Peregrine

ServiceCenter
Client/Server Installation Guide for Windows

Release 5.1

Peregrine
S Y S T E M S.

Contents

Getting Started

Welcome to the *Client/Server Installation Guide for Windows*. This guide has instructions to install the ServiceCenter Windows-based client and server. Follow the steps in this guide for a successful installation.

The *Client/Server Installation Guide for Windows* has this information:

- *Getting Started* describes this guide and what you need to know. Provides product support information, client platform system requirements for the ServiceCenter Windows-based client or server, and how to contact Peregrine Systems, Inc. for customer support.
- *Before You Begin the Installation* on page 11 describes the ServiceCenter ODBC Driver and requirements to install the ServiceCenter Windows client.
- *Installation Instructions* on page 17 describes the steps for a typical or custom installation. You can also learn how to install multiple instances of the ServiceCenter on the same server.
- *Running ServiceCenter* on page 55 describes operational ServiceCenter tasks, such as starting the client and server, removing or reinstalling ServiceCenter, starting background schedulers, and performing background printing.
- *SCEmail* on page 73 lists the steps to start and use SCEmail, the ServiceCenter component that allows users or applications (or both) to send mail through email.

- *Silent Installation* on page 83 describes how to create an installation that requires no responses or intervention by a user.

- *Supplemental Information* on page 95 contains supplemental information for system administrators about installing and running ServiceCenter.

Knowledge Requirements

The instructions in this guide assume a working knowledge of Peregrine Systems ServiceCenter and the installation platform. You can find more information in the following guides.

- For information about a particular platform, see the appropriate platform documentation.

- For information about customizing your environment using parameters, see the *ServiceCenter Technical Reference* guide.

- Before you run the ServiceCenter server, see the *ServiceCenter User's Guide.*

- For administration and configuration information, see the *ServiceCenter System Administrator's Guide* or the *ServiceCenter Application Administration Guide.*

- For database configuration information, see the *ServiceCenter* Database Management and Administration Guide.

- For copies of the guides, download PDF versions from the CenterPoint web site using the Adobe Acrobat Reader, which is also available on the CenterPoint Web Site. For more information, see *Peregrine's CenterPoint Web Site* on page 9. You can also order printed copies of the documentation through your Peregrine Systems sales representative.

Examples

The sample windows and the examples included in this guide are for illustration only, and may differ from those at your site.

Contacting Customer Support

For more information and help with this new release or with ServiceCenter in general, contact Peregrine Systems' Customer Support.

Peregrine's CenterPoint Web Site

You can also find information about version compatibility, hardware and software requirements, and other configuration issues at Peregrine's Centerpoint web site: *http://support.peregrine.com*

1 Log in with your login ID and password.

2 Select **Go** for **CenterPoint**.

3 Select **ServiceCenter** from **My Products** at the top of the page for configuration and compatibility information.

> **Note:** For information about local support offices, select **Whom Do I Call?** from **Contents** on the left side of the page to display the **Peregrine Worldwide Contact Information**.

Corporate Headquarters

Address:	Peregrine Systems, Inc. Attn: Customer Support 3611 Valley Centre Drive San Diego, CA 92130
Telephone:	+1 (858) 794-7428
Fax:	+1 (858) 480-3928

North America and South America

Telephone:	+1 (800) 960-9998 (US and Canada only, toll free) +1 (858) 794-7428 (Mexico, Central America, and South America)
Fax:	+1 (858) 480-3928
E-mail:	support@peregrine.com

Europe, Asia/Pacific, Africa

For information about local offices, see *Peregrine's CenterPoint Web Site*. You can also contact *Corporate Headquarters*.

Contacting Education Services

Training services are available for the full spectrum of Peregrine Products including ServiceCenter.

Current details of our training services are available through the following main contacts or at:

http://www.peregrine.com/education

Address:	Peregrine Systems, Inc.
	Attn: Education Services
	3611 Valley Centre Drive
	San Diego, CA 92130
Telephone:	+1 (858) 794-5009
Fax:	+1 (858) 480-3928

1 Before You Begin the Installation

CHAPTER

This chapter describes the system requirements for installing the ServiceCenter Windows based client/server. It describes Microsoft® Cluster support and the ServiceCenter ODBC Driver. When your system is ready, you can proceed with the installation described in the next chapter.

Read these sections to ensure your system is ready:

- *Installation Requirements* on page 12
- *Microsoft® Cluster Support* on page 14
- *ServiceCenter ODBC Driver* on page 16

Installation Requirements

For complete information about current platform requirements and compatibility, see *Peregrine's CenterPoint Web Site* on page 9.

Client Performance

Peregrine recommends that you try ServiceCenter on a variety of client configurations to verify that the client response time is acceptable in your environment.

The following information applies to client workstations with other operating systems that may be attached to a ServiceCenter Windows NT/2000/XP server.

Specifying client system requirements is not an exact science for a client/server environment running graphical applications. Requirements vary because there are many components working together to run the application. These components include, but are not limited to:

- CPU clock speed
- Amount of memory
- Operating system version
- PC bus architecture
- Video card and its driver
- Type of network and network speed
- CPU utilization
- Other applications running on the workstation

At customer sites, ServiceCenter running on workstations with the same processor experienced a wide range of response times, from sub-second to multi-second. The differences can be attributed to factors such as:

- Operating system (Windows 98/NT/XP/2000 or other supported operating system)
- Architecture - PCI versus IDE bus
- CPU cache
- Video adapter and driver combination

Hardware and Software Requirements

ServiceCenter for Windows NT/2000/XP requires the following items for client and server installation:

For client installation (32-bit):

- 90 MHz Pentium minimum
- Windows 98, Windows 2000, Windows XP, or Windows NT version 4.0
- 20 MB disk space (32 MB disk space to install Work Management)
- 32 MB RAM minimum
- 800 x 600 resolution and 16-color minimum (256-color recommended)

- If you use TCP/IP, you need:
  - TCP/IP connectivity to the host running the ServiceCenter server
  - Winsock 1.1 compliant TCP/IP stack

Important: Before you can run the ServiceCenter client using Windows, you must install and configure the network software.

For server installation:

- Windows XP, Windows NT version 4.0 or Windows 2000 (Windows 98 is not supported on a server)
- 250 MB disk space
- 32 MB RAM minimum
  - For testing purposes, 128 MB RAM is recommended.
  - For production purposes, RAM is based on the expected user load.

User Groups

Create the user groups to be used by administrators who install, run, and maintain ServiceCenter. For information about creating groups and setting permissions with the User Manager, see the Windows NT/2000/XP documentation. These user groups must belong to an Administrators group. The user must be an Administrator to install ServiceCenter.

IP address

ServiceCenter uses a service called *getmyip* to validate the IP address of the workstation or server where it runs. For computers with multiple IP addresses, the *getmyip* service always returns the lowest IP address. In some cases this is not acceptable. For example, if a new IP address is added that is lower than any of the existing addresses, this causes the validation to fail.

If you do not want the ServiceCenter server license to validate against the lowest IP address, you can enter the following initialization parameter in the sc.ini file.

-ip_address:*<address>*

where *address* is the actual IP address to be used. Insert this parameter in the Installed Configuration section. ServiceCenter will not start if the address you specify is not a valid IP address for that workstation or server.

Microsoft® Cluster Support

ServiceCenter supports Microsoft Cluster functionality for Windows NT. By Microsoft definition, "A server cluster is a group of independent servers managed as a single system for higher availability, easier manageability, and greater scalability."

The minimum requirements for a server cluster are:

- Two servers connected by a network
- A method for each server to access the shared cluster disk
- Special cluster software that provides services such as failure detection, recovery, and the ability to manage the servers as a single system

An example would be Microsoft Cluster Server (MSCS)

Installing Clusters Using Microsoft Cluster Server (MSCS)

To support MSCS:

1 Install ServiceCenter on each node of the cluster.

The shared disk contains the ServiceCenter data directory.

2 Modify the ServiceCenter sc.ini file with the location of the data directory and the name of the cluster.

3   Configure ServiceCenter as a cluster resource using the Microsoft Cluster
Administrator.

For more information, see the MSCS documentation.

MSCS Considerations

All data and shared programs should reside on a shared cluster disk. Start and
stop ServiceCenter using the Microsoft Cluster Administrator. Do not start
or stop ServiceCenter using the ServiceCenter console application.

To add ServiceCenter as a cluster resource:

1   Add ServiceCenter as a cluster resource using the Microsoft Cluster
Administrator tool.

2   Install the ServiceCenter service on each node in the cluster.

3   Add ServiceCenter as a generic cluster service.

4   Create a program group on each node of the cluster.

5   Set dependencies on other services, if applicable (for example, Microsoft SQL
server).

6   Add the following parameter to the sc.ini file on the cluster server:

clustername:*your_cluster_name*

where *your_cluster_name* is the name of the cluster service.

7   Generate a new authorization code to use with the cluster.

You must generate a new authorization code for the sc.ini file, based on the
IP address of your cluster environment. Contact Peregrine customer support
for the new authorization code. For more information, see *Contacting
Customer Support* on page 8. Peregrine suggests you save the old
authorization code by making it a comment. You can reuse it if you remove
ServiceCenter from the cluster environment later.

Warning: If you specify a cluster name and the cluster does not exist,
ServiceCenter will fail when it attempts to get the cluster IP
address. As a result, the authorization code validation fails and
ServiceCenter cannot start.

ServiceCenter ODBC Driver

ServiceCenter has an ODBC driver that allows users to generate reports directly from data in the P4 database. The driver installs automatically with ServiceCenter, but you can install it separately.

To install, configure, test, or use ServiceCenter, an appropriate ODBC driver must reside on each system that uses the client application. Typically, this is the ServiceCenter ODBC driver, although for shadowed data, an ODBC driver native to the shadowed platform is also acceptable.

See the *ServiceCenter Database Maintenance and Administration Guide* for more information about the ServiceCenter ODBC driver.

2 Installation Instructions

CHAPTER

This chapter describes how to install the Windows-based ServiceCenter client/server. You can follow the steps for a typical installation, a custom installation, or a version upgrade. This chapter also describes how to manage multiple instances of ServiceCenter on the same server, how to modify, repair, or remove an instance of ServiceCenter version 5.1, and where to find the information you need to customize your server.

Read this chapter for information about:

Preparing for Installation

If you are installing into a client/server environment where the client is remote from the server, ensure that the ServiceCenter server installation is complete before you begin the client portion of your installation.

You will need a working TCP/IP connection for a successful client installation. You will also need to identify an existing Java Runtime Environment (JRE), or install the JRE that accompanies the installation. Consult Peregrine's Centerpoint Web site for current information about JRE compatibility, including version details for servers, clients, as well as Peregrine products cross-compatibility and integration. For more information, see *Peregrine's CenterPoint Web Site* on page 9.

If you need installation instructions for ServiceCenter clients on specific platforms, see:

- The *Java Client Installation and Configuration Guide* with instructions to install ServiceCenter Java clients on Windows, Macintosh, UNIX, and OS/2 platforms to communicate with servers running on OS/390, UNIX, or Windows platforms.
- The *SC3270 Client Installation Guide* with instructions to install the ServiceCenter 3270 bi-directional client that allows the Windows- or UNIX-based client to communicate with an OS/390 server.
- The *Client/Server Installation Guide for Unix* with instructions to install a UNIX server.

HTML Documentation

The installation program installs HTML versions of most ServiceCenter guides by default. This increases the installation time and required storage. You can view PDF or HTML documentation on the ServiceCenter 5.1 Documentation CD-ROM. If you want to minimize the initial installation and rely on the Documentation CD-ROM (and install the documentation later), choose a **Custom** installation. For more information, see *A Custom Installation* on page 29.

Supported Windows Platforms

You can install ServiceCenter on Windows NT, Windows 2000, or Windows XP. For more information about supported platforms and resource requirements, see *Peregrine's CenterPoint Web Site* on page 9.

A Typical Installation

A typical ServiceCenter installation includes:

- ServiceCenter client
- Windows NT Server
- Bitmaps
- A Java client that is a standalone client (the default choice), a local or network client for a web browser, or a local client for a web server. The Java client installation includes a Java Runtime Environment (JRE) that is optional for installation.

The ServiceCenter installation may include some updated shared files from Microsoft. The installation displays messages about these files as it copies them. You may need to restart Windows at the end of the installation.

To install ServiceCenter:

1 Insert the ServiceCenter installation CD-ROM into the appropriate drive on your workstation or server. If you are installing on a system that has autorun enabled, the setup.exe program starts automatically. You can also choose one of these methods:

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

  D:\>setup

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

2 The Peregrine splash screen appears, as shown in Figure 2-1 on page 20. Click **Install** to begin the installation.
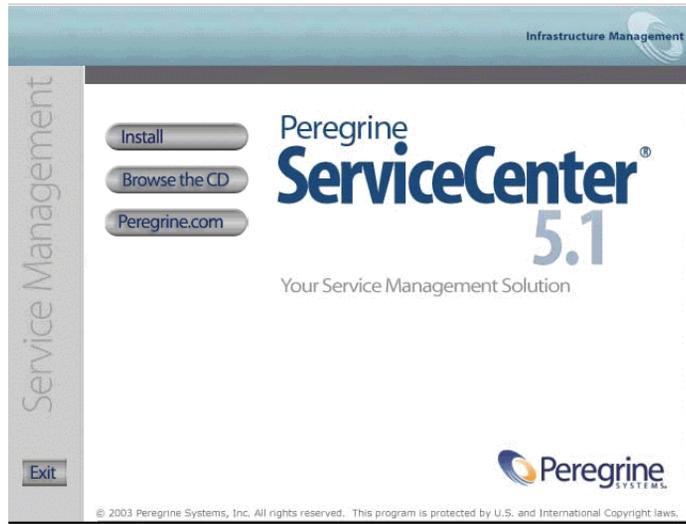
Figure 2-1: ServiceCenter splash screen

3 InstallShield starts the setup wizard, shown in Figure 2-2. Click **Next**.
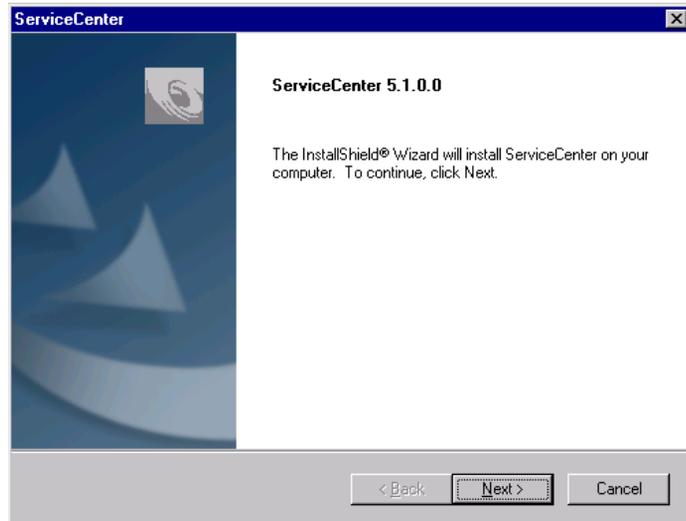
Figure 2-2: Setup wizard

4 Choose a **Typical** installation. Figure 2-3 shows selecting a typical installation to install the most common ServiceCenter components. This is a good choice if you are a new user, or you are unsure about which ServiceCenter components to choose.
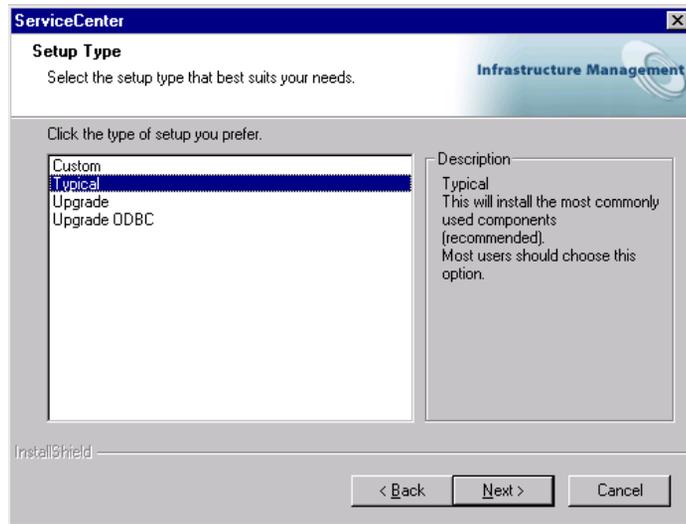
Figure 2-3: Setup Type window

If you want to:

- Install a different set of components, select **Custom** and go to *A Custom Installation* on page 29.
- Upgrade an existing ServiceCenter 5.1 installation, select **Upgrade** and go to *Upgrading an Installation* on page 39.
- Upgrade your ODBC driver, select **Upgrade ODBC** and go to *Upgrading an ODBC Driver* on page 49.

Click **Next** to proceed with the typical installation. You can add or remove components later.

5 The Destination Location window appears. A typical installation creates a C:\Program Files\Peregrine\ServiceCenter folder. Figure 2-4 shows the default destination location. Click **Browse** to choose a different location. Click **Next**.

Figure 2-4: Choose Destination Location window

6 The Authorization Code window appears, as shown in Figure 2-5.
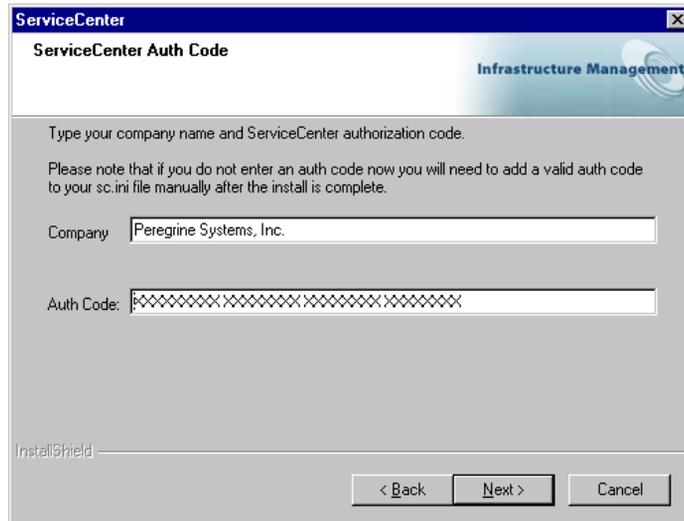
Figure 2-5: ServiceCenter Authorization Code window

Type your company name and case sensitive authorization code. Click **Next**.

