

CallCenterWorX MIS

for CallCenterWorX Business and Enterprise

Installation Manual

N E C NEC Corporation of America



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1

Introduction

The CallCenterWorX MIS Installation Manual provides the information you need to install the CallCenterWorX MIS application.

The following topics are included in this chapter:

Chapter Topics

- [CallCenterWorX MIS Application Overview](#)
- [Manual Organization](#)
- [System Capacities](#)

CallCenterWorX MIS Application Overview

The CallCenterWorX suite includes the Automatic Call Distribution (ACD) system and the Management Information System (MIS). The CallCenterWorX ACD system supplements the call processing capabilities of the platform in use. Typical call routing design connects each caller with the most appropriate agent to handle the call in the shortest time possible, avoiding long wait times and getting the caller directly to someone who can manage their request.

As each call progresses through the system, the ACD system provides call-handling data to the MIS, which translates this data into meaningful statistics. The MIS uses these statistics to offer call center managers and supervisors access to real-time and historical data concerning incoming and outgoing call volume in the call center.

The CallCenterWorX MIS Status Screens (real-time screens) provide color-coded, up-to-the-second views of agent, queue, and system activity. Statistics on the call volume, and on the effectiveness of the agents handling those calls, are computed in real-time and manager and supervisors can display up-to-the-second on their screens. Optional wall display boards can show current statistics and messages to call center personnel.

The call statistics also collect in the MIS database for use in the generation of reports in text or graphical format. Supervisor and managers can print these reports and graphs for views of activity ranging from a graph of today's activity to a retrospective report covering previous months.

Manual Organization

<i>Chapter 1 Introduction</i>	Lists the features and capacities of CallCenterWorX MIS and provides a table of relevant documentation.
<i>Chapter 2 System Requirements</i>	Specifies the hardware and software needed to operate CallCenterWorX MIS.
<i>Chapter 3 Connectivity</i>	Presents diagrams and instructions for installation options for CallCenterWorX MIS.
<i>Chapter 4 Installation Overview</i>	Gives an overview of the installation process for CallCenterWorX MIS.
<i>Chapter 5 Installation Procedures</i>	<p>Lists step-by-step procedures for installing CallCenterWorX MIS, including activation of the License Administration feature.</p> <p>In most cases the screens, reports, and procedures are the same. There are some variations in ranges and capacities depending upon the PBX platform in use, and this manual specifies these differences at the time those items are described.</p> <p>For configuration and operation of CallCenterWorX MIS information, see the <i>CallCenterWorX MIS Administration Manual for CallCenterWorX Business and CallCenterWorX Enterprise</i>.</p>
<i>Chapter 6 Database Management</i>	Lists step-by-step procedures for performing database management tasks, including database back up and restore, using Microsoft SQL Server Management Studio Express.
<i>Appendix A Microsoft SQL Server 2008 R2 Express Edition with Advanced Services</i>	Provides information on installing Microsoft SQL Server 2008 R2 Express Edition with Advanced Services and uninstalling Microsoft SQL Server 2008 R2 Express Edition.

System Capacities

Table 1-1 System Capacities

Item	CallCenterWorX ACD	
	Business	Enterprise
Tenants per System	9	
Splits per System	150	
Splits per ACD Tenant	<i>Note 1</i>	
Splits per Logon ID	32	
Active ACD Agents per System	Up to 200 <i>Note 2</i>	Up to 500 <i>Note 2</i>
Agent Logon ID Codes per System	400	1000
Agent Logon ID Code Digits	9	

Item	CallCenterWorX ACD	
	Business	Enterprise
Priority Levels	<i>Note 3</i>	
Statistics Report History Limit	<i>Note 4</i>	
MIS per ACD/PBX	<i>Note 5</i>	
Pilots	300	600
Trunk Groups	63	255
Trunks	1000	
Tally Code Names per Split	100	
Tally Code Names per System	3000	



1. The total number of splits per system is shared among the total number of tenants.
2. The number of agent positions monitored depends upon the product license. The total number of agents is shared among the total number of tenants.
3. The MIS uses two priority levels in tracking split queue calls: "High" and "Standard".
4. The database is limited to a 4 GB maximum. The amount of historical data stored varies, depending on the database storage interval, call volume, and other variables. It is best to start truncating data before it reaches the 4 GB limit.
5. See [Chapter 2 - "System Requirements" on page 2-1..](#)

2

System Requirements

- Chapter Topics*
- [Setup Variations](#)
 - [CallCenterWorX MIS Requirements](#)
 - [CallCenterWorX MIS PC Support](#)

Setup Variations

CallCenterWorX MIS operates with the CallCenterWorX Business and CallCenterWorX Enterprise ACD systems.

- You can load CallCenterWorX MIS application on the same computer, which is running the CallCenterWorX Business ACD application, or use it alone on one or more remote MIS PCs with CallCenterWorX Business or CallCenterWorX Enterprise.
- Each MIS application maintains an independent database. Each MIS application is not a Client of any other MIS application.

The CallCenterWorX MIS application will run alone on:

- Windows XP
- Windows Vista (32-bit and 64-bit)
- Windows 7 (32-bit and 64-bit)
- Windows Server 2003
- Windows Server 2008 (32-bit and 64-bit)

The application requires an MIS Security Key and Sentinel drivers; drivers automatically install with the MIS installation procedure.



NOTE

NEC Global Navigator is also compatible with CallCenterWorX ACD applications. See [CallCenterWorX MIS PC Support](#).

Minimum System Requirements for PBXs

CallCenterWorX MIS requires an operative PBX with CallCenterWorX ACD system programming (either CallCenterWorX Business or CallCenterWorX Enterprise) already in place.

CallCenterWorX MIS Requirements

Table 2-1 lists the hardware, software, and information requirements for CallCenterWorX MIS application installation on a remote PC using TCP/IP.

Table 2-1 System Requirements for MIS

Minimum Requirements Computer	
3.0 GHz Single Core/1.86 Dual Core Processor	
2 GB RAM or more	
10 GB available hard-disk space or more	
15" or larger SVGA monitor <i>Note 1</i>	
DVD-ROM drive	
One (1) USB Port - For MIS Security Key	
Modem, Cable, & PC Anywhere, or Web Ex access to PC for technical support	
One (1) 100 Mbps NIC Card	
Supported PBX/ACD Platforms	
NEAX 2000 IPS or SV8300 CallCenterWorX ACD 4.0 for Business PBX/ACD Revisions must be within 1 revision of current release.	NEAX 2400 IPX, UNIVERGE SV7000, or UNIVERGE SV8500 CallCenterWorX ACD 4.0 for Enterprise or CallCenterWorX Enterprise (I) PBX/ACD Revisions must be within 1 revision of current release
Other Software	
Microsoft Windows XP, Windows Server 2003, Windows Vista, Windows 7 (32-bit and 64-bit), Windows Server 2008 (32-bit and 64-bit)	
CallCenterWorX MIS DVD-ROM installation disk	
Microsoft Internet Explorer 6.0 or higher for online Help	
Information	
IP address information for ACD	
Product Activation Key Page	



NOTE

If installing the MIS software on the ACD server, please refer to the ACD documentation for minimum server requirements information



NOTE

Must have video card and driver to support 1024 x 768 resolution.

CallCenterWorX MIS PC Support

Multiple MIS PCs

With CallCenterWorX Business and CallCenterWorX Enterprise you can have up to eight MIS PCs. The following information applies to the MIS PCs:

- An MIS application on the CallCenterWorX Business or ACD system requires an MIS Security Key and is counted as one of the MIS PCs.
- Each additional MIS PC requires a separate MIS Security Key.



IMPORTANT

It is important to know that each additional MIS PC is a separate MIS application. This means that the additional PC is not a Client to the main CallCenterWorX MIS application, but maintains its own database.

- While a CallCenterWorX MIS PC application is online, it collects data received from the CallCenterWorX ACD system.
- If the MIS application is terminated, or the PC on which it is running is shut down, data collection stops.



NOTE

If a true Client/Server MIS PC application is required, NEC Global Navigator performs that function.

IP Connections

- CallCenterWorX Business and CallCenterWorX Enterprise provide eight IP connections for MIS PCs or Infolink, which is a Computer Telephony Integration (CTI) link integrated with both CallCenterWorX® - Business, CallCenterWorX-Enterprise (I), and CallCenterWorX-Enterprise applications.

CallCenterWorX MIS Use

- If you are using CallCenterWorX MIS at the main CallCenterWorX Business installation, then you have seven remaining connections to use for other MIS or Infolink applications.

CallCenterWorX MIS and Infolink Use

- If you are using CallCenterWorX MIS at the main CallCenterWorX Business installation and are using Infolink, there are six remaining IP connections for additional MIS applications to use. Each additional connection usage diminishes the MIS IP connections available.
- If you are using CallCenterWorX MIS with CallCenterWorX Enterprise and are using Infolink, there are six remaining IP connections for additional MIS applications to use. Each additional connection usage diminishes the MIS IP connections available.

3

Connectivity

Chapter Topics • [Connection for Remote MIS PC via TCP/IP](#)

Connection for Remote MIS PC via TCP/IP

The following are illustrations of TCP/IP connection for CallCenterWorX CallCenterWorX Business and Enterprise.

Figure 3-1 TCP/IP Connection for CallCenterWorX Business

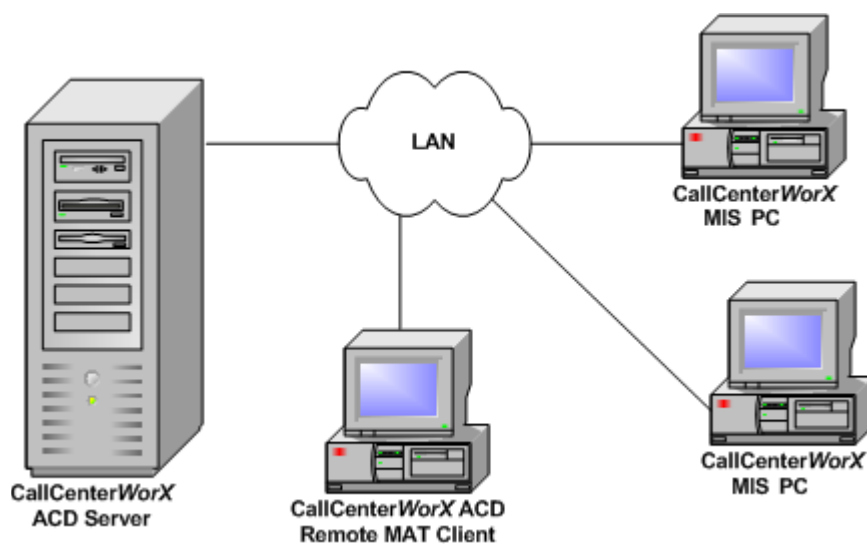
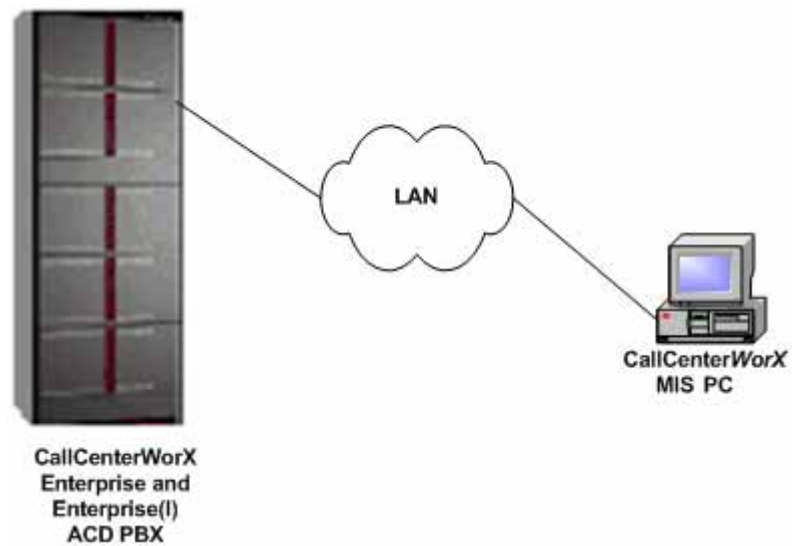


Figure 3-2 TCP/IP Connection for CallCenterWorX Enterprise and CallCenterWorX Enterprise(I)



Follow the procedures in [Installation Overview](#). You can find PBX configuration in the appropriate PBX manuals.

4

Installation Overview

- Chapter Topics*
- [Installation Options](#)
 - [MIS PC Setup](#)

Installation Options

There are two options for installing CallCenterWorX MIS:

- On the same computer running the CallCenterWorX Business ACD application.
- On an MIS PC

See [CallCenterWorX MIS PC Support](#) for information on the possible number of MIS applications.

The following instructions require the CallCenterWorX Business or CallCenterWorX Enterprise ACD system preparation is up to the point necessary to install and configure the MIS application. For further information on preparation and installation procedures for the CallCenterWorX ACD system, see the *CallCenterWorX for Business and Enterprise System Manual*, Stock #151947.

MIS PC Setup

- Step 1** Verify the system requirements in [Table 2-1](#) are available.
- Step 2** For remote MIS connection, complete the connections as you see in [Figure 3-1](#) or [Figure 3-2](#). For MIS installed on the same PC as CallCenterWorX ACD, then enter 127.0.0.1 as the IP Address to connect to the ACD.
- Step 3** Follow the procedure in [Security Key Installation Instructions](#) to install a CallCenterWorX MIS 4.0 Security Key.
- Step 4** Read [Installation Information Needed](#) and assemble the information needed for installing CallCenterWorX MIS.
- Step 5** Install the CallCenterWorX MIS application, following the procedures in [Installation Procedures](#).

Step 6 When program installation is complete, follow the setup procedures in Chapter 2 - MIS Setup in the *CallCenterWorX MIS Administration Manual*.

5

Installation Procedures

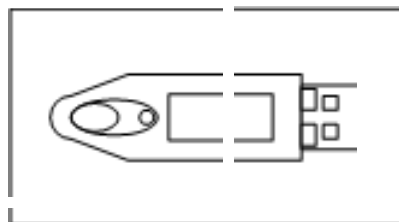
- Chapter Topics*
- *Security Key Installation Instructions*
 - *Installation Information Needed*
 - *USB Key Instructions*
 - *CallCenterWorX MIS 4.0 DVD-ROM Installation Instructions*
 - *Microsoft SQL Server 2008 R2 Express Installation from DVD*
 - *Accessing the License Key Administrator*

Security Key Installation Instructions

CallCenterWorX Management Information System (MIS) uses a USB security key. This key must be installed before running the CallCenterWorX MIS application.

Step Locate the MIS 4.0 Security Key ([Figure 5-1](#)).

Figure 5-1 USB Security Key



USB Key



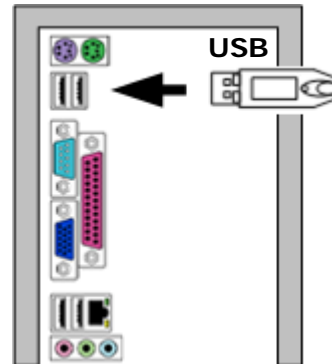
NOTE

You receive one or more CallCenterWorX MIS 4.0 Security Keys if you are using a configuration option calling for one or more MIS PCs.

USB Key Instructions

- Step 1** Install the CallCenterWorX MIS application. See “CallCenterWorX MIS 4.0 DVD-ROM Installation Instructions” on page 5-3.
- Step 2** After restarting the computer, attach the key to one of your computer's USB ports. See Figure 5-2.

Figure 5-2 Connecting the Security Key to USB Port



- A dialog box appears showing the USB security key is installed. No interaction is required from the user.

Installation Information Needed

To complete the installation, you need to have the following information available.

IP Address or Host Name

For the PC using CallCenterWorX MIS via TCP/IP, ask your network administrator for the Host Name or IP Address of the CallCenterWorX Business or the CallCenterWorX Enterprise ACD. If MIS is installed with CallCenterWorX Business ACD System, then the CallCenterWorX MIS can set the ACD IP address to 127.0.0.1 and there is no need to contact the network administrator.

License Key Information

Your CallCenterWorX MIS installation package includes the Serial Number and Activation Key Number for the License Key for this application. These numbers apply to a specific key and cannot be used with any other key. You will need to have this information available to complete the License Key activation in the installation. This information is available on the Activation Page provided with the product.

Location of Installed Program

The default destination directory for the program files is C:\Program Files \ NEC \ CallCenterWorX \ MIS 4.0. You may accept that location, or

choose to place the program files in a different directory by using the **Browse** button. If you select a different destination directory for the files, be sure to make a note of the path so that you can locate the files later if necessary.

CallCenterWorX MIS 4.0 DVD-ROM Installation Instructions

Use the DVD-ROM you received in your CallCenterWorX MIS 4.0 package. For a first time installation or an upgrade from CallCenterWorX MIS 3.07 or older, please verify that Microsoft SQL Server 2008 R2 Express has been installed on your system. If not, it has to be installed prior to CallCenterWorX MIS 4.0 installation. CallCenterWorX MIS 4.0 will use these tools instead of Microsoft Data Engine (MSDE) and Backup Assistant.

Microsoft SQL Server 2008 R2 Express Installation from DVD



NOTE

The MS SQL Server 2008 R2 Express is required for CCWX MIS 4.0.0 installation. Please verify that Microsoft SQL Server 2008 R2 Express is installed prior to installing CallCenterWorX MIS 4.0 software.

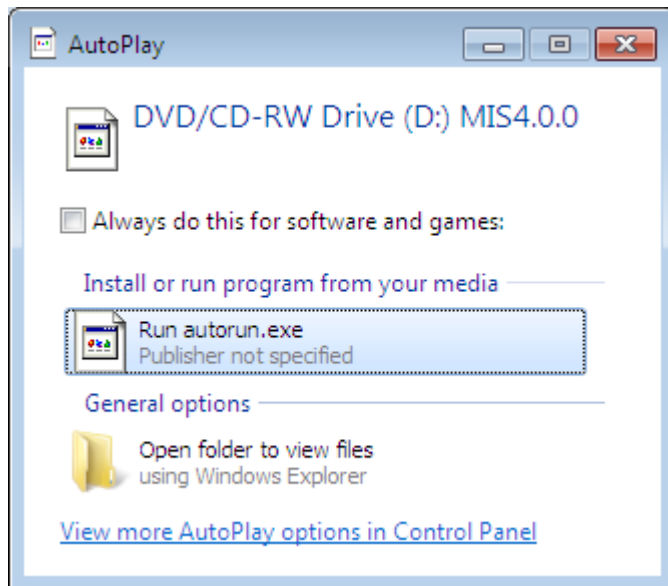
Step 1 Insert the CallCenterWorX MIS installation DVD into your computer's DVD-ROM drive.

- For installations on Windows XP operating system, the main MIS 4.0.0 Installation window automatically displays.
- For Vista, Windows 7, or Server 2008 R2 operating systems, the Autoplay dialog box appears with two choices; select **Run autorun.exe** (Figure 5-3).

