opens.



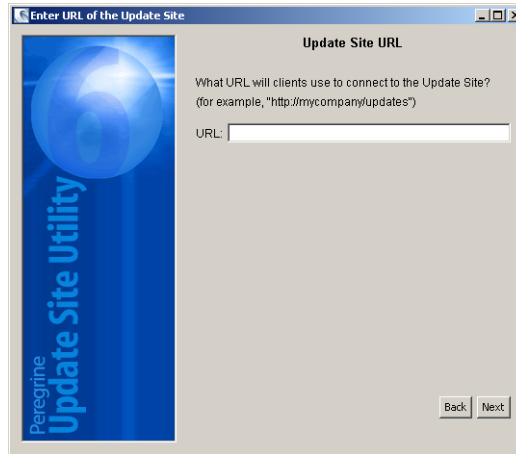
5 Do one of the following:

- Click **Local folder** to select a local Web server virtual directory where you want to install the ServiceCenter update site.
- Click **FTP folder** to select a remote Web server virtual directory where you want to install the ServiceCenter update site.

Field	Description
Host	Type the network name of the remote Web server host.
Login	Type the account name you use to establish an FTP connection to the remote Web server.
Password	Type the account password, if any, you use to establish an FTP connection to the remote Web server.
Destination folder	Type the path on the remote Web server where you want to install the ServiceCenter update site.

6 Click **Next** to continue.

The Update Site URL page opens.



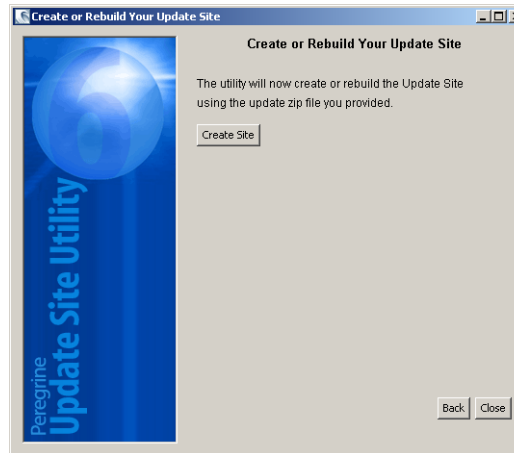
- 7 Type the URL where you want ServiceCenter Windows clients to check for updates.

Important: This URL must be the same as the one you specify with the Client Packaging Utility when enabling dynamic updates. See *Repackaging clients with the Client Packaging Utility* on page 130.

Note: This URL can use an SSL connection if your Web server has a CA certificate.

- 8 Click Next to continue.

The Create or Update your update site page opens.



9 Click **Create Site**.

The Wizard builds and deploys your update site to the location specified. When complete, a confirmation window opens.



10 Click **OK**.

ServiceCenter Windows clients can now check the update site for software updates at startup.

8 Client Packaging Utility

CHAPTER

You can install the ServiceCenter Client Packaging Utility on a Windows system. This section contains information about installation requirements and how to install the Client Packaging Utility.

Topics in this section include:

- *Overview of the ServiceCenter Client Packaging Utility* on page 122
- *Installing the Client Packaging Utility on Windows* on page 124
- *Customizing images used by the Windows client* on page 128
- *Repackaging clients with the Client Packaging Utility* on page 130

Overview of the ServiceCenter Client Packaging Utility

The ServiceCenter Client Packaging Utility is an optional tailoring component that enables you to create a Windows installer that deploys a custom version of the Windows client. The ServiceCenter Client Packaging Utility changes the following Windows client settings:

- The splash screen image that ServiceCenter displays when users open the Windows client
- The name of provider listed for ServiceCenter – for example, Peregrine Systems, Inc.
- The name of the ServiceCenter application – for example, ServiceCenter
- The location of application images and icons
- The location of the Update Site where Windows clients can check for updates
- The location of the Help Server where Windows clients can access documentation
- The changes that an administrator saves within the Windows client interface prior to running the Client Packaging Utility:
 - The list of available connections
 - The default connection
 - The **Window > Preferences** settings
 - The view of the System Navigator (whether it is visible or hidden)
 - The views available in each perspective
 - The size and location of each view within a perspective

Important: The Client Packaging Utility cannot push customization changes to previously installed Windows clients. To change existing installations of the Windows client, you can uninstall the existing client and reinstall using the customized MSI file.