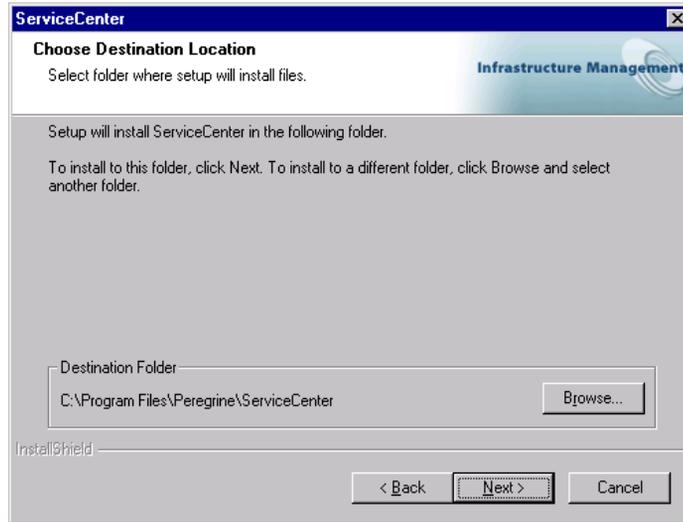The authorization code resides in the **sc.ini** file, where it can be updated later. For information about obtaining or updating your authorization code, see *Contacting Customer Support* on page 8.

Note: During the installation process, click **Back** to return to a previous window to change your input, or click **Cancel** to stop the installation.

7 Figure 2-6 shows the License and ReadMe Information. If you scroll through this information, you can learn more about licensing, accessing the release notes, Peregine's CenterPoint Web site, and customer support information. Click **Next**.
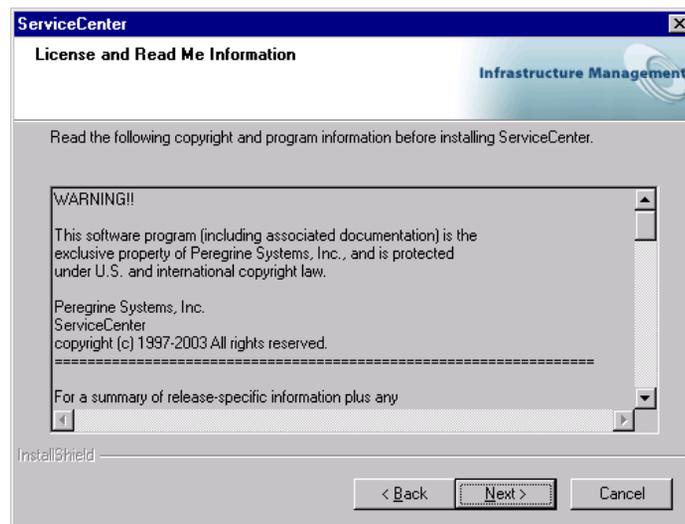
Figure 2-6: License and ReadMe Information window

8 Figure 2-7 on page 24 shows the TCP/IP Server Information window. The installation automatically detects the assigned Service ID (port number) for the workstation or server. If no port number appears, contact your system administrator to troubleshoot the TCP/IP connection. Click **Next**. The installation validates the host name.
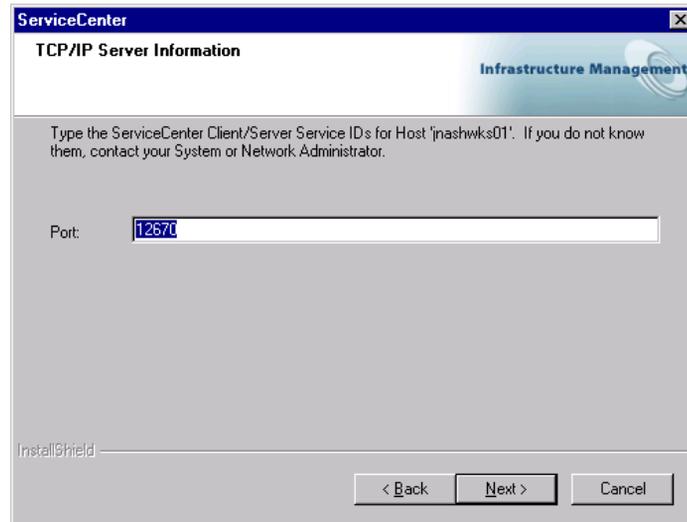
Figure 2-7: TCP/IP Server Information window

Note: Each time you install a new instance on the same workstation, you must specify a different port number for each instance.

9 Figure 2-8 shows the Java Runtime Environment window.
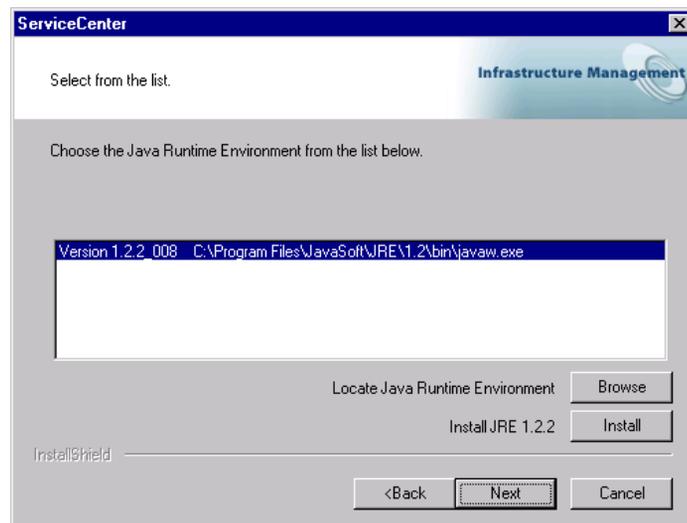
Figure 2-8: Select JRE window

The ServiceCenter Java client requires a JRE to run as a standalone application. The JRE creates a Java Virtual Machine (JVM) that this standalone application requires. If you have one or more JRE versions installed, select the one to be used with ServiceCenter from the list, or you can browse to the location of the desired JRE if it does not appear on the list.

If you do not have a JRE installed, click **Install** to use the version on the installation CD-ROM. The JRE shipped with this release is Sun's Java 2 Runtime, version 1.2.2_008. If installed, this version becomes the default JRE for the system. If you have a different version already installed, verify that the version is recommended for ServiceCenter on *Peregrine's CenterPoint Web Site* before you select it.

Figure 2-9 shows a selected JRE. Whether you choose an existing JRE, or you installed the version shipped with ServiceCenter, click **Next**.
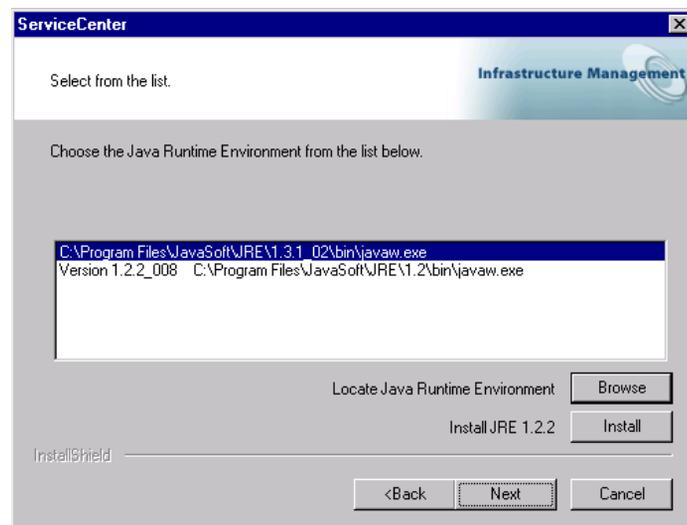
Figure 2-9: Java Runtime Environment window

10 The Program Folder and Service Name window appears, as shown in Figure 2-10 on page 26. The installation program creates a new ServiceCenter program folder or allows you to type a different program folder name.

Figure 2-10: Program Folder and Service Name window

This name also becomes the Windows Service name for ServiceCenter. You can choose to accept the default or change it. Click **Next**.

11 The installation program has enough information to start copying files into the designated program directory. Figure 2-11 shows the summary of settings that you requested during the setup process.
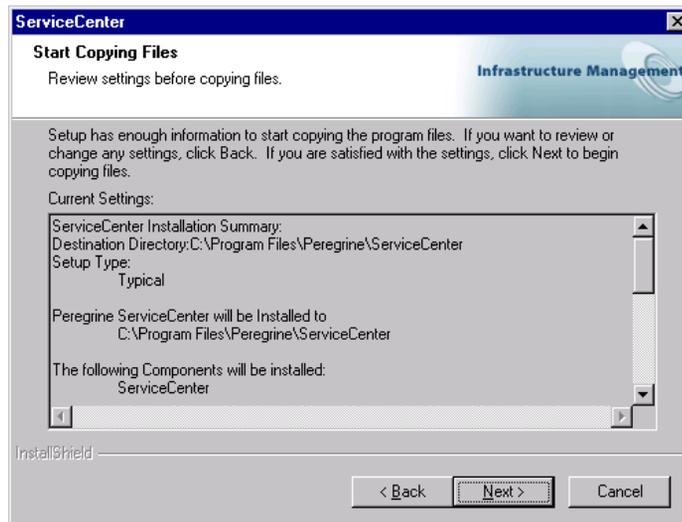
Figure 2-11: Start Copying Files

For a typical installation, you will see which components are to be installed, Report Center and Java Client configuration, and TCP/IP connectivity information. You can change these settings before the installation begins by clicking **Back** to the appropriate window where you can modify the setting values. If you are satisfied with the selections, click **Next**.

12 The installation begins copying the selected files, as shown in Figure 2-12. You can stop the installation if you click **Cancel**.
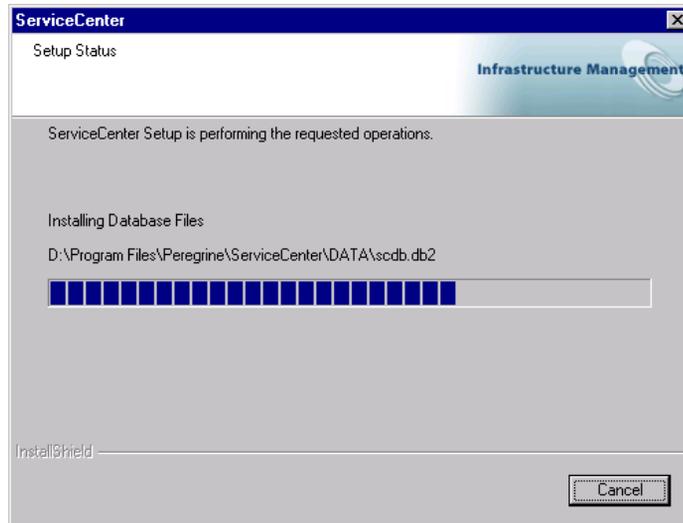
Figure 2-12: Setup Status window

13 Figure 2-13 shows that the installation is complete. If you do not want to start the ServiceCenter server, clear the check box before you click **Finish**.
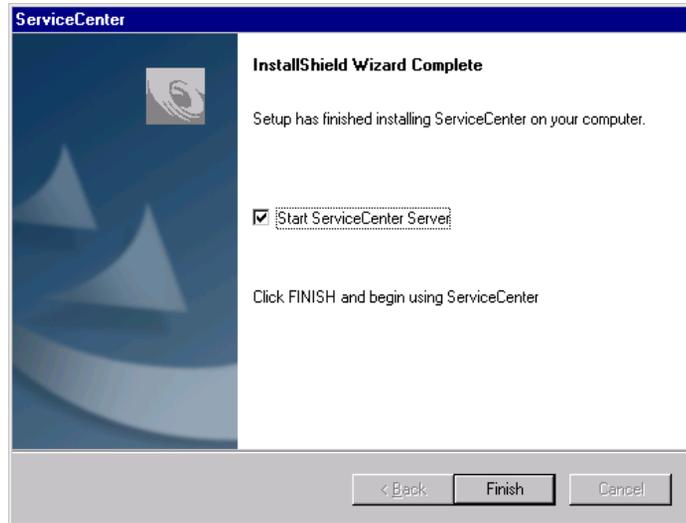
Figure 2-13: InstallShield Wizard Complete

Note: ServiceCenter contains some components that are shared with other programs on your system. If you have not previously installed ServiceCenter or if the ServiceCenter installation provides newer files than those currently in use on your system, such as .dll files in your Windows\System or Windows\System32 directories, the installation program prompts you to restart your system. This dialog box displays only when the installation program installs shared system files. Select **Yes** or **No**, and then click **Finish** to complete the installation.

If you want to install additional components, see *A Custom Installation* on page 29.

Multiple ServiceCenter Server Installations

You can have multiple installations of the ServiceCenter server on the same workstations, and they can run concurrently. If you want to install multiple instances of the server, select the **Windows NT Server** option. Other versions can continue to run as needed but the new version must reside in a new directory.

Important: Each time you install a new instance on the same workstation, you must specify a different port number for each instance.

To install another instance of ServiceCenter:

▶ Follow the installation steps described in *A Typical Installation* on page 19 or *A Custom Installation*. When you begin the installation, Figure 2-14 shows the message that appears. Click **OK** to continue. If the installation program detects an existing instance of ServiceCenter, it assumes the second instance should be ServiceCenter2 and points you to a ServiceCenter2 directory. As you install more instances of version 5.1, the number appended to the ServiceCenter name increments.
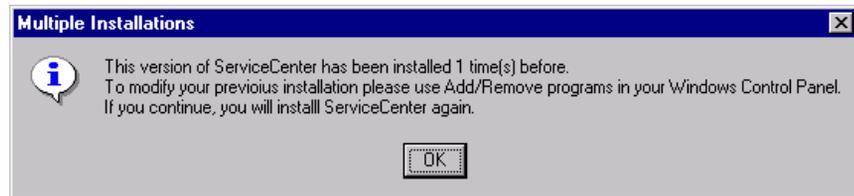
Figure 2-14: Multiple installations warning

Note: Earlier versions do not have this identification system, although you can continue to run them concurrently with new versions.

A Custom Installation

If you are installing ServiceCenter version 5.1 you can choose a typical, custom, or upgrade installation. Choose a custom installation if you want fewer components than a typical installation, a different installation location, or an installation of all available components at once. A custom installation by default contains:

- ServiceCenter client
- Windows NT Server
- Bitmaps
- A Java client that is a standalone client (the default choice), a local or network client for a web browser, or a local client for a web server. The Java client installation includes a Java Runtime Environment (JRE) that is optional for installation.

■ ReportCenter

You can add or subtract components during the setup part of the installation.

Choose a custom installation when you want to add these components to an existing installation:

■ Additional Java clients:
  ■ A standalone client
  ■ A network client
  ■ A browser-based client for a local or remote web server
■ ReportCenter:
  ■ A complete local client
  ■ The client and scheduler only

To create a custom installation:

1 Insert the ServiceCenter installation CD-ROM into the appropriate drive on your workstation or server. If you are installing on a system that has autorun enabled, the setup.exe program starts automatically. You can also choose one of these methods:

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

D:\>setup

where D identifies the CD-ROM drive.

