



P2000

Security Management System

Server/Workstation

Software Installation Manual

PRELIMINARY

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Software Installation Manual

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This equipment must not be modified for any reason and it must be installed as stated in the Manufacturer's instruction.

If this shipment (or any part thereof) is supplied as second-hand equipment, equipment for sale outside the European Economic Area or as spare parts for either a single unit or system, it is not covered by the Directives.

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INTRODUCTION

Information in this manual will help you configure your server and install the P2000 Security Management System version 3.11. Start the procedures described here after your hardware has been installed and all cables are connected.

When you purchase a complete P2000 Security Management System from Johnson Controls®, the server hardware and software are configured and installed at the factory. These instructions are provided for P2000 software only packages, for those occasions when the software must be reloaded in the field, or for those cases where you need to perform a software upgrade.

For those customers who are presently running the P2000 software and wish to upgrade to version 3.11, *Chapter 3: Software Upgrade* provides instructions for upgrading the existing P2000 systems.

CHAPTER SUMMARIES

- ***Chapter 1: Introduction***, describes the P2000 packages, minimum server and workstation requirements, and manual conventions. This chapter also contains information on how to contact technical support.
- ***Chapter 2: Server Setup***, describes how to configure your server prior to installing the P2000 prerequisites and software.
- ***Chapter 3: Software Upgrade***, this chapter has been prepared for users who are upgrading a previous version of the P2000 software or re-installing the P2000 software to add options.
- ***Chapter 4: Software Installation***, provides step-by-step instructions for installing the P2000 prerequisites and software on the server and on the workstation(s).
- ***Appendix A: ASSA ABLOY Integration***, provides an introduction to the P2000 SMS and ASSA ABLOY Intelligent Lock integration.

P2000 PACKAGES

The following P2000 packages are available:

- P2000 server package (hardware and software)

The package includes the operating system, Microsoft® SQL Server® (if required), and P2000 prerequisites/software, as well as user documentation and the P2000 tutorial.

- P2000 workstation package (hardware and software)

This package includes a workstation with hardware and software configured and installed at the factory. The operating system and P2000 prerequisites/software, as well as user documentation and the P2000 tutorial are also provided.

Although the workstation comes pre-loaded with software, end user may be required to change the system Server name, if other than “P2000.” (See “Workstations Supplied by Johnson Controls” on page 4-27 for details.)

- P2000 software only package

This package includes the P2000 prerequisites/software, as well as user documentation and the P2000 tutorial. The end user must supply the operating system and the SQL Server (if required) and perform the installation.

- P2000 software upgrade package

This package includes the P2000 prerequisites/software, as well as user documentation and the P2000 tutorial. The upgrade is performed by the end user.

The P2000 Software DVD contains the P2000 Software, user documentation in electronic form, and the P2000 tutorial.

The P2000 Prerequisites DVDs contain the Microsoft SQL Server Express Edition and majority of updates available from Microsoft at the time of the release. Newer updates may be available on the Internet at the time you perform the installation. It is recommended that you use the latest updates available.

The same P2000 software DVDs are used to install the P2000 prerequisites and software on the P2000 server and on the P2000 workstations.

SYSTEM CONFIGURATION

The P2000 Security Management System operates in a client-server architecture. You must install P2000 software on the system server prior to installing it on the system workstations.

The P2000 software version 3.11 can be used on server/workstations with one of the following operating systems (32 or 64 bit):

Table 1-1: Operating System and Database Engine Platforms(32-bit or 64 bit) for P2000 Systems

	SQL Server 2005	SQL Server 2008	SQL Server 2008 R2	SQL Server 2005 Express
Windows Server® 2003	Yes	Yes	Yes	Yes
Windows Server 2003 R2	Yes	Yes	Yes	Yes
Windows Server 2003 Enterprise	Yes	Yes	Yes	Yes
Windows Server 2003 R2 Enterprise	Yes	Yes	Yes	Yes
Windows Server 2008	Yes	Yes	Yes	Yes
Windows Server 2008 R2	Yes	Yes	Yes**	Yes
Windows Server 2008 Enterprise	Yes	Yes	Yes	Yes
Windows Server 2008 R2 Enterprise	Yes	Yes	Yes	Yes
Windows Server 2008 Foundation	Yes	Yes	Yes	Yes
Windows Server 2008 R2 Foundation	Yes	Yes	Yes	Yes
Windows XP® (workstations only)	N/A	N/A	N/A	N/A
Windows Vista®	Yes	Yes	Yes	Yes
Windows Vista Ultimate	Yes	Yes	Yes	Yes
Windows 7***	Yes	Yes	Yes	Yes

* The SQL Server Express Editions have limited performance and database size, and should only be used for small P2000 systems.

** Recommended platforms.

NOTE

The SQL Server Express Editions have limited performance and database size, and should only be used for small P2000 systems.

NOTE

The P2000 server should be used as a dedicated server for the P2000 Security Management System. The software installed on the server should be limited to the Microsoft Windows® operating system, SQL Server, and the P2000 software. If you wish to install and run other 3rd-party applications, please contact a Johnson Controls® Technical Support specialist for assistance.

NOTE

Support for OSI panels requires Internet Information Services (IIS) version 6.0 (as provided, for example, with Microsoft Windows XP, Windows Server 2003, and Windows Server 2008) and therefore is not available in systems using Windows 7.

Important Notes on Using a 64-Bit Operating System

Johnson Controls Directory Location

On 64-bit Microsoft Windows operating systems supported by P2000, the Johnson Controls directory is located in \Program Files (x86).

ODBC Connection Properties

The P2000 system uses 32-bit ODBC connections and the Data Sources application launched from the Control Panel is only for 64-bit ODBS sources.

To modify ODBC connection properties on P2000 systems using 64-bit operating systems, manually launch the 32-bit version of ODBC as found in:

C:\Windows\SysWOW64\odbcad32.exe

Server Requirements

The following table lists nominal recommendations for P2000 server. If you anticipate heavy use of a system feature, such as many CCTV switches, or heavy use of host events, increase the memory or go to the next, higher platform.

Any P2000 Enterprise system or a system using the Change Tracking option should use the next higher level of system.

Table 1-2: P2000 Host Recommendations

Maximum number of:			SQL Server	Operating System	Hardware*
Readers	Card-holders	Workstations			
64	5000	2	Express	Windows Vista	2 GB RAM 100 GB
128	15,000	5	Standard	Windows 2008 Server	4 GB RAM 250 GB
256	25,000	10	Standard	Windows 2008 Server 64 bit	8 GB RAM 500 GB
1024	50,000	25	Standard	Windows 2008 Server 64 bit	8 GB RAM 1000 GB

* 100BASE-T Network controller card is recommended for all servers.

Workstation Requirements

The following are the recommended workstation requirements:

- Windows XP
- 768 MB RAM
- 1024 x 768 resolution video card, 24-bit color
- 17-inch video monitor
- 40 GB hard drive
- 10BASE-T Network controller card
- DVD drive

Panel Firmware Requirements

The following are the panel firmware requirements:

- CK721-A v2.9+
- CK721 v2.4+
- CK720 v1.2+
- CK705 v1.2+
- S321-DIN (all versions)
- S321-IP v2.5+
- OSI (Portal 2.0.0 build 107, Reader 220.010)
- Isonas (Freescale 9.21 and PIC 3.08)
- HID® (2.27.39)
- S320 (all versions)
- D620 (143G)

- D620-TIU (173E+)
- D600 AP (PS 155B+)
- P900 (Mark I,II)

Printers

Services such as printing and network communications are specific to your system. These services are minimally addressed in your *P2000 Software User Manual*. If you need assistance, see your system administrator.

Configuration of Default Printer for P2000 Reports

Correct display of the P2000 reports on screen depends on the printer used. It is not required that the printer be physically connected, only that a compatible printer driver be added to the operating system from where the P2000 reports are generated.

The printer should then be selected when generating a P2000 report. Alternatively, a **No Printer** check box can be used. Refer to the *P2000 Software User Manual* for details.

NOTE

The Microsoft XPS Document Writer, which is the default printer for some Microsoft operating systems, is not fully compatible with P2000 reports.

Using P2000 Custom Report Writing

If you plan to create custom reports in addition to the many standard reports available in P2000, you must install Crystal Reports® version 9.0 or higher yourself. This software is not supplied by Johnson Controls. Install according to the manufacturer's instructions; no specific settings are required for use with P2000.

NOTE

The Crystal Reports software should be installed after all other software has been installed. It is recommended that the Crystal Reports software be installed and used on a P2000 Workstation, not on the P2000 Server.

NOTE ON OTHER MANUFACTURER'S DOCUMENTATION

Johnson Controls does not duplicate documentation of other equipment manufacturers. When necessary, as in this installation procedure, Johnson Controls provides documentation that supplements that of other manufacturers. When unpacking your equipment, keep all original manufacturer documentation for future reference.

TECHNICAL SUPPORT

Technical assistance is provided to Johnson Controls authorized dealer representatives from 5 a.m. PT (Pacific Time) to 5 p.m. PT Monday through Friday. System users can get answers to operator questions by calling the local Johnson Controls Inc. sales/service office.

The authorized dealer representatives can also provide you with information on the maintenance contracts and the on-site field service.

MANUAL CONVENTIONS

The following items are used throughout this manual to indicate special circumstances, exceptions, important points regarding the equipment or personal safety, or to emphasize a particular point.

NOTE

Notes indicate important points or exceptions to the information provided in the main text.

IMPORTANT

Important messages remind you that certain actions, if not performed exactly as stated, may cause damage to equipment or make your system non-operational.

PRELIMINARY

SERVER SETUP

This chapter describes how to prepare your server for P2000 software installation. These instructions are intended for end users who are installing their own software, or in cases where Johnson Controls-loaded software must be reloaded in the field.

Optional procedures, not described in this document, include configuration of the backup device and Crystal Reports installation. The Crystal Reports software is not included with the standard software package supplied by Johnson Controls. It is required only if you create custom reports.

NOTE

The P2000 server should be used as a dedicated server for the P2000 Security Management System. The software installed on the server should be limited to the Microsoft Windows operating system, SQL Server, and the P2000 software. If you wish to install and run other 3rd-party applications, please contact a Johnson Controls® Technical Support specialist for assistance.

The installation should be performed in the following sequence:

- Operating system installation
- Joining the domain (optional)
- SQL Server installation

In general, you will install the software system per the manufacturer's instructions and according to your system administration requirements. Some P2000-specific settings will be necessary for optimum operation.

The following sections provide you with information on where the default installation or configuration options must be changed.

OPERATING SYSTEM

Verify that the server hardware is compatible with the version of Windows you are using. You may need to perform **firmware upgrade** before installing the operating system. For more information on compatibility and upgrades refer to the server manufacturer's and

Microsoft documentation. If you attempt to perform the installation without the required firmware upgrade, the installation will fail.

If the operating system does not support your computer hardware natively, it may be necessary to create a **driver disk** and install drivers. For instructions, refer to the manufacturer's documentation.

It is recommended that after installing the operating system you verify the hardware configuration in the Device Manager and Event Viewer. Any hardware issues, as indicated by yellow question marks or red stop sign icons must be resolved prior to loading the SQL Server or P2000 software.

The following are the factory default settings for P2000 server:

- Computer name: P2000
- Administrator password: Master1

Specific settings required for computers to be used as P2000 servers:

- Install **Internet Information Services (IIS)** with **ASP.NET**
- Set screen resolution to **1024x768** or higher
- Set color quality to **Highest (32 bit)**

Instructions for installing IIS with ASP.NET are provided below:

- “IIS Installation (Windows Vista)” on page 2-2
- “IIS and ASP.NET Installation (Windows 7)” on page 2-3
- “IIS and ASP.NET Installation (Windows 2003)” on page 2-3
- “IIS and ASP.NET Installation (Windows 2008)” on page 2-7
- “IIS and ASP.NET Installation (Windows Server 2008 R2)” on page 2-12

IIS Installation (Windows Vista)

➤ To install IIS:

1. Go to **Start>Settings>Control Panel** and double-click on **Programs and Features**.
2. In the left window pane under **Tasks** click on the **Turn Windows features on or off** link.
3. In the Windows Features window select the **Internet Information Services** check box. Click **OK**.
4. Wait for the installation to complete and close the windows.

IIS and ASP.NET Installation (Windows 7)

► **To install IIS and ASP.NET:**

1. Log on as the system administrator.
2. Go to **Start>Control Panel**.
3. In Control Panel, click **Programs**.
4. A window opens which allows you to adjust your computer's settings. Click the **Turn Windows features on or off** link.
5. Under **Programs and Features** click **Turn Windows features on or off**.
6. In the Windows Features window, in addition to default selections:
 - Select the **Internet Information Services** check box.
 - Expand the tree and go to **Internet Information Services > World Wide Web Services > Application and Development Features** to select **ASP.NET**.
(When you select it, other check boxes will automatically get selected as well.)
As you are selecting each item, certain additional items may be added automatically.
7. Click **OK**.

IIS and ASP.NET Installation (Windows 2003)

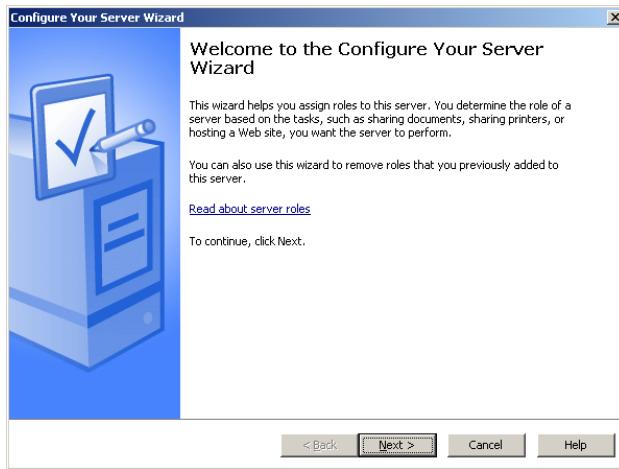
You will need:

- Windows Server 2003 CD

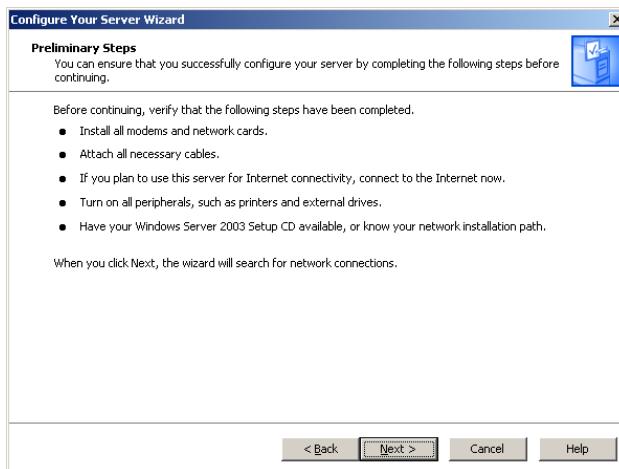
► **To configure the server as an Application Server:**

1. Log on as the system administrator.
2. Go to **Start>Programs>Administrative Tools>Configure Your Server Wizard**.

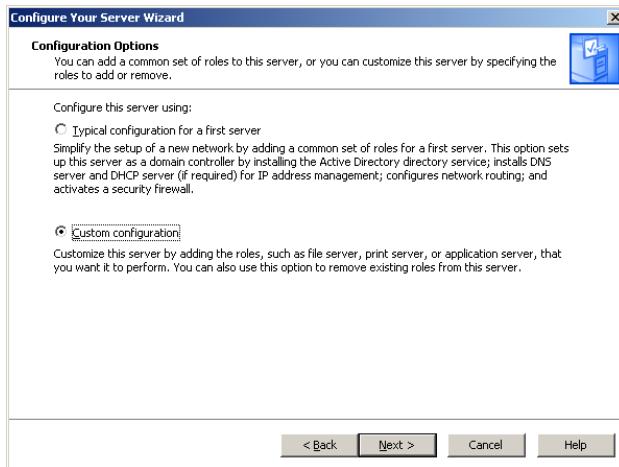
3. The Welcome to the Configure Your Server Wizard opens; click **Next**.



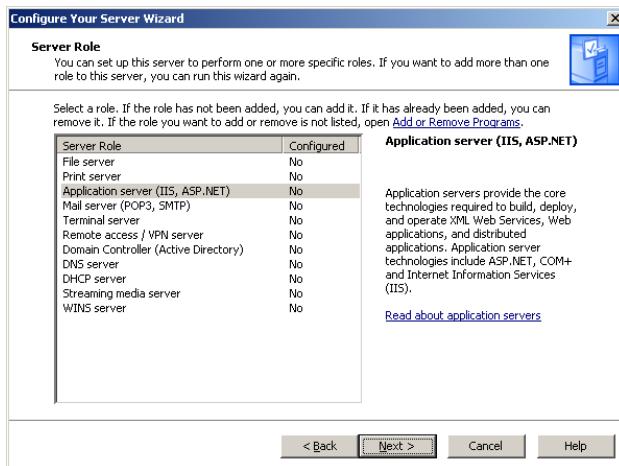
4. Verify the steps listed have been completed and click **Next**. The wizard will then detect your network settings. This may take about a minute.



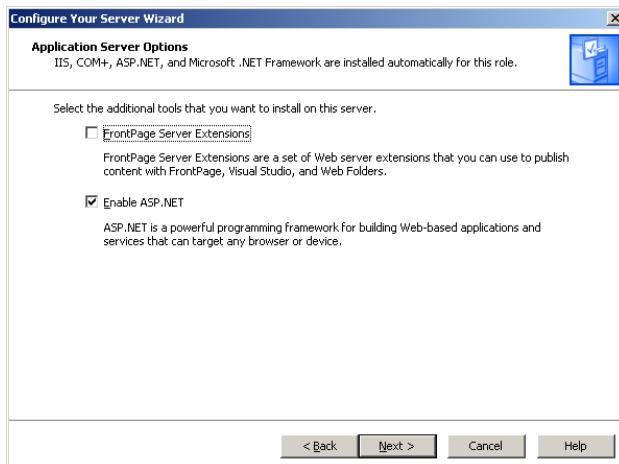
5. Select the **Custom configuration** radio button and click **Next**.



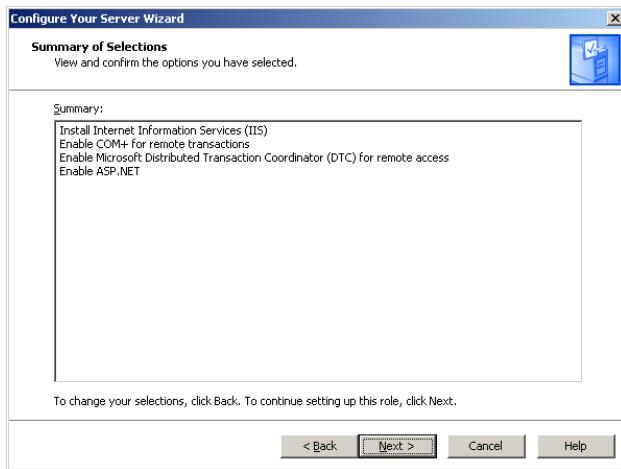
6. Highlight **Application server (IIS, ASP.NET)** and click **Next**.



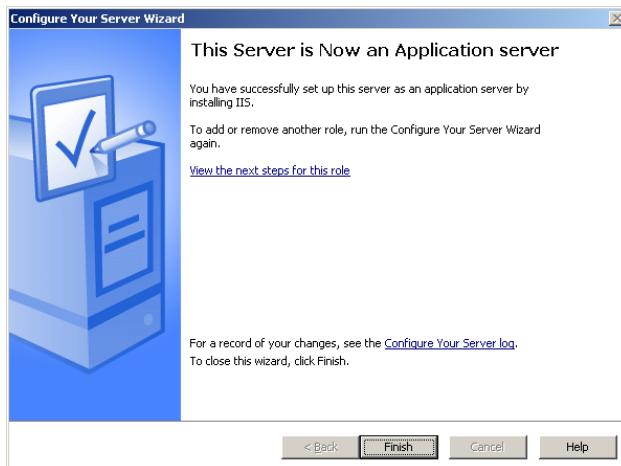
7. Select the **Enable ASP.NET** check box and click **Next**.