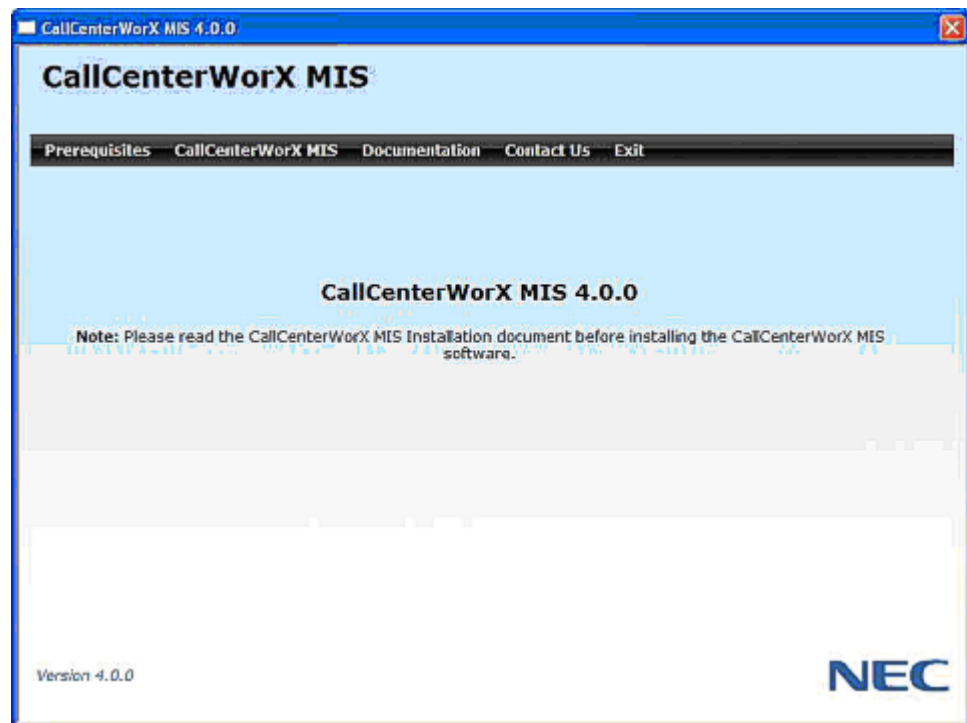


NOTE

*If MIS installation does not automatically run, then go to the DVD-ROM directory and run **launch.hta**.*

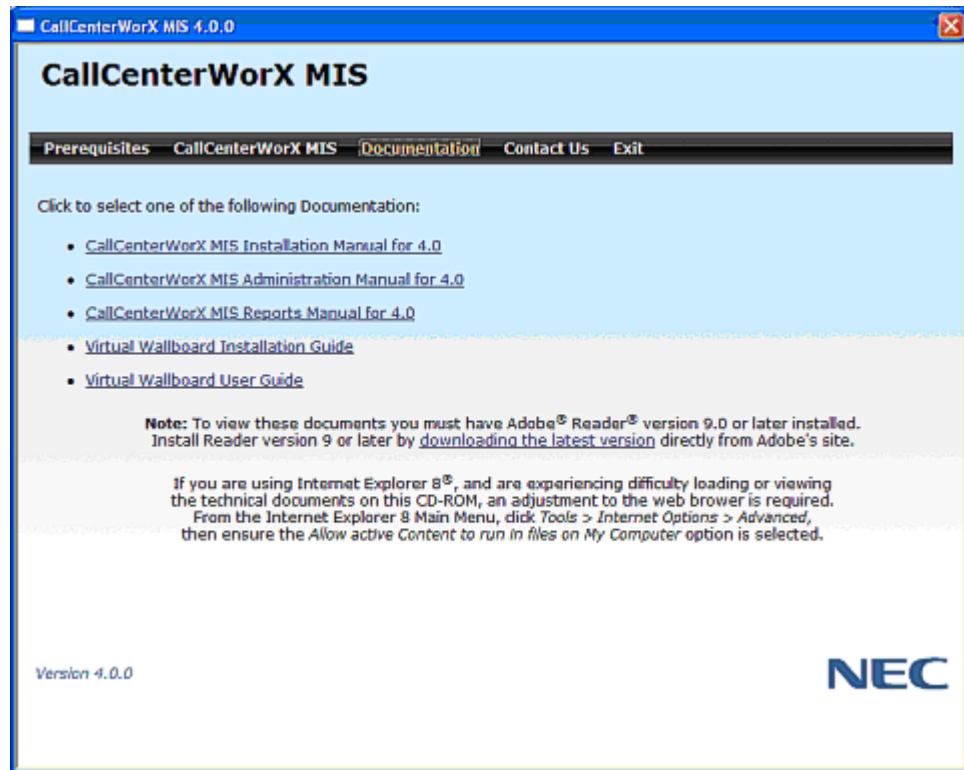
Figure 5-3 Autoplay Dialog Box

Step 2 Click on **Run autorun.exe**. Figure 5-4 displays.

Figure 5-4 CallCenterWorX MIS 4.0.0

- Step 3** Click on **Documentation** to view the MIS 4.0 documents. The following screen (Figure 5-5) displays.

Figure 5-5 CallCenterWorX MIS Documentation

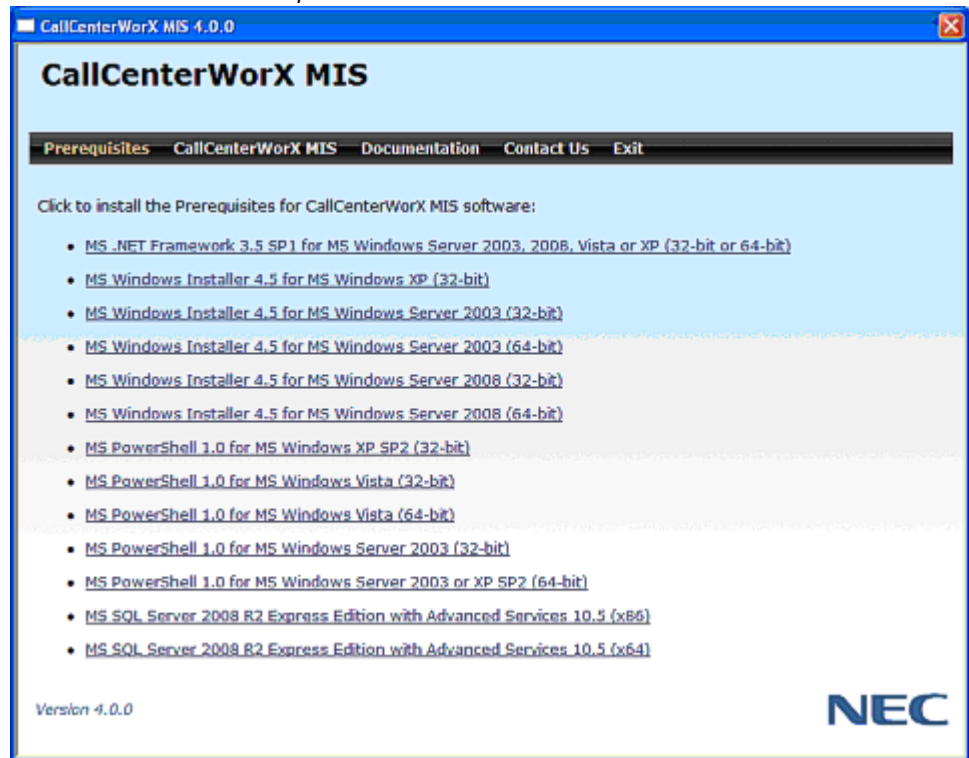


NOTE

Microsoft SQL Server 2008 R2 Express has to be installed prior to installing CallCenterWorX MIS 4.0. Please check that Microsoft SQL Server 2008 R2 Express is installed on the machine. If not, then click on **Prerequisites** to install it. Please see [Appendix A Microsoft SQL Server 2008 R2 Express Edition with Advanced Services](#) for the steps to install Microsoft SQL Server 2008 R2 Express.

- Step 4** If Microsoft SQL Server 2008 R2 Express is not present, click on **Prerequisites**. Figure 5-6 displays.

Figure 5-6 CallCenterWorX MIS Prerequisites

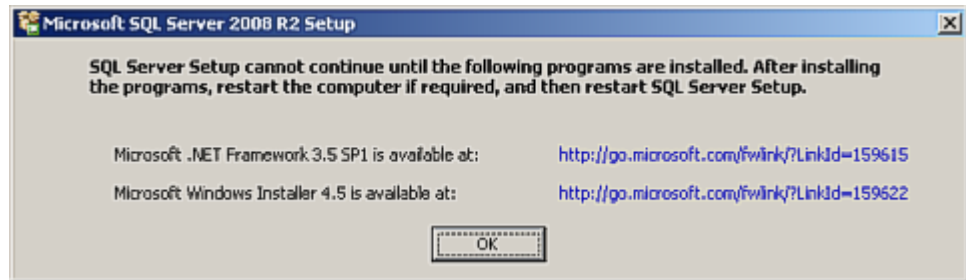


- Step 5** Click on **MS SQL Server 2008 R2 Express Edition with Advanced Services**. You may either select **x86** for 32-bit system or **x64** for 64-bit system. Follow the Microsoft SQL Server 2008 R2 Express installation as described in [Appendix A, Microsoft SQL Server 2008 R2 Express Edition with Advanced Services](#).

If the prerequisites required by MS SQL Server 2008 R2 Express have not been installed, [Figure 5-7](#) may display. If this message appears, install the prerequisites required by MS SQL Server 2008 R2 Express.

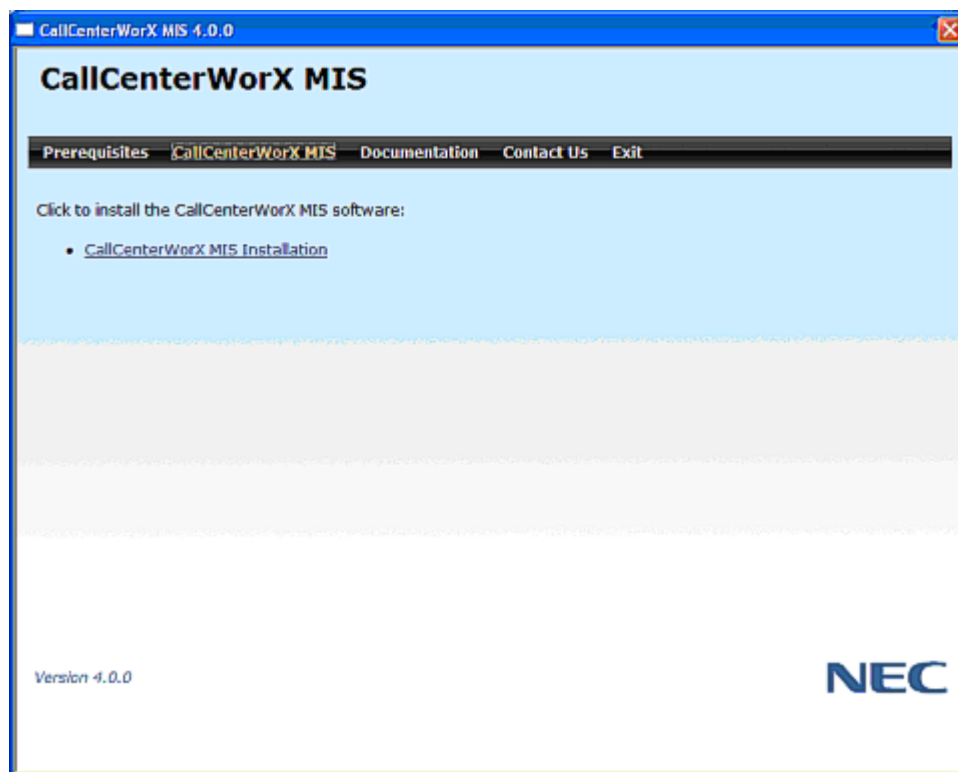
- MS .NET Framework
- MS Windows Installer
- MS PowerShell

Figure 5-7 SQL Server 2008 R2 Setup Message



Step 6 After Microsoft SQL Server 2008 R2 Express has been installed, click on **CallCenterWorX MIS**. The following screen (Figure 5-8) displays:

Figure 5-8 CallCenterWorX MIS Installation



Step 7 Click on **CallCenterWorX MIS Installation** to start the installation.

Step 8 Follow the steps below to complete MIS installation.

MIS Installation



IMPORTANT

For upgrades from MIS 3.0 to MIS 4.0, a database backup and restore is necessary. This process will take place automatically during MIS 4.0 installation.



NOTE

During an upgrade from MIS 3, the following screen displays if a CallCenter database backup already exists in the following location:
C:\Program Files\Microsoft SQL Server\MSSQL 10_50.<SQL Instance Name>\MSSQL\Backup\CallCenter.bak.



If a backup does not exist, then the CallCenter Database in MSDE will be backed up and restored.

- If a previous version of CallCenterWorX is detected, go to [Step 1](#) ([Figure 5-9](#) displays).
- If there is no previous version of CallCenterWorX installed, go to [Step 5](#) ([Figure 5-13](#) displays).

Step 1 Click **OK** when [Figure 5-9](#) displays to begin the uninstall process.



NOTE

It is recommended that you backup your database prior to an upgrade.

Figure 5-9 CallCenterWorX_MIS4.0 InstallShield Wizard



Step 2 Click **OK** when [Figure 5-10](#) displays to remove the previous version of CallCenterWorX MIS 3.

Figure 5-10 Confirm Uninstall Dialog Box

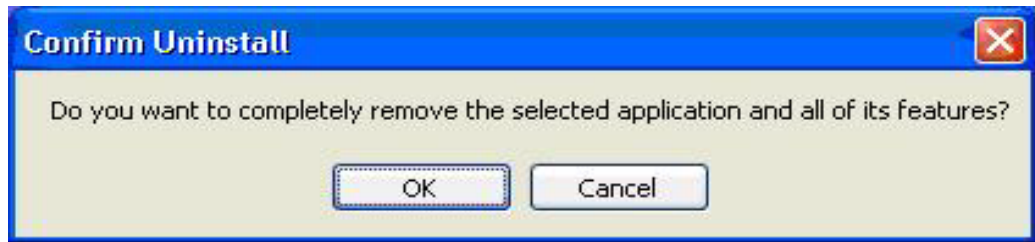
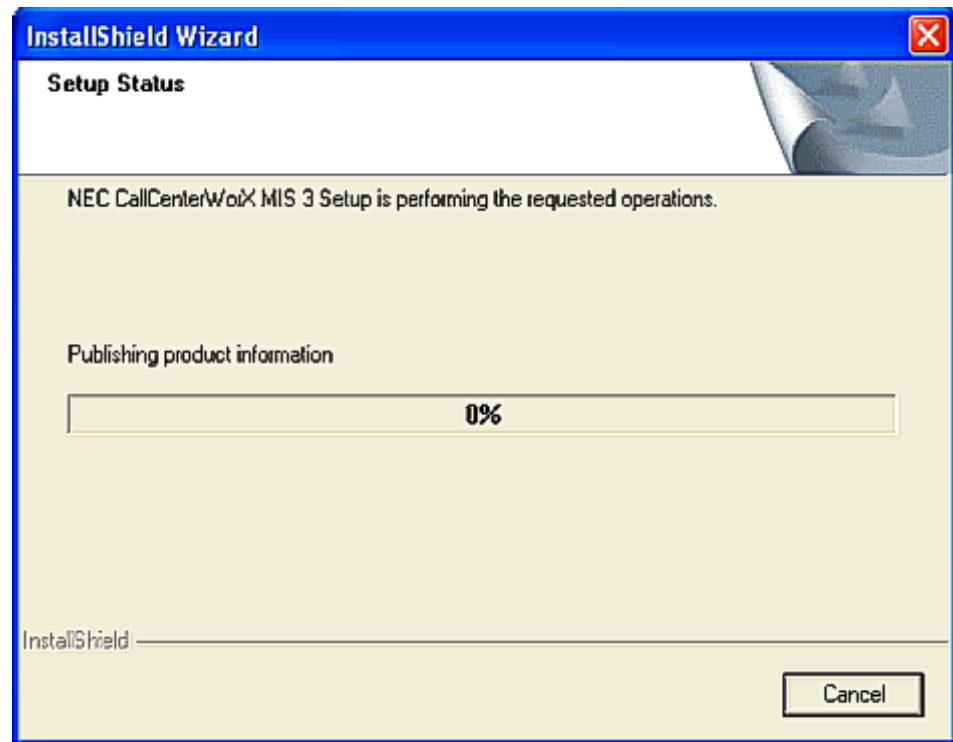


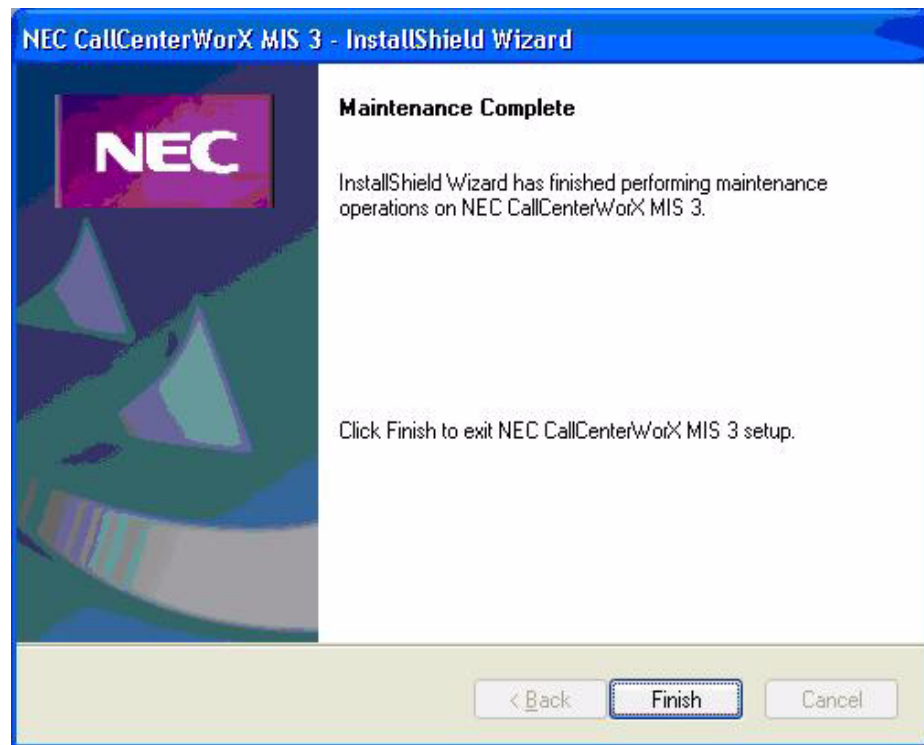
Figure 5-11 displays to show the status of CallCenterWorX MIS removal.