2 The Peregrine splash screen appears, as shown in Figure 2-15. Click **Install** to begin the installation.
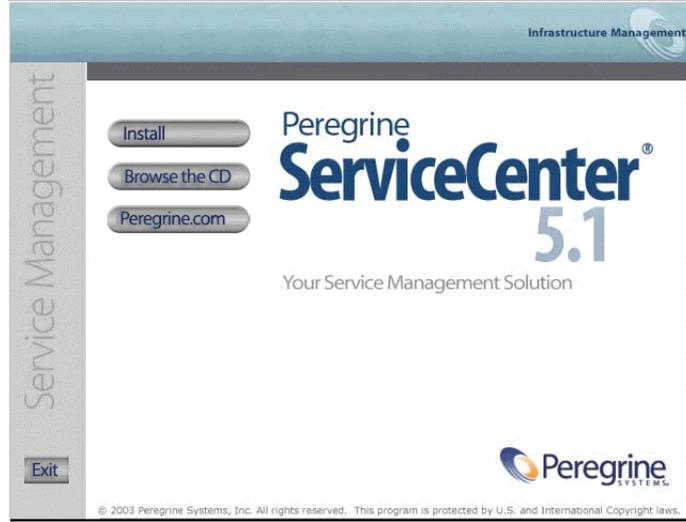
Figure 2-15: ServiceCenter splash screen

3 InstallShield starts the setup wizard, shown in Figure 2-16. Click **Next**.
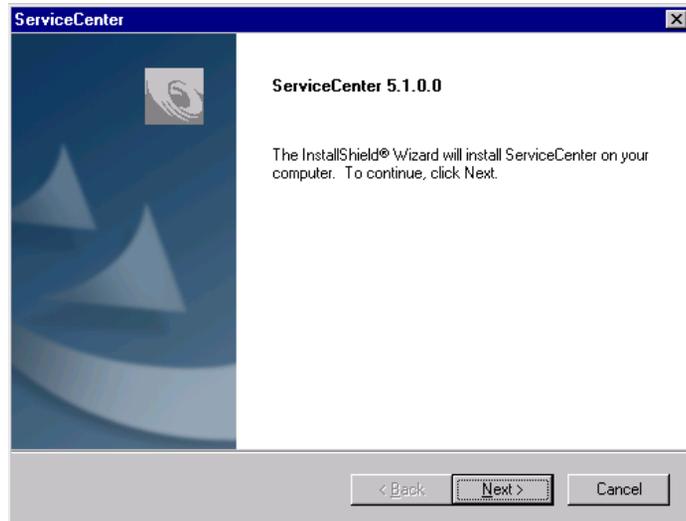
Figure 2-16: Setup wizard

4 When the Setup Type window appears, shown in Figure 2-17, select **Custom**. Click **Next**.
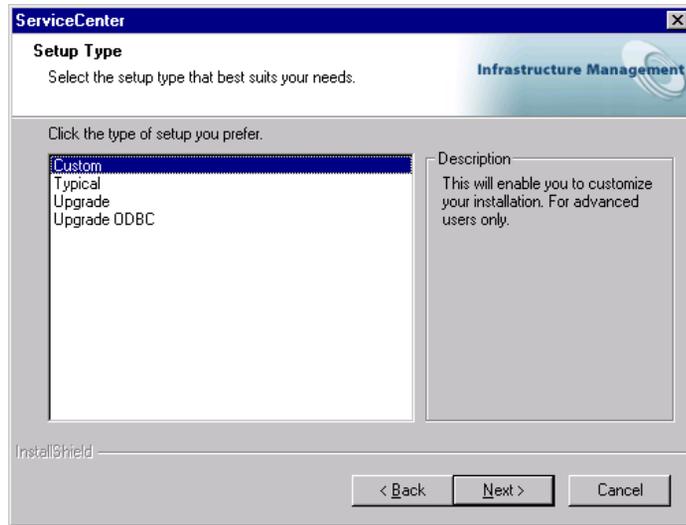
Figure 2-17: Setup Type window

5 The Destination Location window appears. A typical installation creates a C:\Program Files\Peregrine\ServiceCenter folder. Figure 2-18 on page 33 shows the default destination location. Click **Browse** to choose a different location. Click **Next**.
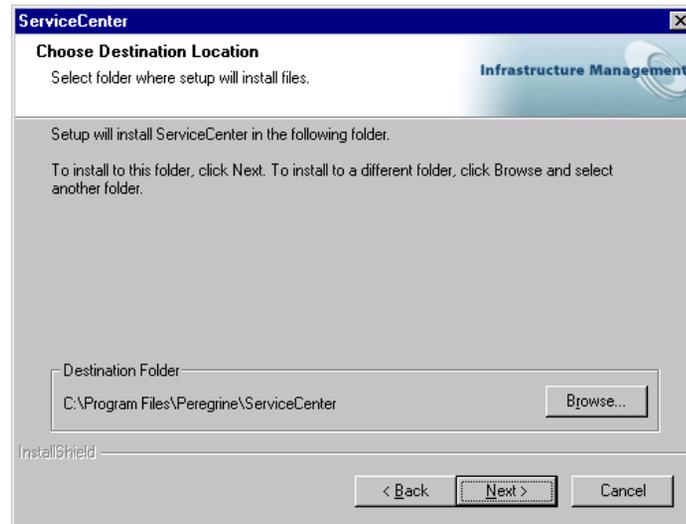
Figure 2-18: Choose Destination Location window

If you already have a ServiceCenter folder in the target location, the installation prompts you to choose a different location.

6 The Select Components window appears, as shown in Figure 2-19 on page 34. The checked components are the default selection for a custom installation. You can clear these boxes or check others to suit your configuration. As long as you install to a different directory, you can add other components or remove them as part of the maintenance process.
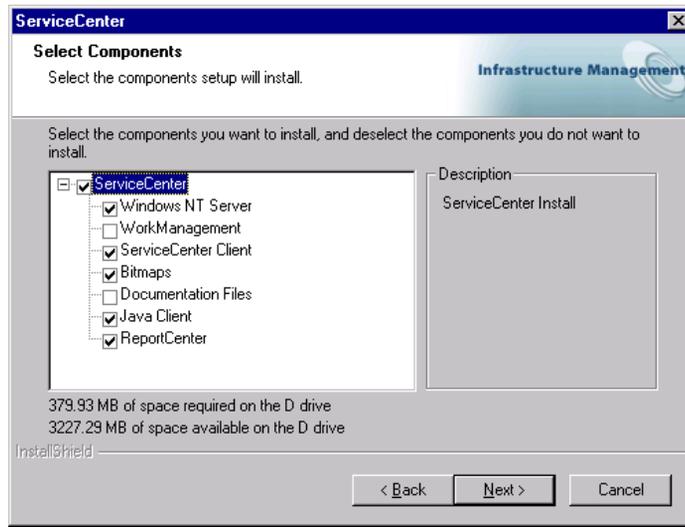
Figure 2-19: Select Components window for a typical installation

Figure 2-20 shows all boxes checked for a complete installation. When you finish selecting the components to be installed, click **Next**.
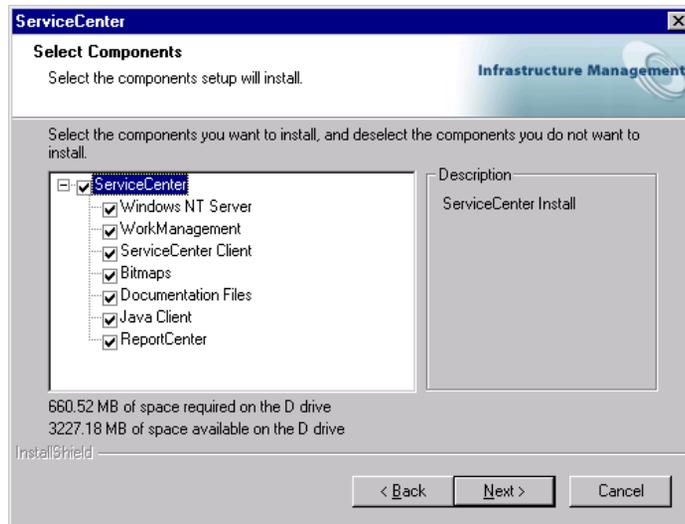
Figure 2-20: Select Components window

7 The Authorization Code window appears, as shown in Figure 2-21. Type your company name and case sensitive authorization code.

Figure 2-21: ServiceCenter Authorization Code window

It will be stored in the sc.ini file, where it can be updated later. The authorization code resides in the sc.ini file, where it can be updated later. For information about obtaining or updating your authorization code, see *Contacting Customer Support* on page 8.

Note: During the installation process, click **Back** to return to a previous window to change your input, or click **Cancel** to stop the installation.

8 Figure 2-22 on page 36 shows the License and ReadMe Information. If you scroll through this information, you can learn more about licensing, accessing the release notes, Peregine's CenterPoint Web site, and customer support information. Click **Next**.

Figure 2-22: License and ReadMe Information window

9 Figure 2-23 shows the TCP/IP Server Information window. The installation automatically detects the assigned Service ID (port number) for the workstation or server. If no port number appears, contact your system administrator to troubleshoot the TCP/IP connection. Click **Next**. The installation validates the host name before it proceeds to the next window.
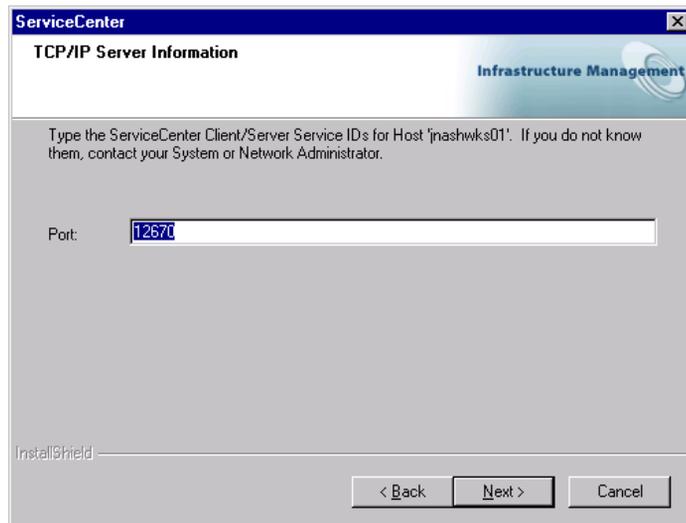
Figure 2-23: TCP/IP Server Information window

Note: Each time you install a new instance on the same workstation, you must specify a different port number for each instance.

10 Figure 2-24 shows the Java Client Option window. A standalone Java client is the default choice, or you can choose one of the other Java Client configuration options. Click **Next**. For more information about the other options, see the *Java Client Installation and Configuration Guide*.

Figure 2-24: Java Client Option window

11 Figure 2-25 shows a selected JRE in the Java Runtime Environment window.

Figure 2-25: Java Runtime Environment window

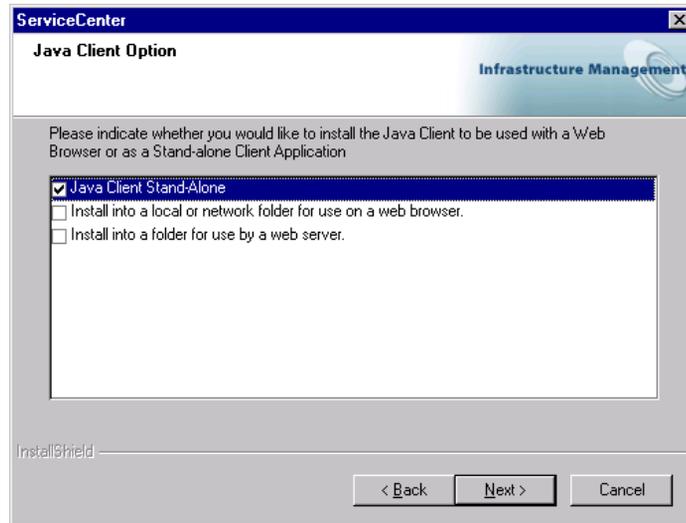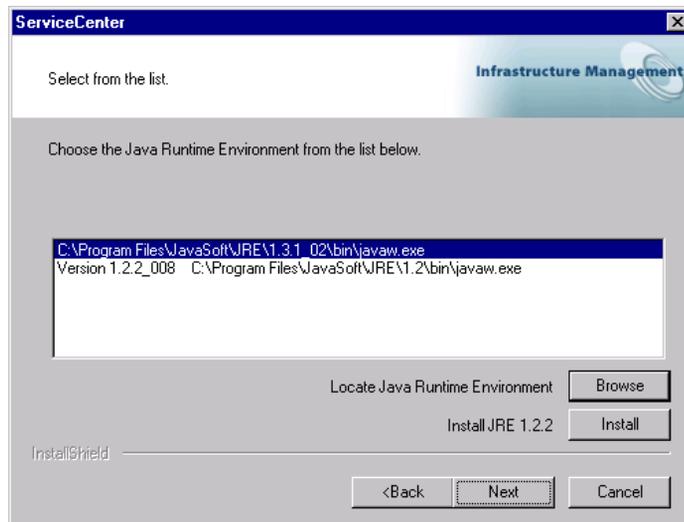The ServiceCenter Java client requires a JRE to run as a standalone application. The JRE creates a Java Virtual Machine (JVM) that this standalone application requires. If you have one or more JRE versions installed, select the one to be used with ServiceCenter from the list, or you can browse to the location of the desired JRE if it does not appear on the list.

If you do not have a JRE installed, click **Install** to use the version on the installation CD-ROM. The JRE shipped with this release is Sun's Java 2 Runtime, version 1.2.2_008. If installed, this version becomes the default JRE for the system. If you have a different version already installed, verify that the version is recommended for ServiceCenter on *Peregrine's CenterPoint Web Site* before you select it.

Whether you choose an existing JRE, or you installed the version shipped with ServiceCenter, click **Next**. For more information about Java client installation, see the *Java Client Installation and Configuration Guide*.

12 The ReportCenter Options window appears. Figure 2-26 shows the local installation of ReportCenter selected. You can also select a client-only installation. For more information about installing multiple ReportCenter instances, see *Other Installation Tasks* on page 50. Click **Next**.
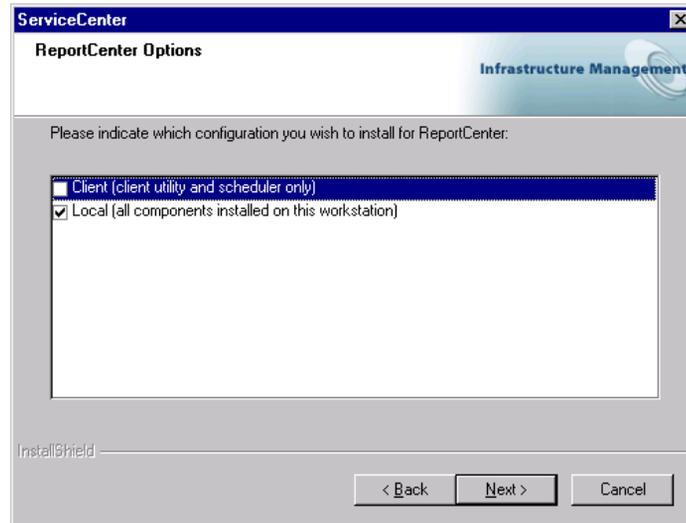
Figure 2-26: ReportCenter Options window

13 Return to the remaining steps in *A Typical Installation*, beginning with step 10 on page 25, to complete the custom installation. Depending on the selected components, you may need to restart the workstation or server when the installation is complete.

Upgrading an Installation

Choose Upgrade to migrate an earlier version of ServiceCenter components to version 5.1. However, an upgrade does not upgrade the ServiceCenter database applications or RTE files for existing installations. Older applications should run successfully with newer RTE files; however, there may be exceptions.

If you want to upgrade your ServiceCenter applications, upgrade both the RTE files and database applications. Follow the directions for an installation in this guide first, and then complete the application upgrade by following the directions in the *ServiceCenter Upgrade Utility Implementation* guide using the ServiceCenter Upgrade Utility, which is not included on the installation CD-ROM.

If you are upgrading to a different release, do an IR regen on the new server. This step is not necessary if you upgrading to different versions of the same release (for example 5.0 to 5.1).

Follow these steps to upgrade your ServiceCenter installation:

1 If the ServiceCenter server to be upgraded is running as a background task, you must stop the server before you install additional components. From the Windows **Start** menu, choose **Programs** > **Peregrine ServiceCenter** > **ServiceCenter Console**. If the stoplight is green, click **Stop**. Wait for the stoplight to turn yellow, and then red. The steps that you see here may vary, depending on the modules to be upgraded.

ServiceCenter Console	_ □ ×
The Peregrine ServiceCenter service is running	
There are 17 processes running	
Start	
Stop	Done
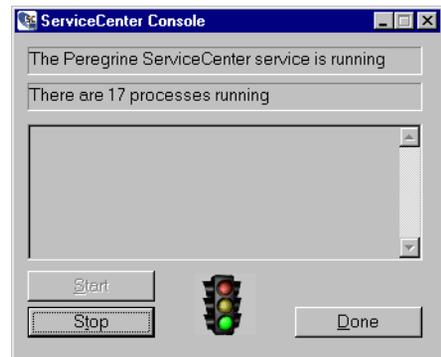
Important: If you have more than one instance of ServiceCenter 5.1 installed, each instance has its own console and set of processes. Ensure that you stop the correct set of processes for the instance of ServiceCenter that you want to upgrade.

2 Insert the ServiceCenter installation CD-ROM into the appropriate drive on your workstation or server. If autorun is enabled, the setup.exe program starts automatically. Otherwise, browse to the CD-ROM directory and double-click autorun.exe.