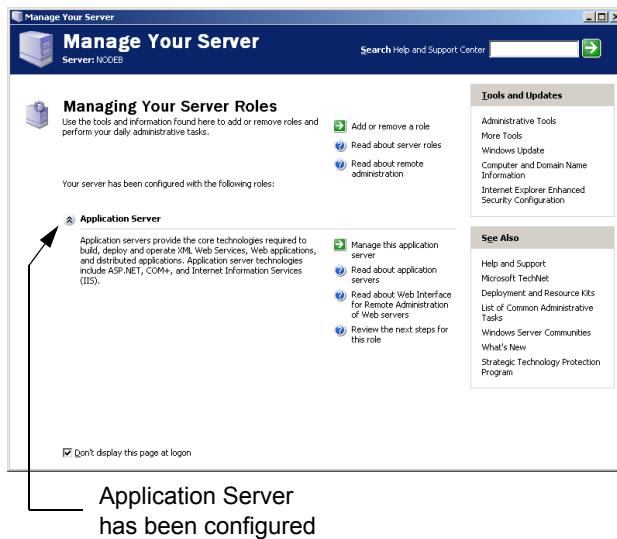
8. View the settings and confirm by clicking **Next**. The Configure Your Server Wizard will now begin adding the selected role to the server. The Applying Selection window will remain active during setup.



9. When prompted, insert the CD and click **OK**. Windows will copy files to the hard drive of the computer and begin configuring ASP.NET and Internet Information Services.
10. When the Welcome screen opens, click **Exit**.
11. When the This Server is now an Application server, window appears, click **Finish** to close the wizard.



12. In the Manage your Server window, verify that the **Application Server** has been configured.



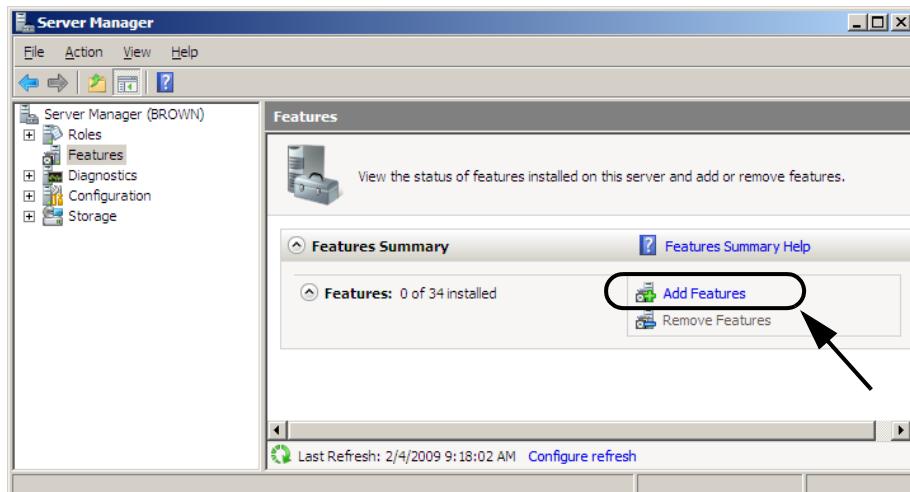
13. Close the Manage Your Server window.

IIS and ASP.NET Installation (Windows 2008)

You must be logged in as the system administrator.

► **To configure the server as a Web Server:**

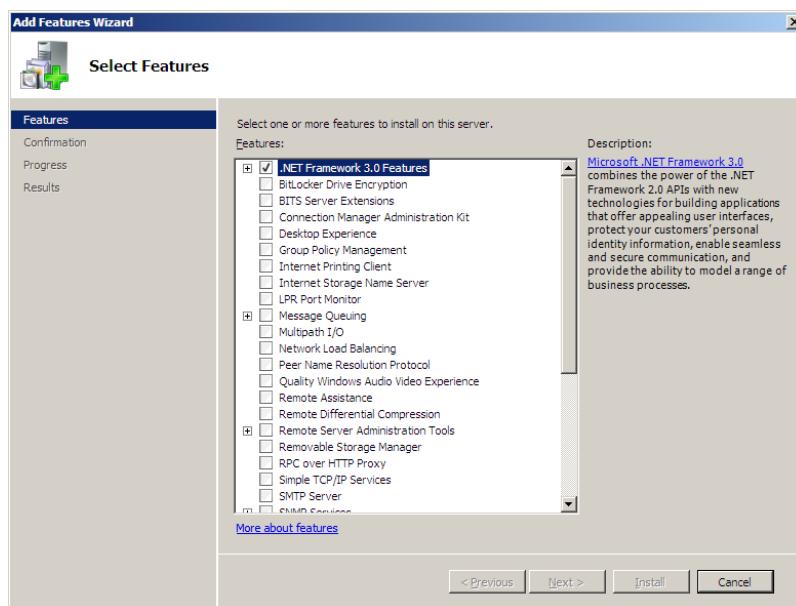
1. Log on as the system administrator.
2. Right-click the **Computer** icon on the desktop and select **Manage**.
3. In the Server Manager window click **Add Features**.



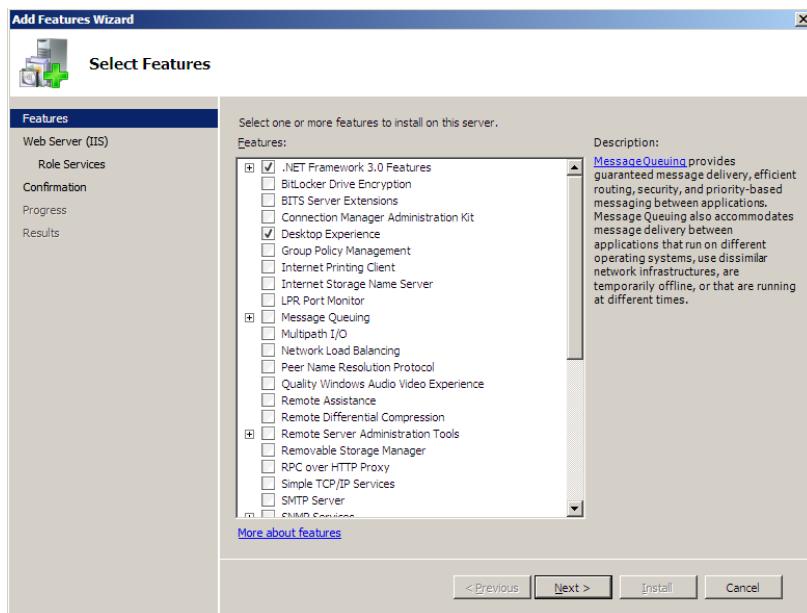
4. Click the **Add Required Role Services** button.

NOTE

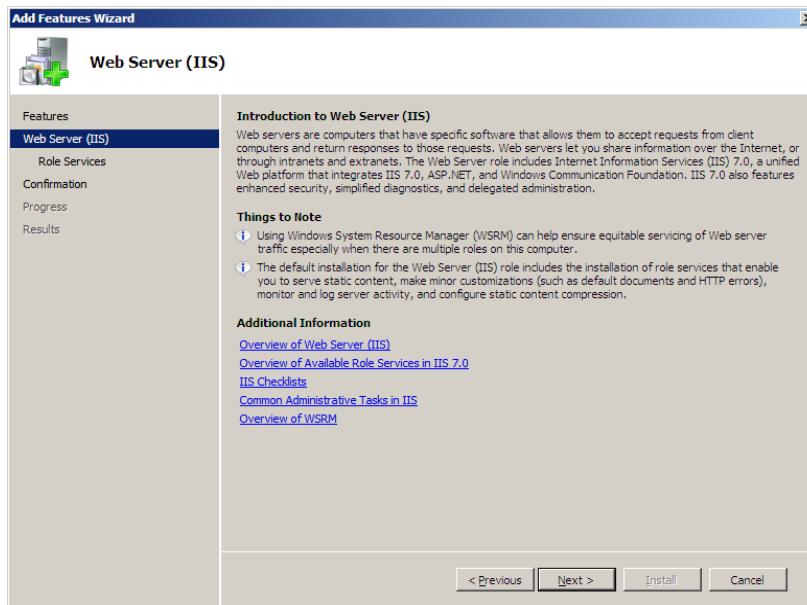
You may be prompted to click the **Add Required Role Services** button at other times during this procedure as well.

**5. Select .NET Framework 3.0 Features.**

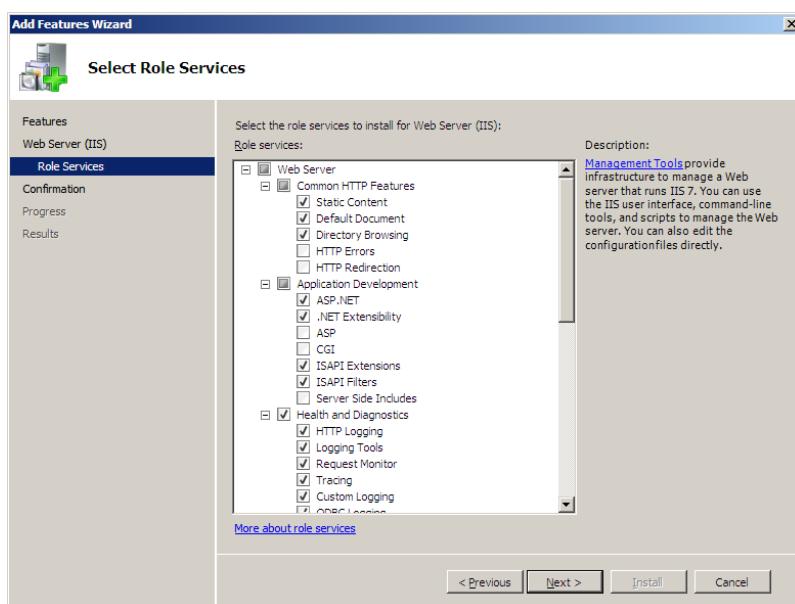
6. In addition to selections already present, select the **Desktop Experience** and **Telnet Client** check boxes. Click **Next**.



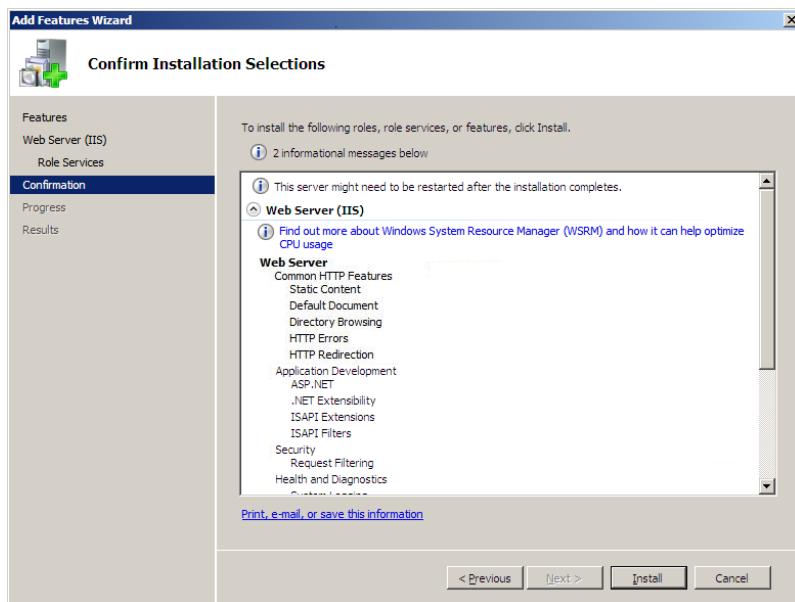
7. Click **Next** to continue.



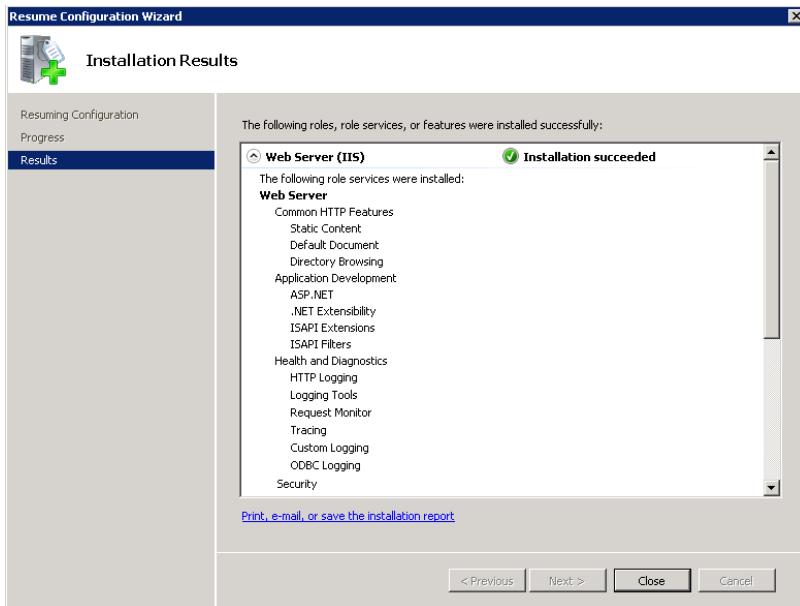
8. In addition to default selections, select the following check boxes:
- **Static Content and Directory Browsing** (under **Common HTTP Features**)
 - **ASP. NET** (under **Application Development**)
 - **Management Tools**
 - **Health and Diagnostics** (select all available components)
- As you are selecting them, certain sub-menu items will get selected as well. Click **Next**.



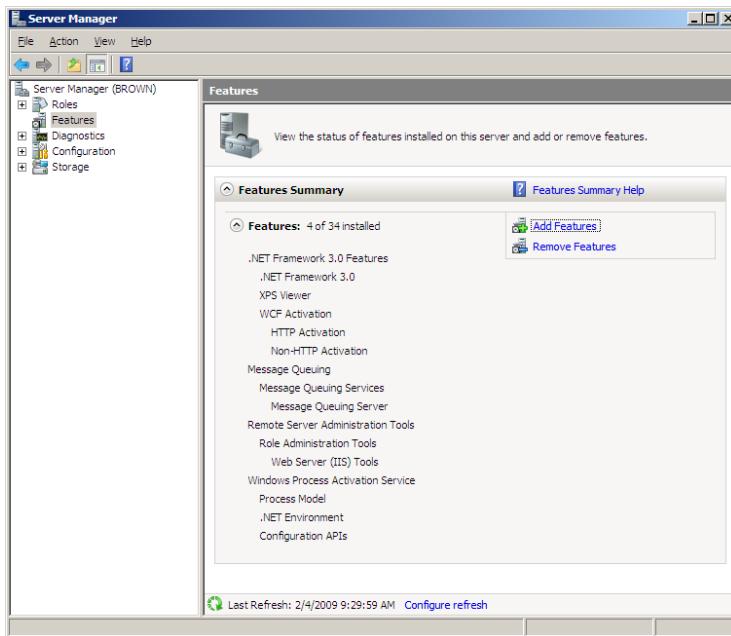
9. Click **Install**.



10. Wait for the installation to complete and click **Close**. (You may be prompted to restart the computer.)



11. Close the Server Manager window.



12. Change the computer name if needed.

You are now ready to proceed to “SQL Server 2005 Standard Edition Installation” on page 2-17.

IIS and ASP.NET Installation (Windows Server 2008 R2)

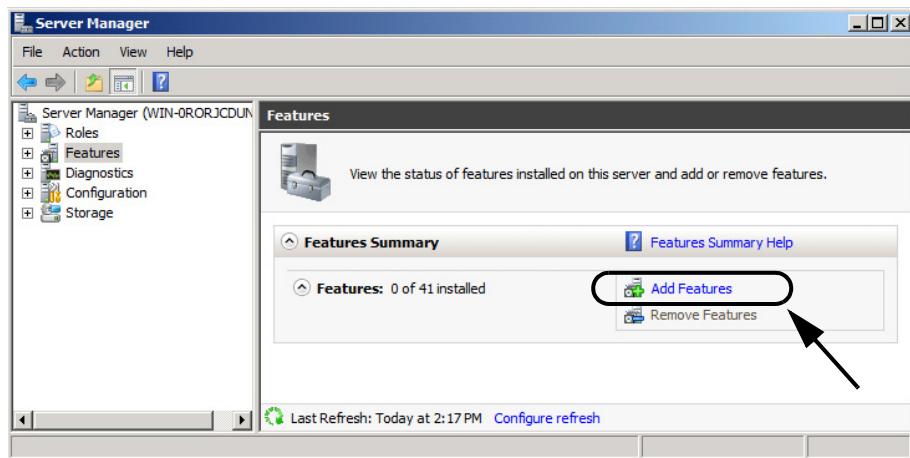
You must be logged in as the system administrator.

NOTE

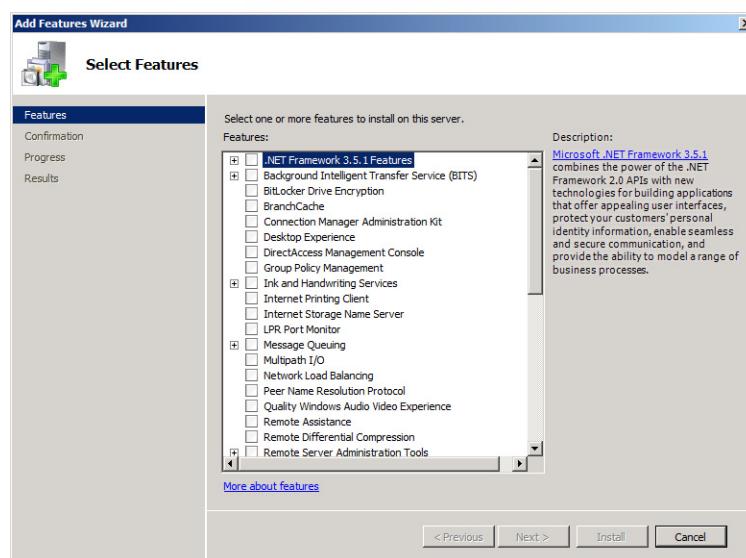
This procedure may vary slightly depending on the software version you are using.

► To configure the server as a Web Server:

1. Log on as the system administrator.
2. Open Windows Explorer.
3. Right-click the **Computer** icon and select **Manage**.
4. In the Server Manager window, click on **Features** in the left window pane and then click **Add Features** in the right window pane.



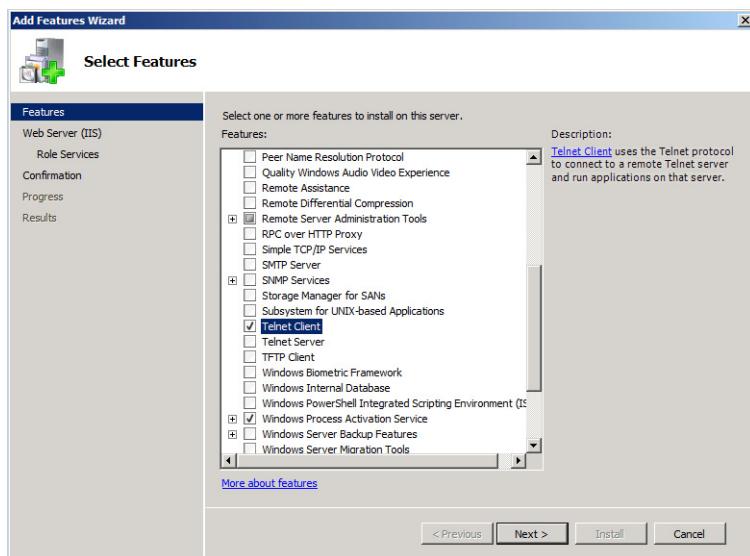
5. Click the check box for .NET Framework 3.5.1 Features.



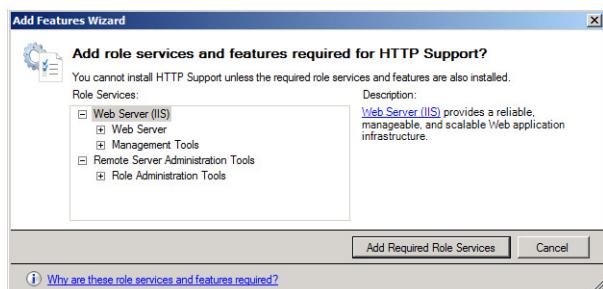
6. Click the **Add Required Role Services** button.



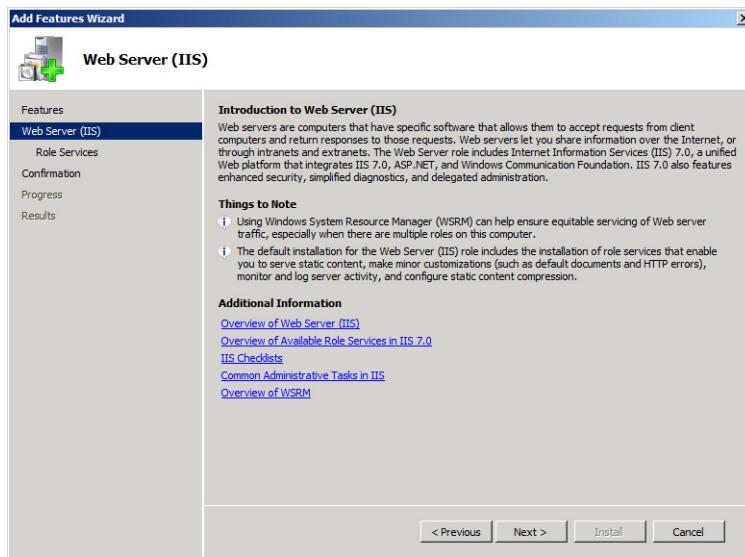
7. In addition to selections already present, select the **Desktop Experience** and **Telnet Client** check boxes (click **Add Required Role Services** when prompted). Click **Next**.