Tip: Use the Client Packaging Utility to customize the Windows client before deploying it to the rest of your organization.

Note: The Client Packaging Utility will only pick up changes made directly from the Windows client interface or within the Client Packaging Utility. The Client Packaging Utility cannot pick up changes made directly to Windows client initialization files.

Installation considerations

You may want to use the ServiceCenter Client Packaging Utility for the following reasons:

- To deploy tailored versions of Windows clients. You can use the Client Packaging Utility to pre-configure Windows clients to use custom settings and images.
- To reduce the number of tailoring steps. When you use the Client Packaging Utility you do not have to tailor each Windows client individually.

Known Issues

The ServiceCenter Client Packaging Utility has the following known issues:

- You need to customize images before you run the Client Packaging Utility. The Client Packaging Utility enables you to change the location of images but not to edit them directly.
- The Client Packaging Utility changes the Windows client installation and configures the Windows client source installation to use the same custom settings as you selected when you created the customized Microsoft installer (MSI).
- If you deploy a repackaged Windows client that has a predefined connection over SSL, then the Windows clients may get the connection error message “No trusted certificate found” if users install the customized client in a different path than the original client install. Users can restore the client connection by providing the correct path to the CA certificate file.

Installing the Client Packaging Utility on Windows

You install the Client Packaging Utility using Microsoft Installer (MSI) technology. After installation, you can customize the Windows client settings using the Client Packaging Utility.

Installation requirements

- Windows 2000 or Windows 2003
- The most current Windows updates on your operating system
- 40 MB disk space
- 256 MB RAM minimum recommended
 - For testing purposes, 128 MB RAM is sufficient
 - For production purposes, add RAM to match the expected user load
- Access to a ServiceCenter Windows client installation

ServiceCenter Client Packaging Utility Setup

Use the following steps to install ServiceCenter Client Packaging Utility.

To install the Client Packaging Utility

- 1 Log on to the Windows system as a user with local administrator privileges.
- 2 Open the Windows client and make any changes that you want the Client Packaging Utility to pick up.

For example, you can set default preferences from **Window > Preferences**.

- 3 Close the Windows client.

The Client Packaging Utility includes your changes in the custom installer.

- 4 Insert the ServiceCenter installation CD-ROM into the appropriate drive of the Windows system.

If you are installing on a system that has autorun enabled, the CD browser starts automatically. If autorun is disabled, you can manually start the CD browser with one of the following methods:

- Use Windows Explorer to navigate to the CD-ROM directory.
Double-click **setup.exe**.
- Start the ServiceCenter installation from the Windows command prompt.
Type the following:

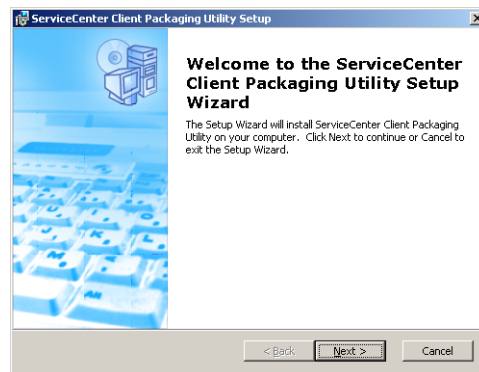
D:\>setup

where D identifies the CD-ROM drive. Substitute your CD-ROM drive identifier.

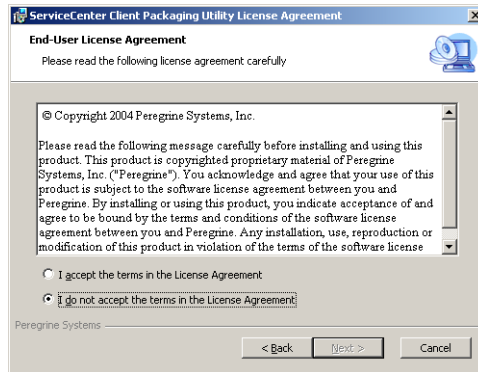


5 Click Install Client Packaging Utility.

The ServiceCenter Client Packaging Utility Setup Wizard opens.