Figure 5-11 MIS 3 Setup Status Dialog Box



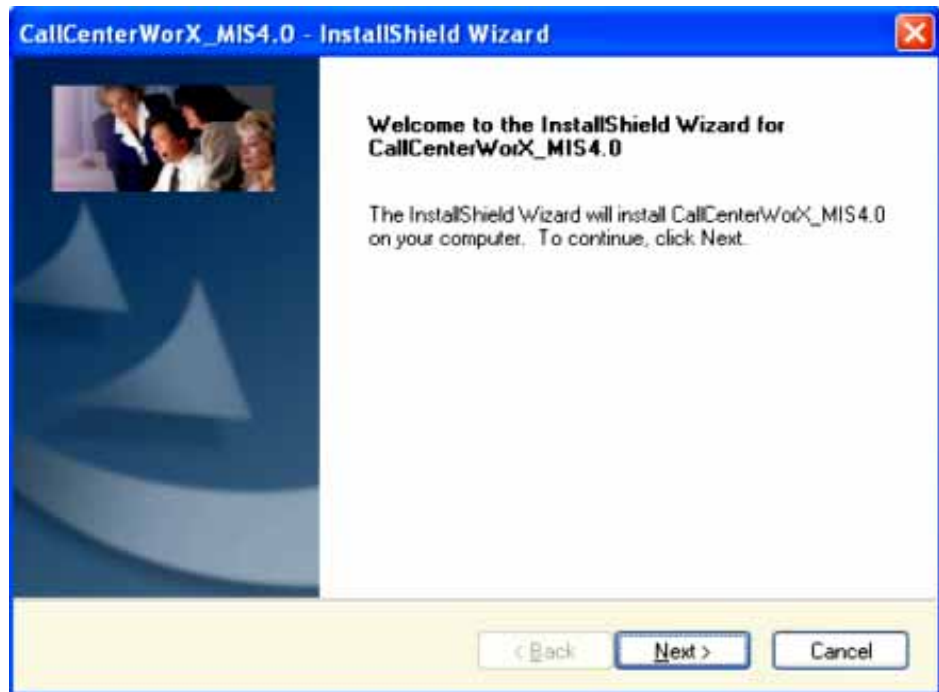
Step 3 When Figure 5-12 displays, click **Finish**.

Figure 5-12 Maintenance Complete Dialog Box



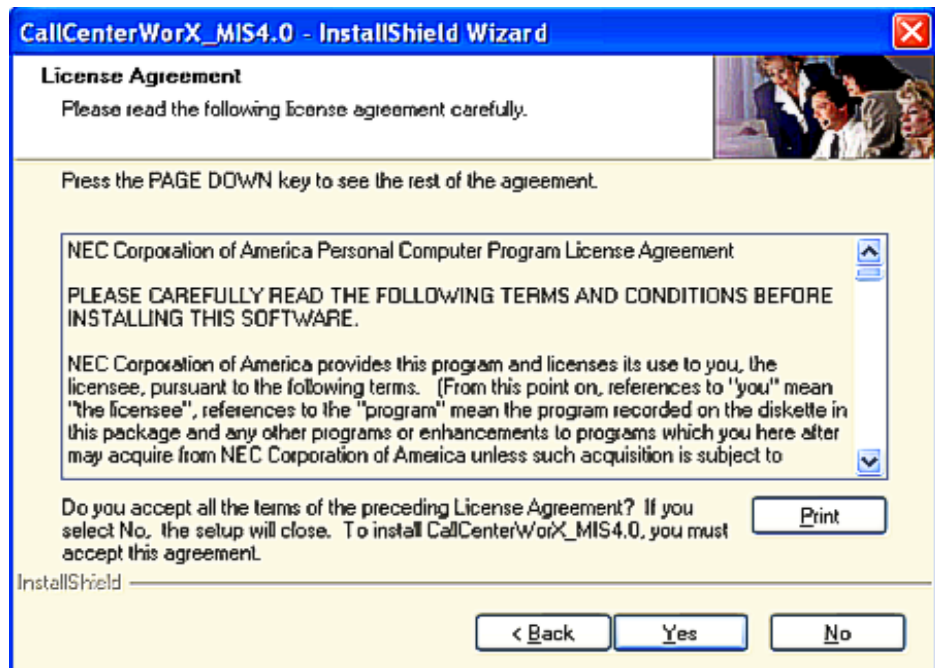
Step 4 The MIS 4.0.0 installation automatically begins and [Figure 5-13](#) displays.

Figure 5-13 MIS 4.0 Install Shield Wizard Welcome



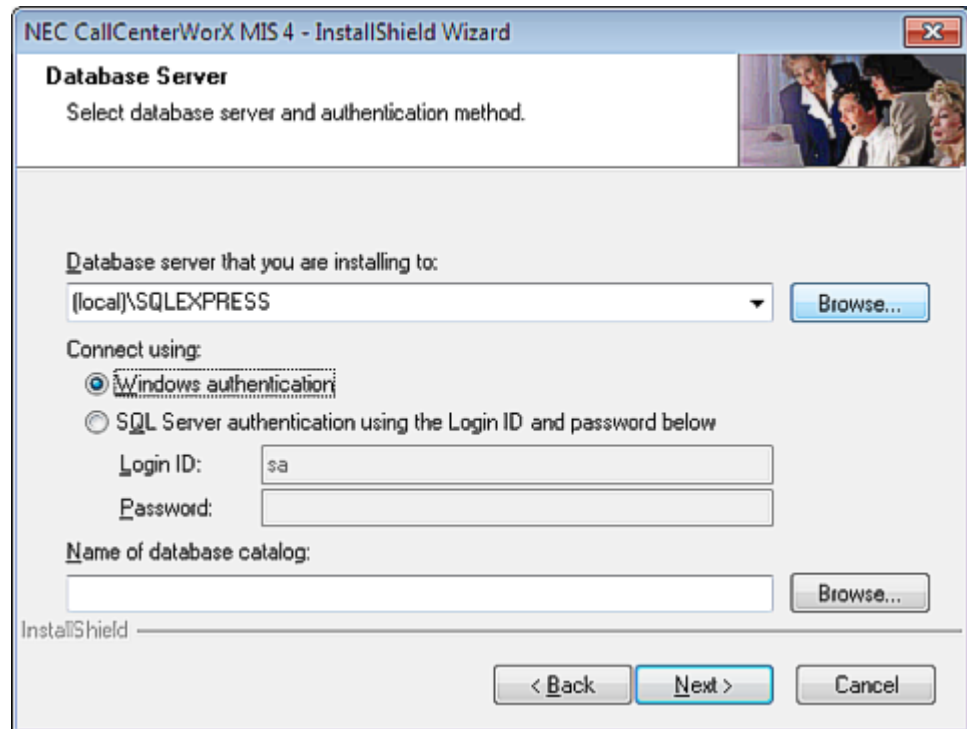
Step 5 Click **Next**. Figure 5-14 displays.

Figure 5-14 MIS License Agreement Dialog Box.



Step 6 Click **Yes** to accept the License Agreement. [Figure 5-15](#) displays.

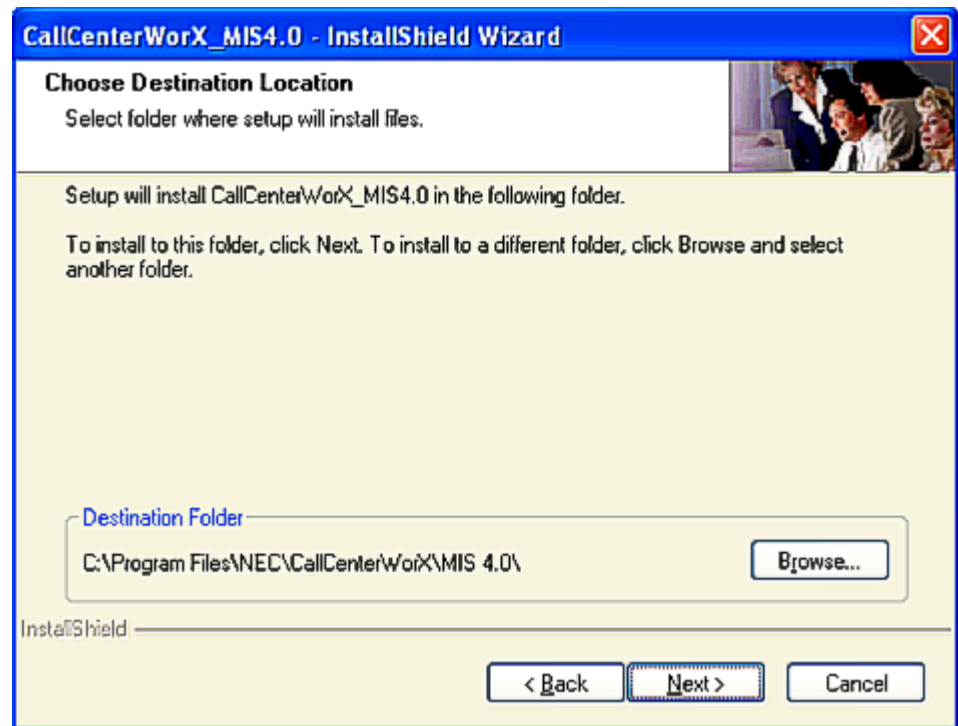
Figure 5-15 Select Database Server



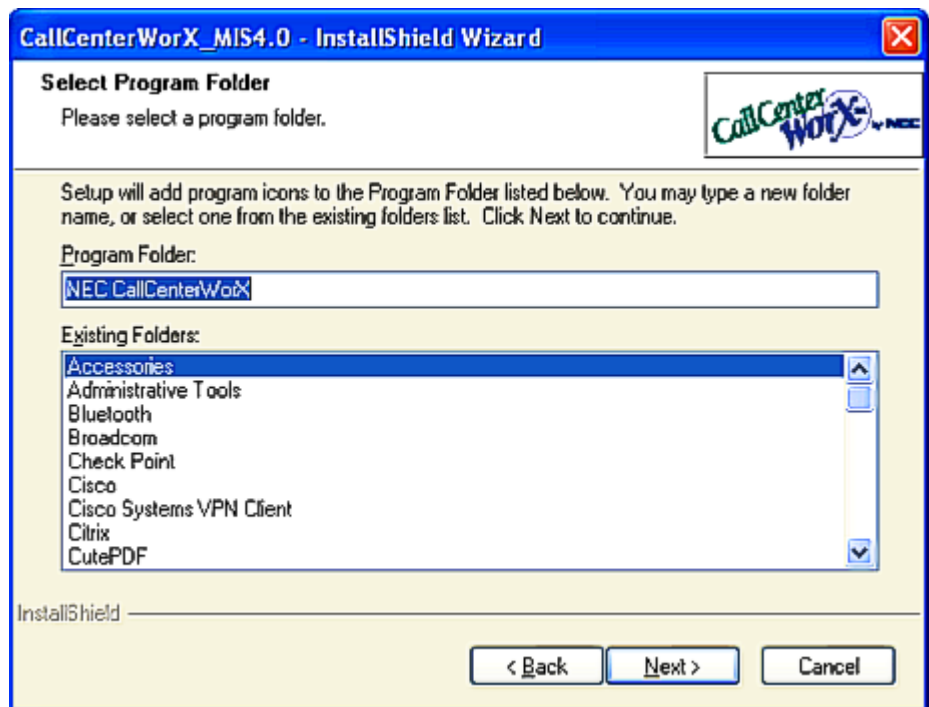
Step 7 Select the **Database server that you are installing to**. If the list does not display, click on the **Browse** button.

- Please select the **Microsoft SQL Server 2008 R2 Express** as the database server and then click **Next**. The **Choose Destination Location** dialog ([Figure 5-16](#)) displays.

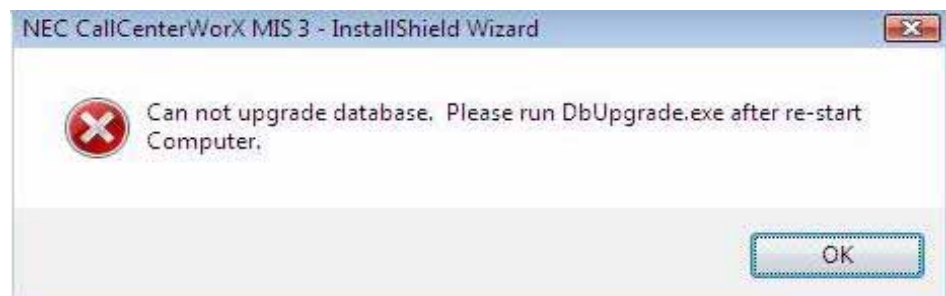
Figure 5-16 Choose Destination Location Dialog Box



Step 8 Click **Next** to install the software in the default location. [Figure 5-17](#) displays.

Figure 5-17 Select Program Folder Dialog Box

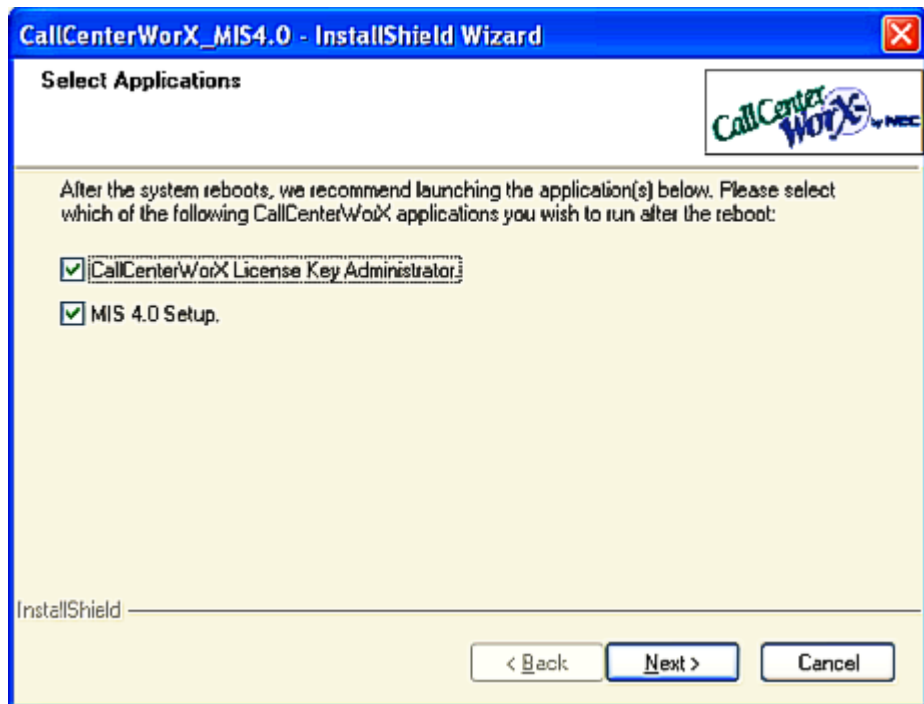
- Due to Vista system requirements, the message displayed below may appear.



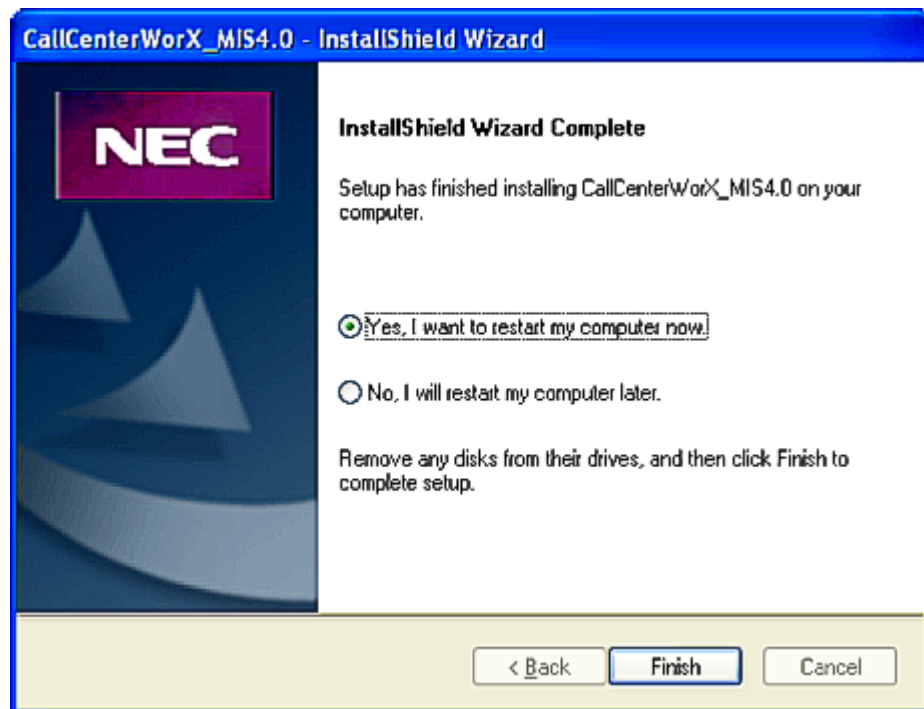
If this occurs, click **OK** and refer to [“Manually Upgrade the Database” on page 6-1](#) for information on upgrading the database.

Step 9 Click **Next**. [Figure 5-18](#) displays.

Figure 5-18 MIS Select Applications Dialog Box



Step 10 Click **Next**. [Figure 5-19](#) displays.

Figure 5-19 MIS Installation Complete

Step 11 Select **Yes** to restart the computer immediately or **No** to restart later.



NOTE

For a new installation, it is recommended to select **NO** to restart your computer later and complete Database Management first.

Step 12 Click **Finish**.

The CallCenterWorX MIS application is now installed and ready to be configured. See the *CallCenterWorX MIS Administration Manual for CallCenterWorX Business* and *CallCenterWorX Enterprise* for configuration procedures for the initial MIS setup.

Accessing the License Key Administrator

The License Key Administrator registers and validates the MIS application as well as the monitoring capacity purchased. There are two sets of licenses that should be entered using this tool.

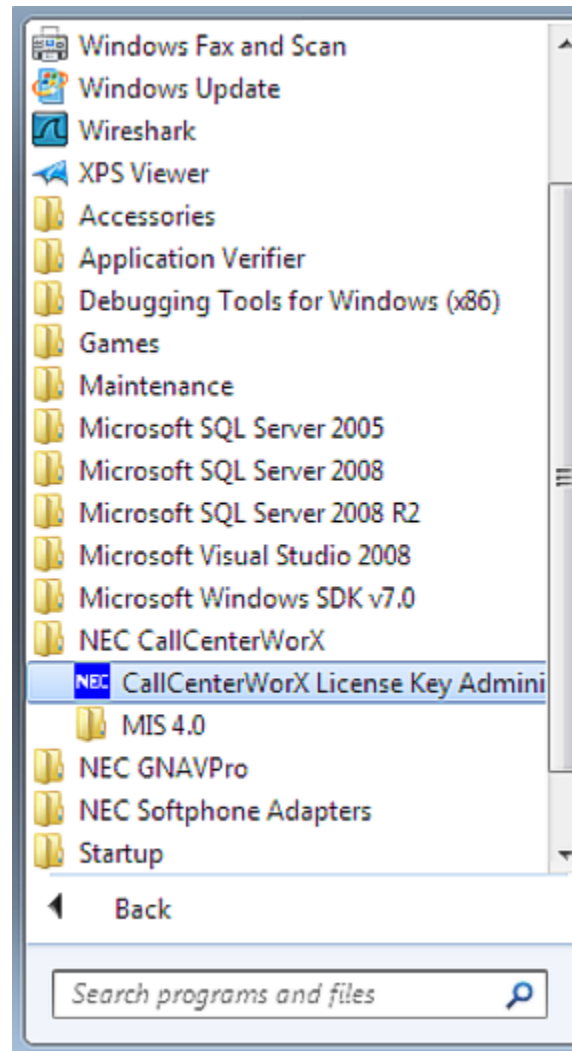
- The first set validates the MIS application.
- The second set determines how many agent positions can be monitored at one time.

Successful registration of both licenses is necessary for proper operation of the application. If an upgrade is purchased (to monitor more agent positions at once), the license information for the new agent positions

will need to be entered using this tool. The first license set does not need to be re-entered when applying an upgrade license.

Step 1 Select **Start > Programs > NEC CallCenterWorX > CallCenterWorX License Key Administrator** (Figure 5-20).

Figure 5-20 Open License Key Administrator



The License Key Administrator dialog box displays (Figure 5-21).