8. Click the **Add Required Role Services** button.



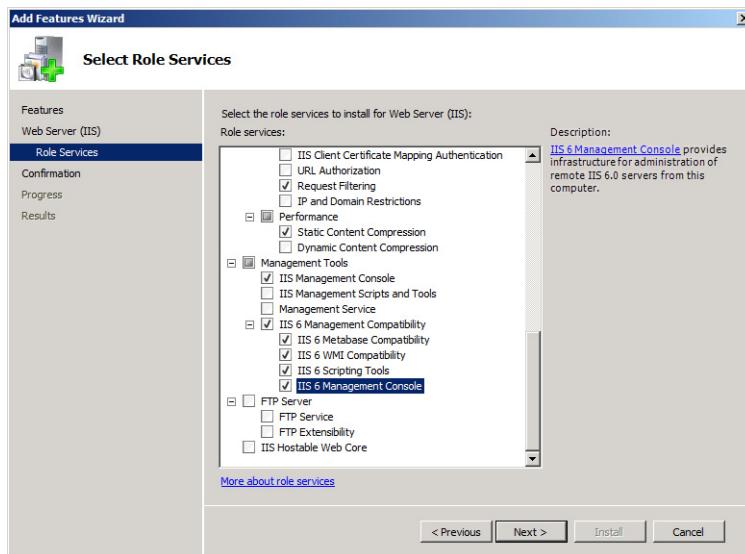
9. Click **Next** to continue.

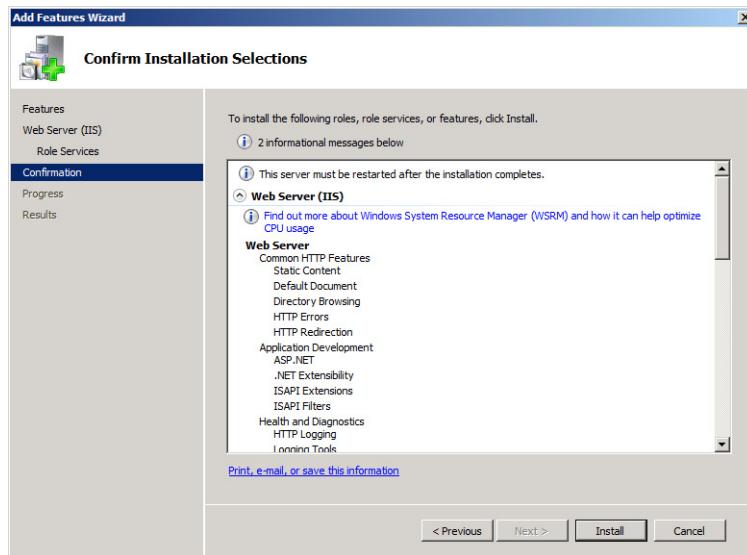
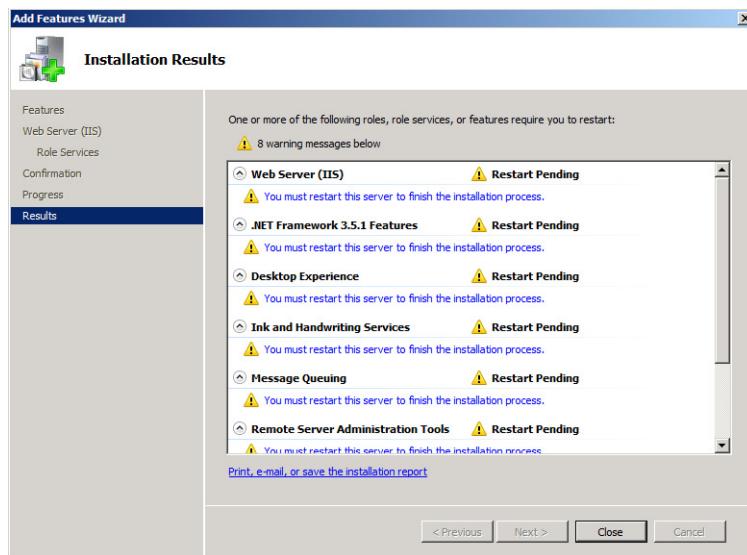
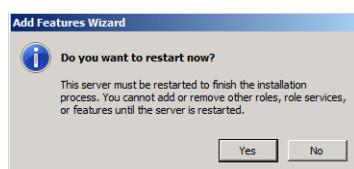


10. In addition to default selections, select the following check boxes (click **Add Required Role Services** when prompted):

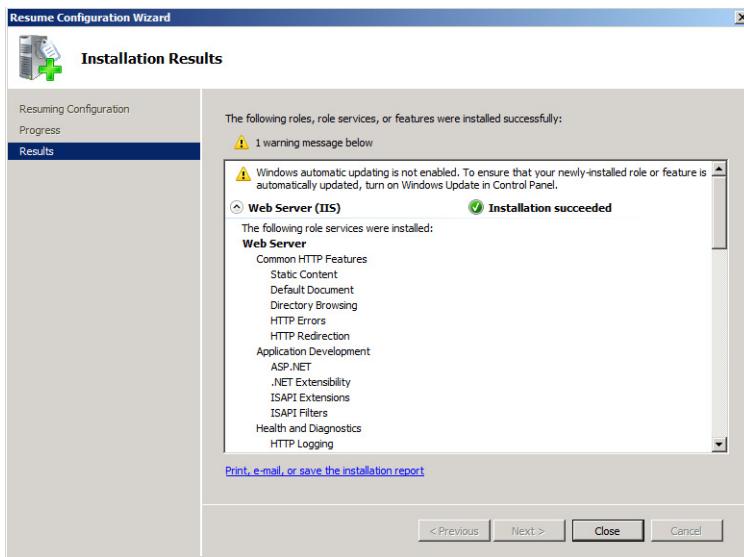
- **ASP. NET (under Application Development)**
- **Basic Authentication and Windows Authentication (under Security)**
- All components of **IIS 6 Management Compatibility** (under **Management Tools**)

As you are selecting them, certain sub-menu items will get selected as well.
Click **Next**.



11. Click **Install**.12. Wait for the installation to complete and click **Close**.13. Click **Yes** to restart the server.

14. Close the resume Configuration Wizard window.



15. Close the resume Server Manager window.

16. Change the computer name if needed.

You are now ready to proceed to “SQL Server 2005 Standard Edition Installation” on page 2-17.

REQUIREMENTS FOR JOINING A DOMAIN

If the P2000 system is to be run on a network with a customer domain, the network administrator must perform necessary configuration steps before proceeding with SQL Server installation:

- Change the P2000 Server from Workgroup to customer's domain.
- Add domain users to the Pegasys Users Local group. To simplify administration, the domain administrator can create a domain global group that contains domain users that will access the P2000. This global group can then be added to the Pegasys Users Local group.

DATABASE ENGINE (SQL SERVER 2005)

P2000 can use either the SQL Server 2005 Standard Edition or the SQL Server 2005 Express Edition. Since the SQL Server 2005 Express Edition has limited performance and database size, it should only be used for small P2000 systems. See “Server Requirements” on page 1-4 for more information.

Factory default setting for the SQL Server 2005 password in P2000 server is:

- Master1 for SQL Server 2005
- Master 2000 for SQL Server 2008 and SQL Server 2008 R2

If you are using SQL Server 2005 Express Edition, it will be installed when you run the P2000 Prerequisites DVD.

Instructions for installing the database engine are provided below:

- “SQL Server 2005 Standard Edition Installation” on page 2-17
- “SQL Server 2008” on page 2-26
- “SQL Server 2008 R2” on page 2-38

The Express Editions of the SQL Server are available as P2000 Prerequisites.

SQL Server 2005 Standard Edition Installation

Specific settings in SQL Server as required for P2000:

- Install the following components: **SQL Server Database Services, Integration Services, Workstation components, Books Online and Development tools**
- For the service account use **SQL Server Agent**
- Select **Mixed Mode (Windows Authentication and SQL Server Authentication)**

Install SQL Server according to the manufacturer’s documentation. The installation will take about 20 minutes. The following steps alert you to settings specific to running P2000.

You will need:

- SQL Server 2005 - Standard Edition CDs or DVD

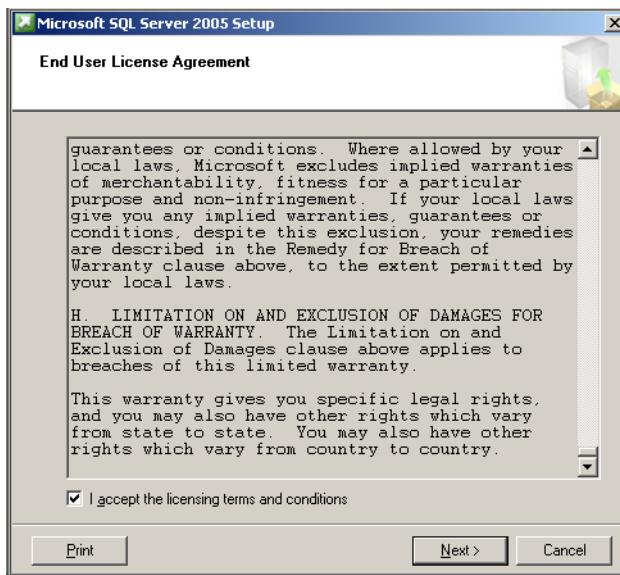
➤ To install SQL Server 2005 Standard Edition:

1. Log on (to the domain, if applicable) as the system administrator.
2. Insert the first SQL Server 2005 Standard Edition CD or the DVD.

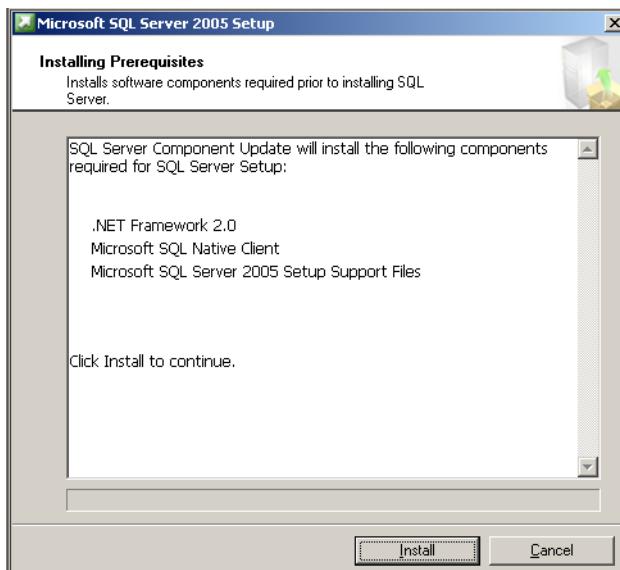
3. In the Start screen, click on **Server components, tools, Books Online and samples**.



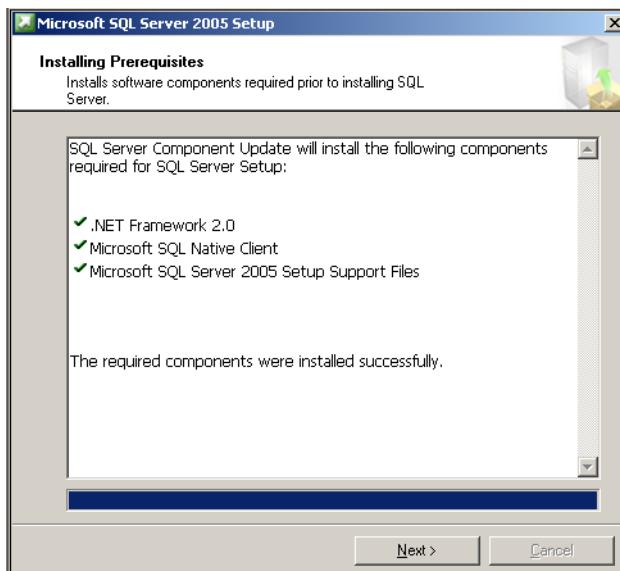
4. Select the **I accept the licensing terms and conditions** check box and click **Next**.



5. In the Installing Prerequisites screen, view the list the components needed prior to installing SQL Server 2005. Click **Install**. The installation will take several minutes.



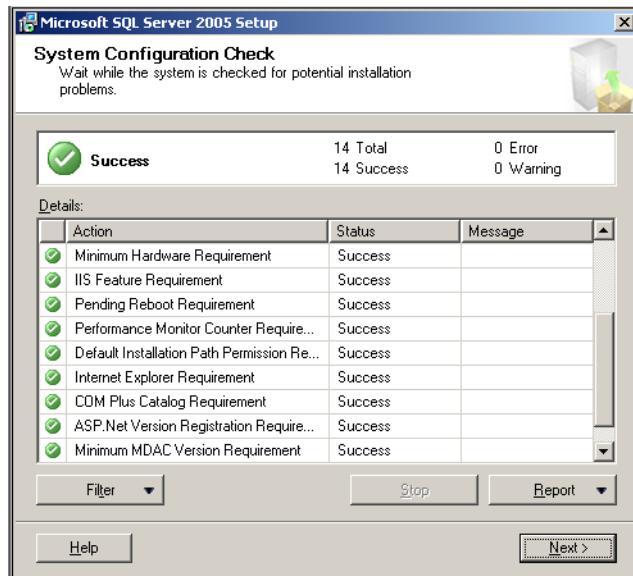
6. When the SQL Server 2005 Prerequisites installation has completed, click **Next**.



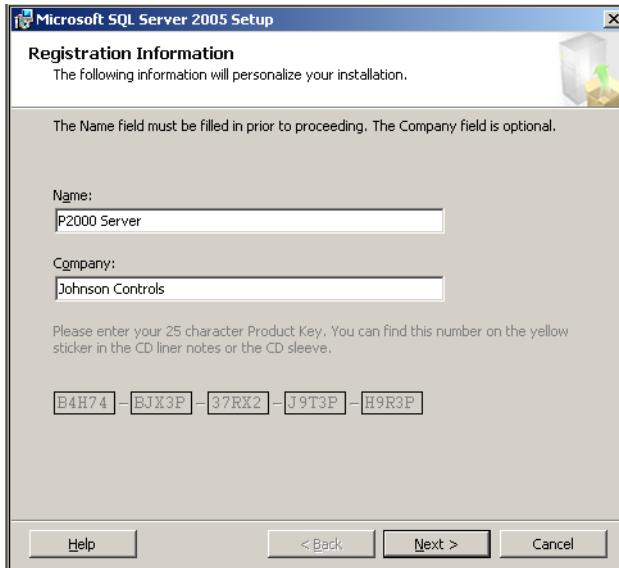
7. In the Welcome screen, click **Next**.



8. Notice any warnings and correct any errors before continuing. When all errors have been corrected, click **Next**.



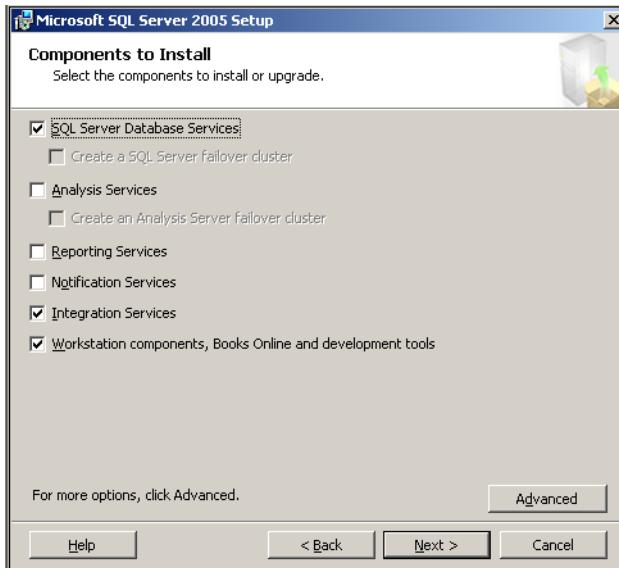
9. Type in the **Name** and **Company**. Enter the Product Key and click **Next**.



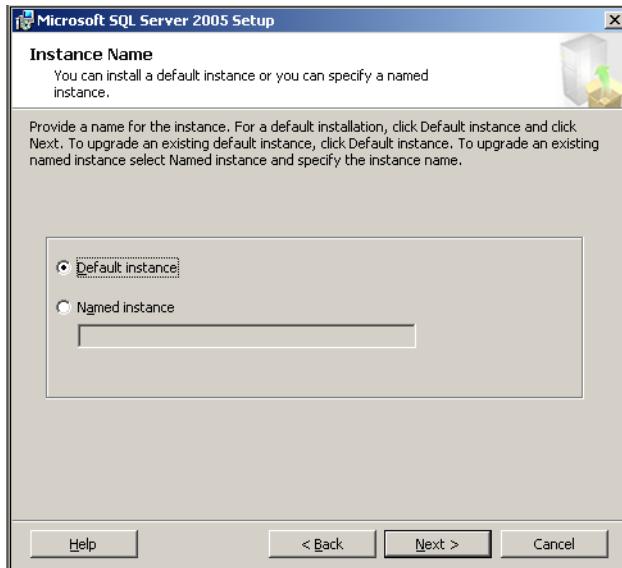
10. In the Components to Install window, select the following check boxes:

- **SQL Server Database Services**
- **Integration Services**
- **Workstation components, Books Online and development tools**

Click **Next**.



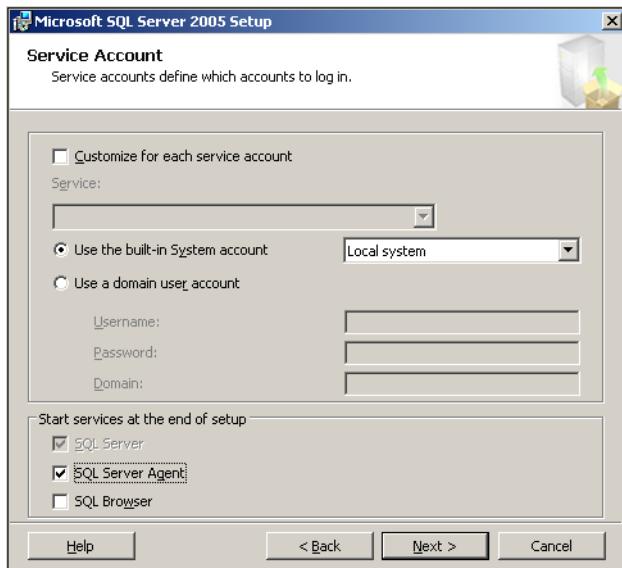
11. Verify that the **Default instance** radio button is selected, click **Next**.



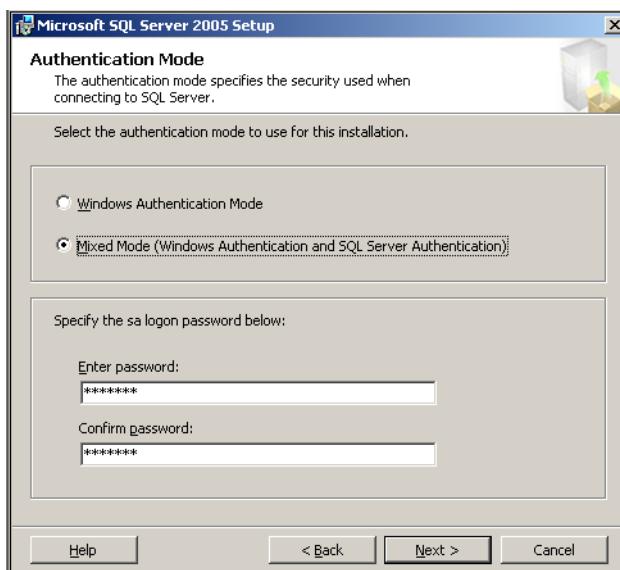
12. In the Services Accounts window, select the **SQL Server Agent** check box.

- If the server is not on a domain, select the **Use the built-in System account** check box and **Local system** from the drop-down list.
- If the server is on a domain, select the **Use a domain user account** radio button, then enter the **Username** (PSQLSERVICE) and **Password** (Master1) for a domain account that has administrative rights in this computer.