- 6 Click **Next** to read and accept the licensing agreement.

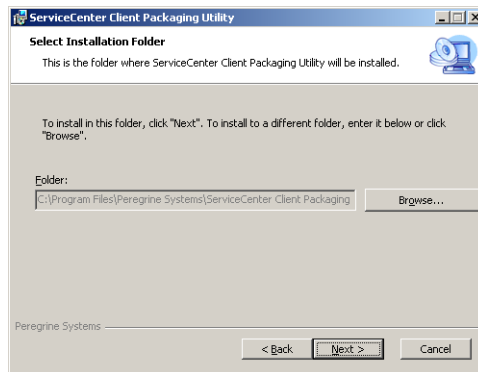


- 7 Select the **I accept the terms in the License Agreement** option.

The **Next** button becomes active.

- 8 Click **Next** to continue.

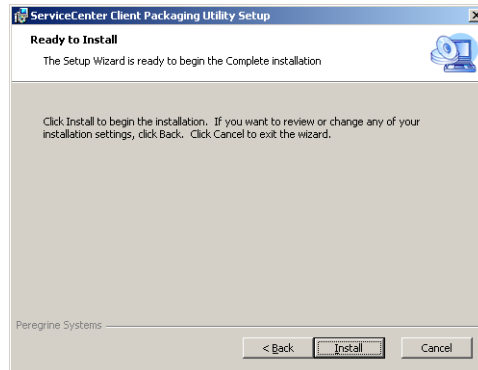
The **Select Installation Folder** page opens.



- 9 Type or select the path where you want to install the Client Packaging Utility.

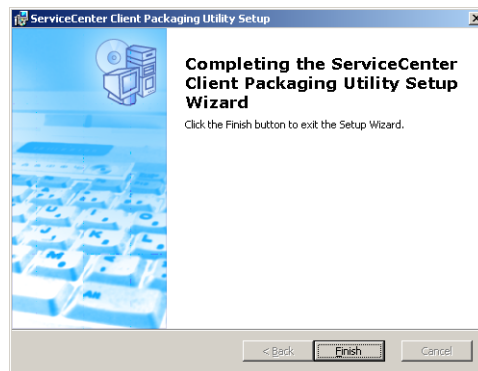
- 10 Click **Next** to continue.

The Ready to Install page opens.



11 Click Install.

The wizard installs the Client Packaging Utility on the system.



12 Click Finish.

Customizing images used by the Windows client

You can customize the images that Windows clients use by providing alternate versions of the images in one of two locations:

- From a local folder
- From a Web server virtual directory

Providing custom images from a local folder

You can use the following steps to provide custom images with the repackaged client. This image customization method increases the amount of hard disk space required to install the ServiceCenter Windows client as the custom images are installed in addition to the default images.

To customize images from a local folder

- 1 Copy the images from the ServiceCenter client into a temporary folder.

The ServiceCenter client images are located in the following folder:

```
<Windows client installation path>\ServiceCenter Client\plugins\
com.peregrine.eclipse.user_6.0.0.<build>\icons\obj16
```

- 2 Edit the images you want to customize in the temporary folder.
See *Image editing guidelines and considerations* on page 129.
- 3 Delete any images that you do not customize from the temporary folder.
- 4 Run the Client Packaging Utility and select the local images option.

The Client Packaging Utility creates the following new folder in the ServiceCenter client installation:

```
<Windows client installation path>\ServiceCenter Client\plugins\
com.peregrine.eclipse.user_6.0.0.<build>\branded\obj16
```

- 5 Copy your custom images to the **branded\obj16** folder.

Tip: You can copy the your custom images to the local folder while the Client Packaging Utility is open.