3 The Peregrine splash screen appears. Click **Install**.

4 The message shown in Figure 2-27 appears. Click **OK**. For more information, see *Multiple ServiceCenter Server Installations* on page 28.
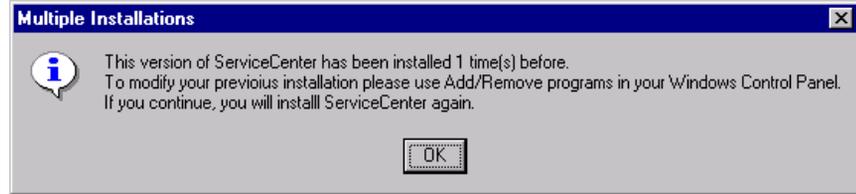

Figure 2-27: Multiple installations warning

5 InstallShield starts the setup wizard, shown in Figure 2-28. Click **Next**.

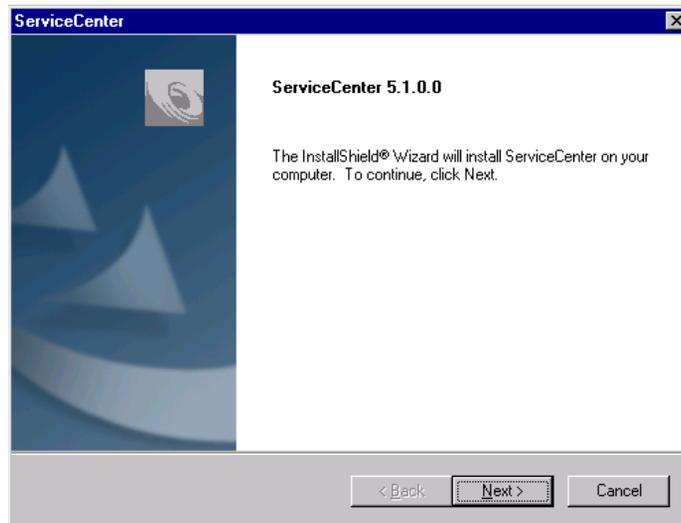**Figure 2-28: Setup wizard**

6 In the Setup Type window, shown in Figure 2-29, select **Upgrade**. Click **Next**.
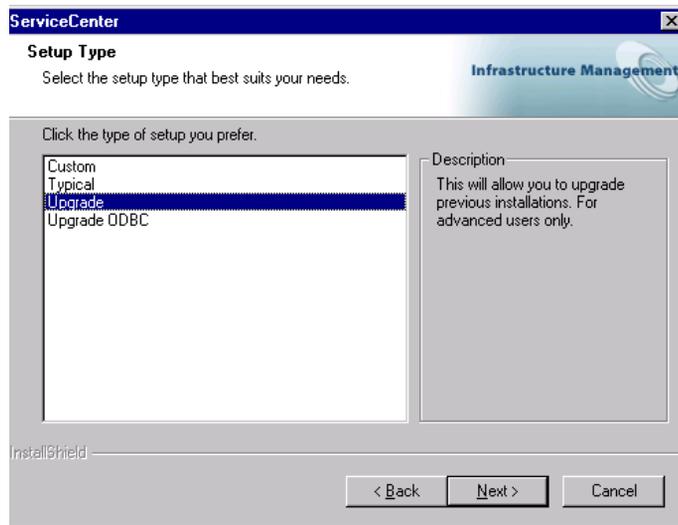

Figure 2-29: .Setup Type

7 Figure 2-30 shows the Upgrade Directory window. select **Upgrade**. Browse to the installation directory for the ServiceCenter instance to be upgraded. Click **Next**.
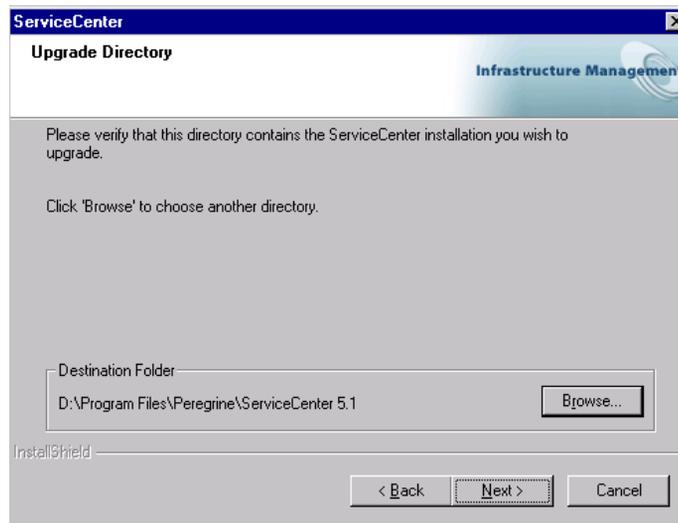

Figure 2-30: Upgrade Directory

8 The Authorization Code window appears, as shown in Figure 2-31.
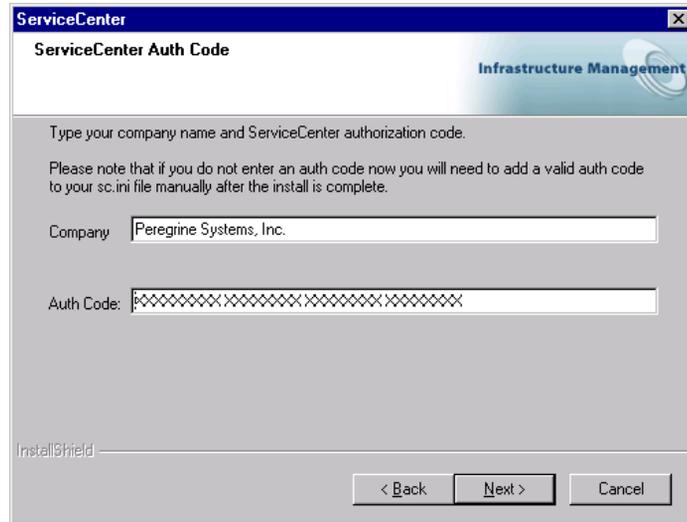
Figure 2-31: ServiceCenter Authorization Code window

Type your company name and case sensitive authorization code. Click **Next**.

The authorization code resides in the **sc**.ini file, where it can be updated later. For information about obtaining or updating your authorization code, see *Contacting Customer Support* on page 8.

Note: During the installation process, click **Back** to return to a previous window to change your input, or click **Cancel** to stop the installation.

9 Figure 2-32 on page 44 shows the License and ReadMe Information. If you scroll through this information, you can learn more about licensing, accessing the release notes, Peregine's CenterPoint Web site, and customer support information. Click **Next**.
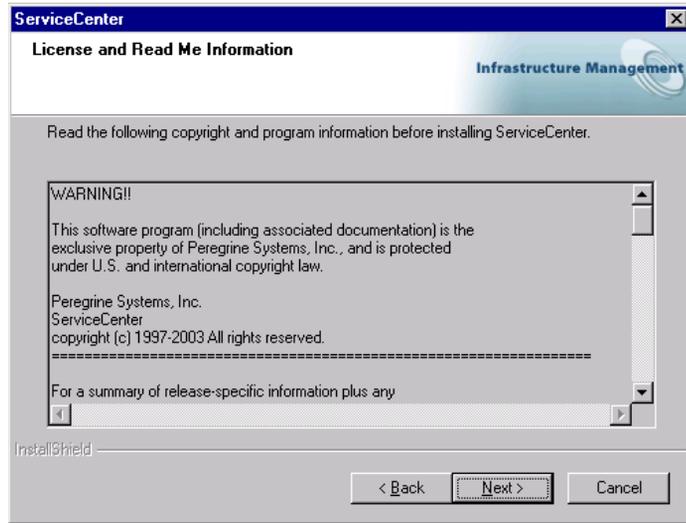
Figure 2-32: License and Readme

10 Figure 2-33 shows the TCP/IP Server Information window. The installation automatically detects the assigned Service ID (port number) for the workstation or server. If no port number appears, contact your system administrator to troubleshoot the TCP/IP connection. Click **Next**. The installation validates the host name.
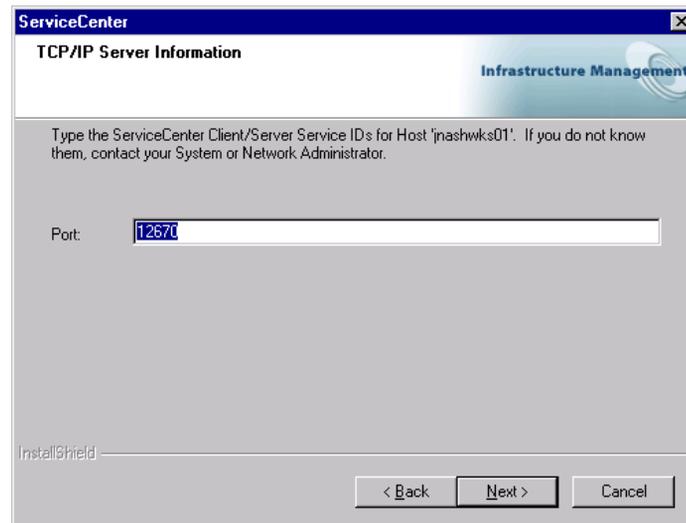
Figure 2-33: TCP/IP Server Information window

Note: The upgrade process detects the port number you specified in the original installation.

11 Figure 2-34 shows the Java Client Option window. A standalone Java client is the default choice, or you can choose one of the other Java Client configuration options. Click **Next**. For more information about the other options, see the *Java Client Installation and Configuration Guide*.

Figure 2-34: Java Client Option window

12 Figure 2-35 shows a selected JRE in the Java Runtime Environment window.

Figure 2-35: Java Runtime Environment window

The ServiceCenter Java client requires a JRE to run as a standalone application. The JRE creates a Java Virtual Machine (JVM) that this standalone application requires. If you have one or more JRE versions installed, select the one to be used with ServiceCenter from the list, or you can browse to the location of the desired JRE if it does not appear on the list.
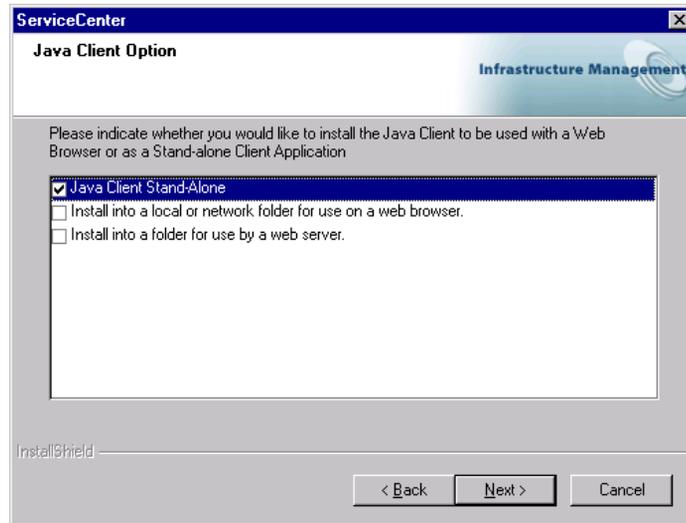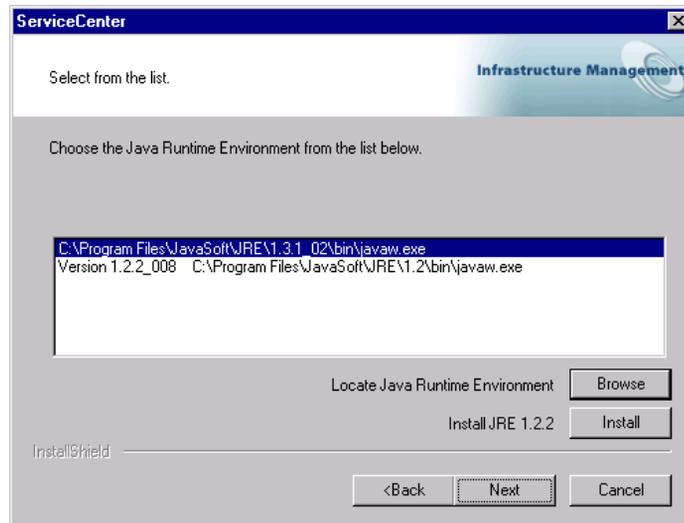
If you do not have a JRE installed, click **Install** to use the version on the installation CD-ROM. The JRE shipped with this release is Sun's Java 2 Runtime, version 1.2.2_008. If installed, this version becomes the default JRE for the system. If you have a different version already installed, verify that the version is recommended for ServiceCenter on *Peregrine's CenterPoint Web Site* before you select it.

Whether you choose an existing JRE, or you installed the version shipped with ServiceCenter, click **Next**. For more information about Java client installation, see the *Java Client Installation and Configuration Guide*.

13 The ReportCenter Options window appears. Figure 2-36 on page 47 shows the local installation of ReportCenter selected. You can also select a client-only installation. For more information about installing multiple ReportCenter instances, see *Other Installation Tasks* on page 50. Click **Next**.
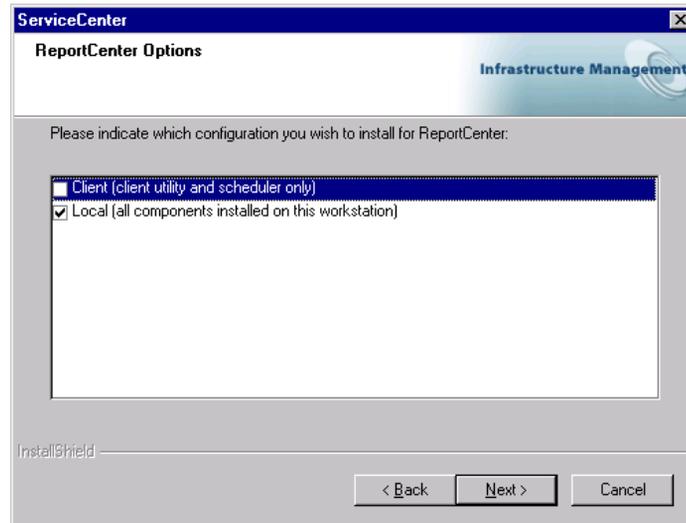
Figure 2-36: ReportCenter Options window

14 Figure 2-37 shows the Program Folder and Service Name window. Scroll
through the list to choose and existing folder, or type a folder name. Consider
matching the name you selected for the Program menu. Click **Next**.

Figure 2-37: Select Program Folder

15 The installation program has enough information to start upgrading the installed ServiceCenter components in the designated program directory. You can change these settings before the installation begins by clicking **Back** to the appropriate window where you can modify the setting values. If you are satisfied with the selections, click **Next**.

16 Figure 2-38 shows that the installation is complete. If you do not want to restart your workstation, clear the appropriate check box before you click **Finish**.
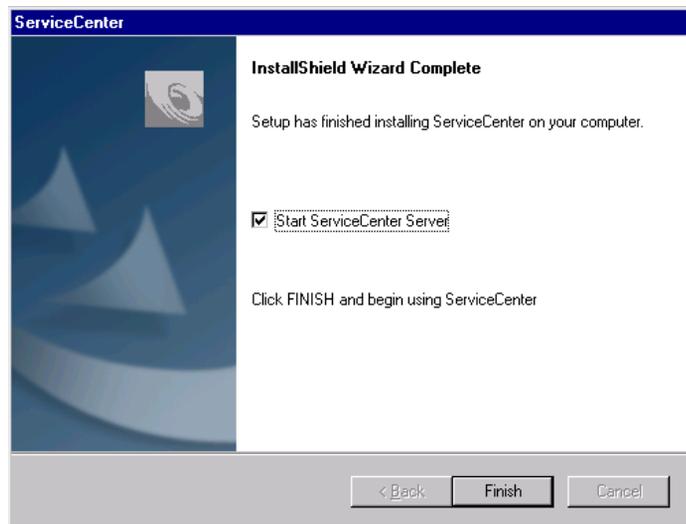
Figure 2-38: Wizard Complete

ServiceCenter Registered Location

A permanent authorization code causes the installation program to verify the IP address of the workstation or server. If you upgrade a version that is not the one in the registered location of the ServiceCenter server, only the client software installs.

Upgrading an ODBC Driver

Read this section if you want to reinstall or upgrade your ODBC driver.

1 Complete step 1 on page 19 though step 3 on page 20.

2 Choose **Upgrade ODBC** and click **Next**. Figure 2-39 shows selecting the ODBC upgrade option.

Figure 2-39: Setup Type

3 The installation prompts you to confirm the upgrade, as shown in Figure 2-40. Click **Yes** to continue.

Figure 2-40: ODBC question

4 The Setup Status window shows the upgrade progress.

5 When the Installation Wizard Complete window appears, click **Finish**.

Other Installation Tasks

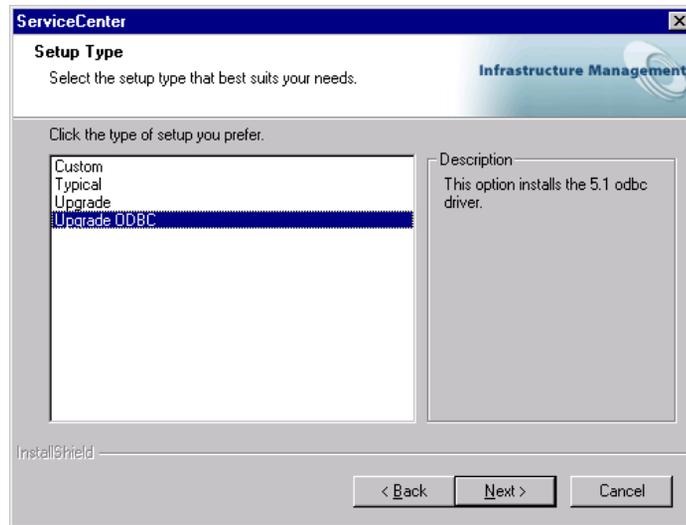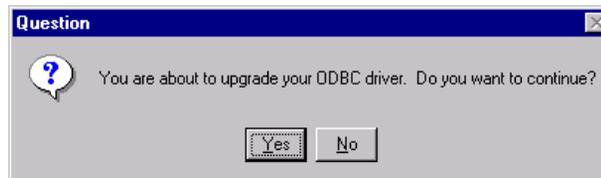You can perform general maintenance on an existing ServiceCenter installation using the Windows Add/Remove dialog box that you access through the Control Panel. There are three general maintenance tasks:

- Modify ServiceCenter by installing new components or deleting selected components.
- Repair ServiceCenter by reinstalling components.
- Remove a complete instance of ServiceCenter.

To modify, repair, or uninstall ServiceCenter:

1 If the ServiceCenter server is running as a background task, you must stop the server if you plan to modify or repair and existing installation. From the Windows **Start** menu, choose **Programs** > **Peregrine ServiceCenter** > **ServiceCenter Console**. If the stoplight is green, click **Stop**. Wait for the stoplight to turn yellow, and then red.
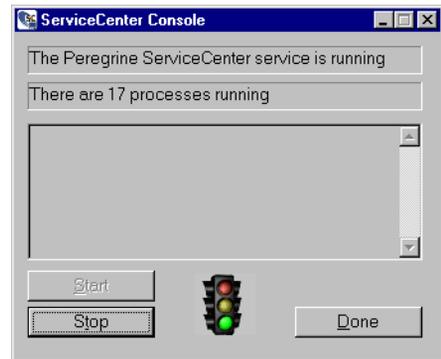
Note: Removing individual components does not automatically stop the server. The installation program stops the server only when you choose removing a complete installation.