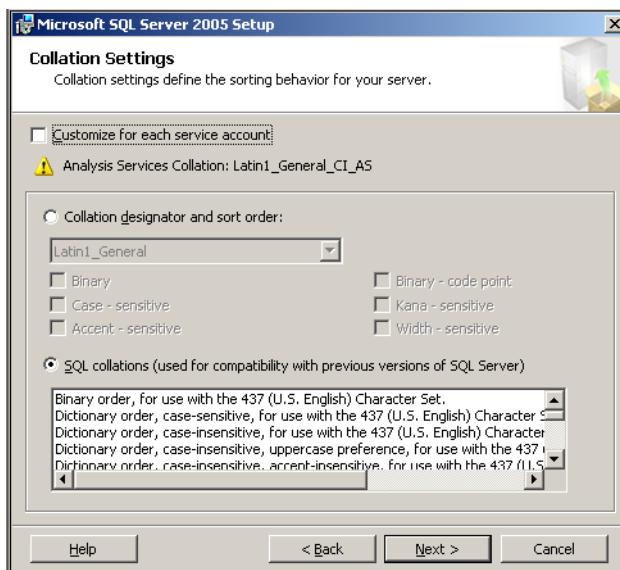
Click **Next**.



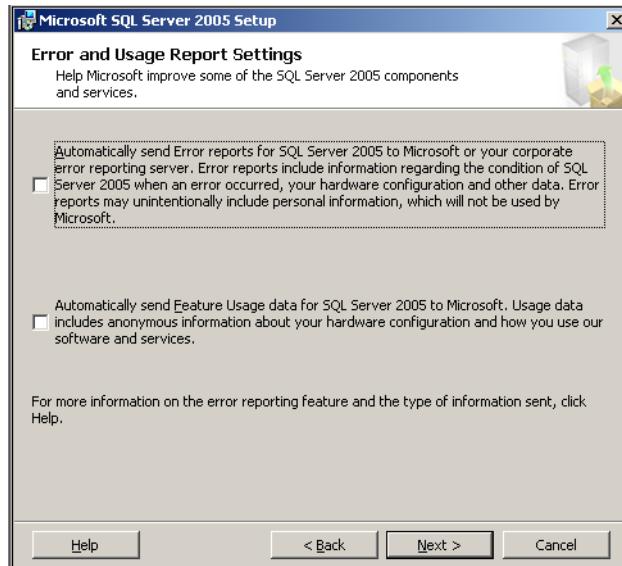
13. In the Authentication Mode window, select the radio button for **Mixed Mode (Windows Authentication and SQL Server Authentication)**. Enter and confirm the password (Master1), and click **Next**.



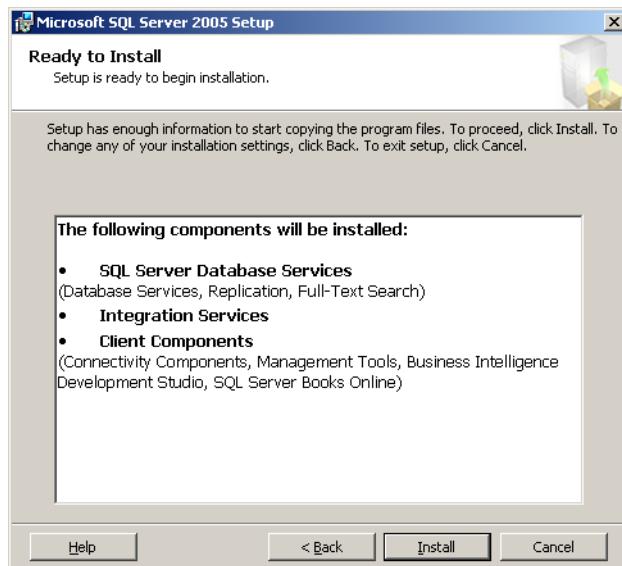
14. In the Collation Settings window verify that the **SQL collation** radio button is selected (SQL collation is used for compatibility with previous versions of the SQL Server). Click **Next**.



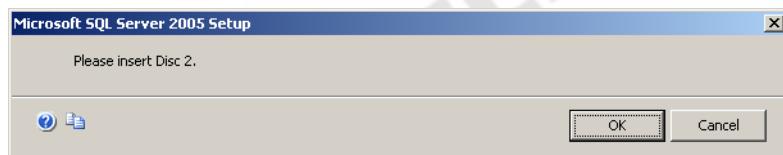
15. In the Error and Usage Report Settings window make the selection according to your preferences and click **Next**.



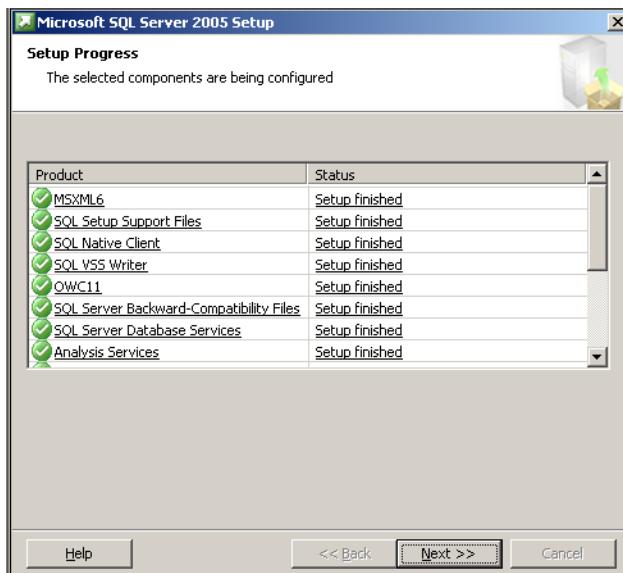
16. In the Ready to Install window click **Install**.



17. In the Setup Progress window click **Next**.
 18. *Installation from CDs only:* When prompted, remove the first CD and insert the second CD. Click **OK**.



19. Wait while Setup performs several operations. This will take 15-20 minutes.
When setup completes, click **Next**.



20. Click **Finish**.



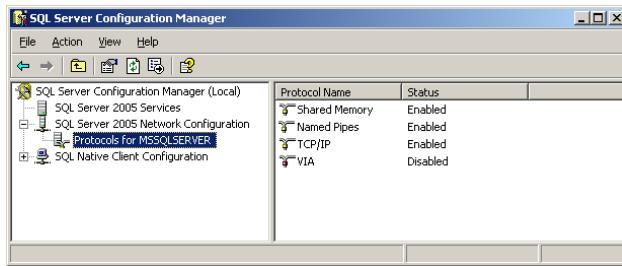
21. Reboot the computer.
22. Remove the CD or DVD.

► To verify network protocol settings:

1. Go to **Start>Programs>Microsoft SQL Server 2005>Configuration Tools>SQL Server Configuration Manager**.
2. In the SQL Server Configuration Manager screen, expand the **SQL Server 2005 Network Configuration** entry and click on the **Protocols for MSSQLSERVER** icon.

Verify that the following protocols are enabled:

- **Shared Memory**
- **Named Pipes**
- **TCP/IP**



You are now ready to proceed to *Chapter 4: Software Installation*.

SQL Server 2008

Specific settings in SQL Server 2008 as required for P2000:

- Install the following components: **Database Engine Services**, **SQL Server Replication**, **Client Tools Connectivity**, **Integration Services**, **Client Tools Backward Compatibility**, **Management Tools - Basic**, and **Management Tools - Complete**.
- Select **Mixed Mode (Windows Authentication and SQL Server Authentication)**

Install SQL Server according to the manufacturer's documentation. The installation will take about 20 minutes. The following steps alert you to settings specific to running P2000.

NOTE

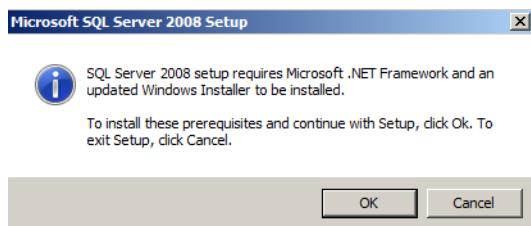
This procedure may vary slightly depending on the software version you are using.

You will need:

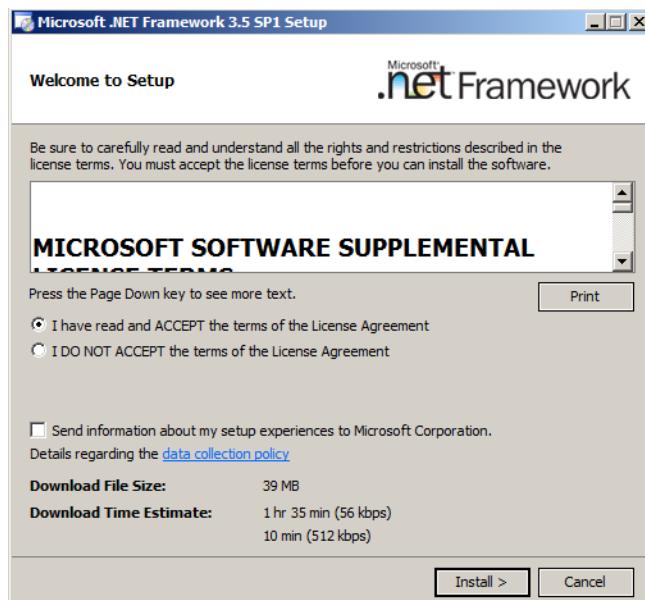
- SQL Server 2008 - Standard Edition DVD

► To install prerequisites to the SQL Server 2008 Standard Edition:

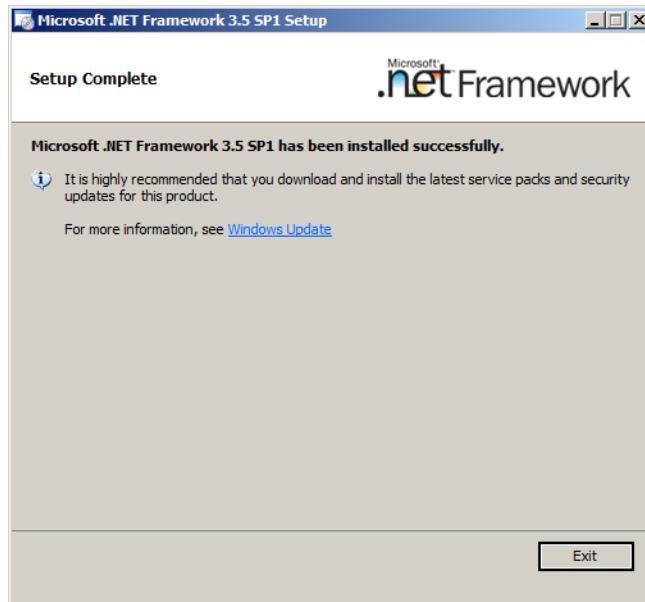
1. Log on (to the domain, if applicable) as the system administrator.
2. Insert the first SQL Server 2008 Standard Edition DVD.
3. When asked to install prerequisites (.NET Framework and updated Windows Installer), click **OK**.



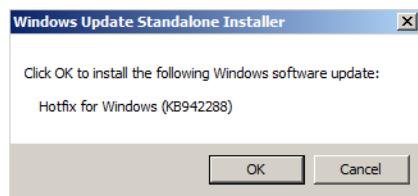
4. In the Microsoft .NET Framework 3.5 SP1 Setup window, accept the License Agreement and click **Install**.



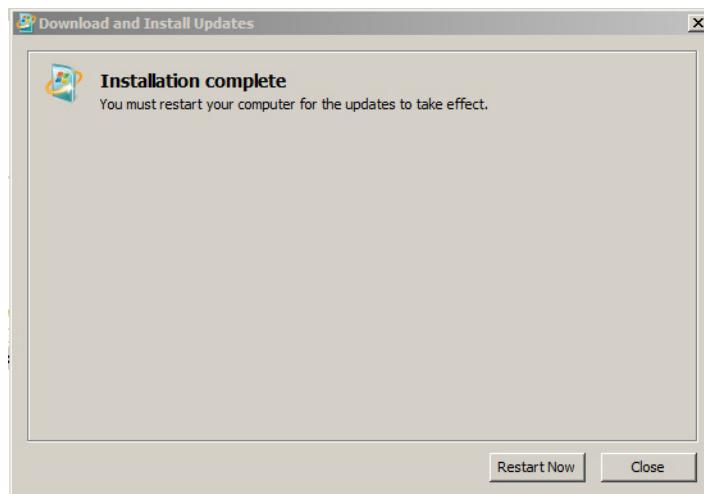
- When the installation is complete, click **Exit**.



- The Windows Update Standalone Installer opens. Click **OK**.

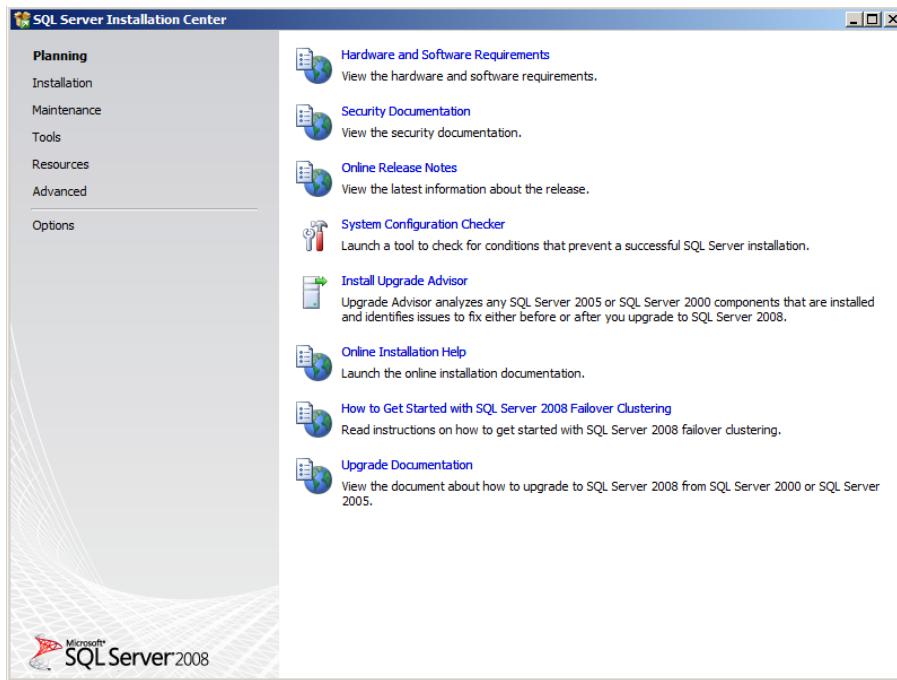


- When the installation is complete, click **Restart Now**.

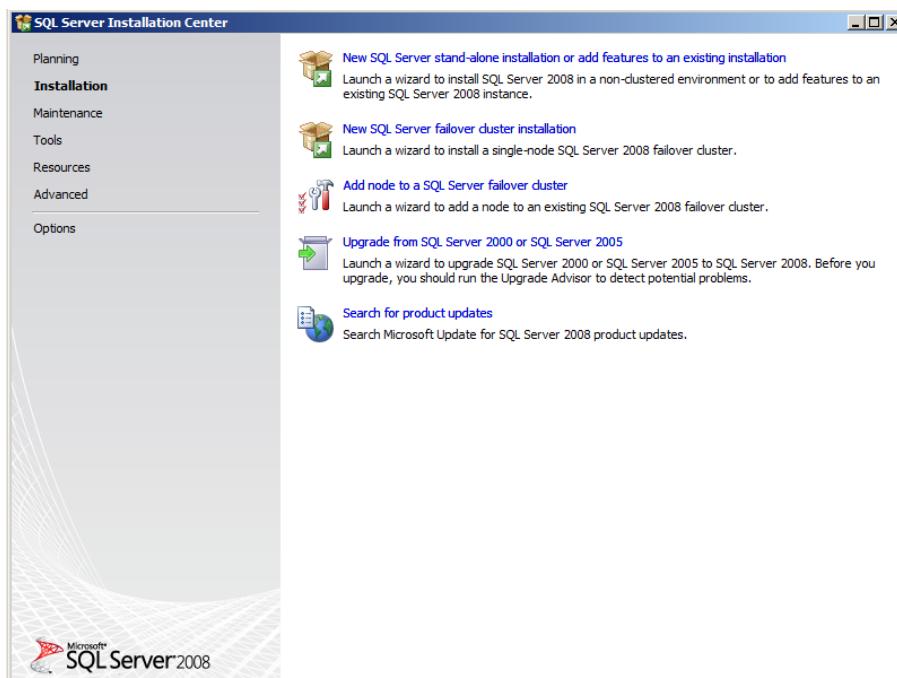


► **To install the SQL Server 2008 Standard Edition:**

1. The SQL Server Installation Center window opens. Click on **Installation** in the left window pane.

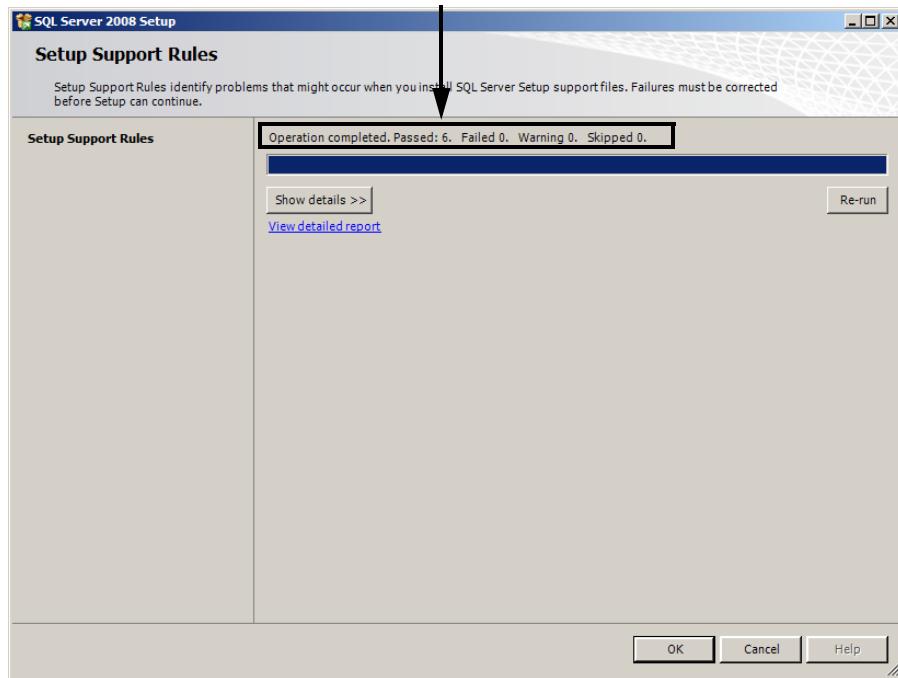


2. In the SQL Server Installation Center window, click on **New SQL Server stand-alone installation or add features to an existing installation** in the right window pane.

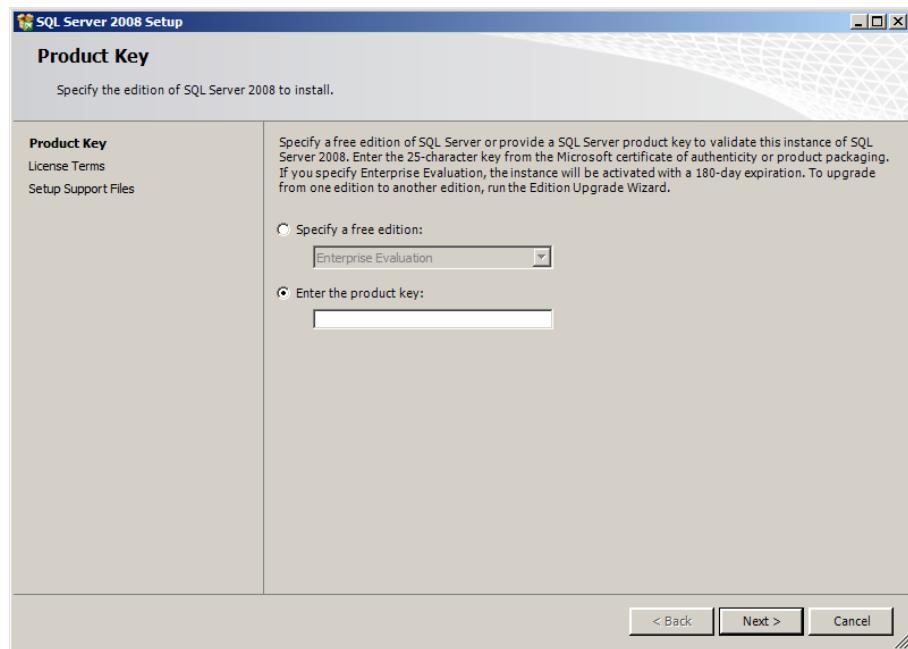


3. In the Setup Support Rules window, verify that all operations have been completed (no failures are reported). Click **OK**.

All operations completed successfully.