6

Database Management

This chapter provides information on some of the basic functions of database management that may be useful in managing the MIS database. For more advanced database management functions, please read the document or Help file from Microsoft SQL Server Management Studio Express.

The following topics are included in this chapter:

Chapter Topics

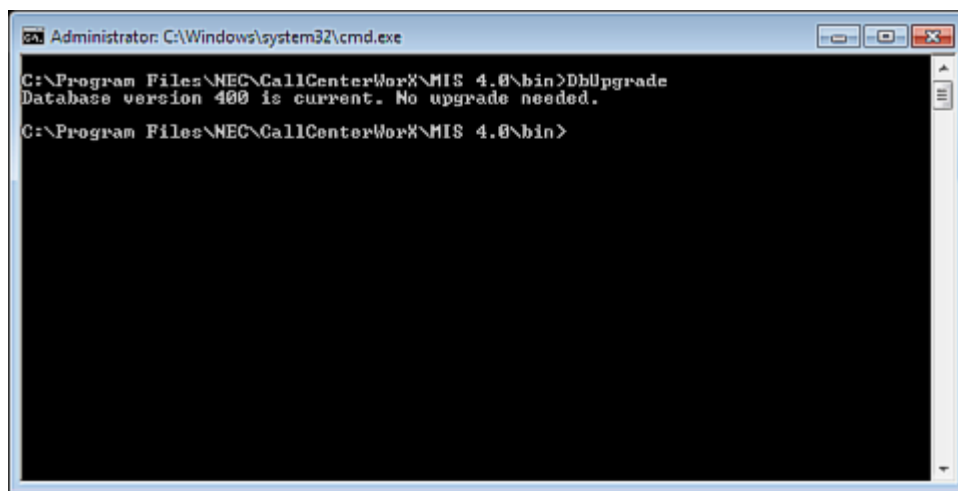
- [Manually Upgrade the Database](#)
- [Changing Authentication Mode to Mixed Mode](#)
- [Restart SQL Server](#)
- [Backup a Database](#)
- [Restore a Database](#)

Manually Upgrade the Database

To manually upgrade a database, perform the following step.

- Step** Open a command window, go to the CallCenterWorX MIS installation bin directory, and run “DBUpgrade” as illustrated in [Figure 6-1](#).

Figure 6-1 DBUpgrade Command

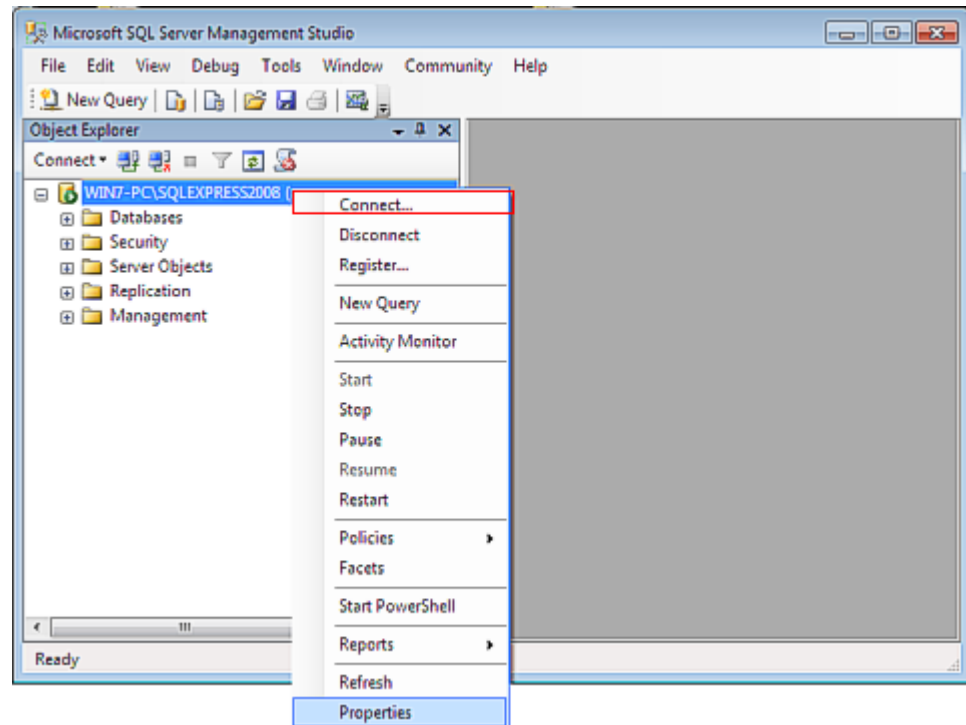


Changing Authentication Mode to Mixed Mode

To change the authentication mode to mixed mode, perform the following steps.

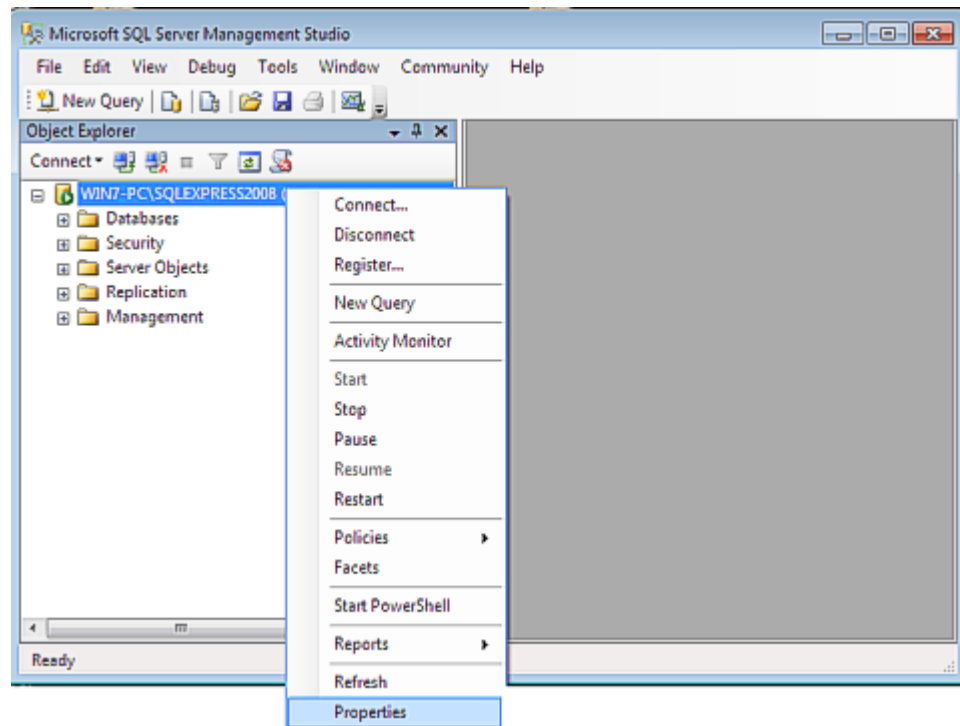
Step 1 Connect to the SQL Server by clicking Connect as shown in [Figure 6-2](#).

Figure 6-2 SQL Server Connection Dialog Box

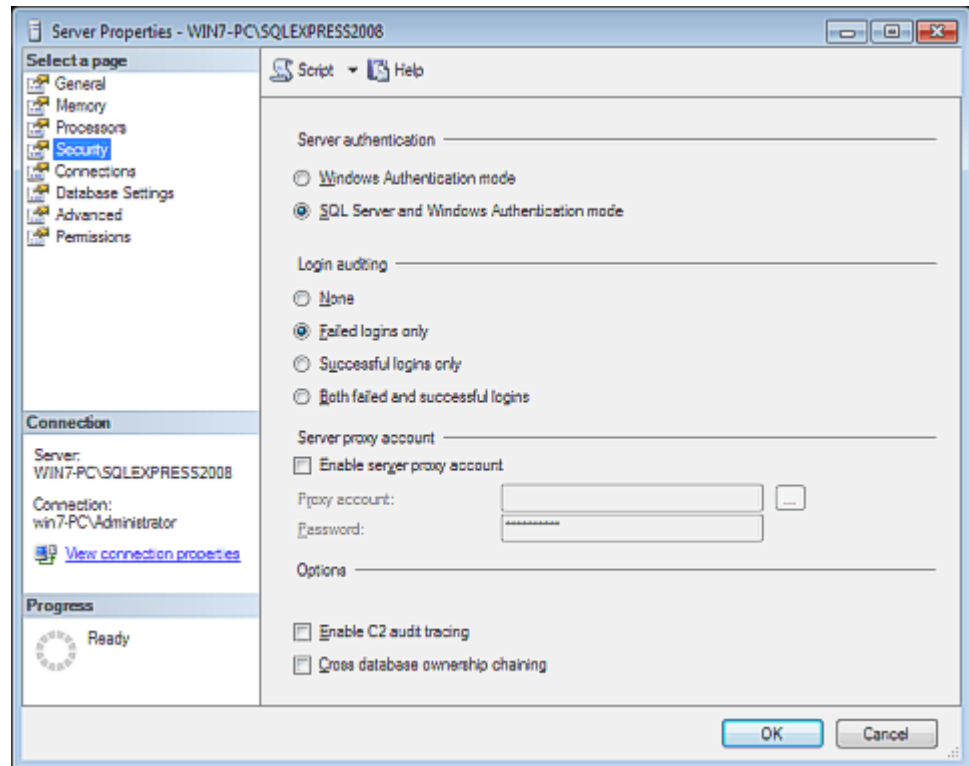


[Figure 6-3](#) displays once a connection is established.

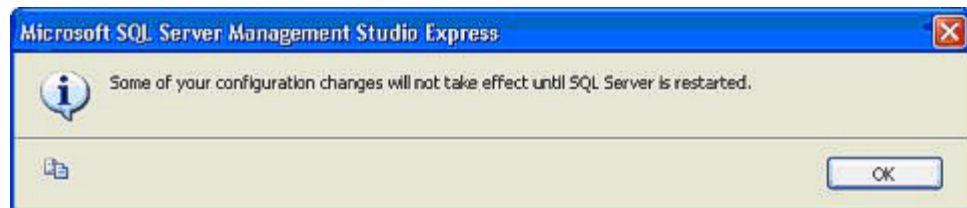
Figure 6-3 SQL Express Properties



Step 2 Right-click on the SQL Server name and select **Properties**. [Figure 6-4](#) displays.

Figure 6-4 Server Properties SQL Server Authentication Mode

Step 3 Select Security from the list, check **SQL Server and Windows Authentication mode**, and click **OK**. Figure 6-5 displays.

Figure 6-5 Server Restart Prompt

Step 4 Click **OK** to restart SQL Express Service.

Restart SQL Server

To restart the SQL Server, perform the following steps.

Step 1 From SQL Server Management Studio Express, right-click on the SQL Server name then click **Restart** as depicted in Figure 6-6.

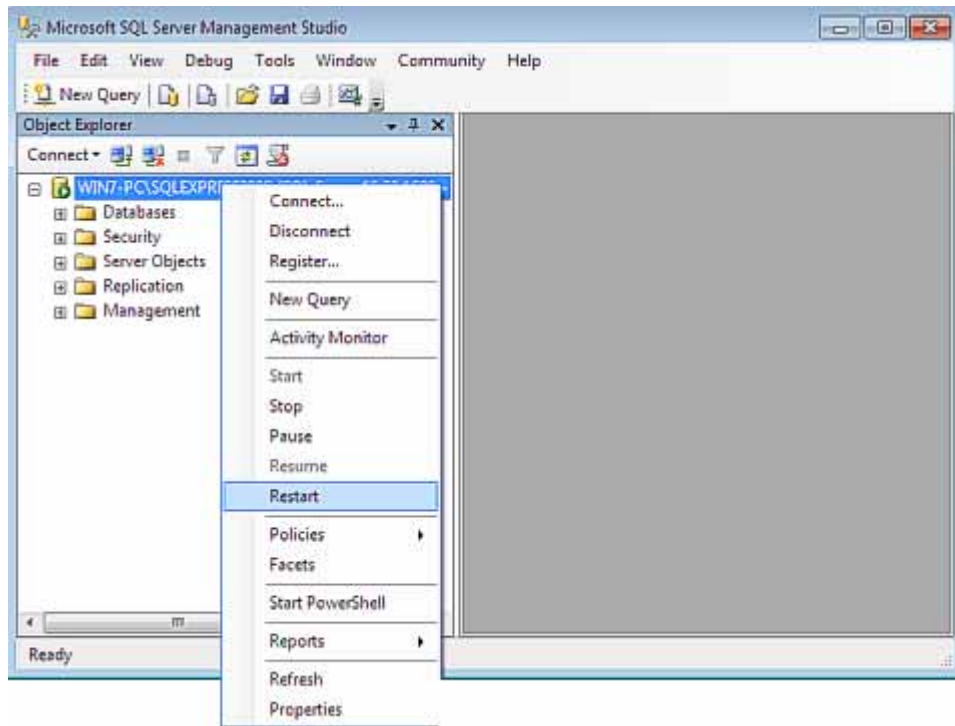
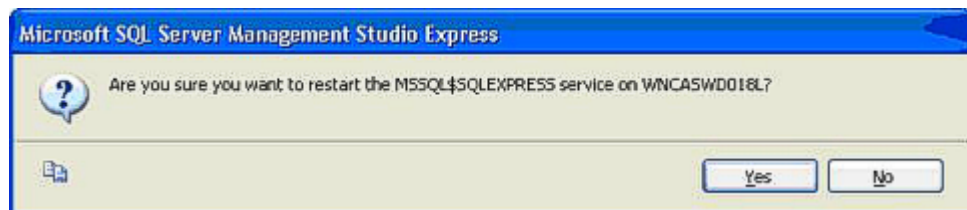
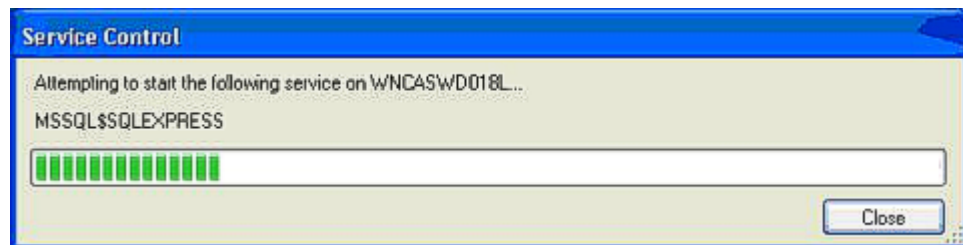
Figure 6-6 Restart SQL Server Dialog Box

Figure 6-7 displays.

Figure 6-7 Server Restart Confirmation Query Dialog Box

Step 2 Click **Yes**. Figure 6-8 displays.

Figure 6-8 Service Control Progress Dialog Box

Backup a Database

To backup a database, perform the following steps.

- Step 1** From SQL Server Management Studio Express, right-click on the database name to back up and select **Tasks > Back Up** as depicted in Figure 6-9.

Figure 6-9 Backup Database

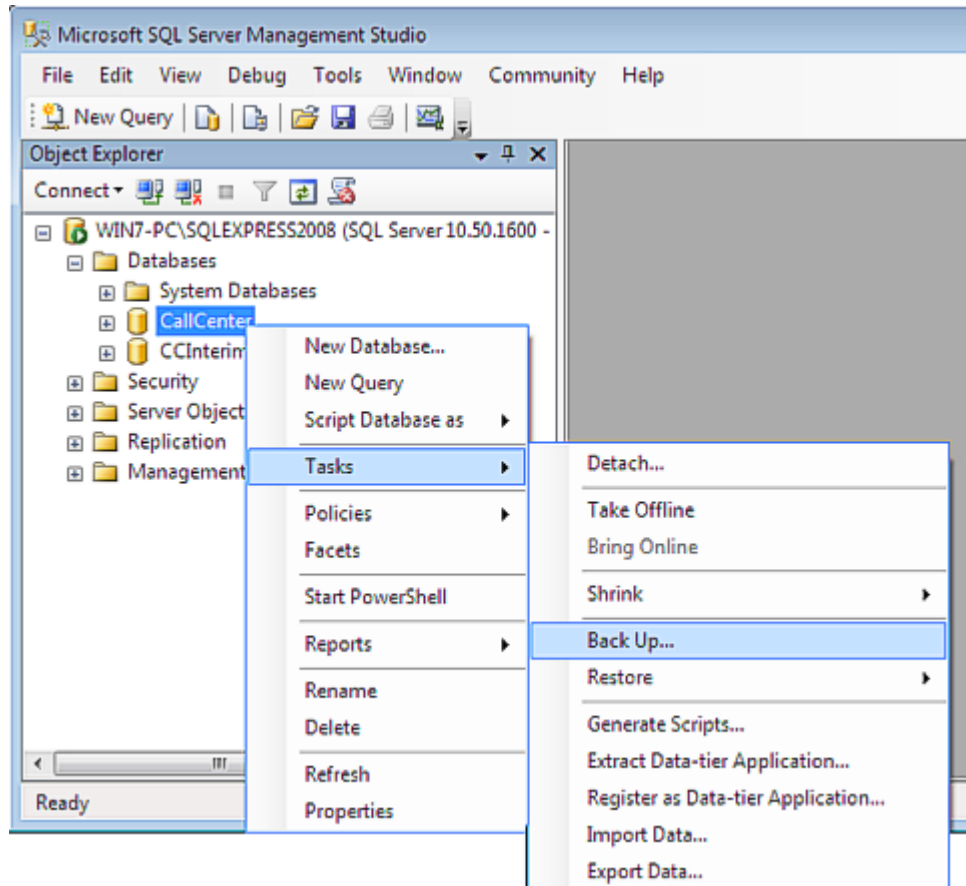
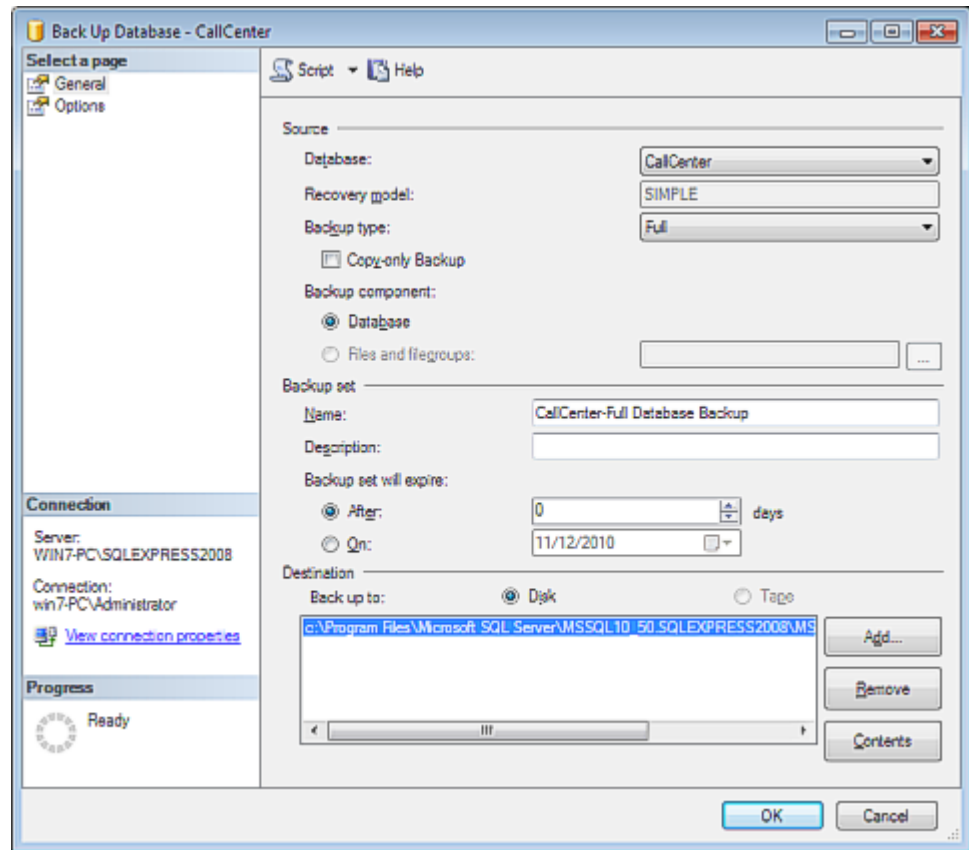
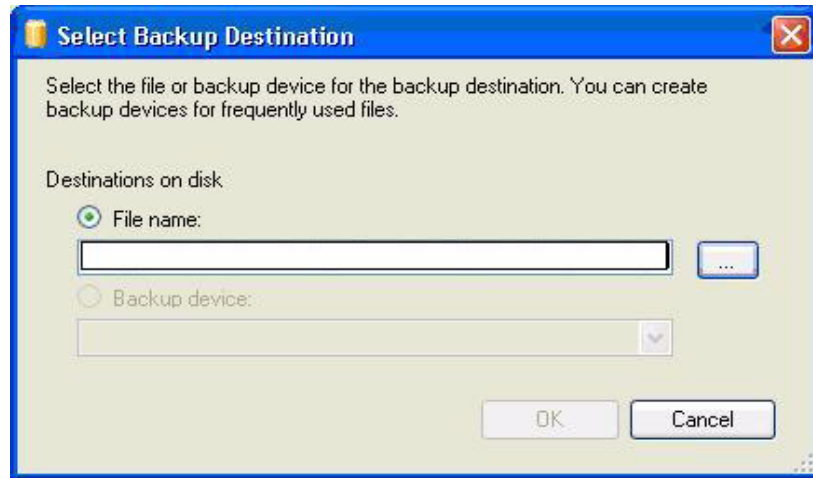


Figure 6-10 displays.