2 From the Windows **Start** menu, select **Settings** > **Control Panel** > **Add/Remove Programs**. If you have multiple instances of ServiceCenter, they will all appear in this list. Select only the instance of ServiceCenter that you want to modify, repair or remove. Click **Add/Remove**. For Windows 2000, click **Change/Remove**. Figure 2-41 on page 51 shows ServiceCenter selected.
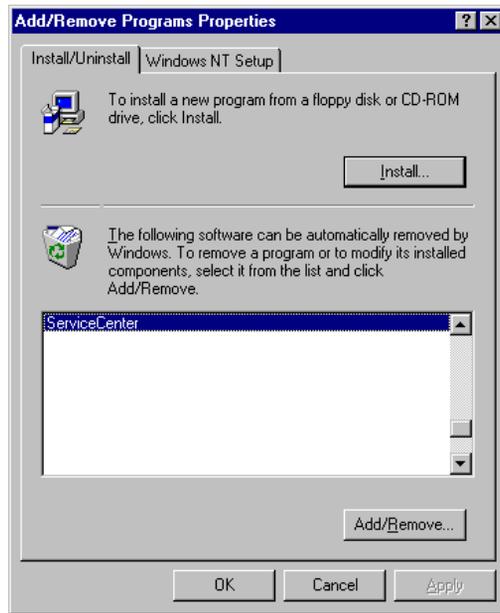
Figure 2-41: Add/Remove Programs dialog box

3 Figure 2-42 shows the Welcome (maintenance) window with Modify selected as the default action.
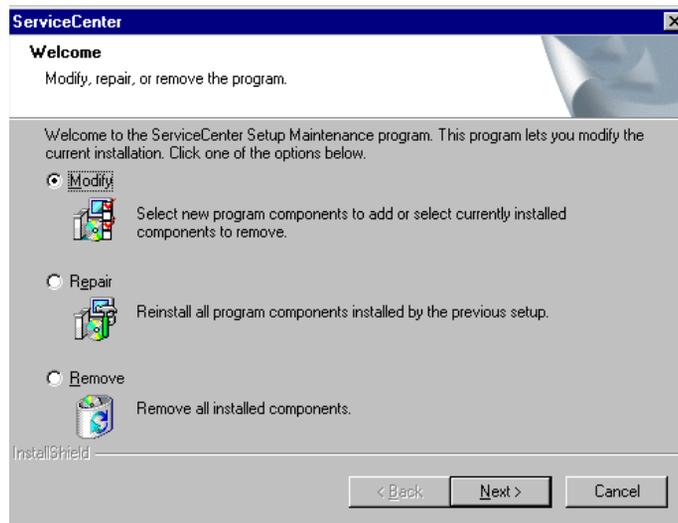
Figure 2-42: Welcome window

- To modify this instance, click Next and continue with the steps in *Modifying ServiceCenter*.
- To repair this instance, select Repair, click Next, and continue with the steps in *Repairing ServiceCenter* on page 53.
- To uninstall this instance, select Remove, click Next, and continue the steps in *Uninstalling ServiceCenter* on page 54.

Note: The Welcome window appears only to make changes to an existing ServiceCenter version 5.1 installation. If you have only earlier versions, you have only one option, which is to uninstall that earlier version.

Modifying ServiceCenter

To modify a ServiceCenter installation:

1 The Select Components window appears, as shown in Figure 2-43. Notice the existing components already checked. These are the current components installed. Check the box for each component that you want to add. The installation program installs all checked components.
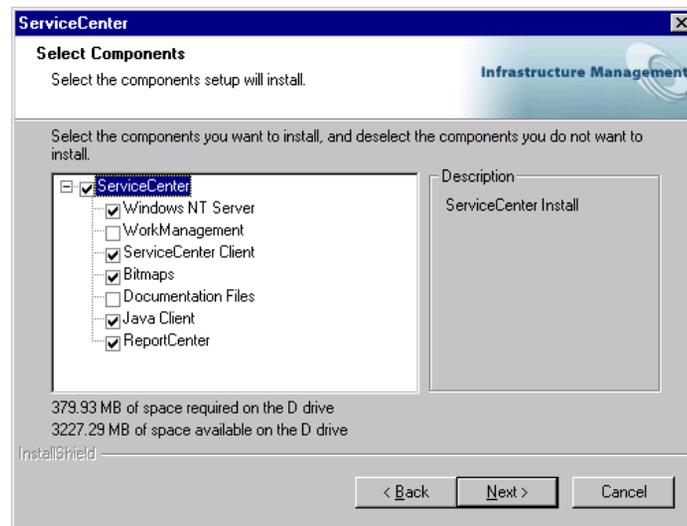
Figure 2-43: Select Components window

Figure 2-44 shows all components selected.
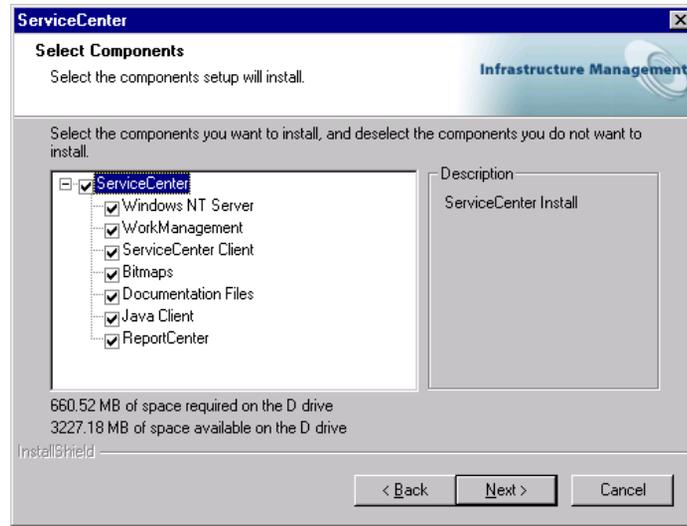
Figure 2-44: Select Components window

2 The License and Readme window appears. Click **Next**.

3 Depending on the components you choose, you may need to provide information about your TCP/IP connection described in step 9 on page 36, Java client configuration described in step 10 on page 37, or Report Center options described in step 12 on page 39.

4 Follow the remaining instructions for a Typical installation beginning at step 10 on page 25.

Repairing ServiceCenter

During the repair process:

■ The installation starts the copy files process to reinstall all your existing components for the selected instance.

■ When the InstallShield Wizard Complete window appears, you may be asked to restart the workstation or server to complete removing the ServiceCenter instance or component.

Uninstalling ServiceCenter

▶ The installation program generates a message to ensure you want to remove the identified components. Figure 2-45 shows the generated message. Click **OK** to proceed.

Figure 2-45: Confirm Uninstall message

When the InstallShield Wizard Complete window appears, you may be asked to restart the workstation or server to complete removing the ServiceCenter instance or component.

■ If you created files and stored them in the ServiceCenter directories, they may not be removed. You must remove these files manually. Click the **Details** button for more information about the files.

Customizing a ServiceCenter Installation

When your installation is complete, you can configure ServiceCenter using information in the following guides.

■ For parameters that control various features of the Service Center client and server, see the *ServiceCenter Technical Reference*.

■ For customization instructions, see the *ServiceCenter System Tailoring* guides.

■ For administration and setup information:

   ■ *ServiceCenter System Administrator's Guide*

   ■ *ServiceCenter Application Administration Guide*

   ■ *ServiceCenter Database Management and Administration* guide

3 Running ServiceCenter

CHAPTER

The information in this chapter will help you verify the ServiceCenter installation. If you did not choose the option to start ServiceCenter at the end of the installation process, this chapter describes how to run the ServiceCenter server and start the client to verify the installation. It also describes different ways to start and stop ServiceCenter and ServiceCenter schedulers.

Topics in this chapter include:

- *Starting and Stopping ServiceCenter* on page 56
- *Running ServiceCenter With a Specific User ID* on page 62
- *Starting a ServiceCenter Client* on page 64
- *Removing or Reinstalling ServiceCenter* on page 71
- *Background Schedulers for ServiceCenter* on page 66

Starting and Stopping ServiceCenter

There are three methods that you can use to start and stop the ServiceCenter server. You can start and stop ServiceCenter manually, or you can set it up to start automatically and run continuously.

Method 1: Using the Start menu to start ServiceCenter:

1 From the **Start** menu, select **Peregrine ServiceCenter**, then click **ServiceCenter Console**. The ServiceCenter Console Window appears, as shown in Figure 3-1.

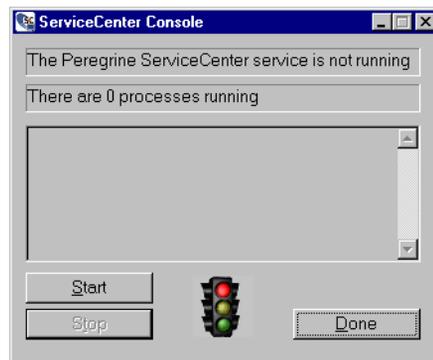**Note:** If you have a trial license, a warning message appears.

Figure 3-1: ServiceCenter Console

2 Click **Start**. When the indicator light turns to green, a message in the console dialog box shows how many processes are running. The Stop button is active.

To stop ServiceCenter:

1 From the **Start** menu, select **Peregrine ServiceCenter**, then click **ServiceCenter Console**. The ServiceCenter Console Window appears, as shown in Figure 3-2.
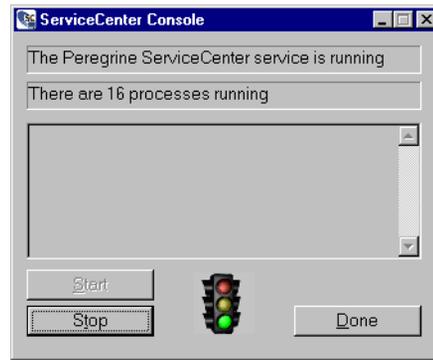
Figure 3-2: ServiceCenter Console

2 Click **Stop**. You can restart the ServiceCenter service by clicking **Start**.

> **Note:** Close the Console by clicking **Done**. If, however, you do not click **Stop** first, the ServiceCenter server continues to run.

Method 2: Using the Control Panel to start ServiceCenter:

When you install ServiceCenter, it becomes one of the registered services for that workstation or server. You can access these services through the Services option on the Control Panel. The ServiceCenter executable defined in the Services option is **scservic.exe** that resides in the RUN directory.

1 For Windows NT, from the Windows **Start** menu, select **Control Panel** > **Service**s. Double-click **Peregrine ServiceCenter**.

Figure 3-3 shows the Windows NT Control Panel.

Figure 3-3: Control Panel

2 Double-click the **Services** icon.

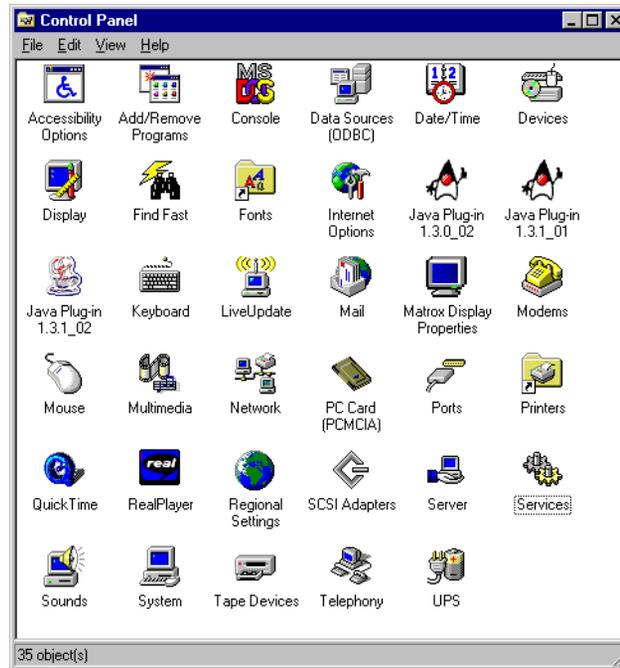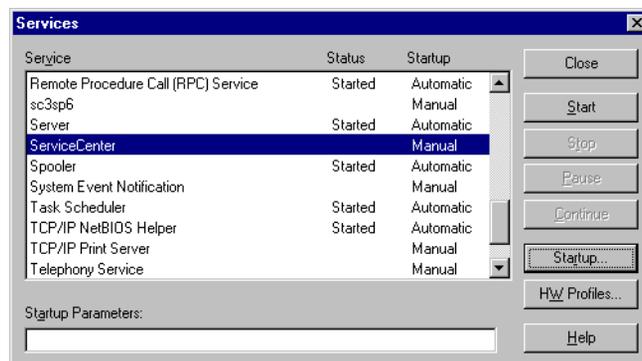The Services dialog box, shown in Figure 3-4, appears.

Figure 3-4: The Services Dialog Box

3 Select **ServiceCenter** in the Services list.

4 Click **Start**. A message appears indicating Windows NT/Windows 2000/Windows XP is attempting to Start the

Service Control	✕
⏱ Attempting to Start the Peregrine ServiceCenter service on JNASHWKS01	

ServiceCenter service on *<servername>*. When the ServiceCenter starts, the Services dialog box shows Started in the **Status** field.
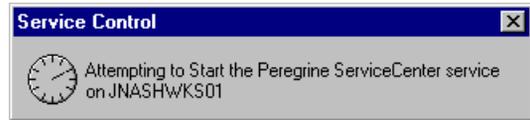
If ServiceCenter does not start, contact Peregrine Systems Customer Support. For more information, see *Contacting Customer Support* on page 8.

Important: To verify that the server is running, start a ServiceCenter client to connect to the server. There should be a client installed on the server during the server installation. See *Method 3: To start ServiceCenter automatically:*. If you want to use a client on another computer, verify that the client is installed and configured correctly.

To stop ServiceCenter:

1 For Windows NT, from the Windows **Start** menu, select the **Control Panel**.

2 Double-click the **Services** icon.

3 Select **ServiceCenter** in the Services list.

4 Click **Stop**.

Method 3: To start ServiceCenter automatically:

You can configure the ServiceCenter service to start automatically and run continuously. ServiceCenter stops only when you close it manually or shut down the workstation or server.

1 For Windows NT and 2000, from the Windows **Start** menu, select the **Control Panel**.

For Windows XP, open **Control Panel** > **Administrative Tools** > **Performance Maintenance**.

2 Double-click the **Services** icon.

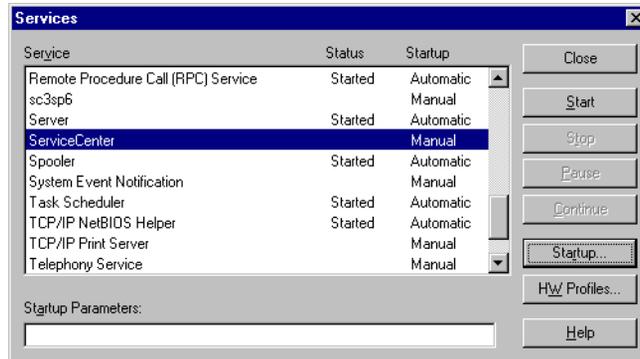Figure 3-5 shows the Services dialog box.

Figure 3-5: Services dialog box

3 Select **ServiceCenter** from the Services list.

4 Click **Startup**. A dialog box appears where you can specify the way the ServiceCenter service starts.

5 Select **Automatic**, as shown in Figure 3-6.

Figure 3-6: Service Startup dialog box

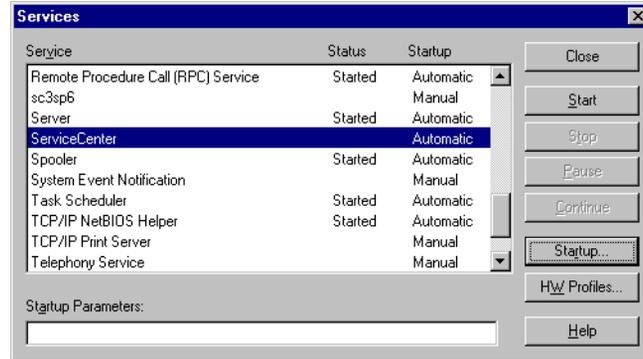**6** Click **OK**. The Services dialog box, shown in Figure 3-7, shows the startup method is now automatic.

Figure 3-7: Services dialog box

7 Click **Close** in the Services dialog box.

Windows 2000 and Windows XP

To start ServiceCenter Server:

▶ For Windows XP, from the Windows **Start** menu, select **Control Panel** > **Administrative Tools** > **Performance Maintenance**. Double-click **Peregrine ServiceCenter**.

For Windows 2000, from the Windows **Start** menu, select the **Control Panel** >**Administrative Tools** > **Services**. Double-click **Peregrine ServiceCenter**.

To stop ServiceCenter Server:

▶ For Windows XP, from the Windows **Start** menu, select **Control Panel** > **Administrative Tools** > **Performance Maintenance**.

For Windows 2000, from the Windows **Start** menu, select the **Control Panel** >**Administrative Tools** > **Services**. Double-click the service you want to modify. Click Startup Type....

Running ServiceCenter With a Specific User ID

To run ServiceCenter as a Windows NT service, you must configure the service startup information. During installation, the setup program installs the ServiceCenter service to run under the default LocalSystem user ID. That user must have the rights to log on to the MAPI profile that you created during the setup.

To set up ServiceCenter to run with a specific user ID:

1 For Windows NT and 2000, from the Windows **Start** menu, select the **Control Panel**.

For Windows XP, open **Control Panel** > **Administrative Tools** > **Performance Maintenance**.

2 Double-click the **Services** icon.

The Services dialog box, shown in Figure 3-8, appears.
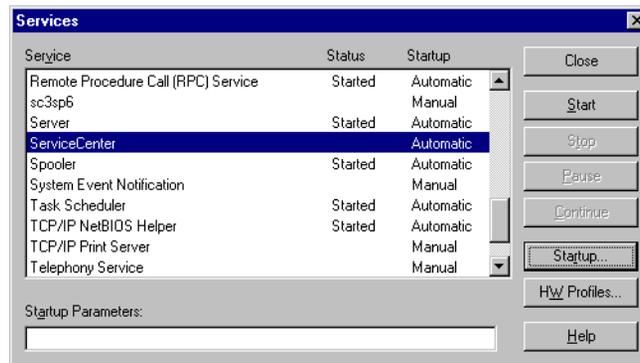
Figure 3-8: The Services dialog box

3 Select **ServiceCenter** in the Services list.

Click **Startup**. Figure 3-9 shows the Service dialog box.