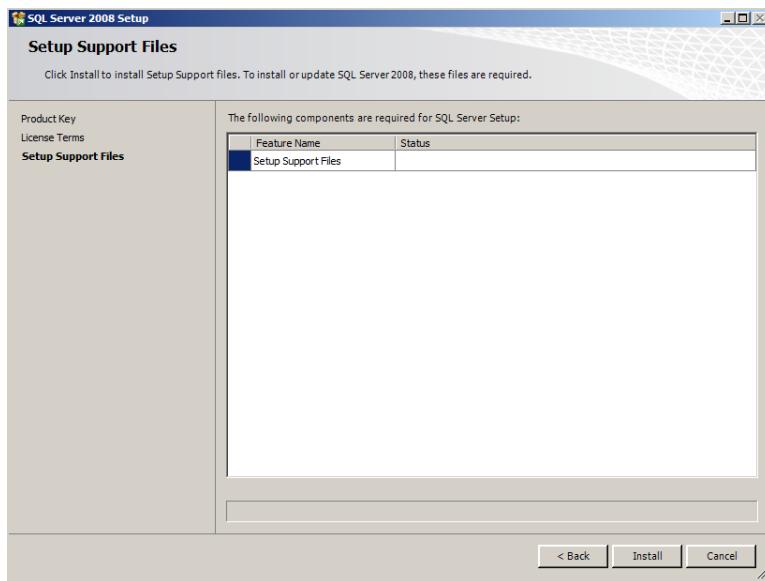
4. Enter the product key and click **Next**.



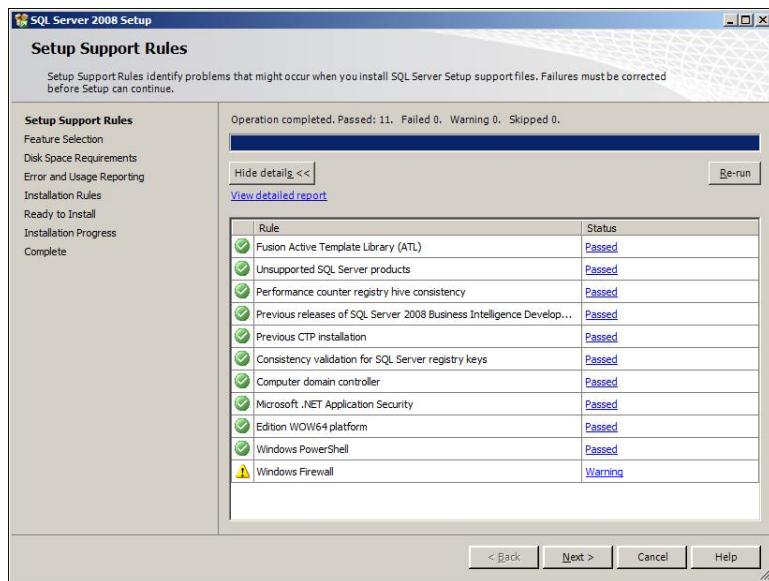
5. Select the **I accept the license terms** check box and click **Next**.



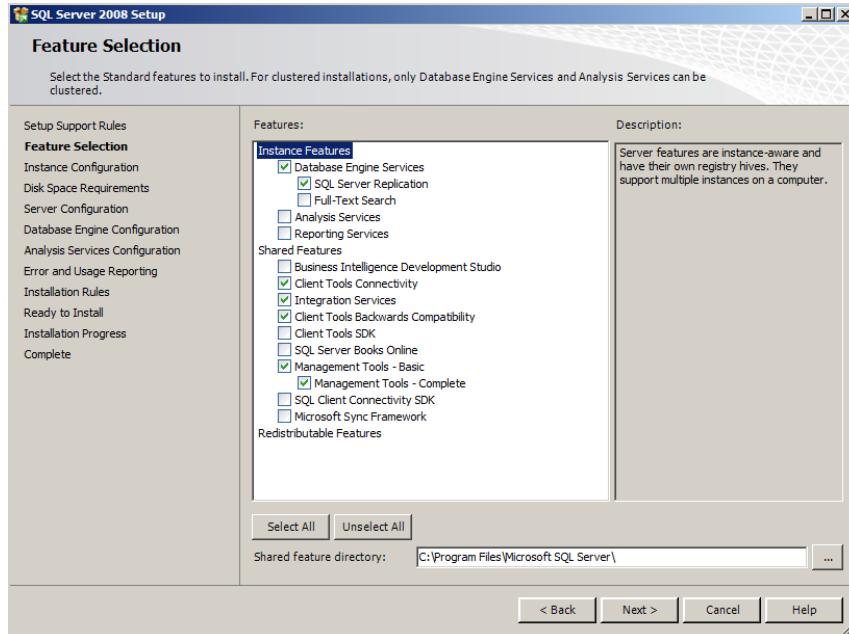
6. In the Setup Support Files window, click **Install**.



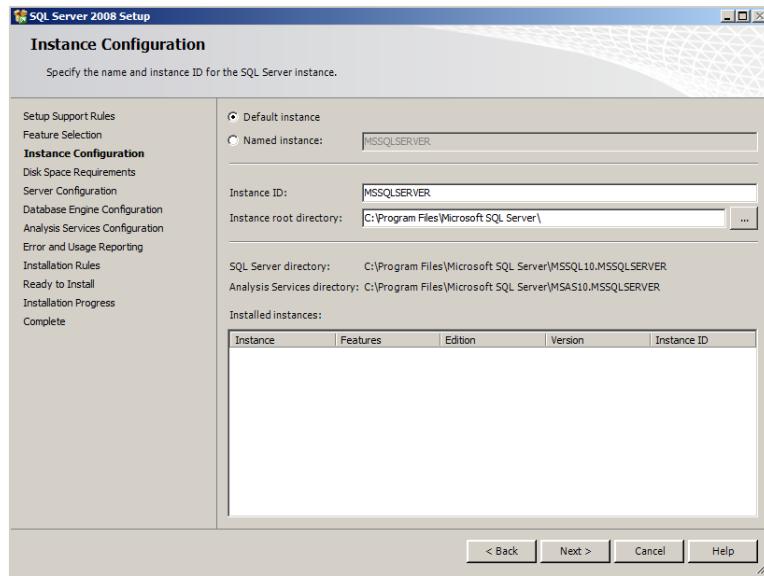
7. In the Setup Support Rules window, click Next.



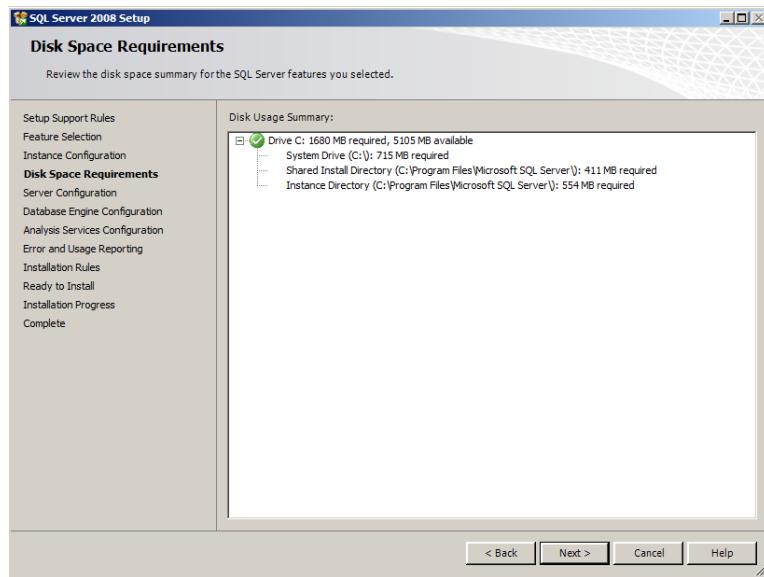
8. In the Feature Selection window, select the following check boxes:
- **Database Engine Services**
 - **SQL Server Replication**
 - **Client Tools Connectivity**
 - **Integration Services**
 - **Client Tools Backward Compatibility**
 - **Management Tools - Basic**
 - **Management Tools - Complete**
- Click Next.



9. In the Instance Configuration window, accept the default settings by clicking **Next**.



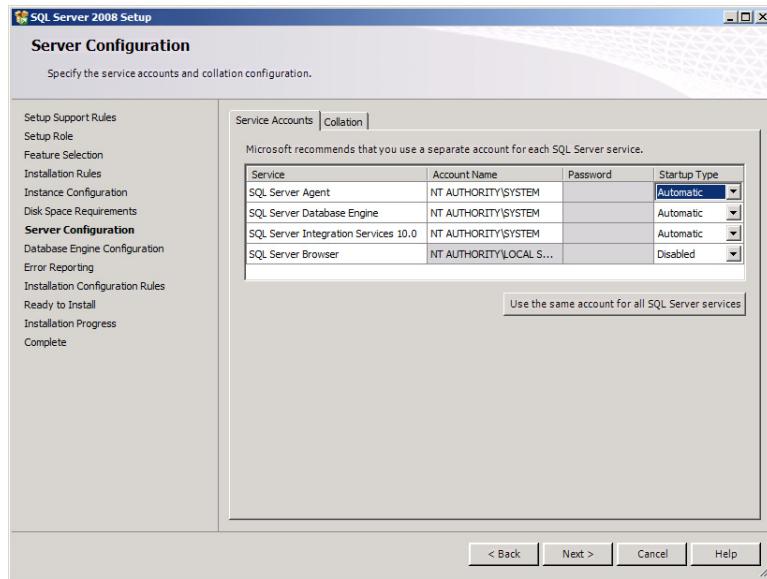
10. In the Disk Space Requirements window, click **Next**.



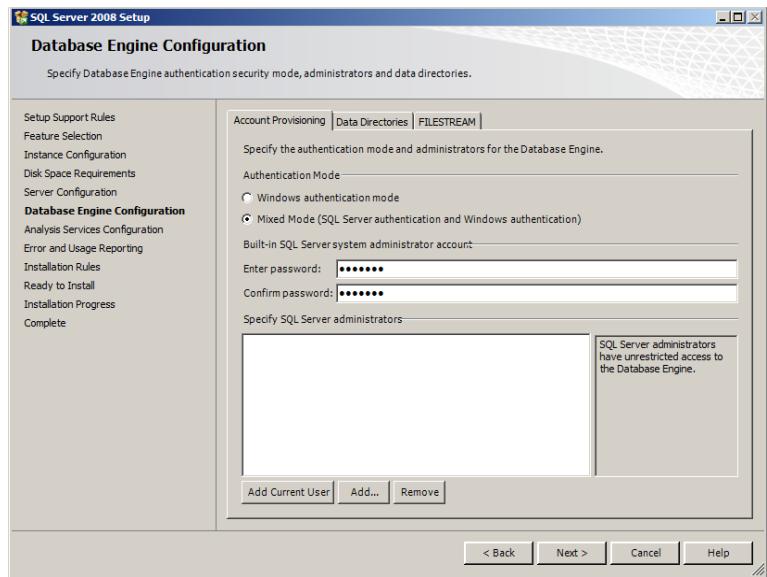
11. In the System Configuration window, use the following settings for SQL Server services:

Service	Account Name	Password	Startup Type
SQL Server Agent	NT AUTHORITY\SYSTEM	(none)	Automatic
SQL Server Database Engine	NT AUTHORITY\SYSTEM	(none)	Automatic
SQL Server Integration Services 10.0	NT AUTHORITY\SYSTEM	(none)	Automatic

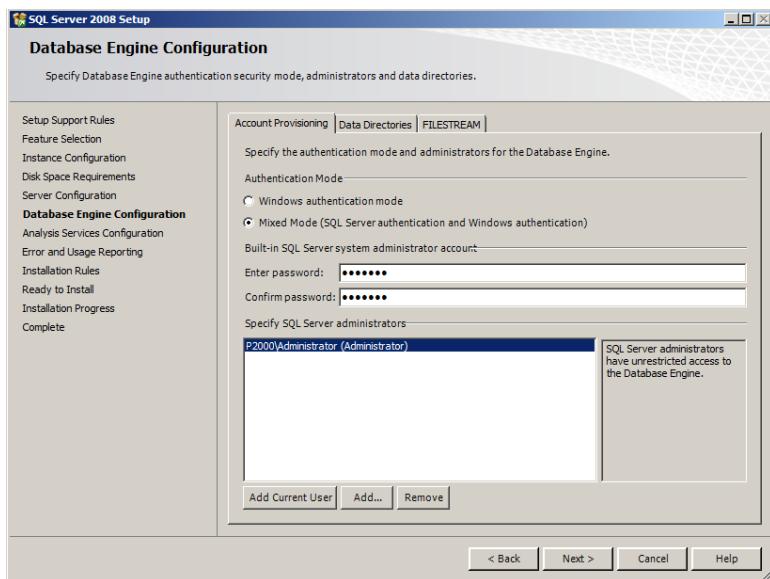
Leave the default values for the remaining settings and click **Next**.



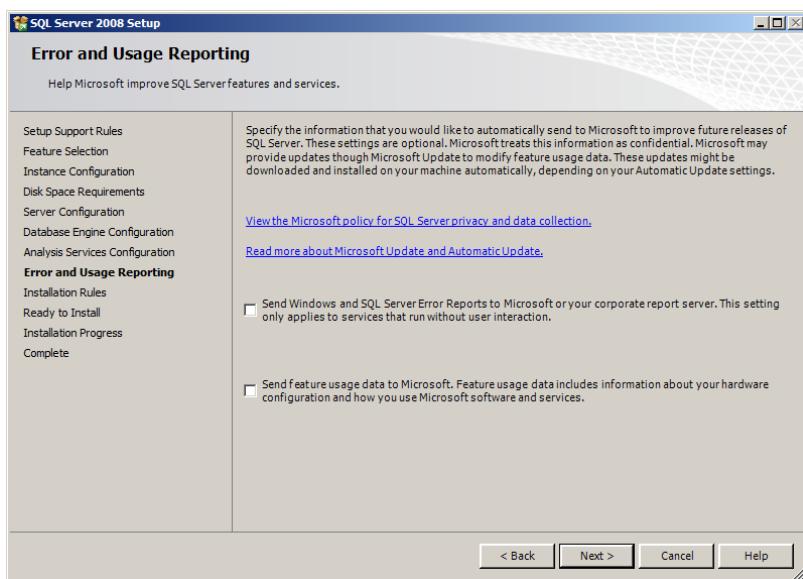
12. In the Database Engine Configuration window, select **Mixed Mode (SQL Server authentication and Windows authentication)**. Specify and confirm password (Master 2000). Click **Add Current User**.



13. In the Database Engine Configuration window, click **Next**.

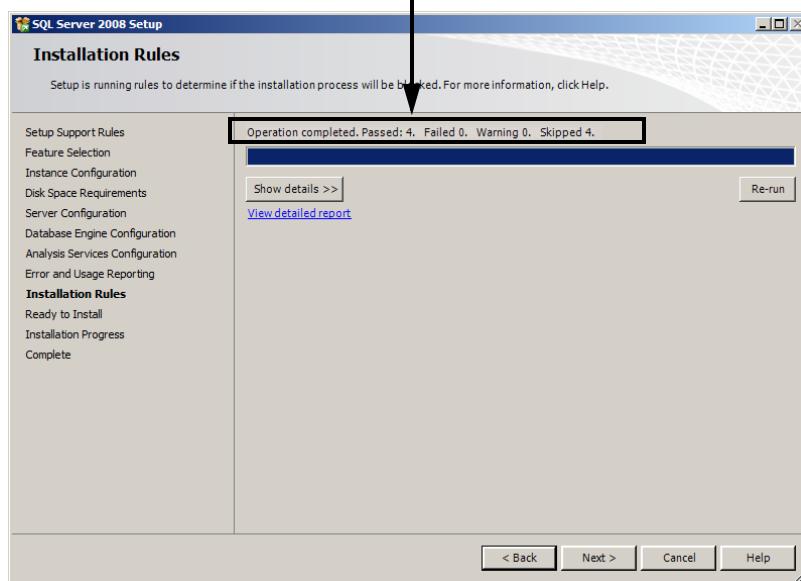


14. In the Error and Usage Reporting window, accept the default settings by clicking **Next**.

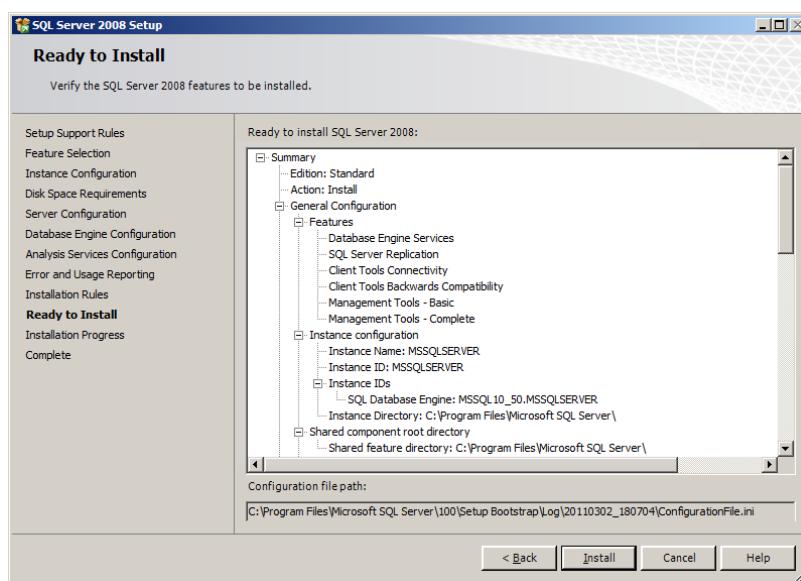


15. In the Installation Rules window, verify that all operations have been completed (no failures are reported). Click **Next**.

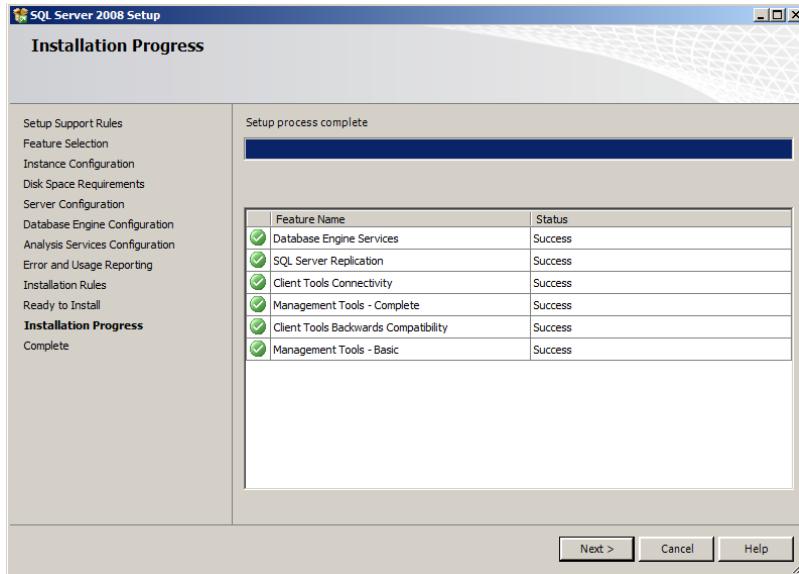
All operations completed successfully.



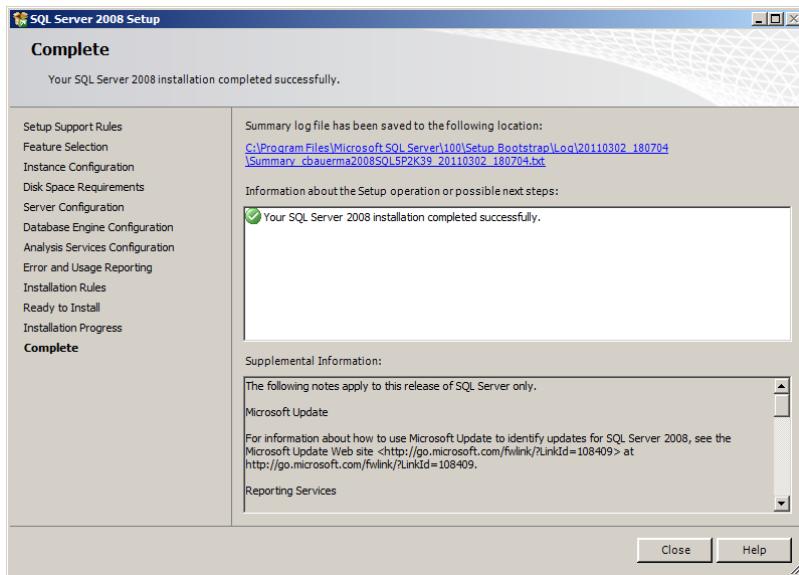
16. In the Ready to Install window, click **Install**.



17. The Installation Progress window opens. The installation will take several minutes. When the progress bar indicates completion, click **Next**.