- 6 Repackage the client as a custom installer.

Providing custom images from a Web server virtual directory

You can use the following steps to provide custom images from a central Web server. This image customization method does not increase the amount of hard disk required to install the ServiceCenter Windows client. In addition, any changes you make to images on a Web server are automatically applied to Windows clients.

To customize images from Web server virtual directory

- 1 Create a virtual directory on your Web server to store the custom images.
- 2 Copy the images from the ServiceCenter client into a temporary folder.

The ServiceCenter client images are located in the following folder:

```
<Windows client installation path>\ServiceCenter Client\plugins\  
com.peregrine.eclipse.user_6.0.0.<build>\icons\obj16
```

- 3 Edit the images you want to customize in the temporary folder.
See *Image editing guidelines and considerations* on page 129.
- 4 Delete any images that you do not customize from the temporary folder.
- 5 Copy your custom images to the virtual directory on your Web server.
- 6 Run the Client Packaging Utility and select the Web server virtual directory option.

The Client Packaging Utility configures the ServiceCenter client to point to the URL to your Web server virtual directory.

Image editing guidelines and considerations

The following guidelines and considerations apply to customized images:

- All custom images must retain their original file name.
- All custom images must retain their original relative path from the `icons/obj16` folder.
- You only need to save customized images in the `branded/obj16` folder. If the ServiceCenter client does find updated images in the `branded/obj16` folder it uses the default images in the `icons/obj16` folder.
- Providing custom images from a Web server allows you to automatically update images without having to reinstall the Windows client.

Repackaging clients with the Client Packaging Utility

In order to run the Client Packaging Utility, you must have previously installed a Windows client. Use the following steps to repackage a Windows client MSI.

To repackage a Windows client MSI

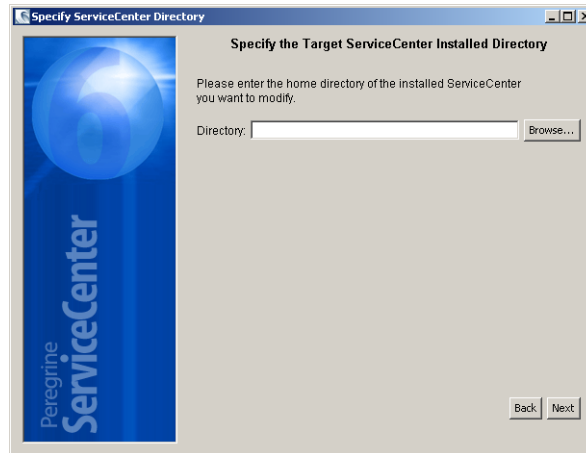
- 1 Click **Start > Programs > ServiceCenter Client Packaging Utility > ServiceCenter Client Packaging Utility**.

The Client Packaging Utility opens.



- 2 Click **Next** to continue.

The Specify ServiceCenter Directory page opens.



- 3 Type or select the path to an existing installation of the ServiceCenter Windows client.
- 4 Click **Next** to continue.

The Change Startup Splash Image page opens.



- 5 Do one of the following:
 - Click **Skip** to use the default splash image.
 - Type or select the path to the splash screen image you want to use.

The default splash screen image is named **splash.bmp** and is located in the following folder:

<Installation location>\ServiceCenter Client\plugins\
com.peregrine.eclipse.user_6.0.0.0<date>

Use the following guidelines to edit the splash screen image:

- The image must retain its original file name
- The image must be in the Windows bitmap (BMP) file format
- The image should be approximately 500 wide by 330 pixels high. The Client Packaging Utility crops larger images to this size.

6 Click **Next** to continue.

The Replace Provider and Application Strings page opens.