Figure 6-10 Back Up Database - Call Center



Step 2 Click **Add** to select the desired destination for the backup file. [Figure 6-11](#) displays.

Figure 6-11 Select Backup Destination Dialog Box


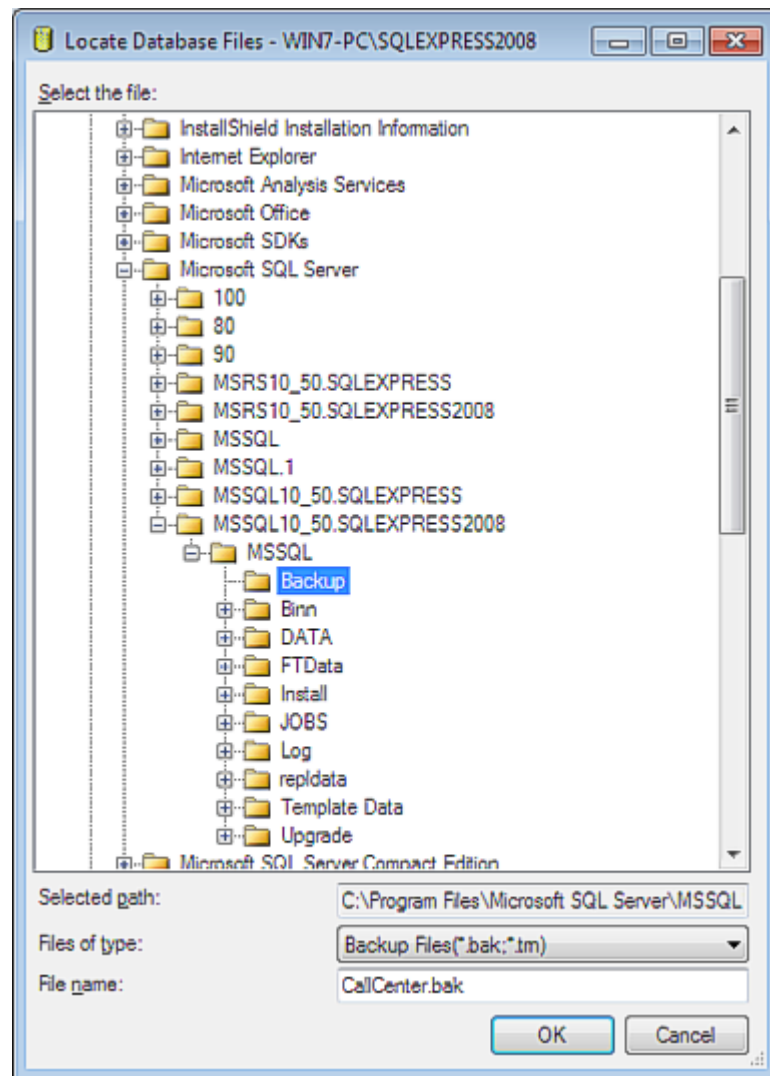
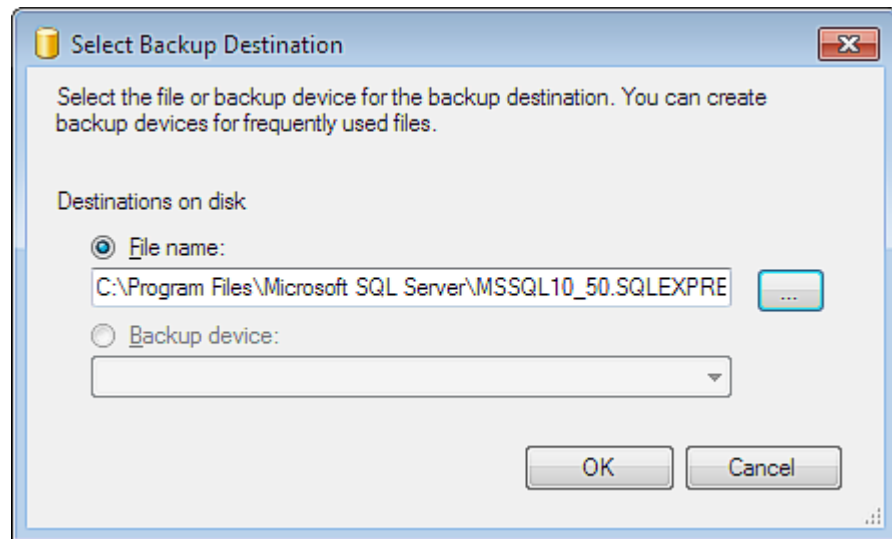
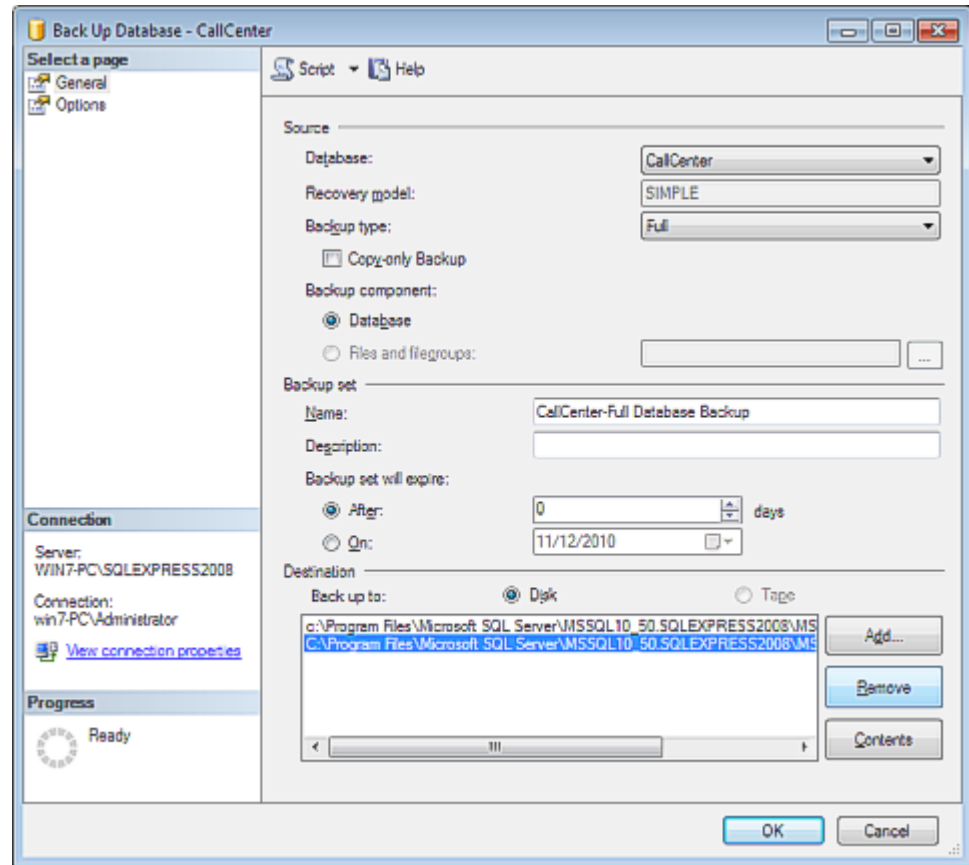
Step 3 Click the  button next to the File name to enter your desired backup file name. [Figure 6-12](#) displays.

Figure 6-12 Selected Path File Name

Step 4 Choose the Selected Path, enter File name, then click **OK**. Figure 6-13 displays.

Figure 6-13 Select Backup Destination

Step 5 Click **OK**. [Figure 6-14](#) displays.

Figure 6-14 Remove Back Up Destination

Step 6 Select the unwanted destination and click **Remove**.



NOTE

The following screen may display if there are multiple backup destinations specified.



Please specify only one destination.

Step 7 Select the desired Destination and click **OK** as depicted in Figure 6-15.

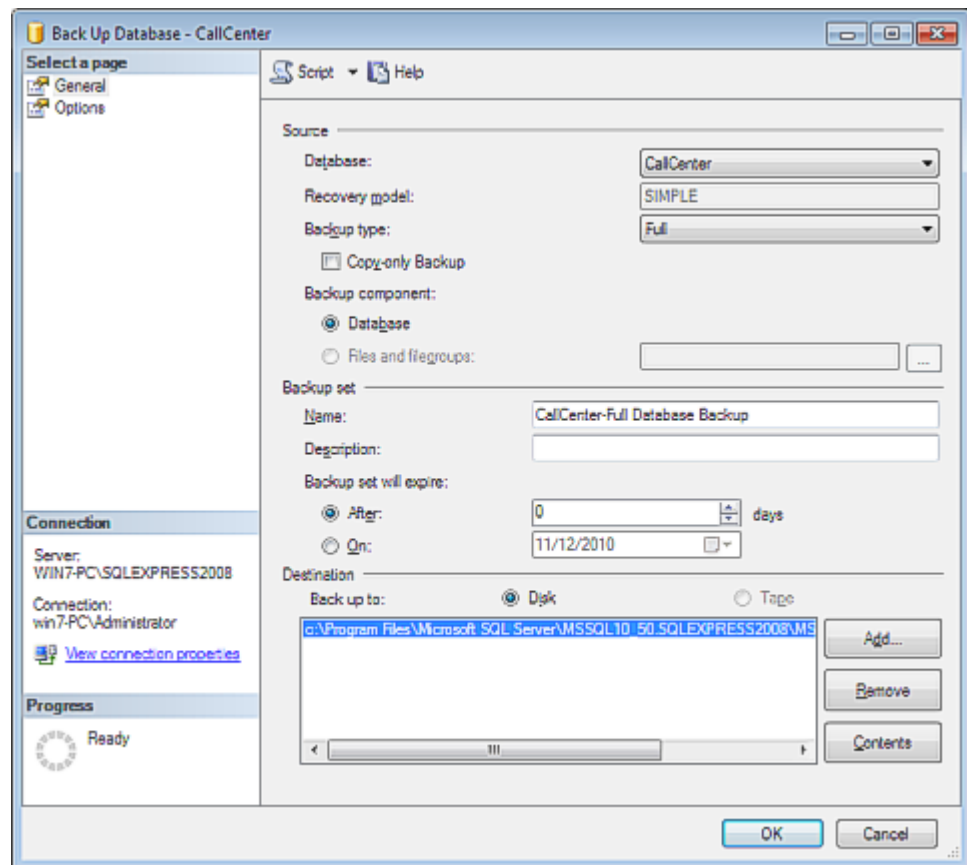
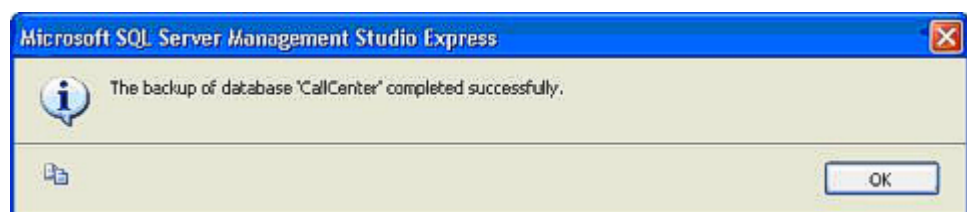
Figure 6-15 Desired Destination

Figure 6-16 displays.

Figure 6-16 Successful Backup Confirmation Dialog Box

Step 8 Click **OK**.

Restore a Database

To restore a database, perform the following steps.

Step 1 From SQL Server Management Studio Express, right-click on the database name to restore and select **Tasks > Restore > Database** as depicted in Figure 6-17.

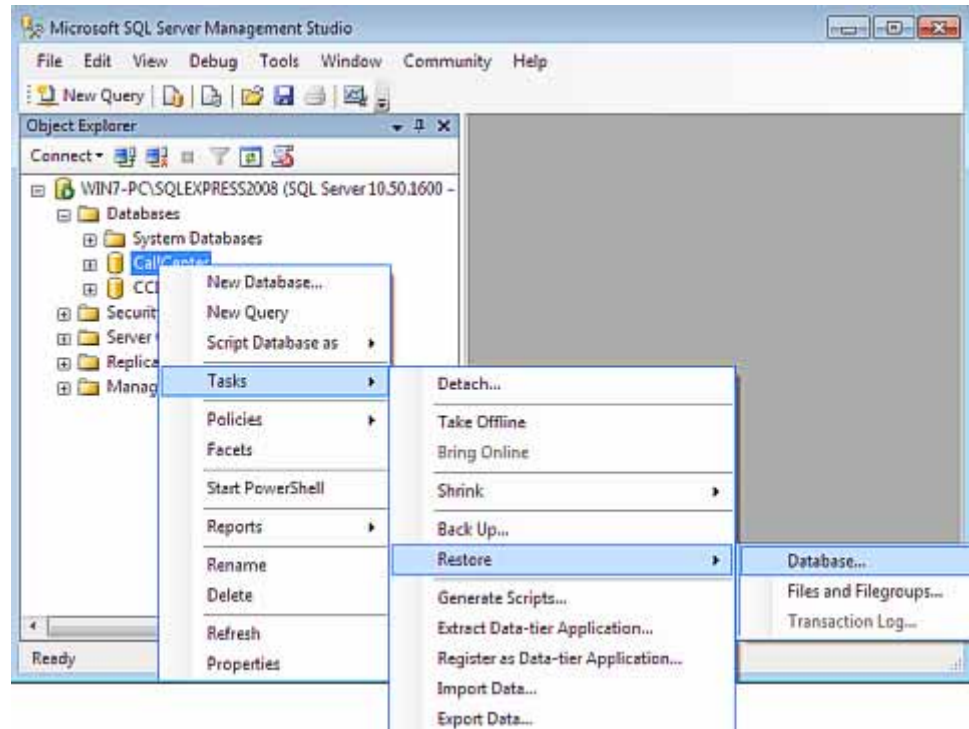
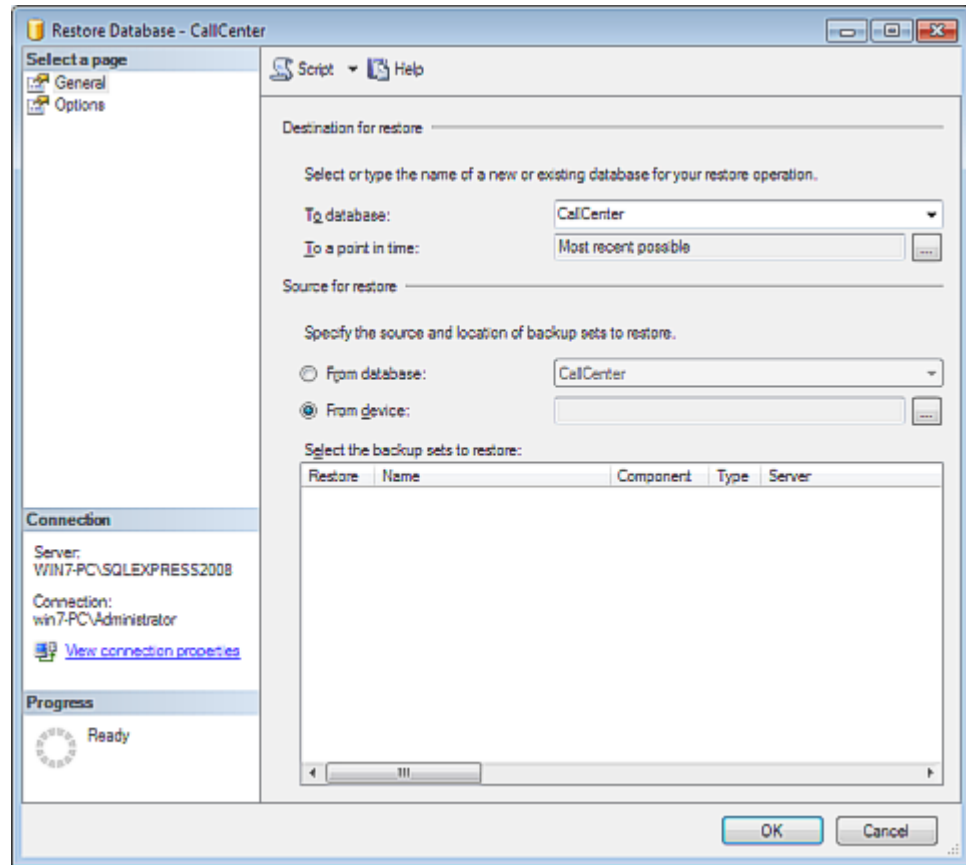
Figure 6-17 Restore Database

Figure 6-18 displays.