Figure 3-9: The Service dialog box

4 Click **This Account**. The LocalSystem user ID appears in **This Account** text box.

5 Click **Browse** (...) to display the Add User dialog box shown in Figure 3-10.

Figure 3-10: Add User dialog box

6 Select the user's domain from the **List Names From** list box.

7 Select the user ID from the **Names** list. The selected name appears in the **Add Name** text box.

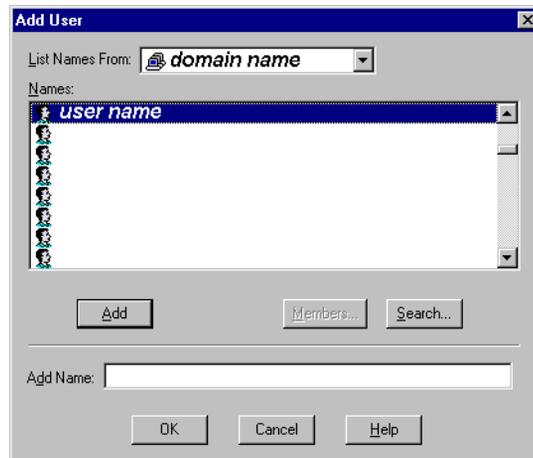**8** Click **OK**. The Windows NT Service dialog box appears. The user ID appears in **This Account**, shown in Figure 3-11.

Figure 3-11: Services dialog box

9 Type the user password in the **Password** text box.

10 Re-type the password in the **Confirm the Password** text box.

11 Click **OK**. A message confirms that the user has automatic start-up rights.

12 Click **OK** again to return to the Windows NT Services dialog box.

When you start ServiceCenter, the service now runs under the new user ID instead of the Local system user ID.

Starting a ServiceCenter Client

To start the ServiceCenter client:

1 Verify that the ServiceCenter server is running. See *Starting and Stopping ServiceCenter* on page 56 for directions.

2 From the Windows Start menu, select **Start** > **Programs** > **Peregrine ServiceCenter** > **ServiceCenter Client**.

You can create a desktop shortcut to ServiceCenter Client, or you can add this icon to the Windows StartUp program group start both server and client automatically when Windows starts.

Figure 3-12 shows the ServiceCenter login dialog box. If startup fails for any reason, check the **.log* files for error messages.

Enter login information

Name

Password

Language English

ServiceCenter®

Figure 3-12: The ServiceCenter Login dialog box

Note: If a message appears that an error occurred connecting to the server, select **Start** > **Programs** > **Peregrine ServiceCenter** > **ServiceCenter Console.** Look for this message:

The service (ServiceCenter) is running.

If the service is running and the login dialog box does not appear, contact Peregrine Systems Customer Support. For contact information see *Contacting Customer Support* on page 8.

To log in the first time:

1 Select one of the default users from the drop-down list for the **Name** field.

No password is required.

2 Select a different language (if necessary).

3 Click the Check (**OK**) button.

Figure 3-13 shows the main menu for the selected user.

Figure 3-13: ServiceCenter Main Menu

Background Schedulers for ServiceCenter

Background schedulers allow ServiceCenter to run tasks and other processes (created using RAD) without client interaction on the server. For example, you may want to schedule certain database processes, such as searching for records with pending status.

You can start background schedulers using one of these methods:

- Automatically at system startup time (specified in the ServiceCenter configuration sc.cfg file)
- Manually from the ServiceCenter system status panel
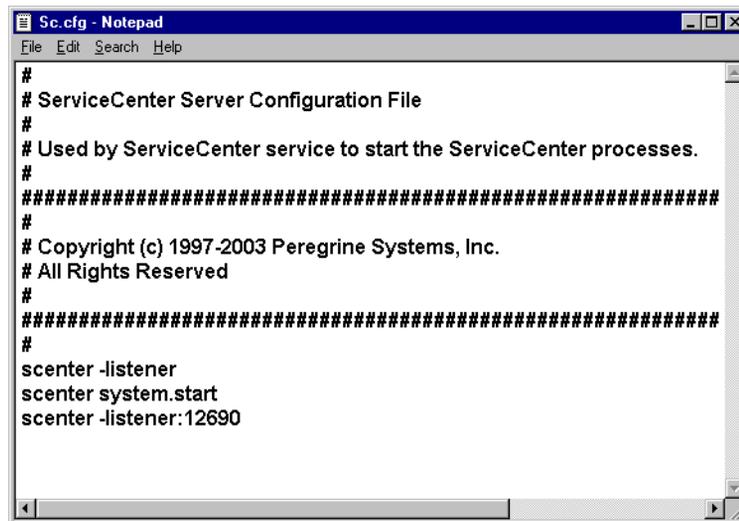
The Configuration File and Background Schedulers

Comments in the ServiceCenter configuration file (**sc.cfg**), begin with a pound sign (#). The ServiceCenter service recognizes each uncommented line as a process.

To edit the config file:

1 From the **Start** menu, Select **Peregrine ServiceCenter** > **Config File** to edit the ServiceCenter config file. The file appears in your default text editor. In this example the default editor is Windows Notepad. The config file resides in ..\..**ServiceCenter\RUN**.

The sample config files shown in Figure 3-14 shows these background schedulers:

- scenter -listener starts the local ServiceCenter server.
- scenter -listener:<service2> starts the ServiceCenter server, where *service2* is the TCP service name.
- scenter system.start starts the background schedulers.

Figure 3-14: Sc.cfg File

The sample **sc.cfg** file has process commands to start the server, the rest of the system (**system.start**), and a TCP/IP connected server (listener scenter -listener:<service2>). You can edit the config file and insert a pound sign (#) in front of any process that you want ServiceCenter to skip.

Stopping and Starting Background Schedulers

This section describes how to stop and start schedulers from the System Status window.

- A user who has system administrator authority can access the System Status form from the ServiceCenter main menu (Figure 3-13 on page 66).

Important: The command to start and stop schedulers must be issued from an Express client.

To stop schedulers from the System Status panel:

1 From the main ServiceCenter menu, click **System Status** to open the System Status window shown in Figure 3-15.

Figure 3-15: System Status window

2 Type **K** in the Command column next to the background scheduler you want to stop.

3 Press **Enter**. ServiceCenter highlights the background scheduler you want to stop.

4 Click **Execute Commands**.

The System Status window appears again with the stopped background scheduler (problem) listed.

A message in the system status tray states that the scheduler (referenced by its PID number) terminated.

To start a scheduler:

1 Click **Start Scheduler** in the System Status window shown in Figure 3-15 on page 68. Figure 3-16 shows a scheduler startup list.

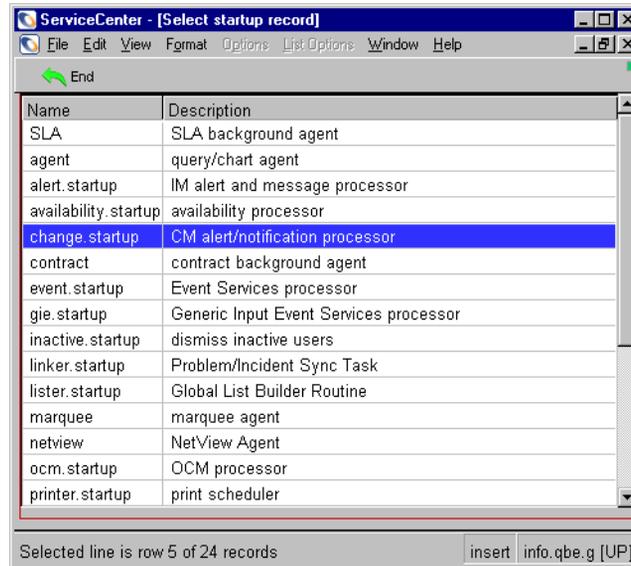**Figure 3-16: Background Schedulers startup list**

2 Double-click a background scheduler that you want to start. For example, you can select change.startup to restart the change background scheduler.

The System Status window reappears with a confirmation message in the status tray stating that the system background scheduler started.

Version Information

Windows Explorer can display version information for any ServiceCenter executable or .dll file.

To display version information from Windows Explorer:

1 Start Windows Explorer.

2 Navigate to the ServiceCenter RUN directory.

3 Right-click any executable or .dll and select **Properties**.

4 Click the **Version** tab. Version and other information appears on the tab.

To display version information from the ServiceCenter client:

1 From the **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **ServiceCenter Client**.

2 Log in following the steps in *Starting a ServiceCenter Client* on page 64. Figure 3-17 shows the client version information.

Figure 3-17: ServiceCenter console version

To display version information from the ServiceCenter server:

1 From the **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **ServiceCenter Console**.

2 Right-click the ServiceCenter Console title bar and select **About SCNTADM...** Figure 3-18 shows the console version information.

Figure 3-18: ServiceCenter console version

Removing or Reinstalling ServiceCenter

To remove a ServiceCenter instance, install a new instance, or reinstall ServiceCenter, follow the instructions in *Other Installation Tasks* on page 50.

4 SCEmail

CHAPTER

SCEmail is a ServiceCenter component that enables you to send email to external mail applications. SCEmail uses the Messaging Application Program Interface (MAPI). Microsoft Exchange, Lotus Notes, Lotus cc:Mail and other mail vendors all support this interface. You can find SCEmail in the ServiceCenter RUN directory.

Read this chapter for information about:

- *Using SCEMail* on page 74
- *Mail Profiles* on page 74
- *Sending ServiceCenter Email* on page 80
- *Lotus Notes Compatibility and Setup* on page 81

Using SCEMail

SCEmail is a Windows program, which enables you to send mail from ServiceCenter using external mail applications. Under Windows NT, SCEmail uses the Messaging Application Program Interface (MAPI). Microsoft Exchange, Lotus Notes, Lotus cc:Mail and other mail systems support this interface. SCEmail for Windows NT is a ServiceCenter adapter product.

Follow these steps to enable SCEmail:

- Set up a mail profile. For more information, see the next section, *Mail Profiles*.
- Configure SCEmail to start automatically when ServiceCenter starts. See *Configuring SCEmail to Start Automatically* on page 77.

Mail Profiles

MAPI uses the concept of a *profile*. A MAPI profile has all the information necessary to log on to a group of mail services. A profile is not the same as a user logon, and a single user may have many different entries within one MAPI profile. MAPI identifies a profile with a user-assigned name.

For example, your SCEmail profile might be named Joe. This profile contains the MS Exchange, cc:Mail, Lotus Notes, and other standard mail services logon and mailbox account information that allow you to interface with those systems. When you use SCEmail, you must log on using the SCEmail profile, not the external mail account or logon names. For this reason, you must establish a unique SCEmail profile, in addition to having a standard mail account.

Note: Give SCEmail its own MAPI profile and mailbox or mail account. You can use an existing mail account or profile, but this can cause problems in the future when you use SCEmail.

Windows NT 3.51 Restrictions

Microsoft Windows 95 and Windows NT 4.0 introduced MAPI profiles. The default Windows NT 3.51 system does not use profiles unless you install software that upgrades the MAPI system (for example, Microsoft Exchange client or Lotus cc:Mail). SCEmail does not work under Windows NT 3.51 unless MAPI support is installed.

Adding a MAPI Profile

Windows does not automatically install the necessary MAPI support files. These files install when you install a MAPI-compliant email client. You should install at least one email client before you create a MAPI profile. Windows have the Windows Messaging email client, which you can use for this purpose if no other client is available.

Before you begin:

1　Review the documentation for the email product you choose.

2　Install that MAPI compliant email client.

3　Create a trial profile.

Add a new profile for SCEmail by following these steps:

1　From the Windows **Start** menu, select **Settings** > **Control Panel**.

2　Double-click the **Mail** or **Mail and Fax** icon. Figure 4-1 on page 76 shows the MS Exchange Settings Properties dialog box.

Figure 4-1: MS Exchange Settings Properties dialog box

Note: If you do not have a mail icon, you probably have an incompatible older version of MAPI, or you did not install an email client on that workstation or server.

3 Click **Show profiles…**

4 Figure 4-2 shows the General tab. Click **Add…**

Figure 4-2: MS Exchange Settings General tab

5 The Microsoft Outlook Setup Wizard guides you through the process to configure the SCEmail profile. Begin by selecting one mail service to use with SCEmail.

6 Test this profile by logging onto it with a MAPI-compliant mail client, such as Microsoft Exchange or cc:Mail.

Configuring SCEmail to Start Automatically

SCEmail can start automatically whenever ServiceCenter starts. You must change the ServiceCenter service from a system account to a user account with an email profile.

Note: It is likely that SCEmail cannot run from the ServiceCenter **sc.cfg** configuration file under Windows. Currently, Microsoft Exchange Server is the only MAPI service provider that you can start from the configuration file. If you use Microsoft Mail, Lotus Notes, cc:Mail, or another MAPI service provider, you may be limited to starting SCEmail manually. This is a Microsoft Windows limitation. Consult Microsoft for future upgrades and patches.

To start SCEmail automatically:

1 On the ServiceCenter server, configure a user account with email privileges to be used by ServiceCenter. For assistance, contact your local system administrator.

2 From the Windows **Start** menu, select **Settings** > **Control Panel** > **Services**.
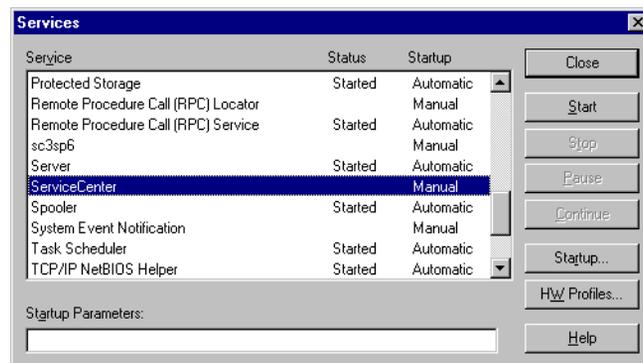

Figure 4-3: Services dialog box

3 Double-click the **ServiceCenter** service, or select it and click **Startup**. The Figure 4-4 shows the Service dialog box.
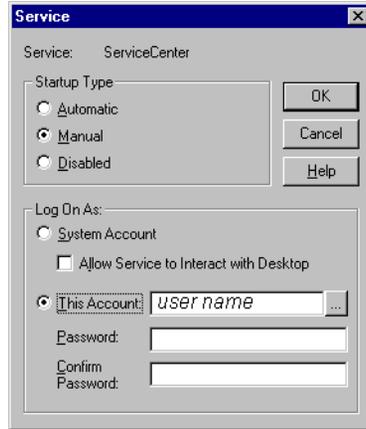

Figure 4-4: Service dialog box

4 Select **This Account**.

5 Browse (...) to the domain and add a user who has rights to start ServiceCenter. Press **Enter**.

6 If the user has a password, type the password and then type it again to confirm the password.

7 Navigate to **\\ ServiceCenter\RUN\ Sc.cfg**, in the installation directory.

8 Use any text editor to open the file and verify or add the SCEmail user profile name, as shown in Figure 4-5.
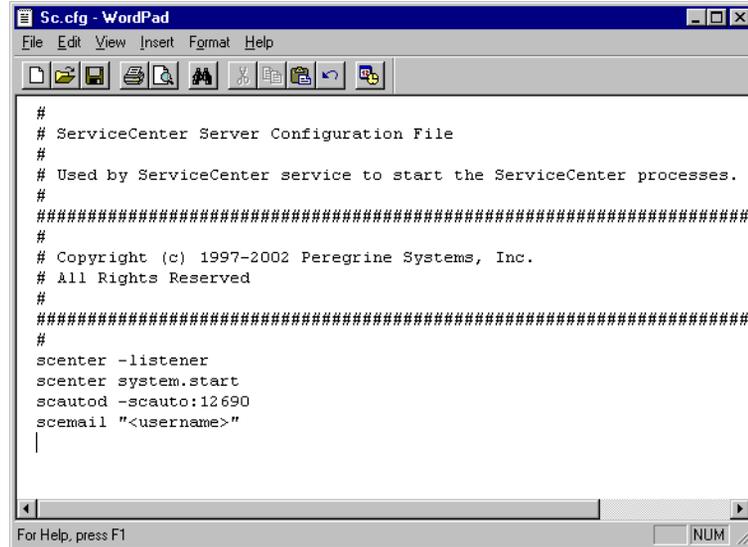
Figure 4-5: Sc.cfg file

Note: `<username>` is the SCEmail profile name created in step 1 on page 77. If the profile name includes any spaces, you *must* have double quotes around the entire name.

9 Add any optional parameters you wish to use. For more information, see *Optional Parameters* on page 81.

To check the status of SCEmail:

1 From the main ServiceCenter menu, click **System Status** to open the System Status window.

Sending ServiceCenter Email

Sending ServiceCenter mail to email users is a simple process. Your system administrator must log on and change the user's operator record to point to the external email address for that user.

To change the user's operator profile:

1 Log on to ServiceCenter with an account that has system administration authority.

2 From the main **ServiceCenter** menu, click the **Utilities** tab. Choose **Administration**. Click **Operators** in the Security section to access the operator record.

3 Type the email address for the user in the email field.

4 Save the operator record.

> **Note:** There are different syntax variations when entering your address in the operator record. Enter the name as it appears in the address book of an external mail client. You may also use SMTP style addresses:

username@host.com.

When you make these changes to the operator record, any user who can send mail can send ServiceCenter mail.

Errors and Returned Mail

Mail sent to the mail account used by SCEmail is not delivered to ServiceCenter. This includes any failed email messages that bounce because of incorrect or outdated email addresses. Peregrine Systems recommends that you should periodically use an email client to log on to the SCEmail MAPI profile to check for mail messages.

Optional Parameters

You can use the following optional parameters when starting SCEmail.

Parameter	Purpose
log *<file>*	The name of the file where messages can be logged. The default file is the ServiceCenter log file. You can specify <con> to log messages to the console.
keepmail	Do not delete mail events when they are sent successfully.
sleep *<n>*	The number of seconds to sleep between checking for events and mail. The default value is 10 seconds.
gui	Allows a pop-up dialog when SCEmail requires additional logon information. For example, there is no profile passed on the command line, or a password is required.
debug	Prints more diagnostics to the log file. This also turns on -keepmail.