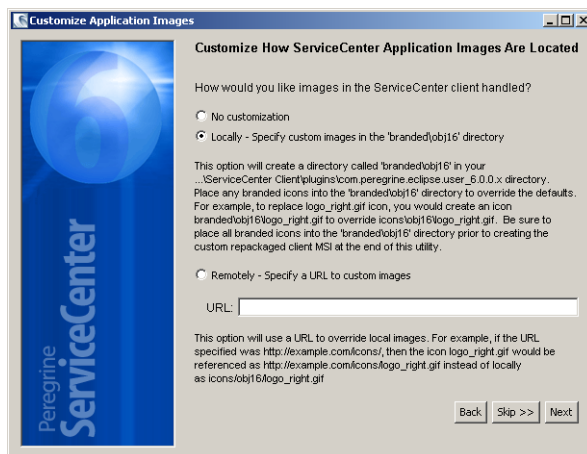


7 Do one of the following:

- Click **Skip** to use the default application text strings.
- Type the text strings you want to use for the following items:
 - Provider: Type the company name you want to display in the Windows Client interface. The default name is Peregrine Systems, Inc.
 - Application: Type the application name you want to display in the Windows client interface. The default name is ServiceCenter.

8 Click **Next** to continue.

The Customize how ServiceCenter application images are located page opens.



9 Do one of the following:

- Use the default application images:
 - **No customization:** Select this option to use the default images.
 - Click **Skip**.
- Select the path to your customized Windows client images:
 - **Locally:** The Client Packaging Utility creates a folder named `\branded\obj16` where you can place customized images to override the default Windows client images.
 - **Remotely:** Type the URL where the Windows client can access customized images.

See *Customizing images used by the Windows client* on page 128 for more information.

10 Click **Next** to continue.

The Customize Default Login Options page opens.

11 Do one of the following:

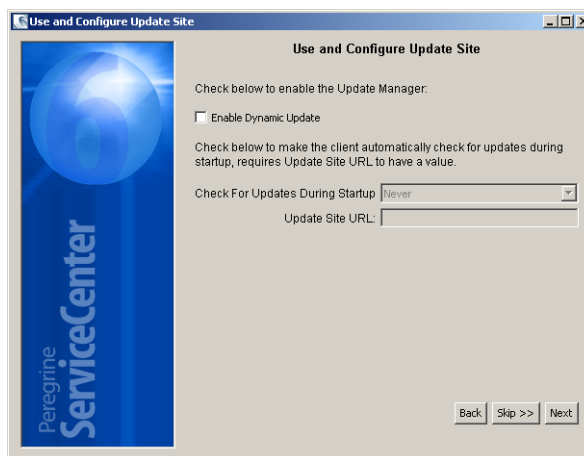
- Click **Skip** if you do not want to create a default connection.
- Type the following information about the default connection you want to create.

Field	Description
Hostname	Type the network name or IP address of the ServiceCenter server to which you want the Windows client to connect.
Port Number	Type the communications port on which the ServiceCenter server listens to client connection requests. The default communications port is 12670.
Compress Messages	Select true to enable message compression between the Windows client and the ServiceCenter server. Select false to have messages remain uncompressed.
Use SSL Connection	Select true to enable an SSL connection between the Windows client and the ServiceCenter server. Select false to use a standard connection.
CA Certificate Path	Type or select the local path to the CA certificate used by your SSL connection. Leave this entry blank if you are not using an SSL connection.

Note: You can find a sample CA certificate file `cacerts` in the following path:
 <ServiceCenter Client>\plugins\com.peregrine.commons.<version>

12 Click **Next** to continue.

The Use and Configure Update Site page opens.



13 Do one of the following:

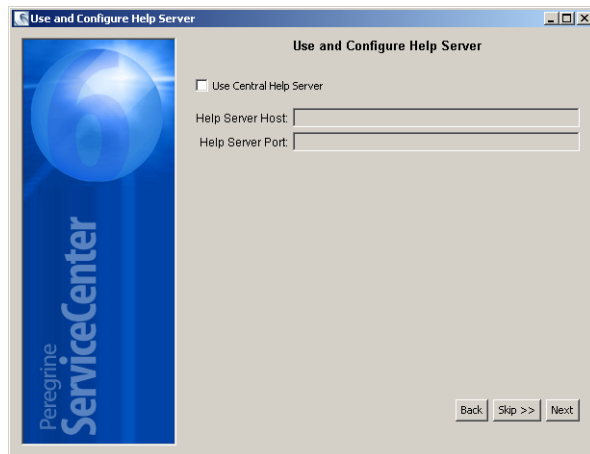
- Click **Skip** if you do not want to enable automatic updates.
- **Enable Dynamic Update:** Select this option to automatically check for Windows client updates from an update site.