18. When the Complete window appears, click **Close**.



19. Close the SQL Server Installation Center window.

20. Remove the DVD.

► **To verify network protocol settings:**

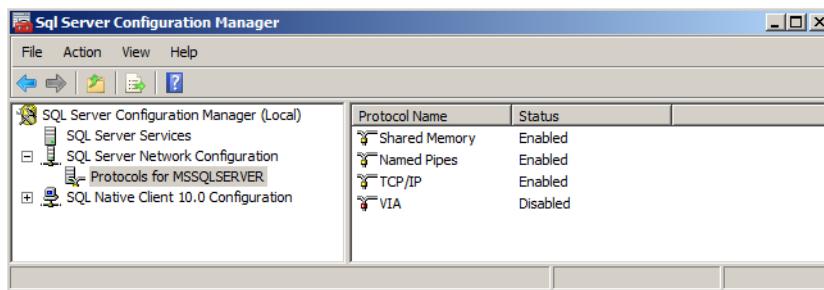
1. Go to **Start>Programs>Microsoft SQL Server 2008>Configuration Tools>SQL Server Configuration Manager**.

2. In the SQL Server Configuration Manager window, expand the **SQL Server 2008 Network Configuration** entry and click on the **Protocols for MSSQLSERVER** icon.

Verify that the following protocols are enabled:

- **Shared Memory**
- **Named Pipes**
- **TCP/IP**

To enable a disabled protocols, right-click on the icon, select **Enable**, and follow the prompts. SQL Server services need to be restarted for configuration changes to take effect.



You are now ready to proceed to *Chapter 3: Software Installation*.

SQL Server 2008 R2

Specific settings in SQL Server 2008 R2 as required for P2000:

- Install the following components: **Database Engine Services**, **SQL Server Replication**, **Client Tools Connectivity**, **Integration Services**, **Client Tools Backward Compatibility**, **Management Tools - Basic**, and **Management Tools - Complete**.
- Select **Mixed Mode (Windows Authentication and SQL Server Authentication)**

Install SQL Server according to the manufacturer's documentation. The installation will take about 20 minutes. The following steps alert you to settings specific to running P2000.

NOTE

This procedure may vary slightly depending on the software version you are using.

You will need:

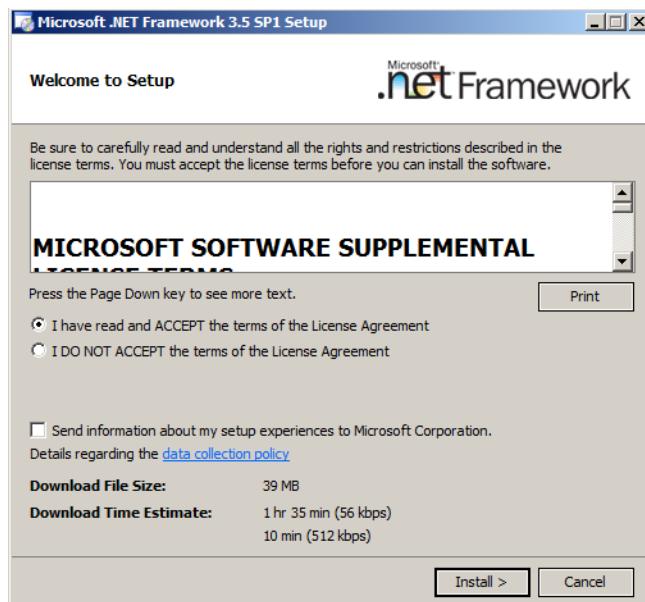
- SQL Server 2008 R2 DVD

► To install prerequisites to the SQL Server 2008 R2:

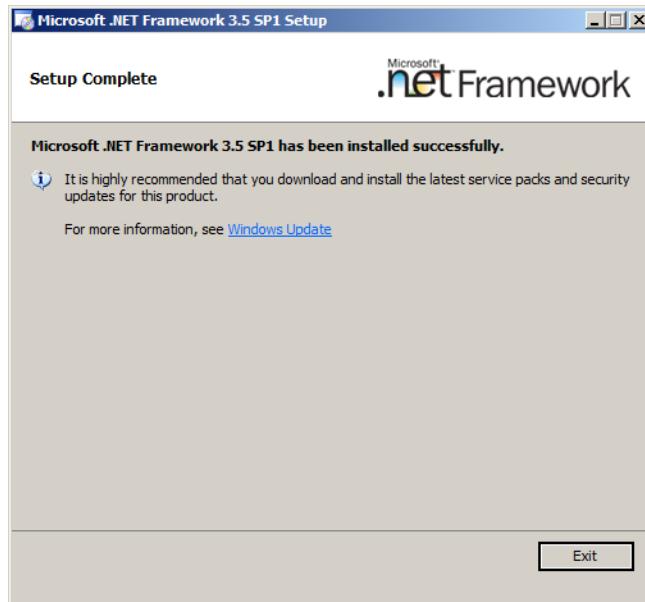
1. Log on (to the domain, if applicable) as the system administrator.
2. Insert the first SQL Server 2008 R2 DVD.
3. When asked to install prerequisites (.NET Framework and updated Windows Installer), click **OK**.



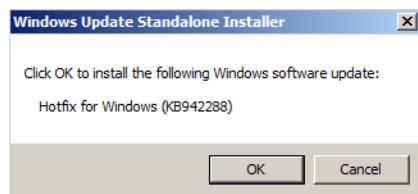
4. In the Microsoft .NET Framework 3.5 SP1 Setup window, accept the License Agreement and click **Install**.



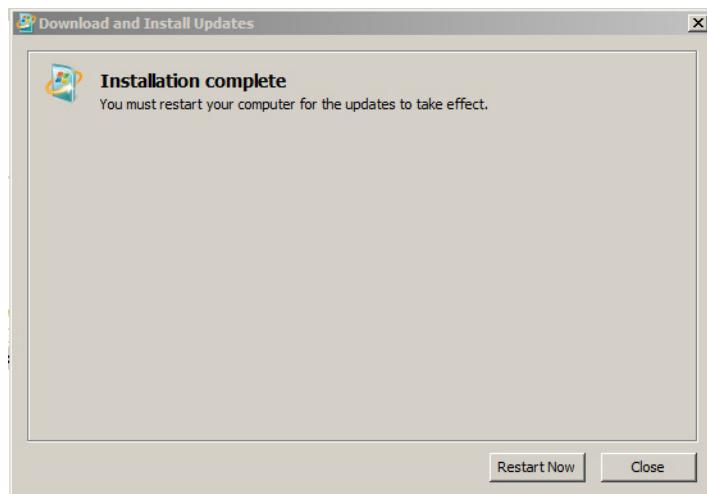
- When the installation is complete, click **Exit**.



- The Windows Update Standalone Installer opens. Click **OK**.

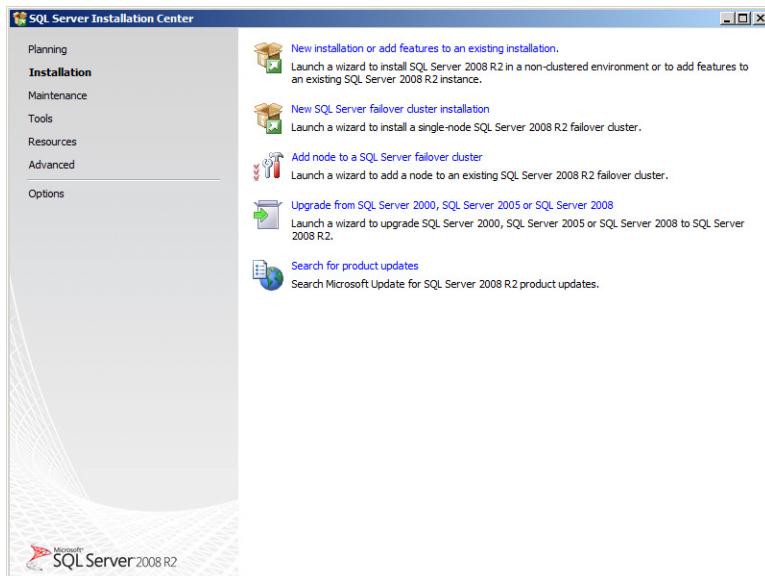


- When the installation is complete, click **Restart Now**.



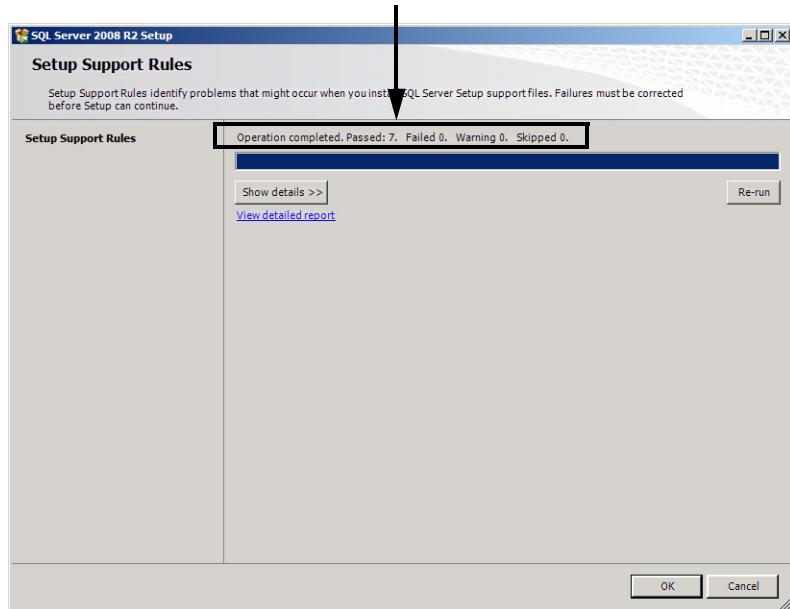
► **To install the SQL Server 2008 R2:**

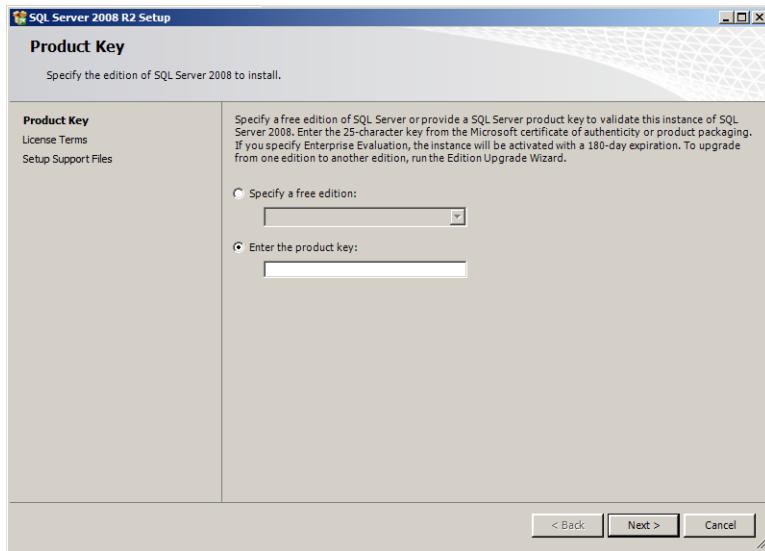
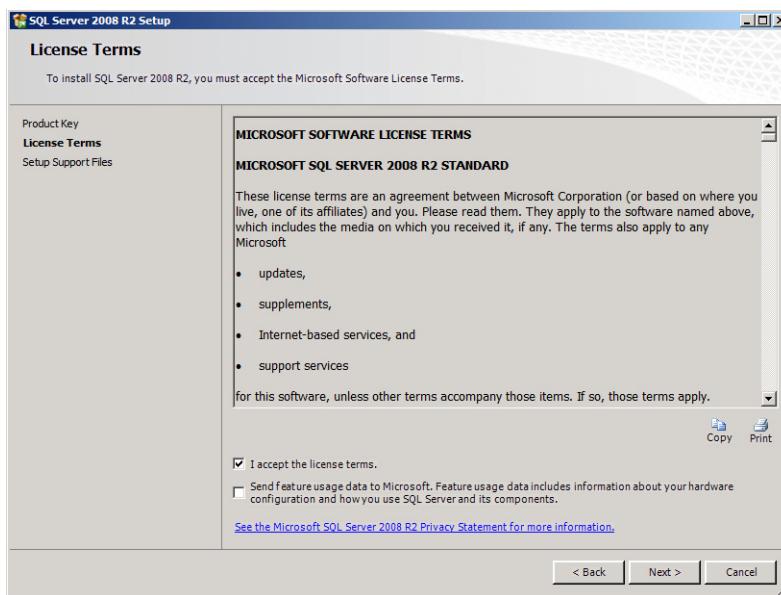
1. Log on (to the domain, if applicable) as the system administrator.
2. The SQL Server Installation Center window opens. Click on **New installation or add features to an existing installation** in the right window pane.



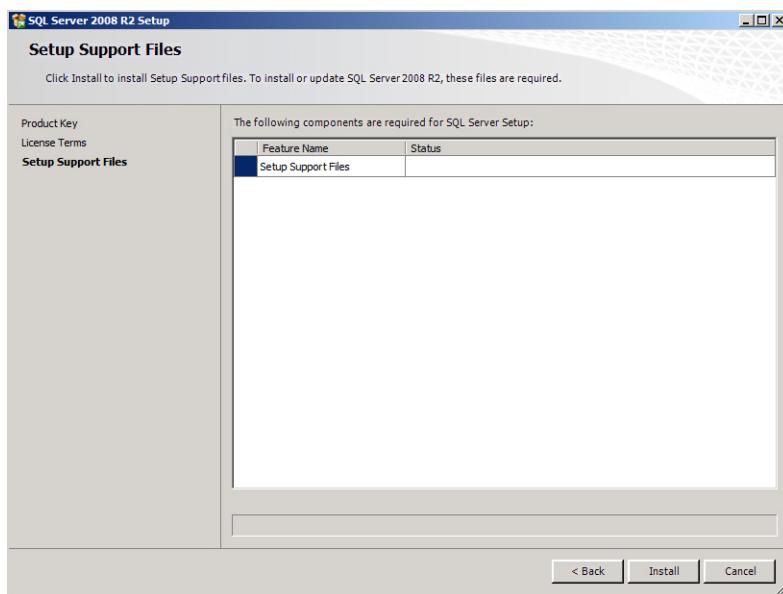
3. In the Setup Support Rules window, verify that all operations have been completed (no failures are reported). Click **OK**.

All operations completed successfully.

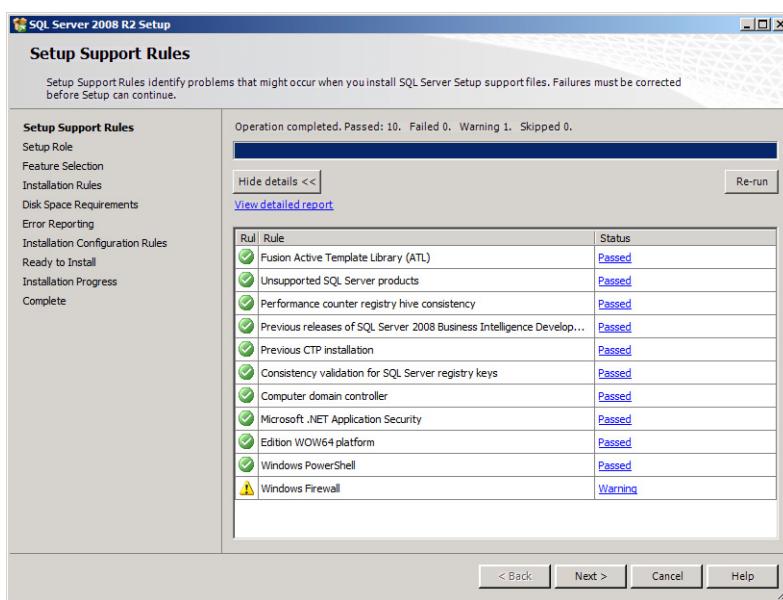


4. Enter the product key and click **Next**.5. Select the **I accept the license terms** check box and click **Next**.

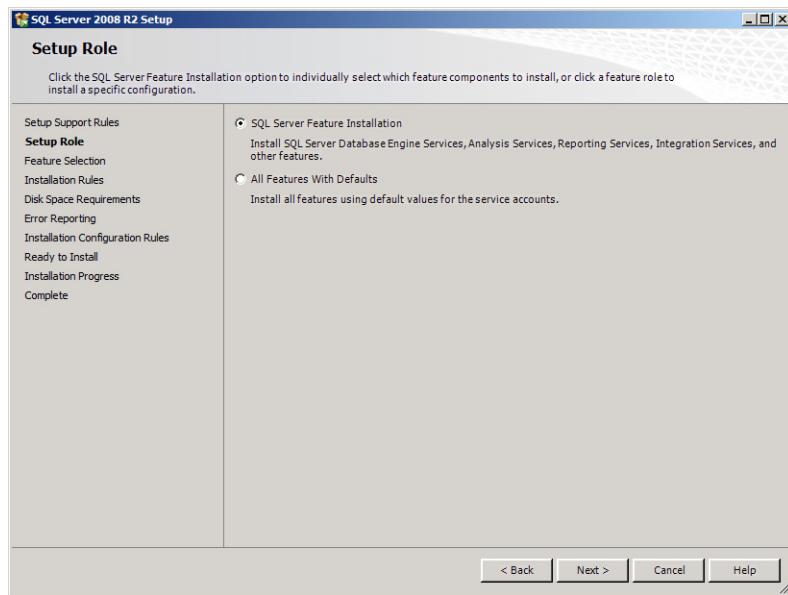
6. In the Setup Support Files window, click **Install**.



7. In the Setup Support Files window, click **Next**.



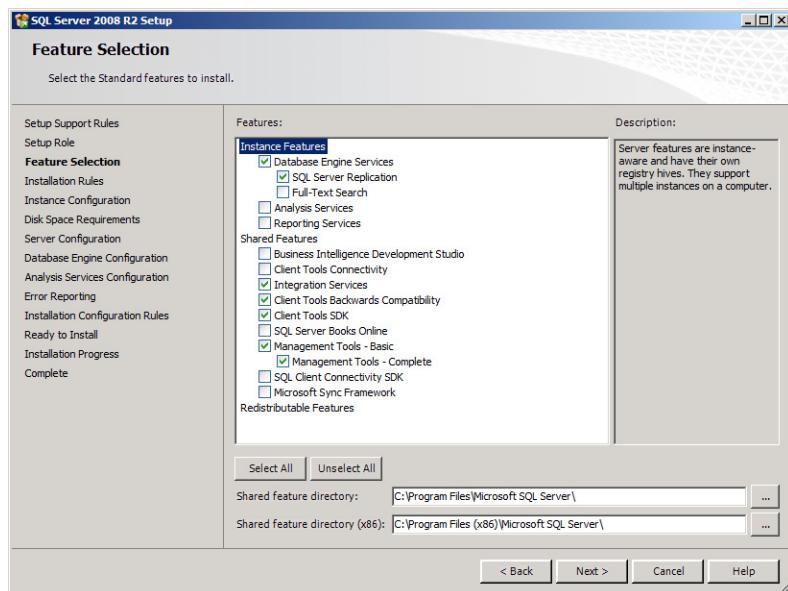
8. In the Setup Role window, **Select SQL Server Feature Installation** and click **Next**.



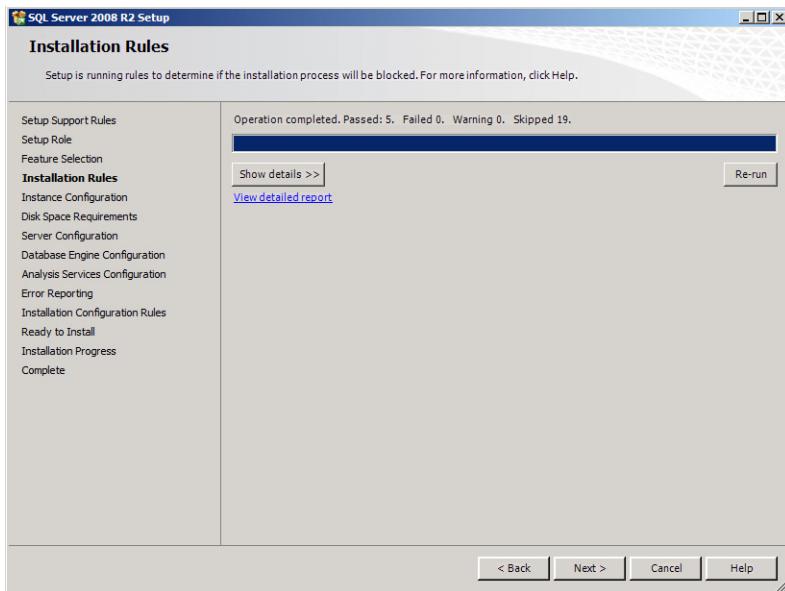
9. In the Feature Selection window, select the following check boxes:

- **Database Engine Services**
- **SQL Server Replication**
- **Client Tools Connectivity**
- **Integration Services**
- **Client Tools Backward Compatibility**
- **Management Tools - Basic**
- **Management Tools - Complete**

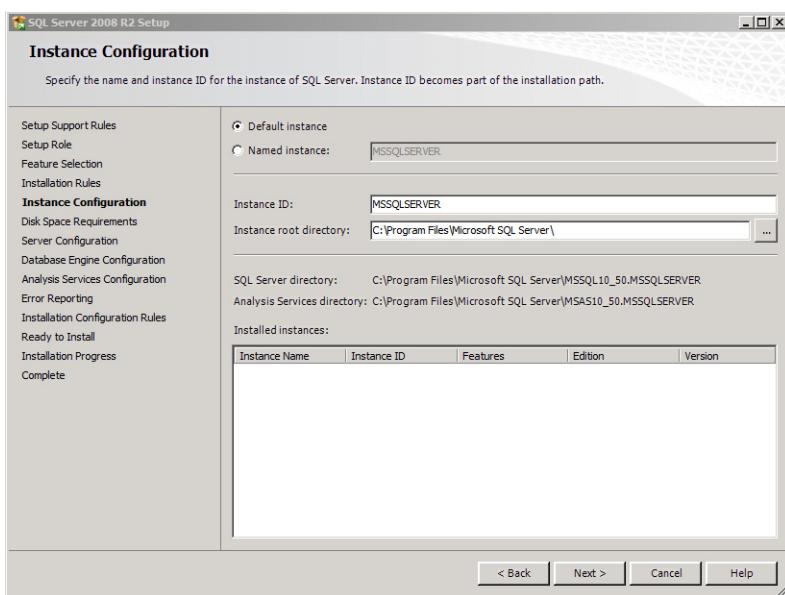
Click **Next**.