Lotus Notes Compatibility and Setup

Important: SCEmail runs as a Windows service if the mail service providers are *tightly coupled*. This includes running from the ServiceCenter configuration file. Currently, the only mail service provider that does this is Microsoft Exchange Server. For other mail service providers, SCEmail needs to run on an interactive desktop.

If you are using Lotus Notes, the following restrictions apply:

- Only Lotus Notes versions 4.11 (or later releases) are supported.
  - Read the Lotus Notes installation guides for special instructions on creating a MAPI profile.
  - Install a MAPI-compliant mail client *before* you install Lotus Notes. For example, MAPI-compliant mail clients include Windows Messaging, Microsoft Exchange, or Lotus cc:Mail. This applies even if you do not intend to use these mail clients. Lotus Notes does not add MAPI support if it fails to find MAPI installed. If Lotus Notes is already installed, refer to the Lotus Notes release notes for possible workarounds.

- After setting up a Lotus Notes profile, edit the properties of the profile and select the Delivery tab. Change the selection under **Deliver new mail to the following location** to **Lotus Notes Message Store.**

- When SCEmail starts, it prompts you for a password even if you specify a password on the command line, regardless of the -**gui** parameter.

Important: Do not install Microsoft Office 97 on the workstation or server where Lotus Notes and SCEmail reside. Office 97 upgrades MAPI automatically to a version that does not work well with Lotus Notes, and may not work with other MAPI service providers. This restriction is true for Lotus Notes version 4.5a.

- If using Lotus cc:Mail, the following restrictions apply:
  - You need Lotus cc:Mail for Windows version 7 or a later release to work with MAPI. This means that you must have release 6 or DB8 post office.
  - If the cc:Mail profile has a password, cc:Mail always prompts you for a password even if you specify a password on the command line. In this case, you must pass the -**gui** flag when you start scmapi; otherwise, the session terminates with an error. You can avoid this by selecting the Remember Password check box when you log on with a normal cc:Mail client.

- Periodically check the out box of the MAPI profile for deleted messages to purge.

5 Silent Installation

CHAPTER

An InstallShield Silent installation runs automatically to install software without user intervention. With InstallShield Silent, you do not need to monitor the installation and specify preferences in the installation dialog boxes.

Read these sections for more information about:

- *The Silent Response File* on page 84
- *Using Command Line Parameters* on page 87
- *Running a Silent Installation* on page 89

The Silent Response File

A silent installation uses information in an InstallShield Silent Response (.iss) file that you would usually provide in dialog boxes if you run a normal installation. The Silent Response file is a text file with sections containing information required by InstallShield to complete the installation. This is a text file in a format similar to an initialization (.ini) file. InstallShield Silent reads the necessary input from the response file at run time instead of waiting for your individual responses.

Creating a Silent Response File Automatically

The first step is to create the Install shield Silent Response file. If you complete an installation in record mode, your choices are automatically recorded in a Setup.iss file.

To create a response file:

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

2 Click Browse to locate **Setup.exe** on the installation CD-ROM. Append the **-r** parameter to record the installation responses, as shown in Figure 5-1. Click **OK**.
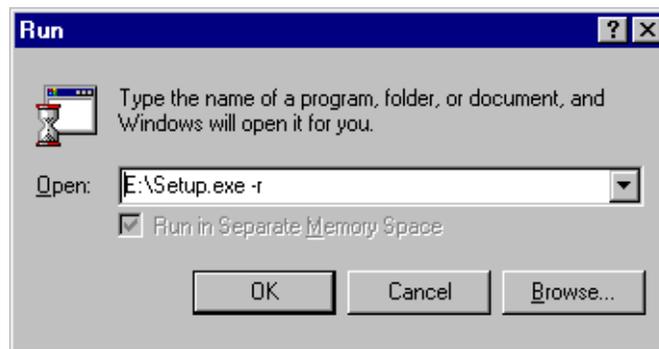
Figure 5-1: Record responses

You can also open a command prompt window, navigate to the installation directory, and type setup.exe -r, as shown in Figure 5-2.
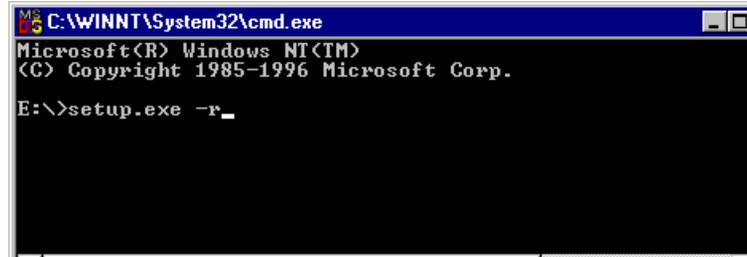

Figure 5-2: Command prompt

3 Type all responses to installation dialog boxes with the global responses that you want the silent installation to use. Figure 5-3 shows the InstallShield Wizard Complete window. Click **Finish**.
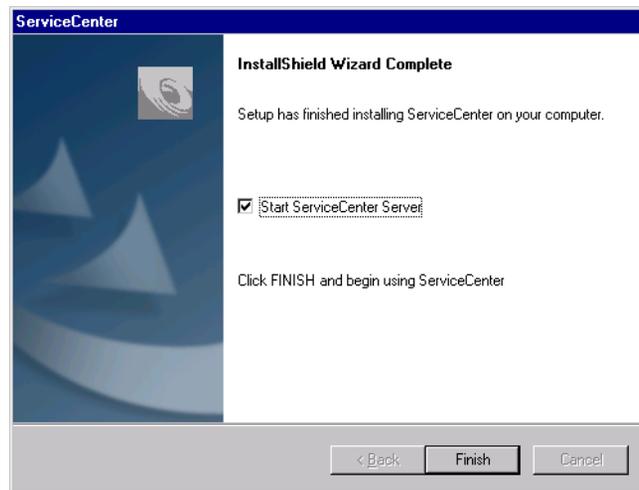

Figure 5-3: Installation Complete

InstallShield stores the setup.iss file created by the recorded installation in a root operating system directory. For example, on Windows NT, the file resides in C:\WINNT\setup.iss.

Editing a Silent Response File

All InstallShield dialog box functions write values into the Setup.iss file when InstallShield runs in record mode (Setup -r). Figure 5-4 shows the beginning of the Setup.iss file. You can edit any response text with a text editor and save it for future installations.

```
[{D4340B05-E2F7-4521-A687-35C157953E21}-DlgOrder]
Dlg0={D4340B05-E2F7-4521-A687-35C157953E21}-SdShowDlgEdit2-0
Count=9
Dlg1={D4340B05-E2F7-4521-A687-35C157953E21}-SdSetupTypeEx-0
Dlg2={D4340B05-E2F7-4521-A687-35C157953E21}-SdShowDlgEdit1-0
Dlg3={D4340B05-E2F7-4521-A687-35C157953E21}-SdAskOptionsList-0
Dlg4={D4340B05-E2F7-4521-A687-35C157953E21}-SdAskDestPath-0
Dlg5={D4340B05-E2F7-4521-A687-35C157953E21}-SdAskOptionsList-1
Dlg6={D4340B05-E2F7-4521-A687-35C157953E21}-SdSelectFolder-0
Dlg7={D4340B05-E2F7-4521-A687-35C157953E21}-SdStartCopy-0
Dlg8={D4340B05-E2F7-4521-A687-35C157953E21}-SdFinish-0
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdShowDlgEdit2-0]
szEdit1=Peregrine Systems
szEdit2=[your authorization code]
Result=1
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdSetupTypeEx-0]
Result=Typical
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdShowDlgEdit1-0]
szEdit1=12670
Result=1
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdAskOptionsList-0]
Component-type=string
Component-count=1
Component-0=ServiceCenter\JavaClient\StandAlone
Result=1
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdAskDestPath-0]
szDir=C:\Program Files\Peregrine\ServiceCenter
Result=1
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdAskOptionsList-1]
Component-type=string
Component-count=1
Component-0=ServiceCenter\ReportCenter\Local
Result=1
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdSelectFolder-0]
szFolder=Peregrine ServiceCenter (5.1)
Result=1
[{D4340B05-E2F7-4521-A687-35C157953E21}-SdStartCopy-0]
Result=1
[Application]
Name=ServiceCenter
Version=5.1
Company=Peregrine Systems
Lang=0009
```

Figure 5-4: Setup.iss file

Advanced Users

If you are creating custom dialogs, you must call **SdMakeName** and **SilentWriteData** to add sections and dialog data to the response file when setup runs in record mode. Refer to the Sd dialogs source code in the **<InstallShield location>\Include** folder for examples of using these functions to write to **Setup.iss**.

Consult the InstallShield documentation for more information about what to add to **Setup.iss** when calling **SdMakeName** and **SilentWriteData**. For instructions about how to create a Silent Response file manually, you must consult the InstallShield documentation. For more information, visit *http://www.installshield.com*.

Using Command Line Parameters

Setup.exe is the main InstallShield executable; it performs setup initialization and launches the appropriate InstallShield engine file (**_instxxx.ex_**) to execute the setup script (**Setup.exe**) on the target system. You can rename the program file and distribute it freely with its new name. Use these notes when you run a silent installation:

Command Line Parameter Rules

Setup.exe has optional command line parameters represented as switches. Follow these syntax rules:

- A slash (**/**) or a dash (**-**) must precede the command line parameters.
- Separate multiple command line parameters with a space.
- Do not put a space inside a command line parameter. For example, **-r-fInstall.exe** is valid, but **-r-f Install.exe** is invalid.
- If you use long path and file name expressions with switches, enclose the expressions in double quotation marks to ensure that spaces within the quotation marks are not treated as command line delimiters.
- The command line parameters described in the following table are InstallShield parameters. If you redefine these command line parameters, errors may occur.
- You must define custom command line parameters before you specify the InstallShield parameters.

- Command line parameters are not case sensitive; you can use uppercase or lower case letters. The exception is -**SMS**.

- If you omit the -**f1** switch when you run the silent installation, Setup looks for the response file **Setup.iss** in the same folder as **Setup.exe**. One technique is to copy all ServiceCenter installation files from the CD-ROM into a local directory, then use it as the base silent installation directory. For example, create a new directory, **C:\SilentInstallation**, where you can copy all the ServiceCenter installation files, add the silent installation response file, and keep the log file.

- If you omit the -**f2** switch, the log file has the default name **Setup.log**. When the silent installation runs, **Setup.log** appears in the same folder as the response file.

- If you specify an alternate compiled script using the -**f** switch, always use the -**f** switch before specifying an -**f1** or -**f2** switch.

- Ensure that **Data1.cab** and **Data2.cab** are in the same folder as the installation script. For example, if **Setup.exe** resides in the **C:\Silent Installation**, then **Data1.cab** and **Data2.cab** must also reside in **C:\Silent Installation**.

- You can pass command line parameters directly to **Setup.exe**, or you can insert the command line parameters in **Setup.ini**.

Parameter Syntax	Description
-f<path\CompiledScript>	Specifies the alternate compiled script. Unless the compiled script (.exe file) also resides in the same directory as of **Setup.exe**, you must specify the full path to the compiled script. For example, setup -fTest.exe launches a setup using **Test.exe** instead of Setup.exe.
-f1<path\ResponseFile>	Specifies the alternate location and name of the response file (.**iss** file). If you use this option when running a silent installation, it reads the response file from the folder or file specified by <path\ResponseFile>. If you specify an alternate compiled script using the -**f** switch, the -**f1** switch must follow the -f switch.

Parameter Syntax	Description
-f2<path\LogFile>	Specifies the alternate location and name of the log file created by InstallShield Silent. By default, Setup.log log file resides in the same directory as that of Setup.exe. If you specify an alternate compiled script using the -f switch, the -f2 switch entry must follow the -f switch entry.
-d	Runs setup in debug mode. The -d switch also includes a <pathonly> option to specify the path of the Setup.rul file. For more information, see the Visual Debugger help file.
-m<filename>	Generates a Management Information Format (.mif) file automatically at the end of the installation. Do not include a path. The silent installation stores the .mif file in the same folder as setup.exe. <filename> is optional. If you do not specify a file name, the generated file name is Status.mif.
-m1<serial number>	Inserts the specified serial number in the generated .mif file.
-m2<locale string>	Specifies a locale in the .mif file. English (ENU) is the default locale. For more information about locale strings, see the Microsoft documentation.
-r	Generate a silent installation file (.iss file), which records the installation input in the same folder as setup.exe.
-s	Runs a silent installation.
-SMS	Prevents a network connection and the Setup.exe file from closing before the installation is complete. This switch works with installations originating from a Windows NT server over a network. SMS s a case-sensitive switch; use uppercase only.

Running a Silent Installation

After you create the response file, you are ready to run the silent installation. When you install in silent mode, no messages appear. Instead, a log file named Setup.log captures installation information, including whether the installation was successful. You can review the log file to determine the result of the installation.

To run a silent installation:

▶ Launch InstallShield Silent with the Setup.exe -s command line parameter.

Use the -f1 and -f2 switches to specify the name and location of the response file and the location of the log file. For more information, see *Command Line Examples* on page 92.

Setup.log is the default name of the silent installation log file. Its default location is the installation folder. To verify the success of the silent installation, look at the ResultCode value in the [ResponseResult] section of Setup.log. InstallShield writes an appropriate return value after the ResultCode keyname.

If you install from CD-ROM, you can specify a different name and location for Setup.log using the -f2 switch with Setup.exe.

The Setup.log File

The Setup.log file contains three sections:

- The first section, [InstallShield Silent], identifies the version of InstallShield Silent used in the silent installation. It also identifies the file as a log file.
- The second section, [Application], identifies the installed application's name and version, and the company name.
- The third section, [ResponseResult], contains a numeric return code that indicates whether the silent installation is successful.

InstallShield inserts one of the following return codes after the ResultCode identifier.

Result Code	Definition
0	Success
-1	General error.
-2	Invalid mode.
-3	Required data not found in the Setup.iss file.
-4	Not enough memory available.
-5	File does not exist.
-6	Cannot write to the response file.

Result Code	Definition
-7	Unable to write to the log file.
-8	Invalid path to the InstallShield Silent response file.
-9	Not a valid list type (string or number).
-10	Data type is invalid.
-11	Unknown error during setup.
-12	Dialogs are out of order.
-51	Cannot create the specified folder.
-52	Cannot access the specified file or folder.
co-5	Invalid option selected.

Setup.log example

Figure 5-5 shows a sample Setup.log file with a result code of 0, which indicates a successful silent installation.
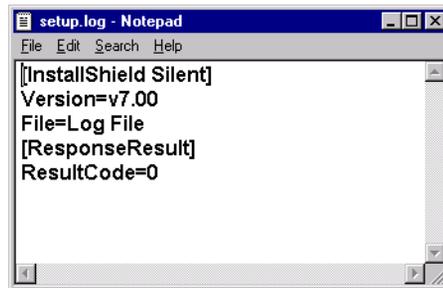
Figure 5-5: Setup.log file

Command Line Examples

The following examples show how to use **Setup.exe and** the command line switches **-s, -d, -f, -f1,** and **-f2.**

Command Line	Result
setup	Launches Setup.exe and loads Setup.inx from the same directory that contains Setup.exe.
setup -s	Launches InstallShield Silent and tries to load Setup.exe and Setup.iss from the folder containing Setup.exe. The log file Setup.log is created in the same folder.
setup -fC:\Mydir\Test.exe	Launches Setup.exe and loads Test.exe from the C:\Mydir folder.
setup -fTest.exe	Launches Setup.exe and tries to load Test.exe from the same directory that contains Setup.exe.
setup -d	Launches the InstallShield Visual Debugger and loads Setup.exe.
setup -dC:\Mydir\Test	Launches the InstallShield Visual Debugger, loads Setup.exe, and looks for the Setup.rul file in the C:\Mydir\Test folder.
setup -d -fC:\Mydir\Test.exe	
	Launches the InstallShield Visual Debugger and loads **Test.exe** from the C:\Mydir folder.
setup -s -f1C:\Mydir\Mydir.iss	
	Launches the silent installation, loads Setup.exe from the same folder, and uses Mydir.iss (from the C:\Mydir folder) as the response file. Also creates the log file Setup.log in the folder that contains the response file (C:\Mydir). If you specify an alternate installation script using the -f switch and insert the -f1 before -f in the command line, the Setup file ignores the -f1 switch and creates the response file (the .iss file) in the default Windows folder. For example, the default Windows folder on a Windows NT operating system is C:\Winnt.
setup -s -f1C:\Mydir\Mydir.iss -fC:\Mydir\Mydir.exe	

Command Line	Result
	Does not launch a silent installation because the -f1 switch appears before the -f switch. Therefore, it ignores the -f1 switch. No log file is generated. However, the -fC:\Mydir\Mydir.exe part of the command line does execute.
setup -s -fC:\Mydir\Mydir.exe -f1C:\Mydir\Mydir.iss	
	Launches a silent installation, loads Mydir.exe from the C:\Mydir folder, uses Mydir.iss from the C:\Mydir folder, and generates the log file Setup.log in the C:\Mydir folder.
setup -s -fC:\Mydir\Mydir.exe -f1C:\Mydir\Mydir.iss -f2C:\Mydir\Mydir.logxo	
	Launches a silent installation, loads Mydir.exe from the C:\Mydir folder, uses Mydir.iss from the C:\Mydir folder, and generates the log file Mydir.log in the C:\Mydir folder.

A Supplemental Information

APPENDIX

This appendix has supplemental information for system administrators to install and run ServiceCenter.

Read this chapter for information about:

- *The Directory Structure* on page 96
- *The ServiceCenter Program Group* on page 96
- *Updating the Initialization File* on page 102
- *Using TCP/IP* on page 105
- *Using Other Databases* on page 109

The Directory Structure

The installation creates the following subdirectories in the main Service Center directory. You must complete a custom installation to install the browser-based documentation and Work Management.