Figure 6-18 Restore Database - Call Center


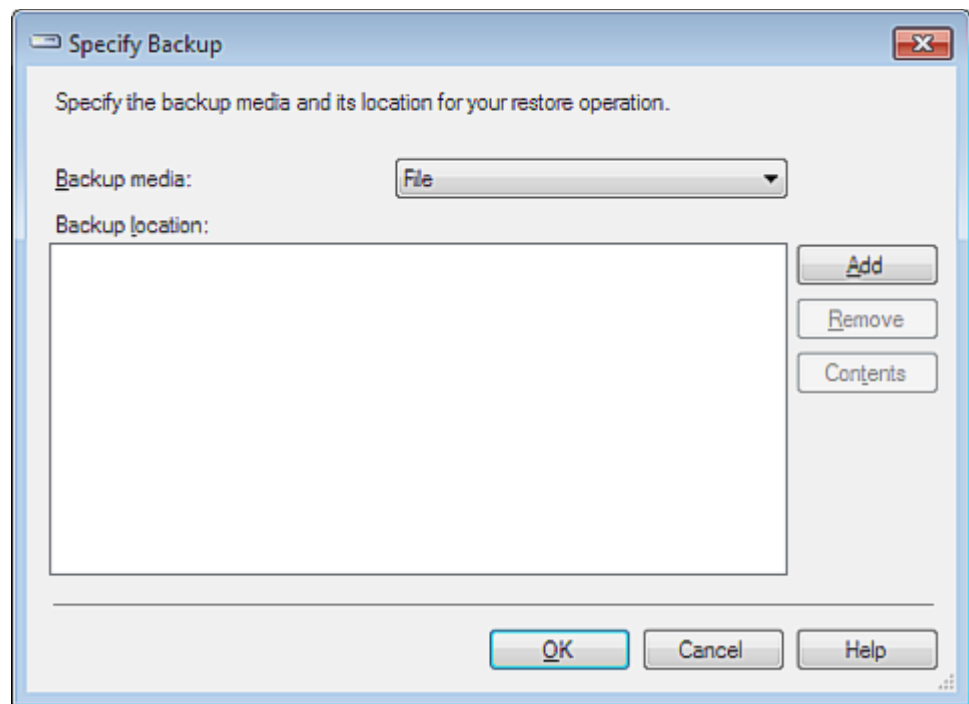
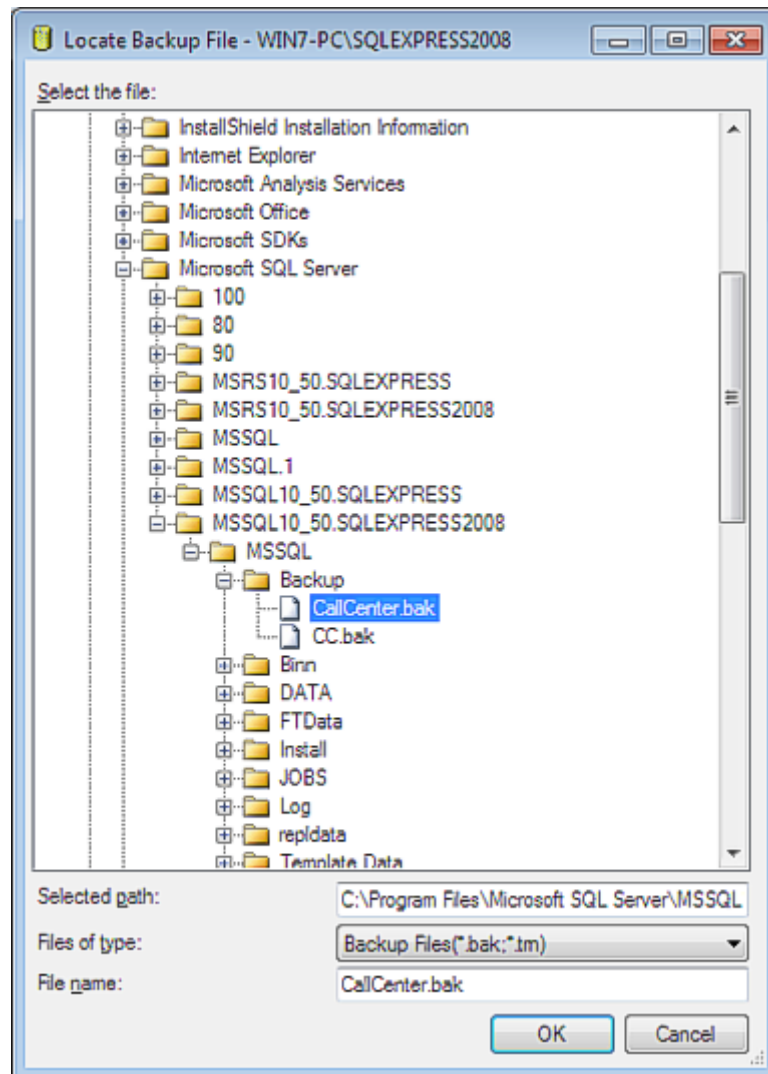
Step 2 Under Source for restore, Click the  button to specify the backup file name to restore from. [Figure 6-19](#) displays.

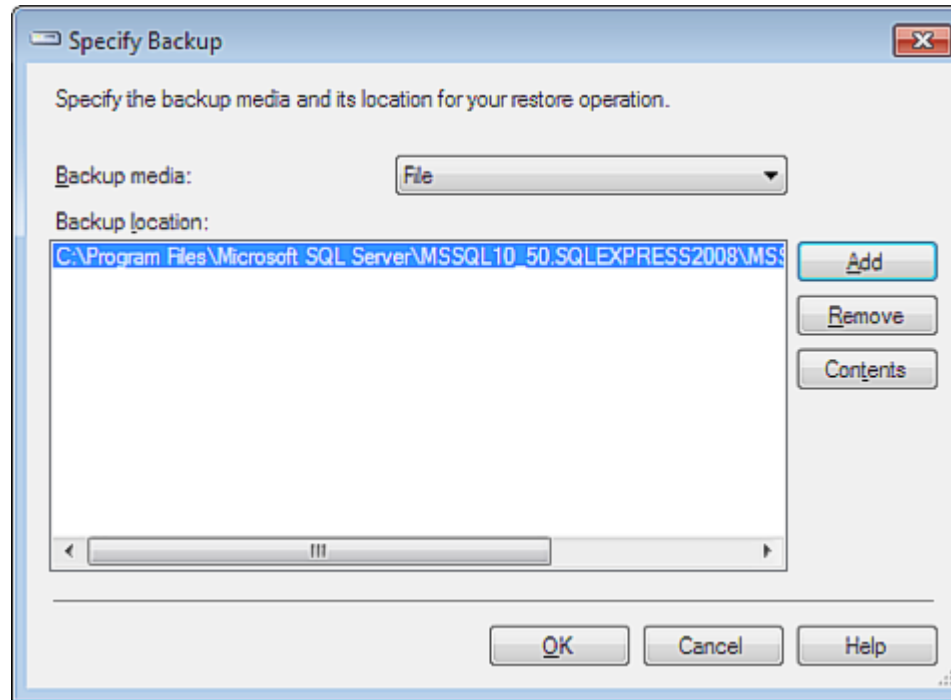
Figure 6-19 Specify Backup for Restore



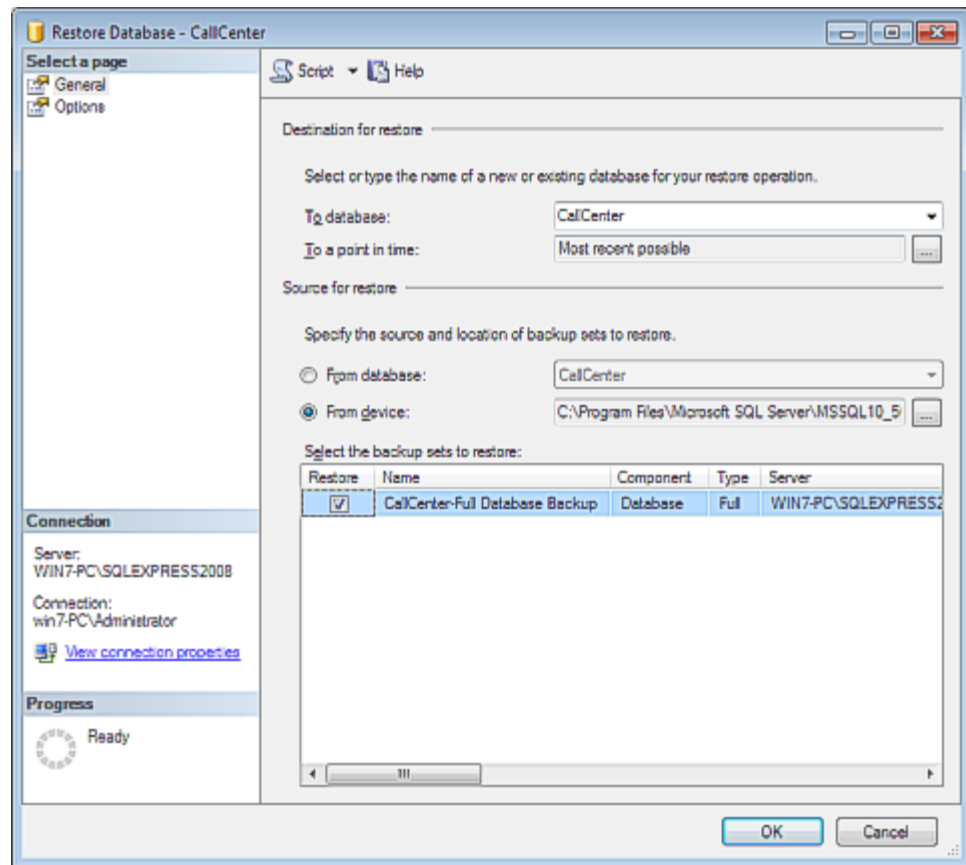
Step 3 Click **Add**. [Figure 6-20](#) displays.

Figure 6-20 Locate Backup File to Restore

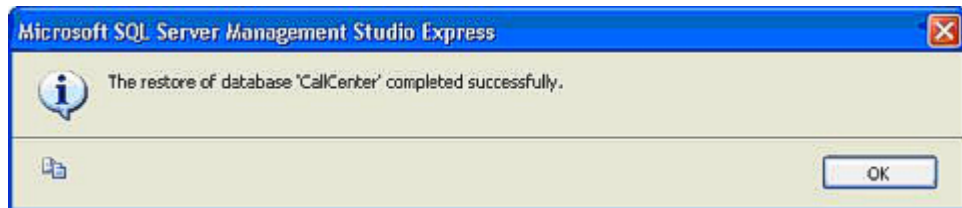
Step 4 Select the file name and click **OK**. Figure 6-21 displays.

Figure 6-21 Specify Backup File to Restore

Step 5 Click **OK**. [Figure 6-22](#) displays.

Figure 6-22 Backup Sets to Restore

Step 6 Under **Select the backup sets to restore**, check the **Restore** box and then click **OK**. [Figure 6-23](#) displays.

Figure 6-23 Successful Restore Confirmation Dialog Box

Step 7 Click **OK**.

Appendix A

Microsoft SQL Server 2008 R2 Express Edition with Advanced Services

The following topics are included in this section.

Chapter Topics

- [Microsoft SQL Server 2008 R2 Express Edition with Advanced Services Install](#)
- [Microsoft SQL 2008 R2 Express Edition Uninstall](#)

Microsoft SQL Server 2008 R2 Express Edition with Advanced Services Install

Microsoft SQL Server must be installed prior to CallCenterWorX MIS 4.0 installation.

If SQL Server 2008 has not yet been installed for use with CallCenterWorX MIS 4.0, please follow the instructions provided in this Appendix to install Microsoft SQL Server 2008 R2 Express Edition with Advanced Services Install, from CallCenterWorX MIS 4.0 DVD-ROM under **Prerequisites**.

Prerequisites for Microsoft SQL 2008 R2 Express Edition with Advanced Services

Prior to installation of SQL Server 2008 R2 Express Edition with Advanced Services, the following three Microsoft redistributables must be installed (or confirmed):

Microsoft .NET Framework 3.5 Service Pack 1
Microsoft Windows Installer 4.5
Microsoft PowerShell 1.0

After installing the pre-requisites, a hardware-appropriate version of Microsoft SQL Server 2008 R2 Express Edition with Advanced Services can be installed.

**NOTE**

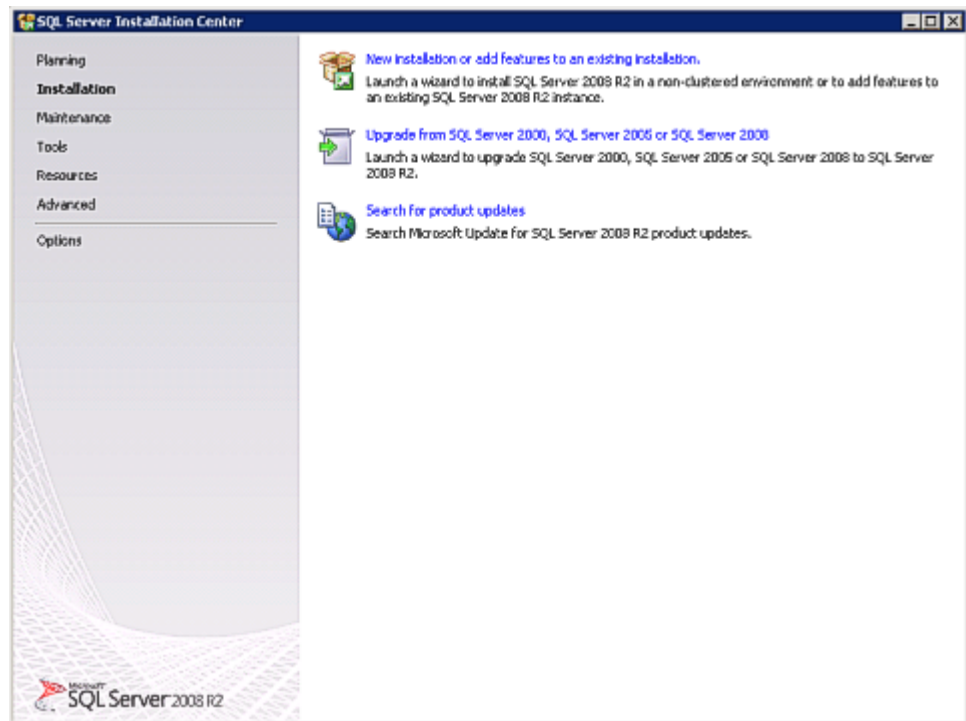
Some Windows Operating Systems do not need to have these prerequisites installed since they are already installed.

Microsoft redistributables for SQL Server 2008 R2 Express Edition with Advanced Services are included on the CallCenterWorX MIS 4.0 Installation DVD. Inserting the Disk into a DVD drive will display a menu with links for installation of the appropriate version (32-bit or 64-bit), under the Prerequisites section.

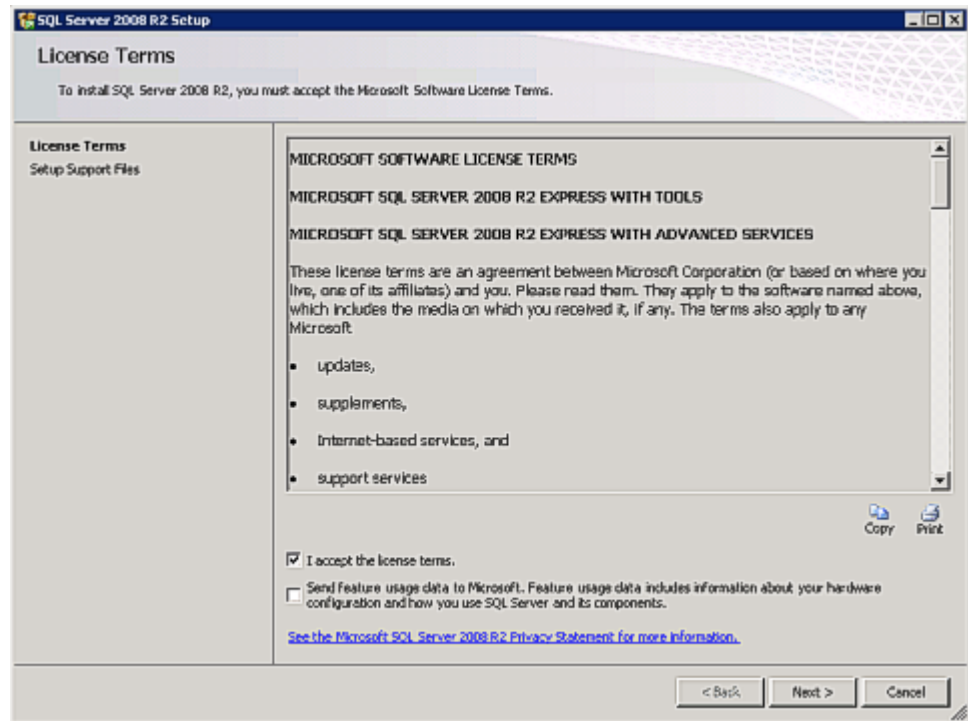
To install the Microsoft SQL Server 2008 R2 Express Edition with Advanced Services, follow the steps below.

- Step 1** Place the CallCenterWorX MIS 4.0 Installation DVD into the DVD-ROM drive and wait for the installation menu to open.
- Step 2** From the Prerequisites menu, select either the 32-bit or 64-bit link for installing SQL Server 2008 R2 Express Edition with Advanced Services. An Extracting Files dialog box displays and after the necessary files are extracted, an SQL Server Installation Center dialog box, figure A-1 displays.

A-1 SQL Express Install dialog box

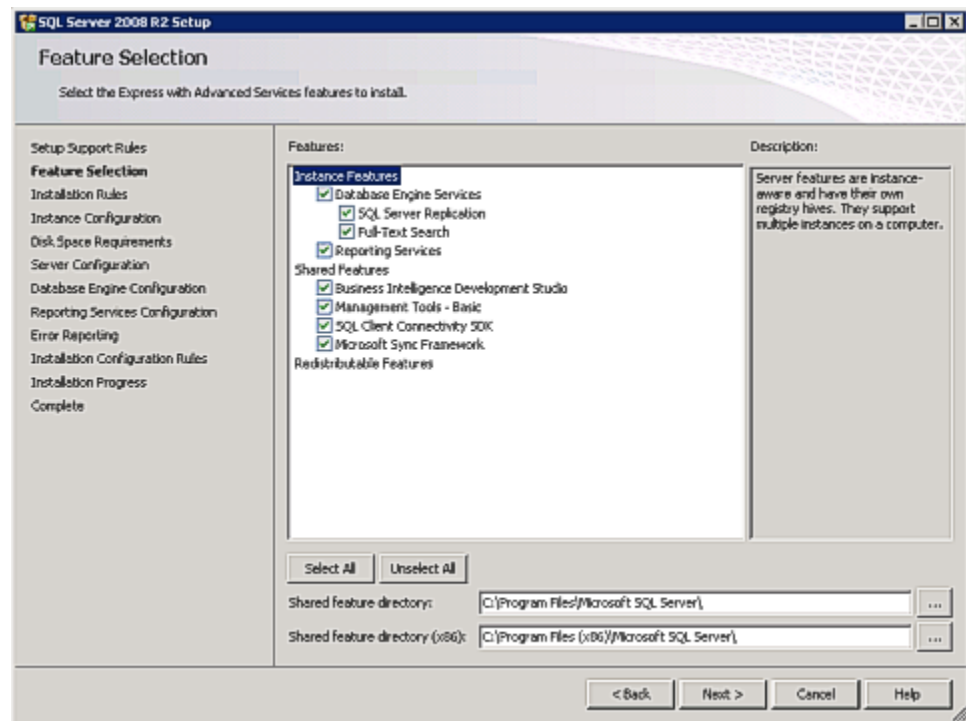


- Step 3** Click **New installation or add features to an existing installation** to display a Software License Agreement dialog box (A-2).

A-2 Software License Agreement dialog box

Step 4 Read the software license agreement in the list box and click **I accept the license terms.**

Step 5 Click **Next**. A Feature Selection dialog box displays (A-3).