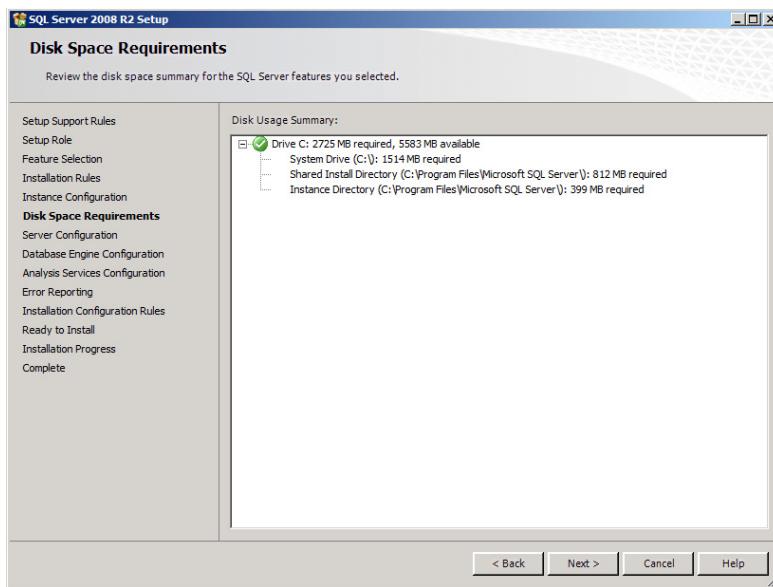
10. In the Instance Configuration window, click **Next** to continue.



11. In the Instance Configuration window, accept the default settings by clicking **Next**.



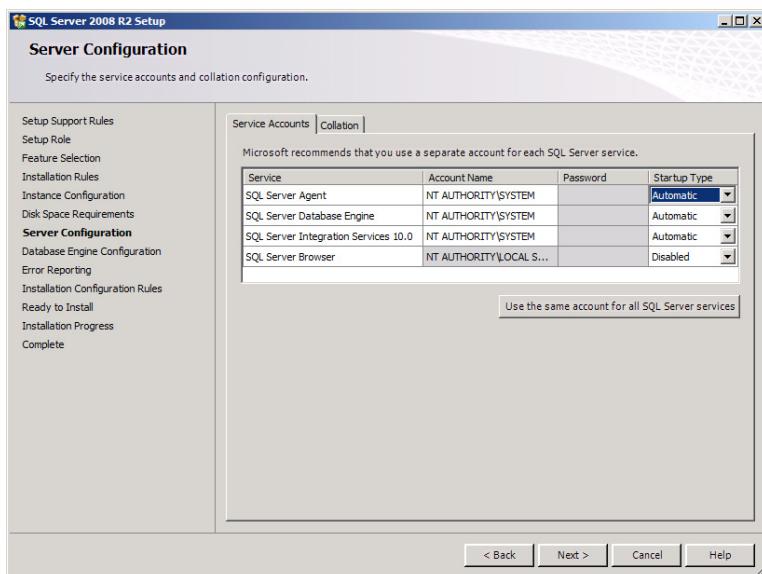
12. In the Disk Space Requirements window, click **Next**.



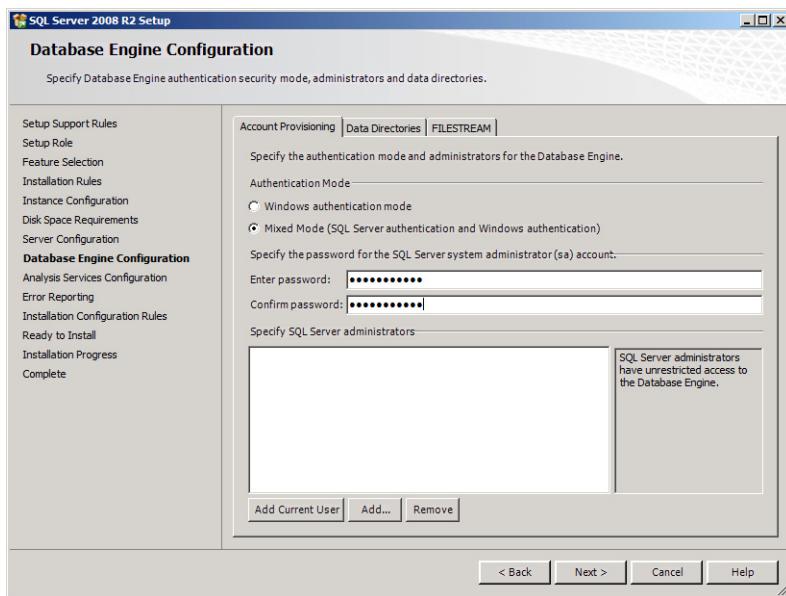
13. In the System Configuration window, use the following settings for SQL Server services:
14. In the System Configuration window, use the following settings for SQL Server services:

Service	Account Name	Password	Startup Type
SQL Server Agent	NT AUTHORITY\SYSTEM	(none)	Automatic
SQL Server Database Engine	NT AUTHORITY\SYSTEM	(none)	Automatic
SQL Server Integration Services 10.0	NT AUTHORITY\SYSTEM	(none)	Automatic

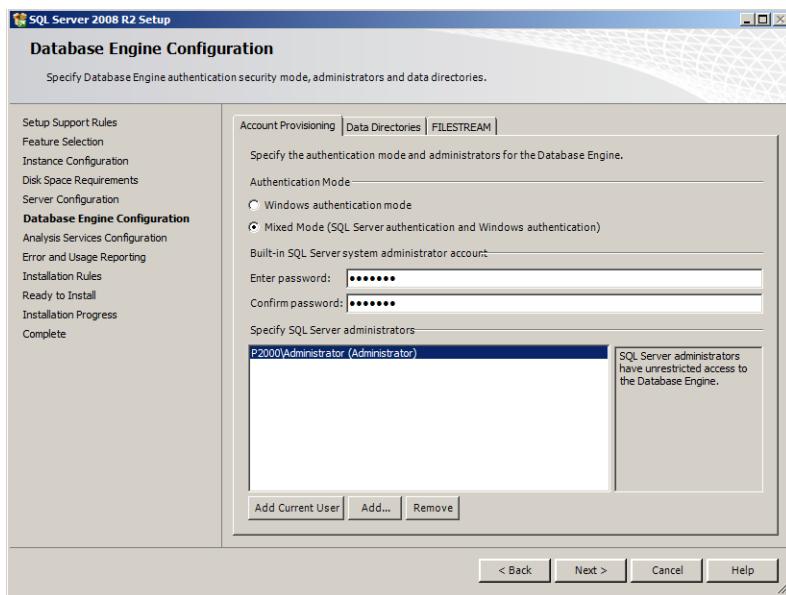
Leave the default values for the remaining settings and click **Next**.



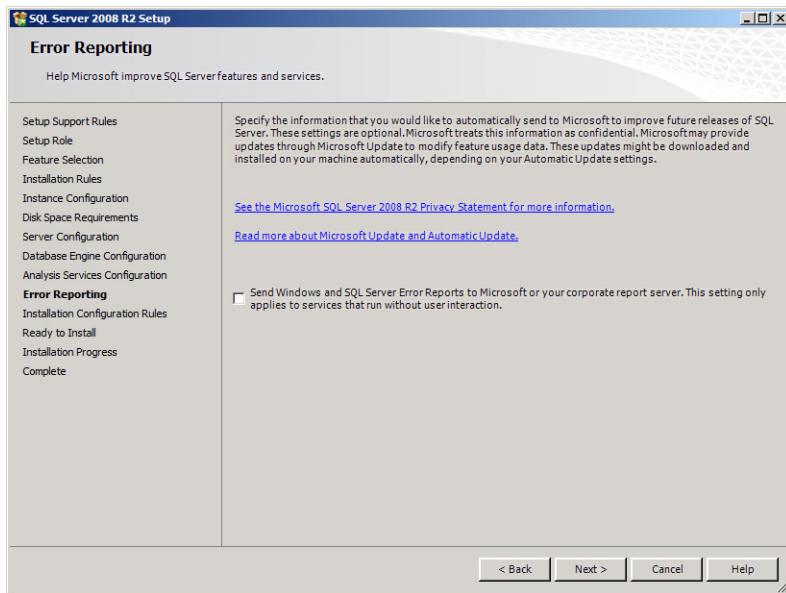
15. In the Database Engine Configuration window, select **Mixed Mode (SQL Server authentication and Windows authentication)**. Specify and confirm password (Master 2000). Click **Add Current User**.



16. In the Database Engine Configuration window, click **Next**.

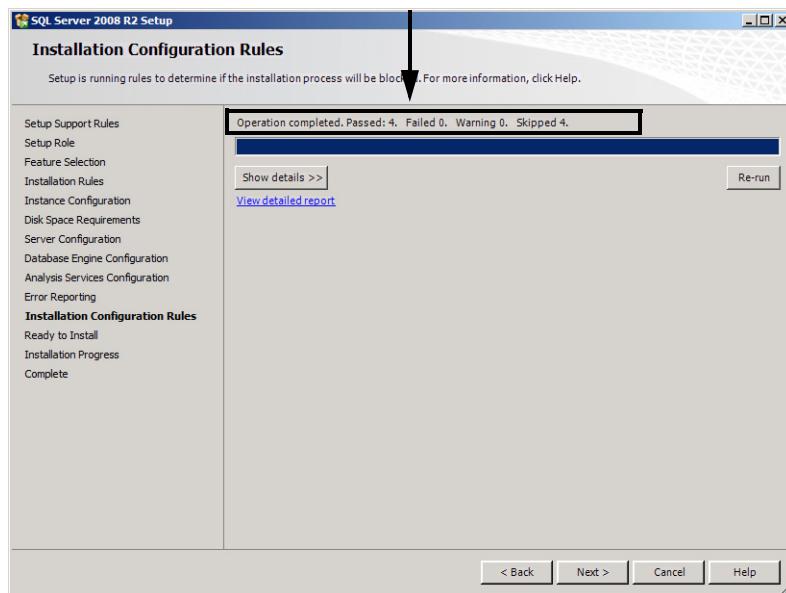


17. In the Error and Usage Reporting window, accept the default settings by clicking **Next**.

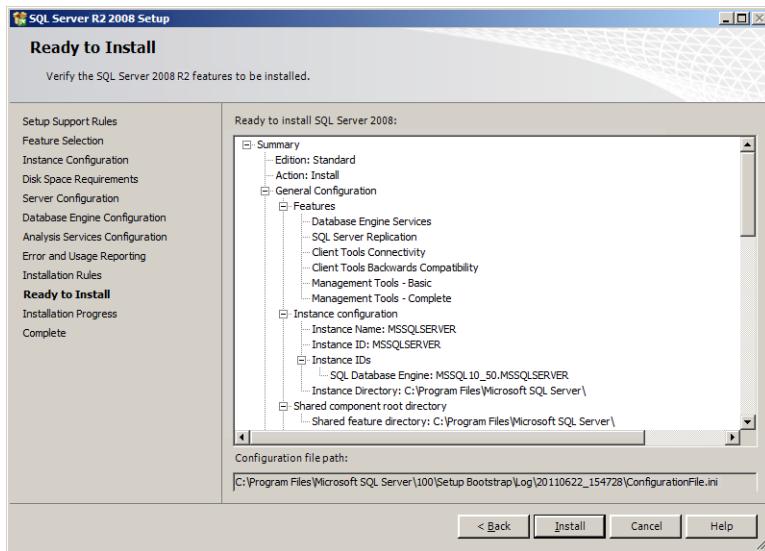


18. In the Installation Rules window, verify that all operations have been completed (no failures are reported). Click **Next**.

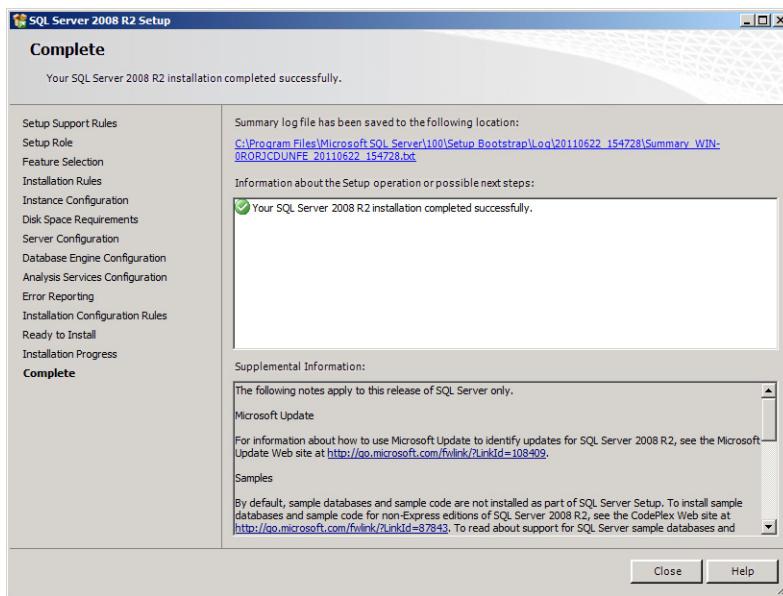
All operations completed successfully.



19. In the Ready to Install window, click **Next**.



20. When the Complete window appears, click **Close**.



21. Close the SQL Server Installation Center window.

22. Once the installation is processed and the notice to wait disappears, remove the DVD.

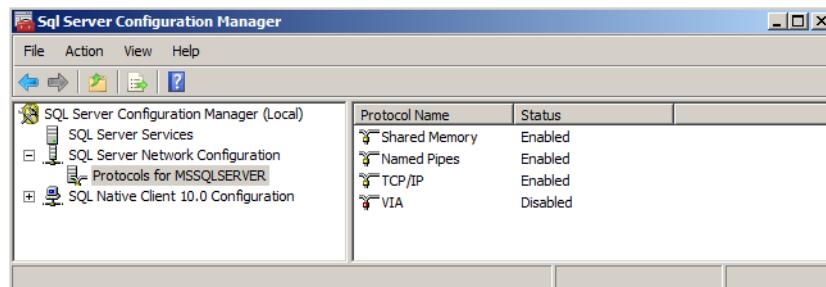
➤ To verify network protocol settings:

1. Go to **Start>Programs>Microsoft SQL Server 2008 R2>Configuration Tools>SQL Server Configuration Manager**.
2. In the SQL Server Configuration Manager window, expand the **SQL Server 2008 R2 Network Configuration** entry and click on the **Protocols for MSSQLSERVER** icon.

Verify that the following protocols are enabled:

- **Shared Memory**
- **Named Pipes**
- **TCP/IP**

To enable a disabled protocols, right-click on the icon, select **Enable**, and follow the prompts. SQL Server services need to be restarted for configuration changes to take effect.



You are now ready to proceed to *Chapter 3: Software Installation*.

SOFTWARE UPGRADE

This chapter provides instructions for upgrading P2000 software to version 3.11 (for new installations, refer to *Chapter 4: Software Installation*). Once the software upgrade is installed, refer to your *P2000 Software User Manual* for complete software operation instructions.

The same P2000 Software CD is used to upgrade the software on the P2000 server and at the P2000 workstations. Perform the upgrade on the server *before* you upgrade the workstations.

The P2000 software installation process creates a log file **P2000Install.log**, which is created in the root C:\ directory and allows Johnson Controls Technical Support to debug the installation process.

NOTE

An earlier version of P2000 LE must be registered as a non-LE system before upgrading to P2000 version 3.11.

UPGRADING P2000 SOFTWARE ON THE SERVER

Depending on the software version you are upgrading from, observe the notes and recommendations as listed below. If you are ready to proceed with the upgrade, go to “P2000 Prerequisites Installation on the Server” on page 3-7.

Important Notes Before the P2000 Upgrade

Review the notes below carefully to avoid making errors and losing valuable data.

P2000 Software Upgrade From Versions 2.3 and Earlier

Alarm Filter

Alarm Filter is no longer available; a Message Filtering feature has been introduced.

During upgrade, the Alarm Filter settings will be lost. Therefore, run the Alarm Filter Report *before* the upgrade. Print the current Alarm Filter configuration for reference and, after the upgrade, manually re-apply the settings to Message Filtering. See the *P2000 Software User Manual* for instructions.

BACnet Interface

All panels are by default disabled for BACnet Interface. After the upgrade you need to manually adjust the settings for every panel that needs to be BACnet Interface enabled by selecting the **Enabled for BACnet Interface** check box in the Edit Panel window, under the **General** tab.

CCTV Server

If you were using CCTV Server, un-install it before the upgrade.

Custom Reports

The P2000 version 3.11 software uses Crystal Reports version 9.0 or higher. All custom reports created in versions 2.3 and earlier need to be opened and saved in Crystal Reports version 9.0 or higher. Any customized (manually edited) queries need to be re-built in Crystal Reports version 9.0 or higher.

In addition, there is a database structure change between P2000 version 2.3 and 3.11, which impacts the Badge and Cardholder records and related custom reports.

For detailed information, refer to the Crystal Reports documentation and the *P2000 Software User Manual*.

P2000 Integrated Video Imaging

P2000 software versions prior to 3.4 have been using the ID Server. During an upgrade from those versions to version 3.11, you will be presented with two Video Imaging software choices: ID Server and EPI Builder.

If you select **ID Server**, the Integrated Video Imaging option will continue to use the ID Server software, and ID Setup will be upgraded to the version currently integrated with P2000.

If you select **EPI Builder**, the Integrated Video Imaging option using the EPI Builder software will be installed.

For more details regarding this option, see the *P2000/P2000LE Integrated Video Imaging Installation and Operation Manual*.

CK720/705 and CK721 Panels

After the upgrade, any CK720/705 and CK721 panels previously configured as version 2.1+ or 2.2+ may need to be manually re-configured at the host to match the panel type and version. See the *P2000 Software User Manual* for further instructions.

P2000 Software Upgrade From Versions 2.5

BACnet Interface

After the upgrade, all panels, terminals, input points, and output points will be enabled for those panels that were enabled for BACnet Interface in version 2.5. If you wish to disable any terminals, input points or output points for specific panels, you will have to manually disable them using the Edit Panel dialog.

Custom Reports

There is a database structure change between P2000 version 2.5 and 3.11, which impacts the Badge and Cardholder records and related custom reports.

P2000 Integrated Video Imaging

P2000 software versions prior to 3.4 have been using the ID Server. During an upgrade from those versions to version 3.11, you will be presented with two Video Imaging software choices: ID Server and EPI Builder.

If you select **ID Server**, the Integrated Video Imaging option will continue to use the ID Server software, and ID Setup will be upgraded to the version currently integrated with P2000.

If you select **EPI Builder**, the Integrated Video Imaging option using the EPI Builder software will be installed.

For more details regarding this option, see the *P2000/P2000LE Integrated Video Imaging Installation and Operation Manual*.

CK720/705 and CK721 Panels

After the upgrade, any CK720/705 and CK721 panels previously configured as version 2.1+ or 2.2+ may need to be manually re-configured at the host to match the panel type and version. See the *P2000 Software User Manual* for further instructions.

P2000 Software Upgrade From Versions 3.0 and Higher

DVR Integration

If previously installed, the following SDKs (Software Development Kits) should be manually removed prior to upgrade:

- Genetec SDK
- Milestone SDK

For un-installing, use the Add/Remove Programs utility.