Field	Description
Check for Updates During Startup	Select how often you want Windows clients to automatically check for updates
Update Site URL	Type the URL of the update site you want to use

Important: The update site URL must match the URL you created with the Update Site Utility. See [Update Site Utility](#) on page 109 for more information.

14 Click **Next** to continue.

The Use and Configure Help Server page opens.



15 Do one of the following:

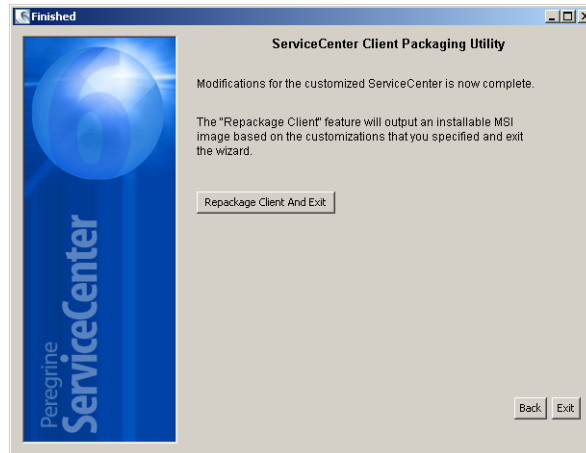
- Click **Skip** if you do not want to provide on-line help from a Help Server.
- Select the **Use Central Help Server** option to establish a connection to a Help Server. Type the following Help Server information.

Field	Description
Help Server Host	Type the network name of the ServiceCenter Help Server to which you want the Windows client to connect.
Help Server Port	Type the communications port on which the ServiceCenter Help Server listens to client connection requests. The default communications port is 80.

Important: The Help Server host and port must match the settings you configured with the Help Server configuration wizard. See [Help Server](#) on page 99 for more information.

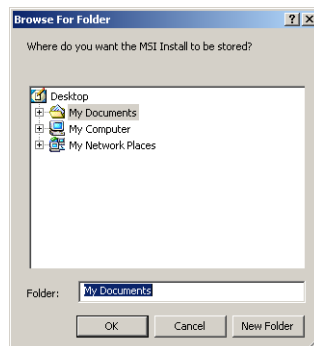
16 Click **Next** to continue.

The Client Packaging Utility page opens.



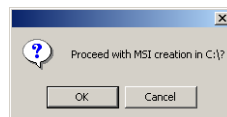
- 17 Click **Repackage Client And Exit**.

The Browse For Folder dialog box opens.



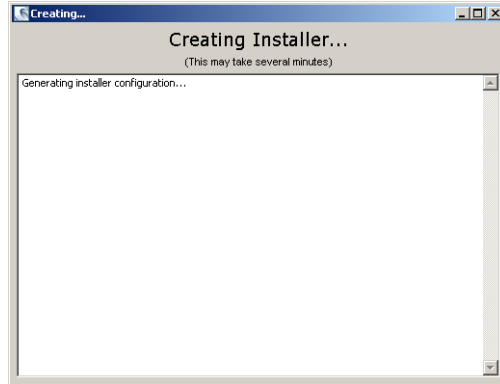
- 18 Type or select the folder where you want to create the customized Windows client MSI.
- 19 Click **OK**.

A confirmation dialog box opens.

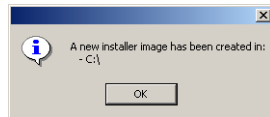


- 20 Click **OK**.

The Creating Installer page opens and displays the current status of the client repackaging.



When complete, the confirmation window opens.



21 Click OK.

The confirmation window and Client Packaging Utility closes.

The custom ServiceCenter Windows client installer appears in the output folder you selected. You can now deploy the repackaged Windows client installer to your network.

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