Directory	Contents
Bitmaps	Bitmaps for the client
Data	ServiceCenter database (application) files
Docs	ServiceCenter guides in HTML format (open doc_index.html first)
Java	Java client files
K_paks	Knowledge Packs files
Rptctr	Report Center files
Run	.exe files, .dll files, and scripts to start, stop, and administer ServiceCenter
WorkMan	Work Management files

The ServiceCenter Program Group

The installation program creates a program group for ServiceCenter that appears on the Windows **Start** > **Programs** menu. The program group name is Peregrine ServiceCenter by default; however, you can assign a unique name during installation. The program group contains the following files and programs.

File or program	ServiceCenter function
Config File	Contains information for the ServiceCenter client and server startup. It is not necessary to modify the file to begin using ServiceCenter. This file resides in the \\ServiceCenter\RUN directory.
Hosts File	Identifies devices and their IP addresses. This is a Windows system configuration file, not a ServiceCenter file, that resides in the \\WINNT\system32\drivers\etc directory.

File or program	ServiceCenter function
Init File	Contains initialization parameters, such as the authorization code and required paths, and configuration information for the ServiceCenter server and support programs. This file resides in the \\ServiceCenter\RUN directory.
Java Client	Shortcut to run the Java Client.
Java Client Log File	The first time you select Start > Programs > Peregrine ServiceCenter > Java Client Log File, a prompt appears to create the scj.log file. The default location for this file is in the \\WINNT\Profiles*username* directory.
Log File	ServiceCenter server creates **sc.log** the first time you run the service. The log records service events, background schedulers, and errors by date and time. The log also contains version and build number information. This file resides in the *ProgramFiles\ServiceCenter* directory.
Peregrine Online!	Shortcut to the Peregrine Systems web site: *http://www.peregrine.com*
ReportCenter Administrator	Shortcut to ReportCenter Administrator.
ReportCenter Client	Shortcut to ReportCenter Client.
ReportCenter Scheduler	Shortcut to ReportCenter Scheduler.
ServiceCenter Client	Shortcut to ServiceCenter Client.
ServiceCenter Console	Shortcut to ServiceCenter Console.

File or program	ServiceCenter function
Services File	Identifies Windows services available on your network. This is a Windows network configuration file, not a ServiceCenter file, that resides in the \\WINNT\system32\drivers\etc directory.
Work Management	Shortcut to Work Management.
Work Management Help	Shortcut to Work Management Help system.

Protecting Internal ServiceCenter Resources

ServiceCenter uses various internal resources such as mutexes (mutual exclusion locks), semaphores that provide the status of a common resource, events, file mapping, and shared memory. ServiceCenter processes use all these resources to communicate with each other. It queues the processes to make sure that no two processes update a specific record at the same time. Windows assigns a Discretionary Access Control List (DACL) that defines which user or process has a specific access to a shared resource.

By default, ServiceCenter grants full access for all its internal resources to two predefined Windows Groups: NT AUTHORITY\SYSTEM and NT AUTHORITY\Authenticated Users to provide full access to all ServiceCenter resources.

However, a more restrictive policy might be desired. To limit full access to the ServiceCenter resources, you must use the ServiceCenter parameter ntsecuritygroup:<Group-Name>. When you specify this parameter and refer to a valid Windows User Group, ServiceCenter creates a different DACL granting full access to the following groups: NT AUTHORITY\SYSTEM, BUILTIN\Administrators and the group named in the ntsecuritygroup parameter. If a user tries to run a ServiceCenter process, such as scdbutil or scenter -startlogging, but is not member of a group with access permission, the process fails and a message appears in the sc.log file:

4011 01/01/2002 17:59:15 Process is not member of the Windows Group 'SC Group' and is not authorized to run.

Warning: If you set up a ServiceCenter service to run under another user account, include that user account in the group ntsecuritygroup. Otherwise, the service will fail and generate an error message. If your service runs as LocalSystem, it is a member of the BUILTIN\Administrators group automatically.

Note: This affects only processes running on the ServiceCenter server. It does not impact users who connect to a ServiceCenter server through a client. However, the TCP/IP listeners that usually start from the Windows console or the ServiceCenter service must be authorized.This means that the service itself must be authorized. When a regular user logs in to ServiceCenter, the TCP/IP listener starts a new scenter process. For Windows, the scenter process runs under the same user as the ServiceCenter service.

To create a new user group on Windows NT:

1 From the Windows **Start** menu, select **Programs** > **Administrative Tools (Common)** > **User Manager**.

2 From the **User** menu, select **New Local Group**. Figure A-1 shows the New Local Group dialog box.
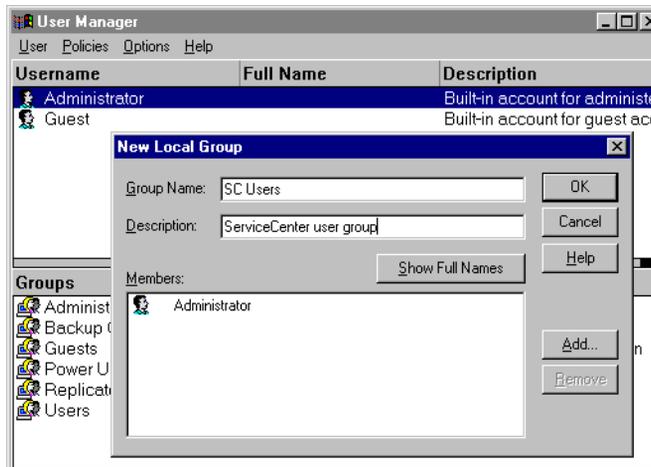
Figure A-1: Creating a New Local Group

3 Specify the new group name and a short description.

4 Click **Add**. A new window lists all users and groups.
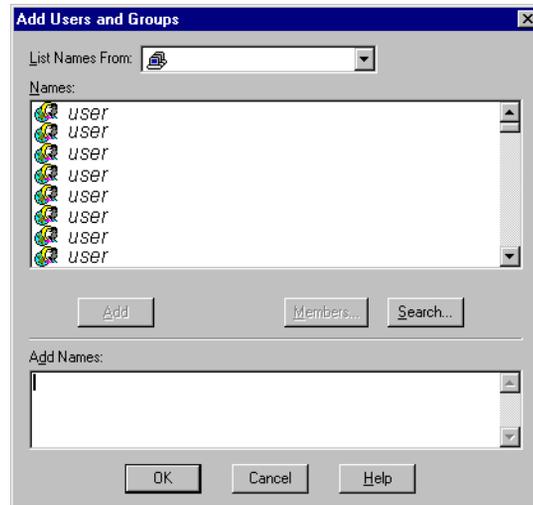
Figure A-2: Add Users and Groups dialog box

5 Select each user or group and click **Add** to create a new group authorized to run ServiceCenter.

6 Click **OK** when the list is complete.

7 Click **OK** to create the new group.

You can change the group's members at any time.

To create a new user group on Windows 2000:

1 From the Windows **Start** menu, select **Settings** > **Control Panel** > **Administrative Tools** > **Computer Management**.

2 Select **Computer Management** (**Local**) > **System Tools** > **Local Users and Groups** > **Groups**.

3 From the **Action** menu, select **New Group**.

A new dialog box appears.

4 Specify the new group name and a short description.

5 Click **Add**.

A new window appears showing all available users and groups.

6 Select each user or group and click **Add** to create a new group authorized to run ServiceCenter.

7 Click **OK** when the list is complete.

8 Click **Create** to create the new group. The window resets. You can create another group or click **Cancel** to exit. You can change the group's members at any time.

Updating the Initialization File

If you completed a typical installation, it is not necessary to modify the sc.ini file. However, there are some modifications that you may require for your environment. You can edit sc.ini to add or change startup parameters. Read the following sections for information about:

- *Updating the ServiceCenter Authorization Code* on page 102
- *Adding a Named Users File* on page 103
- *Changing the Default Language* on page 104
- *Server Host and Services Files* on page 105
- *Changing the System Parameter* on page 108

Updating the ServiceCenter Authorization Code

You must have a valid authorization code to run ServiceCenter. The installation program requires an authorization code to complete the installation successfully. If you are running a trial, the authorization code is temporary. You will receive a permanent authorization code when you purchase the product. Enter your new authorization code by editing the sc.ini file. If you do not have your authorization code, contact your Peregrine Systems, Inc. Account Executive.

To change the ServiceCenter authorization code:

1 From the Windows **Start** menu, select **Programs** >
Peregrine ServiceCenter > **Init File**. Your default text editor opens
\\Peregrine\ServiceCenter\RUN\sc.ini.

2 At the auth parameter, type the authorization code supplied by your Peregrine Systems, Inc. Account Executive. Figure A-3 shows a typical sc.ini file and the authorization code entry.
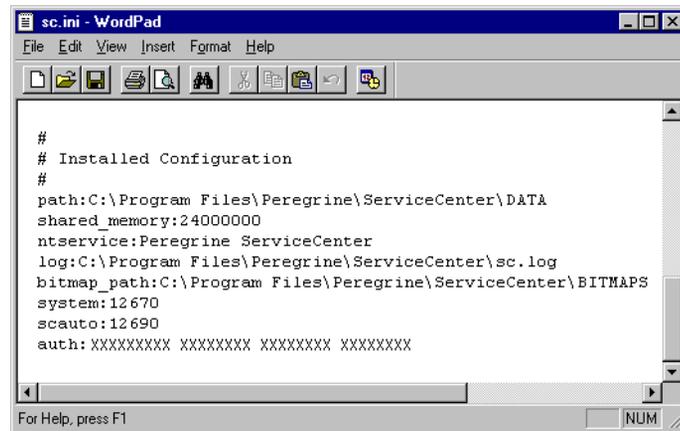
Figure A-3: Authorization code

3 If you have a Named Users License, you must select Named users. (If you are running with a Floating Users License, skip to step 4.)

Flag the user's operator record as described in the *Named Users* section of the *System Administrator's Guide*, or you can add the namedusersfile parameter. Add the namedusersfile parameter in this format:

> namedusersfile:*<filename>*

> where *filename* identifies the text file listing the ServiceCenter operators. If this file is not in the ServiceCenter RUN directory, specify the fully qualified path with the file name.

4 Save the changes and close the file.

Adding a Named Users File

Important: If you run ServiceCenter with a Named Users license, when you switch from a temporary to a permanent license, you must select named users.

Choose one of these methods to specify named users:

- Add a flag to each user's operator record.

- Create a named users file and add the `namedusersfile` parameter to the `sc.ini` file.

To add the namedusersfile parameter:

1 Create a namedusers file that lists the ServiceCenter operators. This text file should reside in `\\Peregrine\ServiceCenter\RUN`.

2 From the Windows **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **Init File**. Your default text editor opens `\\Peregrine\ServiceCenter\RUN\sc.ini`. For an example of this file, see Figure A-3 on page 103.

3 Add the `namedusersfile` parameter:

> `namedusersfile:<filename>`

where *filename* identifies the text file listing the ServiceCenter operators. If this file is not in the ServiceCenter `RUN` directory, specify the fully qualified path with the file name.

4 Save the changes and close the file.

If you run ServiceCenter with a Floating Users License, you do not need the `namedusers` file and the `namedusersfile` parameter in the `sc.ini` file. For a complete description of `namedusersfile and all other sc`.ini file parameters, see the *ServiceCenter Technical Reference*.

Changing the Default Language

The default language upon installation is English. For a complete description of the `language` parameter and supported languages, see the *ServiceCenter Technical Reference*.

To change the default language:

1 From the Windows **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **Init File**. Your default text editor opens `\\Peregrine\ServiceCenter\RUN\sc.ini`. For an example of this file, see Figure A-3 on page 103.

2 At the `language` parameter, delete English.

3 Type `language:xxx` for the parameter, where xxx is the new language code.

4 Save the changes and close the file.

Using TCP/IP

ServiceCenter supports TCP/IP for client/server communication. The ServiceCenter server becomes available to the network at startup using a TCP/IP service name. The server system parameter specifies the service name. Figure A-4 shows a typical ServiceCenter client/server configuration.

Client   **Server**

hostname = myclient   **hostname = *hostserver***

host = hostserver   **service = *scprod***
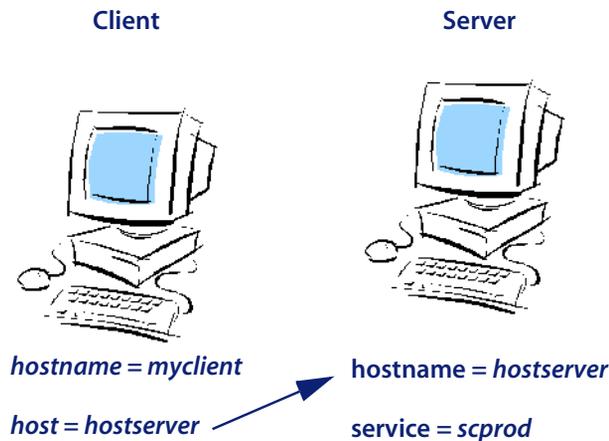
Figure A-4: TCP/IP Communication

The ServiceCenter server has a host name of hostserver. The service name for the server is scprod, which you must specify with a service parameter. The client has a host name of *myclient.* It communicates with this server by specifying the hostname *hostserver* and the service name *scprod*.

Server Host and Services Files

Most TCP/IP configurations use hosts and services files to identify the IP address and the service or port number. See the following examples of hosts and services files. For more information about the location and format of these files, see your TCP/IP documentation.

Example of a hosts file:

31.41.59.61myclient myclient.peregrine.com # MYCLIENT host entry
31.41.59.62hostserver hostserver.peregrine.com# HOSTPC host entry

Example of a services file:

scprod1423/tcp# Production ServiceCenter

The Host Parameter

If you completed a standard installation, it is not necessary to modify the sc.ini file. Define the host name in the TCP/IP hosts file or in the DNS (Domain Name Server) to specify the TCP/IP host name where the ServiceCenter server is running. Define the host parameter in the initialization file (sc.ini), or as a command line parameter for the program icon. The host parameter specifies the TCP/IP host name where the ServiceCenter server is running.

To add the host parameter:

1 From the Windows **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **Init File.** Your default text editor opens \\Peregrine\ServiceCenter\RUN\sc.ini.

2 Add (or modify) this parameter:

host:hostname

Using the example in Figure A-4 on page 105, the host parameter is:

host:hostserver

3 Save the changes and close the file.

As a command line startup parameter, you can also specify:

-system:hostname.service

The Service Parameter

The service parameter specifies the servicename of the ServiceCenter server if you run in client/server mode. You can specify the service name as a port number instead of a name, or you can leave it blank to assume the default port setting. The default service port number is 12670. You can specify the service parameter in the initialization file (sc.ini), or as a command line parameter for the program icon.

Note: Verify the correct servicename and hostname values for the target server before you change the sc.ini file.

To change the services parameter:

1 From the Windows **Start** menu, select **Programs** >
Peregrine ServiceCenter > **Init File**. Your default text editor opens
\\Peregrine\ServiceCenter\RUN\sc.ini.

2 Add (or modify) this parameter:

service:servicename

Using the example in Figure A-4 on page 105, the service parameter is:

service:scprod

If you specify a port number instead of a service name, the correct format is:

service:1423

If you use the default port number of 12670, you can omit the service name.

3 Save the changes and close the file.

Note: If you use a name for the service parameter, such as scprod, the name
must appear in the TCP/IP services file.

As a command line startup parameter, you can also specify:

-system:hostname.service

The Express Parameter

Express mode can improve performance if communication to the server is
slow, or if the client CPU has insufficient resources.

For the ServiceCenter client, the express parameter specifies the
ServiceCenter server when you choose Express mode. You may enter the
express name as a port number instead of a name, or you can leave it blank
to assume the default port setting. The default port number for express is
12670, the same as the port number for a full client.

You can specify the express parameters in the initialization file (sc.ini), or as
a command line parameter for the program icon.

To change the express parameter:

1 From the Windows **Start** menu, select **Programs** >
Peregrine ServiceCenter > **Init File**. Your default text editor opens
\\Peregrine\ServiceCenter\RUN\sc.ini.

2 If you are connecting to an Express server, substitute the **express** parameter for the **service** parameter:

host:hostname
express:expressname

Using the example in Figure A-4 on page 105, the express parameter is:

express:scprodex

If you specify a port number instead of a service name, the correct format is:

host:hostpc
express:1424

If you assume the default port number of 12680, you can omit or leave the **express** parameter value blank.

host:hostpc
express:

3 Save the changes and close the file. As a command line startup parameter, you can also specify:

-host:hostname -express:expressname

Changing the System Parameter

If you select a typical installation, it is not necessary to add the **system** parameter. The installation does this for you.

To change the system parameter:

1 From the Windows **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **Init File**. Your default text editor opens \\Peregrine\ServiceCenter\RUN\sc.ini.

2 Modify the **system** parameter:

system:TCP/IP servicename

This is a unique **service** name that defines the ServiceCenter server port on your workstation. Contact your system administrator for the correct service name, if your **services** file does not assign it.

3 Save the changes and close the file.

Using Other Databases

In addition to the high level of performance and stability offered by the ServiceCenter database, you may also use other databases including:

- IBM DB2 Universal
- Oracle
- Sybase
- Microsoft SQL Server

Contact Peregrine Systems about the availability of other vendor products. ServiceCenter Setup can automatically prepare other RDBMS that are supported by ServiceCenter and are ODBC compliant.

To use another database, such as Microsoft SQL Server:

1 From the Windows **Start** menu, select **Programs** > **Peregrine ServiceCenter** > **Init File**. Your default text editor opens \\Peregrine\ServiceCenter\RUN\sc.ini.

2 Add the sqlserver parameter to the sc.ini file:

sqlserver:hostname

where *hostname* is the ODBC connection name for the server.

3 Add the sqllogin parameter to the sc.ini file:

sqllogin:logon/password

where *logon* is the logon name of a user with DBA authority, and password is the password for the DBA account. For more information, see the *Database Management and Administration Guide*.

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