A-3 Feature Selection dialog box

Step 6 Click **Select All** and then click **Next**. (It is best to install every feature now, during this initial install of SQL Server 2008 R2 Express Edition with Advanced Services, than to add features later, as required by various applications.) An Instance Configuration dialog box displays [\(A-4\)](#).

A-4 Instance Configuration dialog box

SQL Server 2008 R2 Setup

Instance Configuration

Specify the name and instance ID for the instance of SQL Server. Instance ID becomes part of the installation path.

Setup Support Rules
Feature Selection
Installation Rules
Instance Configuration
Disk Space Requirements
Server Configuration
Database Engine Configuration
Reporting Services Configuration
Error Reporting
Installation Configuration Rules
Installation Progress
Complete

☐ Default instance
☒ Named instance:

Instance ID:
Instance root directory:

SQL Server directory: C:\Program Files\Microsoft SQL Server\MSSQL10_50.SQLEXPRESS
Reporting Services directory: C:\Program Files\Microsoft SQL Server\MRS10_50.SQLEXPRESS

Installed instances:

Instance Name	Instance ID	Features	Edition	Version
---------------	-------------	----------	---------	---------

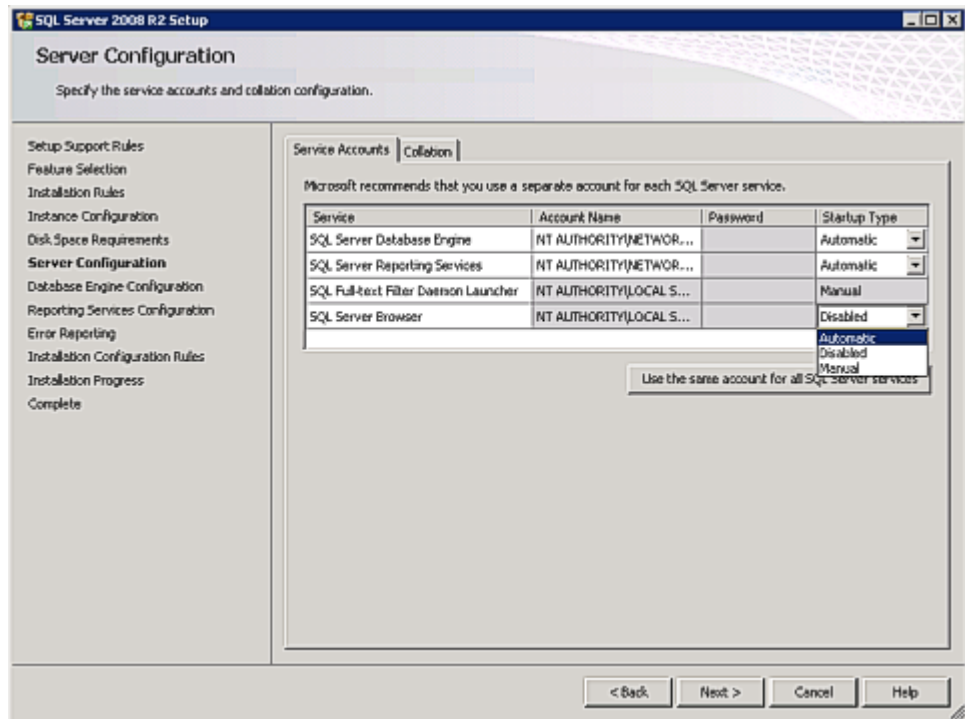
< Back Next > Cancel Help

Step 7 Edit the **Named Instance** if instance name **SQLEXPRESS** already exists on the system.



For example, if Microsoft SQL Server 2005 Express is already installed on the system and the instance name is **SQLEXPRESS**, then you will have to use a different instance name for the Microsoft SQL Server 2008 R2 Express installation, such as, **SQLEXPRESS2008**.

Step 8 Click **Next** to display a Server Configuration dialog box (A-5).

A-5 Server Configuration dialog box

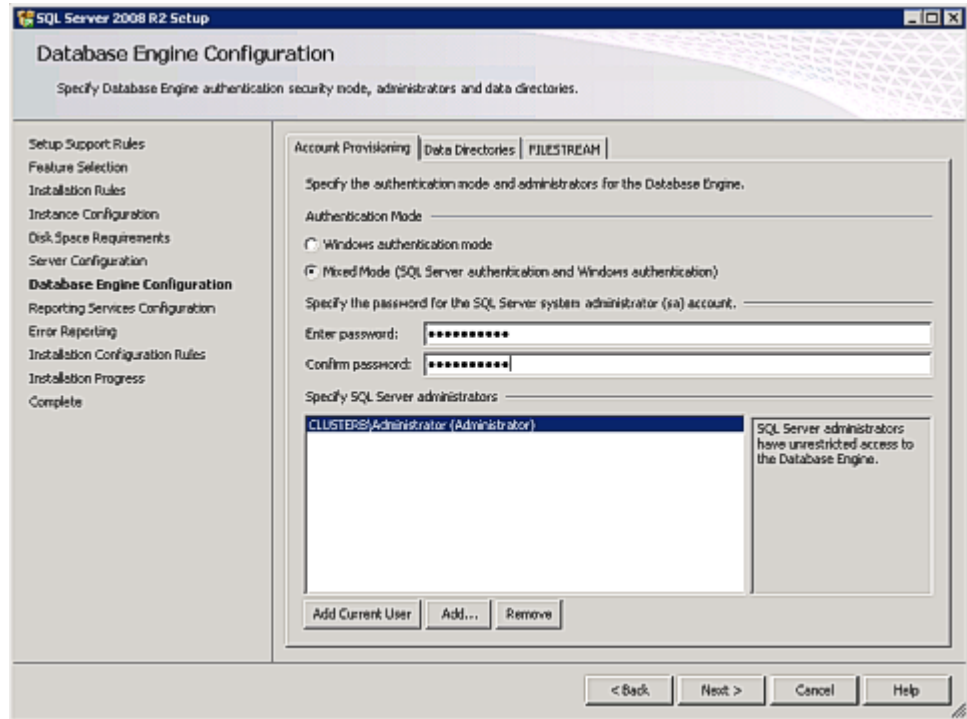
Step 9 Specify **NT AUTHORITY\NETWORK SERVICE** as the Account Name for **SQL Server Database Engine** and **SQL Server Reporting Services**.

Step 10 Specify **NT AUTHORITY\LOCAL SERVICE** as the Account Name for **SQL Full-text Filter Daemon Launcher** and **SQL Server Browser**.



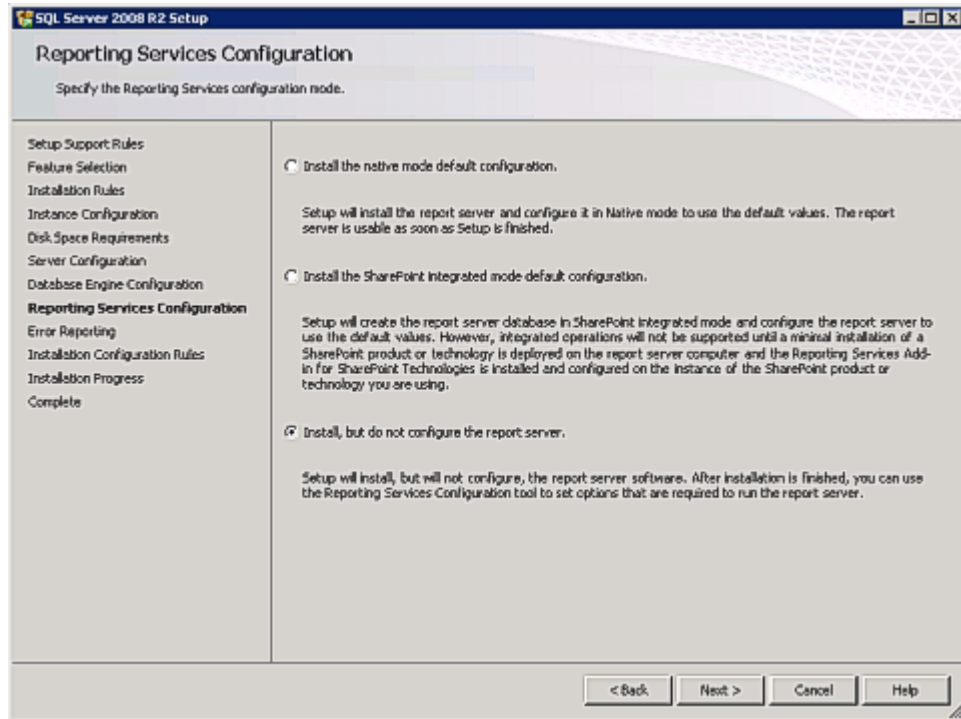
The Service Accounts specified here, in the Server Configuration dialog, can be modified after installation of SQL Server 2008 R2 via the SQL Server Configuration Manager. Please refer to Microsoft documentation for further information.

Step 11 Select **Automatic** for SQL Server Browser Startup Type and then click **Next**. A Database Engine Configuration dialog box displays (A-6).

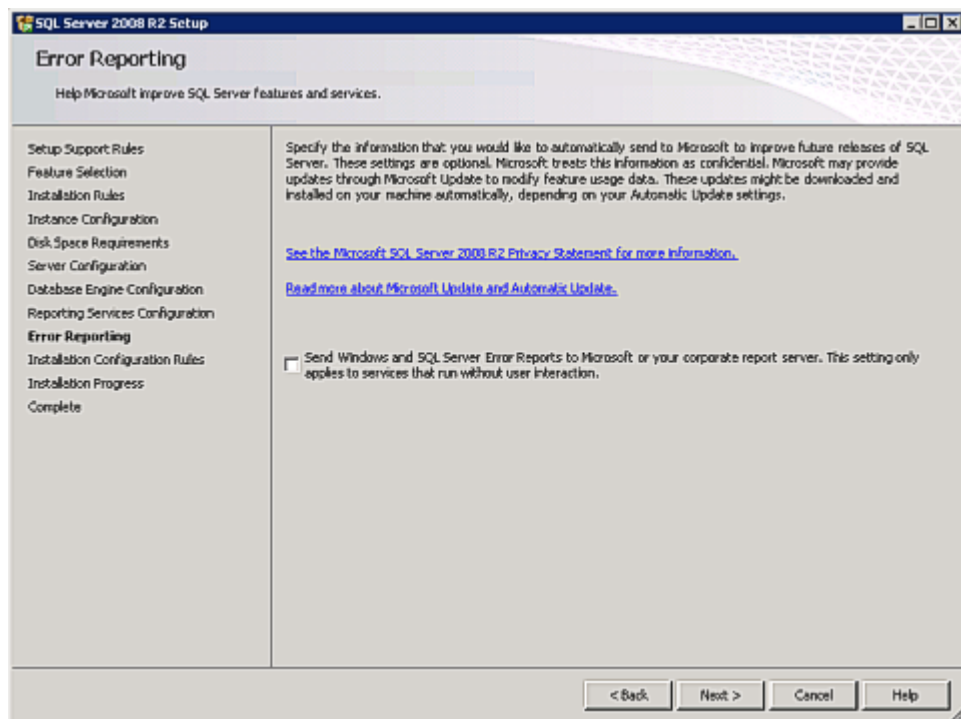
A-6 Database Engine Configuration dialog box

Step 12 Select **Mixed Mode** authentication, supplying a strong SA password and writing it down for later reference, and then click **Next**.

A Reporting Services Configuration dialog box displays [\(A-7\)](#).

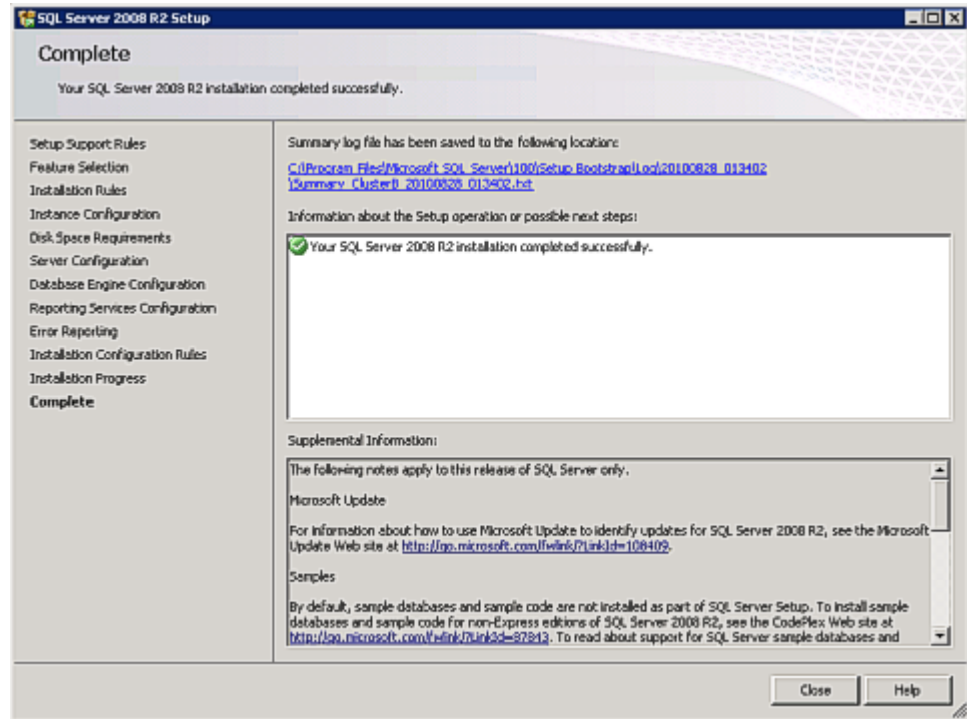
A-7 Reporting Services Configuration dialog box

Step 13 Select **Install, but do not configure the report server** then click **Next**. An Error and Usage Reporting dialog box displays (A-8).

A-8 Error and Usage Reporting dialog box

Step 14 Click **Next**. The installation starts automatically. A Complete dialog box displays (A-9).

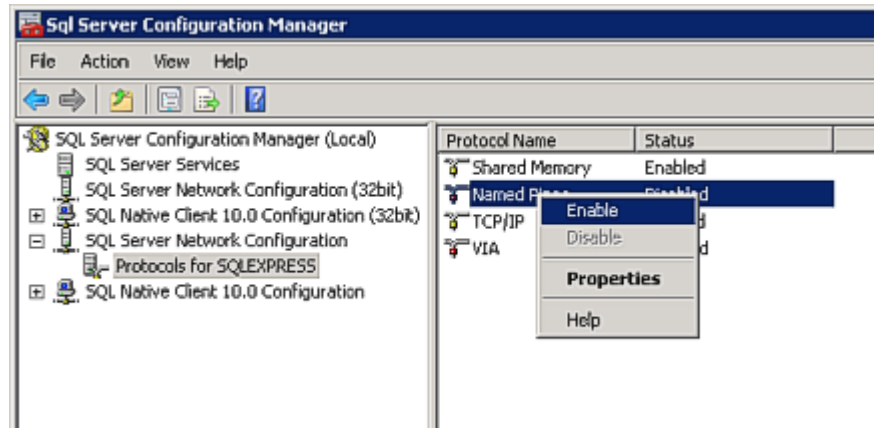
A-9 Complete dialog box



Step 15 Click **Close** to complete the installation. Also, close SQL Server Installation Center.

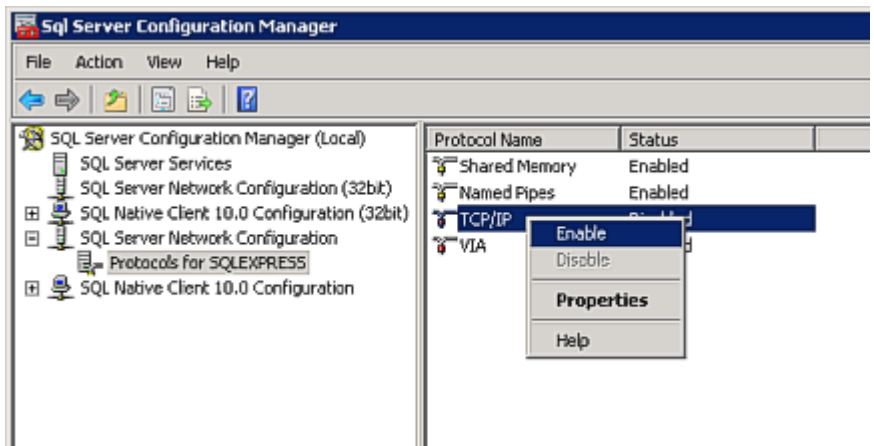
Step 16 From the **Start** menu, select **All Programs > Microsoft SQL Server 2008 R2 > Configuration Tools > SQL Server Configuration Manager**.

Step 17 Expand the **SQL Server Network Configuration** branch, then click **Protocols for SQLEXPRESS** (or the instance name created during installation). Right-click the **Named Pipes** protocol. A Named Pipes popup menu displays (A-10).

A-10 Named Pipes popup menu

Step 18 Select **Enable**. After a warning message displays, click **OK**.

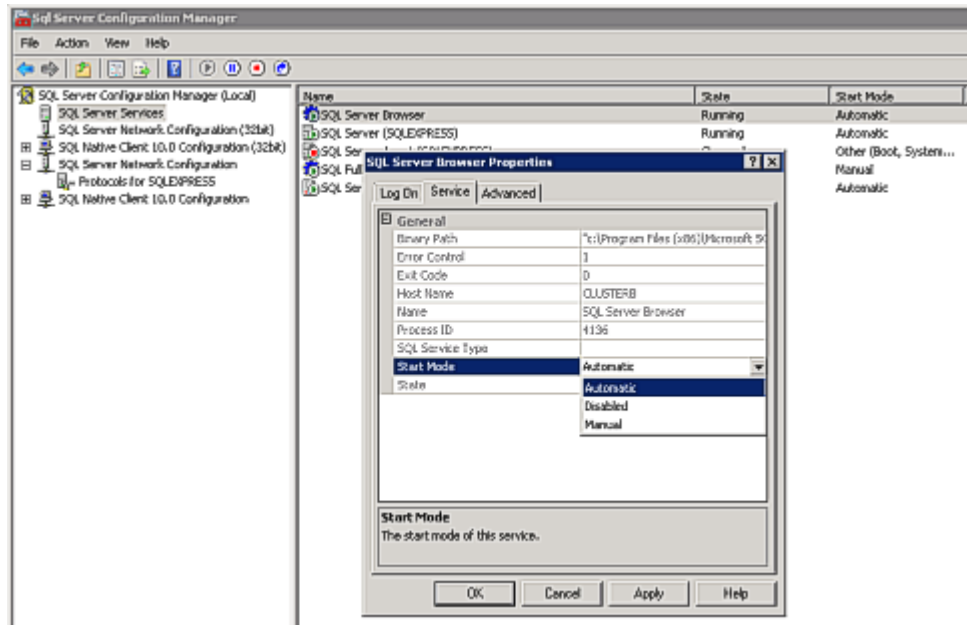
Step 19 Right-click the **TCP/IP** protocol to display a popup menu (A-11).

A-11 SQL Server Configuration Manager

Step 20 Select **Enable**. After a warning message displays, click **OK**.

Step 21 Confirm that Start Mode of SQL Server Browser is set to Automatic correctly. If not configured, click on **SQL Server Services**, then right-click on **SQL Server Browser** and select **Properties**. Then move to the **Service** tab and confirm that the Start Mode for SQL Server Browser was set to **Automatic** during installation of SQL. If not, change the Start Mode from **Manual** to **Automatic** and then click **OK**.

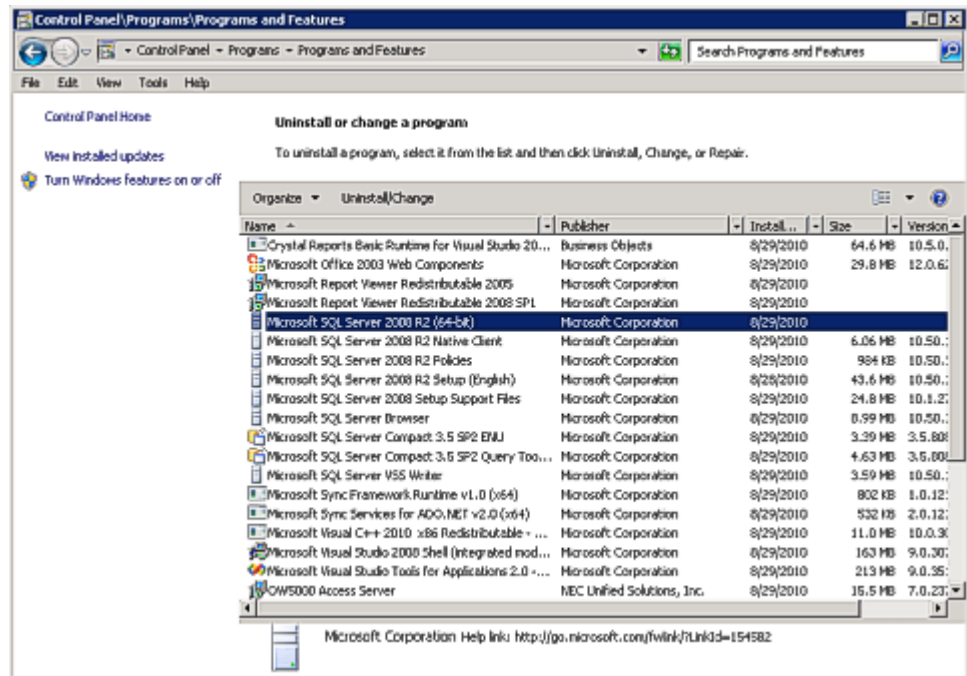
A-12 SQL Server Browser Service-Automatic Startup Mode



Microsoft SQL 2008 R2 Express Edition Uninstall

The Microsoft SQL Server 2008 R2 Express Edition can be uninstalled using the Windows operating system **Add/Remove** software function (**Programs > Uninstall a program** for Windows Server 2008), in the Windows Control Panel.

A-13 Uninstall SQL 2008 Express Server



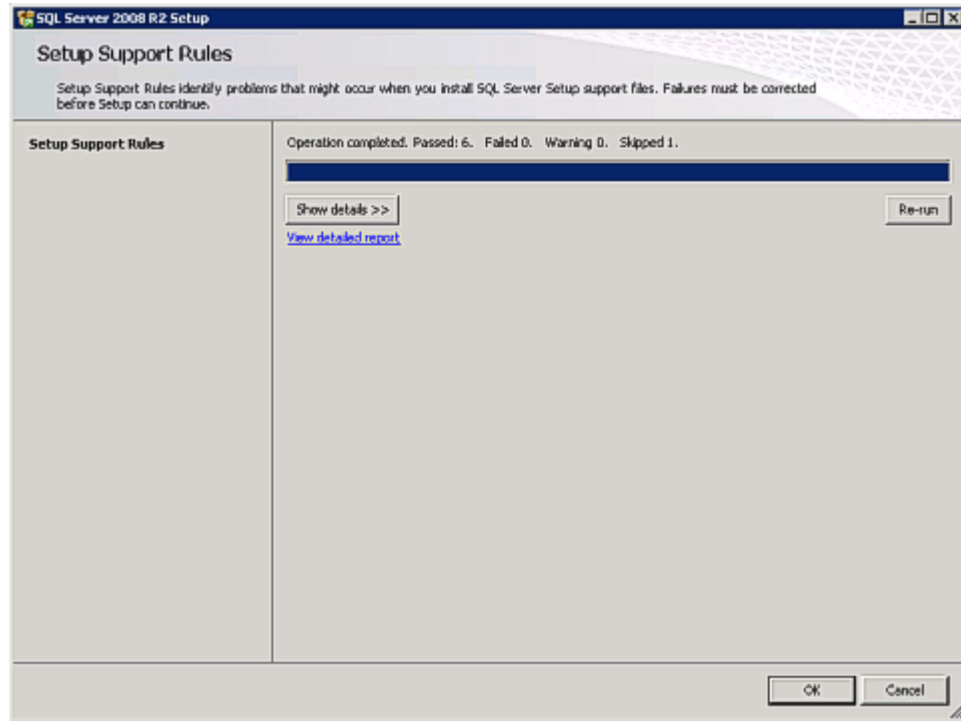
Step 1 Select Microsoft SQL Server 2008 R2 and click **Change/Remove** (**Uninstall/Change** for Windows 2008) from the Add or Remove Programs. A-14 displays.

A-14 Remove dialog box

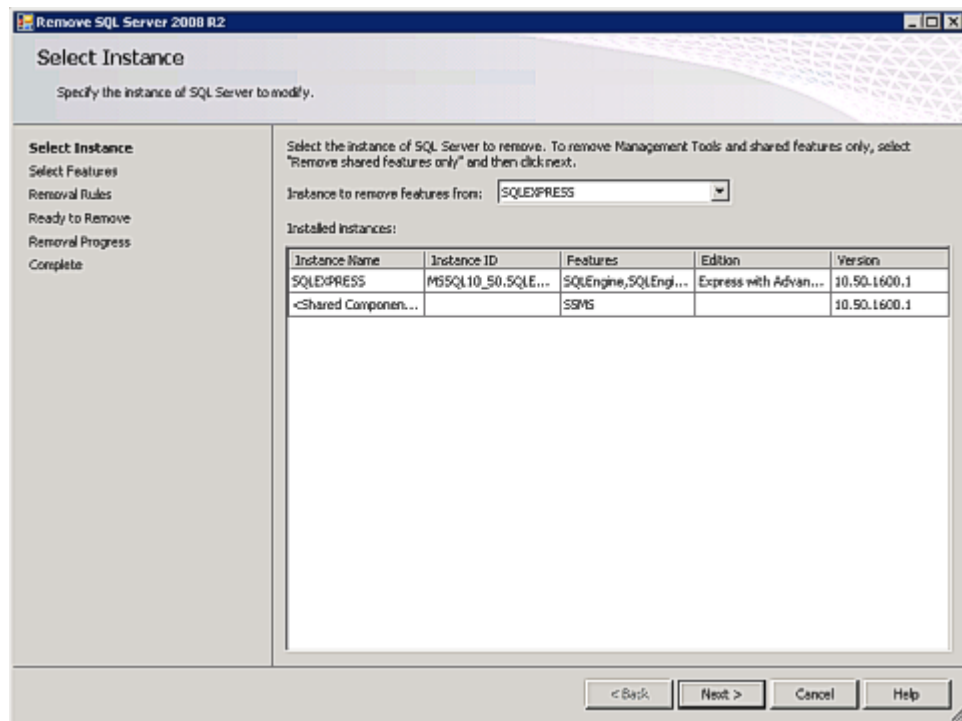


Step 2 Click **Remove**. A-15 displays.

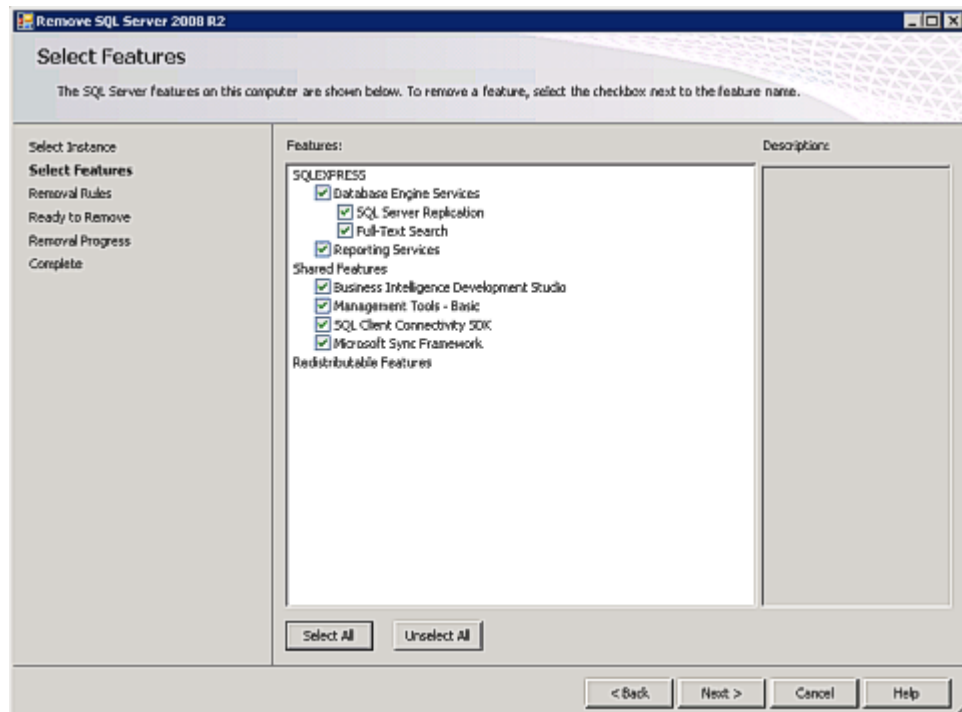
A-15 Setup Support Rules dialog box



Step 3 Click **OK**. A-16 displays.

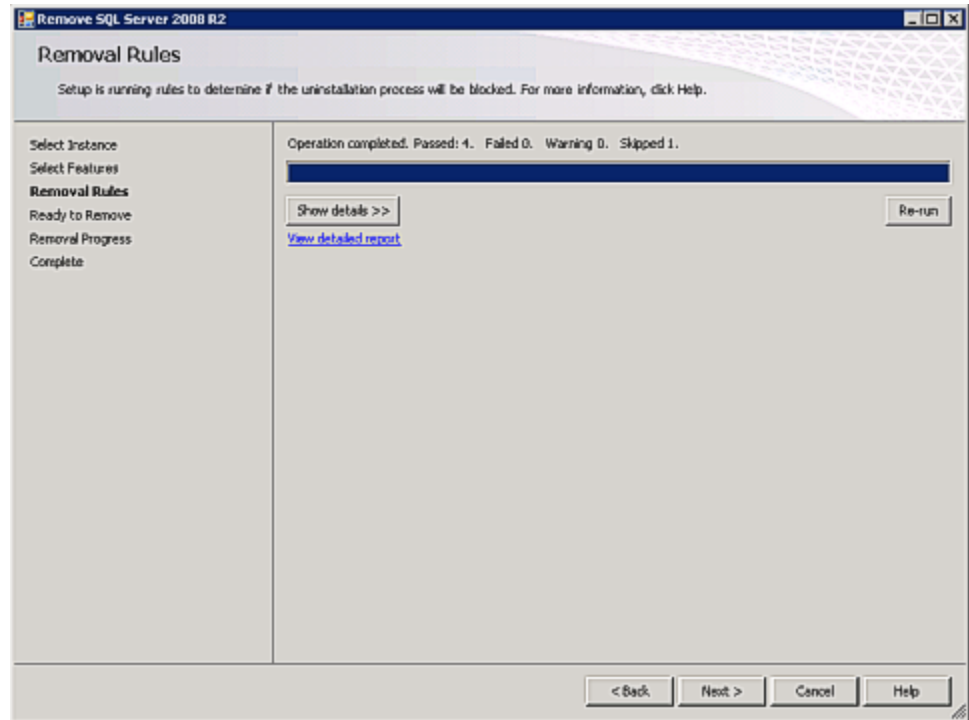
A-16 Select Instance dialog box

Step 4 Click **Next**. A-17 displays.

A-17 Select Features dialog box

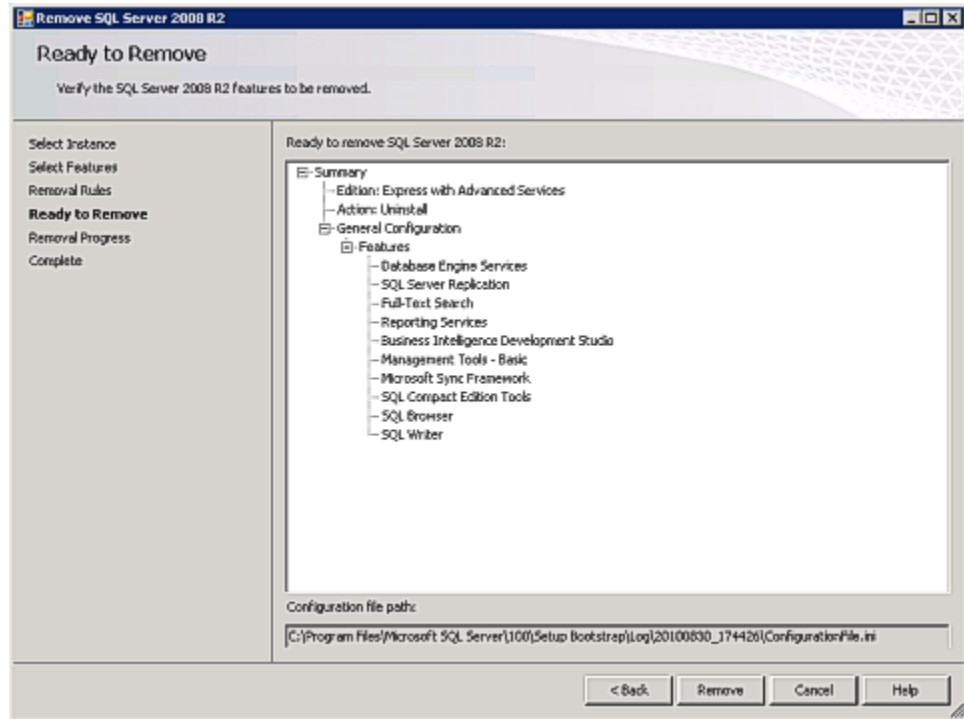
Step 5 Click **Select All** and then click **Next**. A-18 displays.

A-18 Removal Rules dialog box



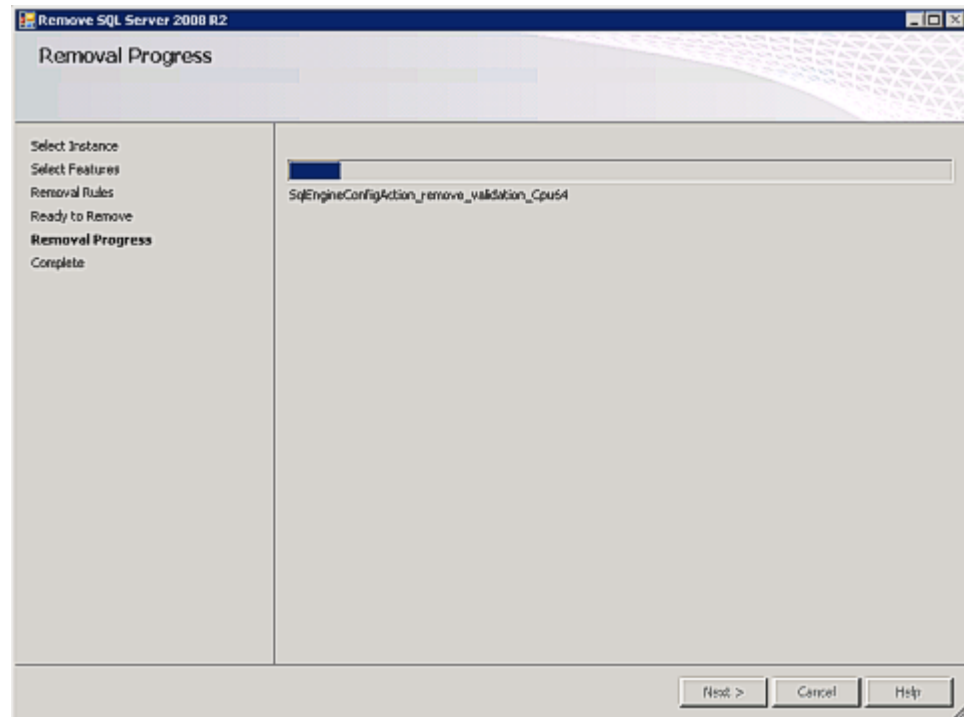
Step 6 Click **Next**. A-19 displays.

A-19 Ready to Remove



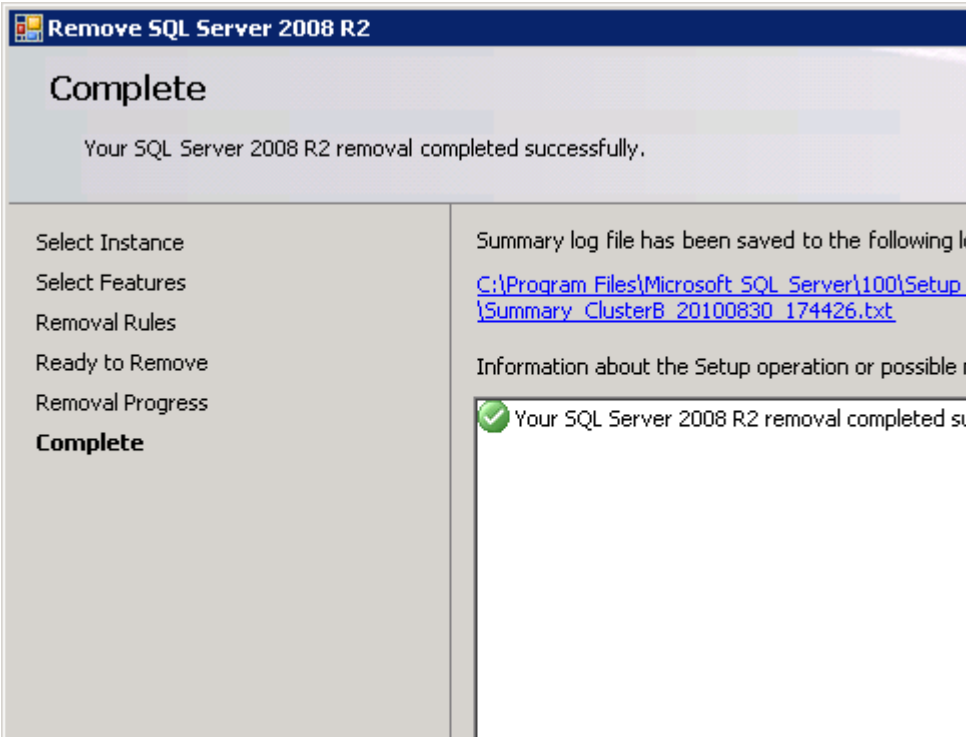
Step 7 Click **Remove**. A-20 displays.

A-20 Removal Process dialog box



When the removal process is complete, A-21 displays.

A-21 SQL Server 2009 Removal Completion dialog box



Step 8 Click Close.

For additional information or support on this NEC Corporation of America product, contact your NEC Corporation of America representative.

N E C NEC Corporation of America

CallCenterWorX MIS Installation Manual

NDA-30159, Revision 8