P2000 Integrated Video Imaging

During an upgrade to version 3.11, you will be presented with two Video Imaging software choices: ID Server and EPI builder.

If you select **ID Server**, the Integrated Video Imaging option using the ID Server software will be installed.

If you select **EPI builder**, the Integrated Video Imaging option using the EPI Builder software will be installed.

For more details regarding this option, see the *P2000/P2000LE Integrated Video Imaging Installation and Operation Manual*.

CK720/705 and CK721 Panels

After the upgrade, any CK720/705 and CK721 panels previously configured as version 2.4+ or 2.5+ may need to be manually re-configured at the host to match the panel type and version. See the *P2000 Software User Manual* for further instructions.

Prior to Upgrading - All Systems

When upgrading the software, follow this sequence:

- Obtain the new Registration Key and Option Keys.
- Back up the database. Refer to the *P2000 Software User Manual* for instructions.
- Log off the P2000 workstations and stop all P2000 services.
- Install the appropriate P2000 Prerequisites (the system will detect and display which prerequisites are required).

Then proceed with the upgrade.

Optional: The following components are no longer used in P2000 version 3.11 and, if previously installed, can now be removed using the Windows Add/Remove Programs utility:

- JCI.P2000.ThinClient
- JCI.P2000.ThinClient.WebEngine
- M-Authorize
- M-Graphics
- M-Password
- Web Site
- Web Services

Obtaining the New Registration Key and Option Keys

All P2000 systems require Registration Key. If your P2000 system also includes one or more options, you will also need Option Key(s).

NOTE

In addition to the Option Key(s), some options require components to be selected during the P2000 software upgrade.

P2000 version 3.11 supports the following Option Keys:

- Aritech Intrusion
- ASSA ABLOY Panels
- Bosch Intrusion

- Change Tracking (FDA)
- Cardkey Legacy Serial Panels
- Cardkey S321 Serial Panels
- Command Intercom
- Enterprise
- Fire Alarm Panel Interface
- HID Controllers
- Isonas Controllers
- SmartSight DVRs
- OSI Panels
- Otis Compass Elevator
- P900 Panels
- SIA Interface
- Zenitel Intercom
- DVR protocols (for a list of supported DVR protocols refer to the *P2000 DVR Integration Manual*)

NOTE

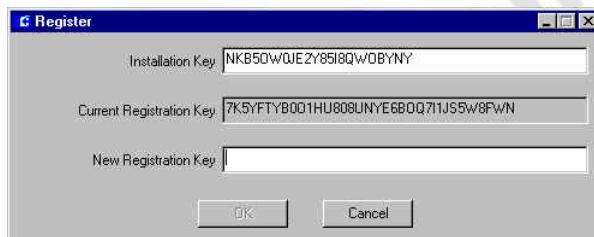
The Installation Key and Option Keys are connected to the hardware, and therefore a hard drive failure could result in having to request a new license.

You are required to get a new Registration Key for the P2000 version 3.11 *before* you begin the upgrade. Without the key you will not be able to complete the upgrade. The Option Key(s) are entered after the upgrade process.

If you are upgrading the server using new hardware, you need to obtain *two* Registration Keys: one for the P2000 software version 3.11 (just like you would in course of fresh installation) and one for the old version of the P2000 server, but matching the new hardware. For more details on when and how to use these keys, see “Upgrading the P2000 Server Using New Hardware” on page 3-11.

➤ **To obtain a new Registration Key and Option Key(s):**

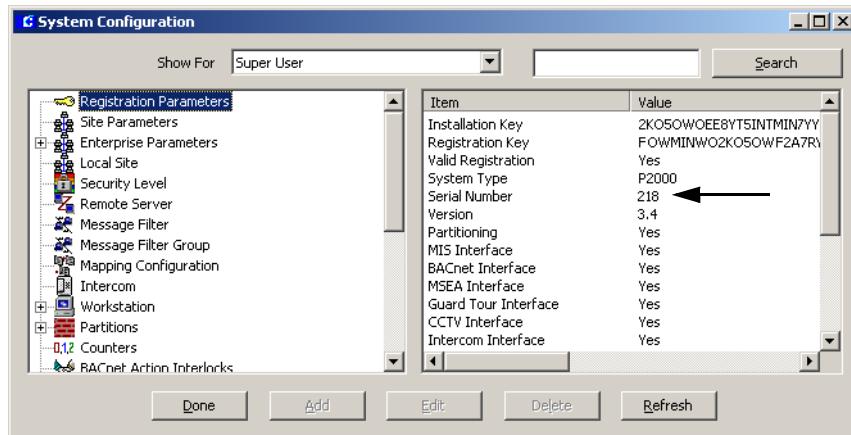
1. Go to **Start>Programs>Johnson Controls>P2000>Register**.
(With older P2000 versions the path may be: **Start>Programs>Johnson Controls>Pegasys 2000>Register**.)



2. E-mail the following information to software.manufacturing@jci.com:
 - The Installation Key number (it is recommended that you *cut and paste* the number to avoid mistakes).
 - The 7-digit AOMS number, as found on the Registration of Options form.
 - End user name, city, and state.
 - Serial number (see instructions below).
3. When you receive an e-mail with new Registration Key, keep it handy for use *during* the upgrade. The Option Key(s), if required by your system, will be entered *after* the upgrade.

➤ **To view the serial number:**

1. From the P2000 Main menu select **Config>System**.
2. If prompted, specify the password (**master**) and click **OK**.
3. Click on the **Registration Parameters** icon. The serial number is displayed in the right window pane.



4. Copy the serial number (for use in obtaining the Installation Key) and close the window.

Stopping P2000 Services and Logging off Workstations

Before you begin actual procedures, you will be required to log off all workstations.

➤ **To stop all services:**

1. From the P2000 Main menu, select **System>Service Control**.
2. If prompted, enter the password (**master**) and click **OK**.
3. In the Service Control window, click the **All** button.
4. Click **Stop** and then click **Done**.

► **To log off all workstations:**

1. Select **System>Workstation Status** from the P2000 Main menu to determine which workstations are logged on.
2. Click **Done** to exit Workstation Status.
3. Select **Exit>Exit** from the P2000 Main menu.
4. Click **Yes** to log out.

P2000 Prerequisites Installation on the Server

The installation procedure is the same as for regular installation (some updates may be omitted if they are already installed on your system). See “P2000 Prerequisites Installation on the Server” on page 4-1 for details.

P2000 Software Upgrade on the Server

At this point, you will have already installed P2000 Prerequisites 3.11 and already have a valid Registration Key and Option Keys. *The Registration Key is necessary to perform the upgrade.*

Depending on then needs of your site, follow one of the following procedures:

- “Upgrading the P2000 Server Using the Same Hardware” on page 3-7
- “Upgrading the P2000 Server Using New Hardware” on page 3-11

Upgrading the P2000 Server Using the Same Hardware

You will need:

- P2000 Software CD, version 3.11

You must be logged on as system administrator.

► **To upgrade the P2000 software on the server:**

1. Insert the P2000 Software CD into the drive to start Autorun.
2. When the CARDKEY P2000 Setup window appears, click **Next**.
3. Read the license agreement; click **Yes** to accept it.
4. For Setup Type select the **Server** radio button and click **Next**.
5. Verify that the **P2000 Server** check box is selected. Make remaining selections depending on the server features you intend to use and the purchased options:
 - **P2000 Web Access** - Select this check box to install files required for Web Access.
 - **OSI Interface** - Select this check box to install the OSI elements.

Click **Next**.

6. Verify that the **P2000 Client** check box is selected. In addition, if *this* computer is also to be used as a workstation, select the check boxes for the components you intend to use on this workstation:
 - **Badging** - This selection will install the Integrated Video Imaging option along with all other workstation capabilities.
 - **AV Codecs** - This selection will install the files necessary for integration between P2000 and Digital Video Recording (DVR).
 - **Tutorial Files** - This selection will install the files necessary to view the P2000 Tutorial, which presents an overview of the P2000 security system's major features and options. It also covers a number of system configuration, installation, and troubleshooting tips.

Click **Next**.

7. If you have selected **Badging** in the previous step, choose the Video Imaging software: **ID Server** or **EPI Builder**:
 - If you select **ID Server**, the Integrated Video Imaging option using the ID Server software will be installed.
 - If you select **EPI Builder**, the Integrated Video Imaging option using the EPI Builder software will be installed.

Click **Next**.

8. Select the protocol(s) to be used with the AV option. Note that:
 - *You can install only one version of each protocol at a time* (for example, if you select **Loronix 4.3**, you cannot select **Loronix 4.4+** at the same time).
 - Select the **Milestone** check box for P2000 integration with supported Milestone protocol versions prior to 4.0. Those versions are not using the Milestone Integration Platform (MIP).

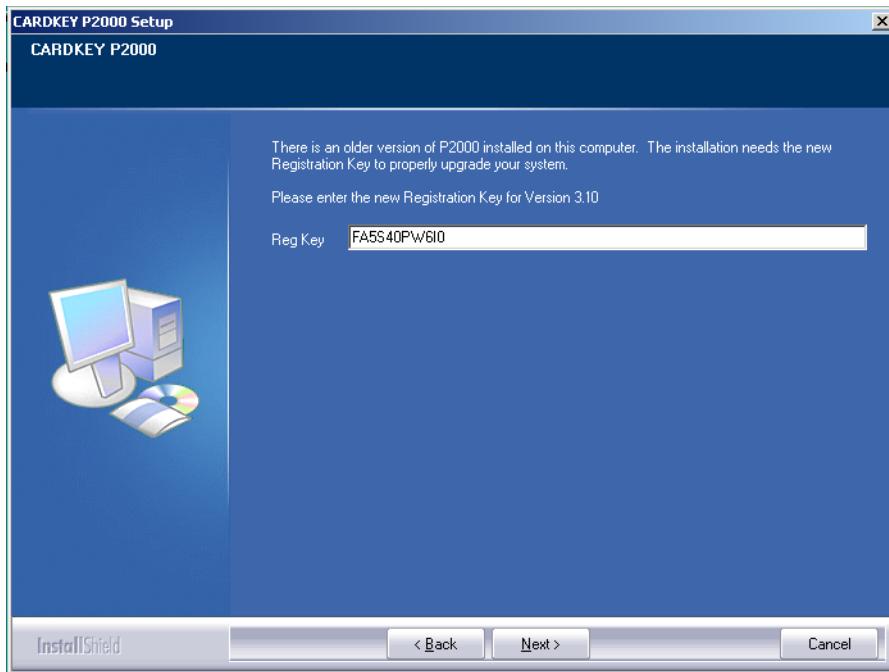
Select the **Milestone MIP** check box for P2000 integration with supported Milestone protocol versions 4.0+. Those versions are using the Milestone Integration Platform (MIP).

- Select the **Pelco Endura** check box for P2000 integration with Endura protocol *without* Pelco 1.0 SDK.

Select the **Pelco XPortal - Endura** check box only when using Endura with Pelco 1.0 SDK.

9. The following screen appears if the installation program detects an older version of P2000 (like during an upgrade from previous versions of the software).

Enter the new Registration Key to upgrade to version 3.11. It is strongly recommended that you ***cut and paste*** the number as received via e-mail. Click **Next**.



10. The P2000 system requires either configuring the P2000 server as SNTP server, or using a custom mechanism to synchronize time between the server and the workstations.

To configure the P2000 server as SNTP server, verify that **Yes** is selected; if you are using a different time server, select **No**.

Click **Next**.

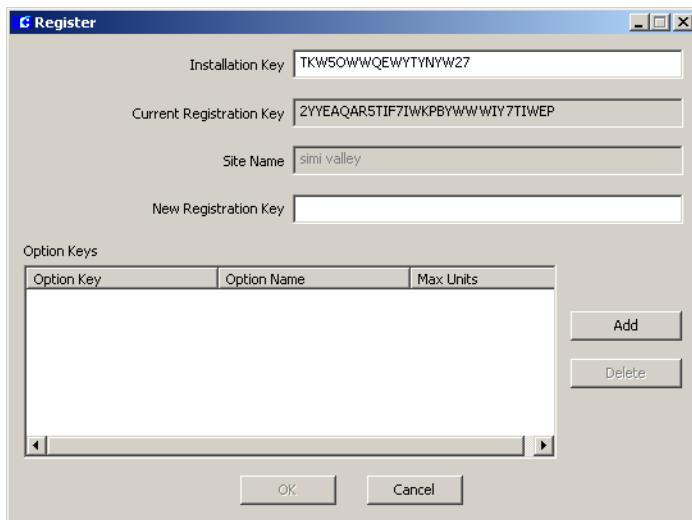
11. To set this server as the Authoritative Time Server (for synchronizing time with another computer or the internet), select **Yes** and click **Next**.
12. *Some operating systems:* If you had **not** selected this server as the Authoritative Time Server, you will be asked to use the P2000 Time Service. Verify that **Yes** is selected and click **Next**.
13. The system will display current settings. Click **Next** to begin copying files. This will take a few minutes.
14. Remove the P2000 Software CD and click **Finish** to restart the computer.
15. When the computer restarts, log on as the system administrator and continue with the startup.

➤ To start up P2000:

1. Double-click the **P2000** icon on the computer's desktop.
2. In the Login window, log on as Cardkey and use the password master; click **OK**.

➤ To register P2000 option(s):

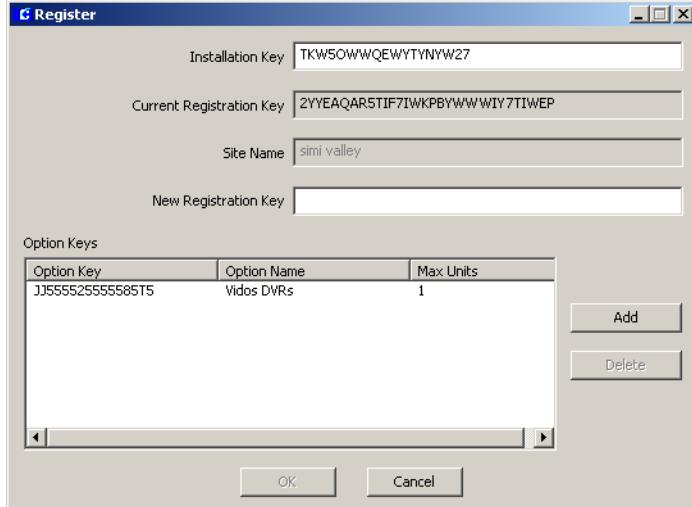
1. When you receive the Option Key(s), go to **Start>Programs>Johnson Controls>P2000>Register**.



2. In the Register window click the **Add** button.
3. In the Add Option Key window, *cut and paste* the number you have received into the **New Option Key** field. You can enter only one number at a time. Click **OK**.



4. If you have more than one option to register, repeat steps 2 and 3 until all numbers are listed in the Register window. To delete an Option Key, select it from the list and click **Delete**.
Click **OK**.



5. Click **Yes** to restart the computer.

See “Important Notes After the P2000 Upgrade” on page 3-13 for additional procedures that may be necessary on your system.

Your upgraded P2000 server software is now ready to configure and operate. See your *P2000 Software User Manual* for full configuration and programming instructions.

Upgrading the P2000 Server Using New Hardware

This section describes how to upgrade a P2000 server to version 3.11 when the upgrade involves the use of new hardware equipment.

In essence, in addition to establishing a new P2000 version 3.11 system (fresh installation), you will need to restore and upgrade the P2000 databases from the earlier version P2000 server.

The Installation and Registration Keys are connected to the particular hardware, and therefore additional steps are needed when you are changing server hardware in addition to performing the upgrade.

In the instructions below, the earlier version of the P2000 server version is called the “old server,” while the P2000 server version 3.11 is called the “new server.” The old server’s P2000 database which has to be restored on the new hardware is referred to as “foreign database.”

You will need:

- P2000 Software CD, version 3.11

You must be logged on as system administrator.

► To upgrade the P2000 database on the new hardware:

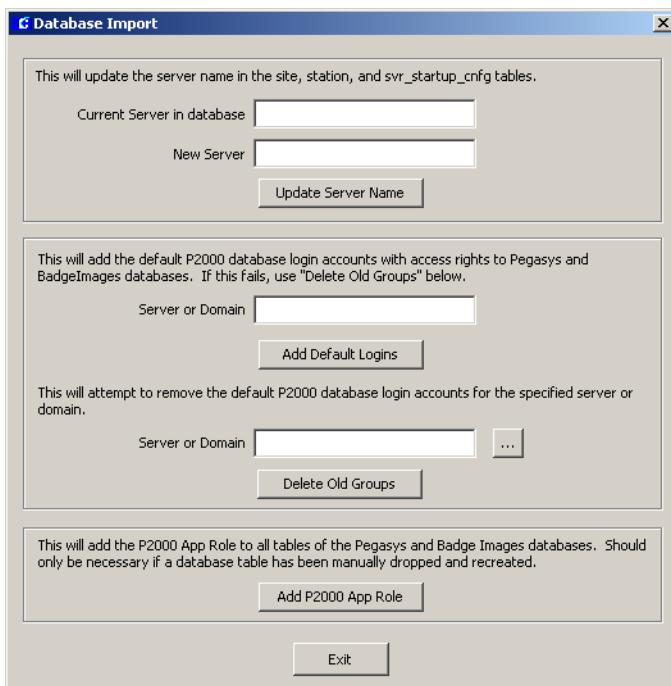
1. Install P2000 software version 3.11 on the new hardware. This will be a fresh installation, therefore refer to *Chapter 4: Software Installation* for details.
2. Based on the new server’s Installation Key, obtain two Registration Keys:
 - a. One for P2000 software version 3.11
 - b. One for the old version of the P2000 server (this will be a Registration Key for the new hardware that matches the foreign database version)Also, obtain the Option Keys; you do not need to enter them at this time.
3. Register the P2000 software version 3.11 on the new hardware using the key obtained in step 2a.
4. Start up P2000 and verify that all services are running on the new server and that the “traffic signal” icon in the system tray displays green light.
5. Stop all P2000 services and close the “traffic signal” icon.
6. Restore the older version of P2000 Data and P2000 Images databases using the P2000 Backup utility. Refer to the *P2000 Software User Manual* for full instructions.

7. If the computer names of the old and new server are not the same, use the DatabaseImport tool to change the computer name on the new server. See “To change the computer name.” on page 3-12 for details.
8. From SQL, update the registration table with the new server’s Installation Key.
9. From SQL, update the registration table with the Registration Key for the old software version (as obtained in step 2b).
10. Run the P2000 version 3.11 software installation again to upgrade the database. If the previous steps were completed successfully, during the upgrade you will be asked to enter the Registration Key. Enter the key for version 3.11 (as obtained in step 2a).
11. Start up the P2000 and register the options. See page 3-9 for details.

➤ **To change the computer name:**

1. Run the **DatabaseImport.exe** software located in:

C:\Program Files\Johnson Controls\CARDKEY P2000\bin



2. In the Database Import window, click the **Update Server Name** button and verify that the name in the **Current Server in database** field matches the name in the **New Server** field.
3. Click the “browse” button next to the lower **Server or Domain** field.
4. In the Current Servers and Domains window, select an entry and click **OK**.
5. The selected entry will appear in the **Server or Domain** field in the Database Import window. Click the **Delete Old Groups** button.
6. Repeat steps 3-5 until all entries in the Current Servers and Domains window have been deleted.

7. Verify that the upper **Server or Domain** field contains the new server name and click the **Add Default Logins** button.
8. Click the **Add P2000 App Role** button.
9. Exit the Database Import window.

See “Important Notes After the P2000 Upgrade” on page 3-13 for additional procedures that may be necessary on your system.

Your upgraded P2000 server software is now ready to configure and operate. See your *P2000 Software User Manual* for full configuration and programming instructions.

Important Notes After the P2000 Upgrade

Review and follow these notes as applicable to your system.

BACnet

If you are using BACnet, perform the following procedures after the upgrade:

- Enable the P2000 BACnet Service to auto-start
- Enable BACnet interface in Site Parameters

For detailed instructions refer to the *P2000 Metasys Integration* manual.

Web Access

If you were previously using the Live Capture feature:

- Un-install and re-install the WebUSB application on Web Access client(s)

For detailed instructions refer to the *P2000 Web Access* manual.

UPGRADING P2000 SOFTWARE ON THE WORKSTATION

P2000 Prerequisites Installation on the Workstation

The installation procedure is the same as for regular installation (some updates may be omitted if they are already installed on your system). Refer to “P2000 Prerequisites Installation on the Workstation” on page 4-17 for details.

P2000 Software Upgrade on the Workstation

This procedure is identical to the P2000 software installation on a Workstation. Refer to “P2000 Software Installation on the Workstation” on page 4-18 for details.

PRELIMINARY

SOFTWARE INSTALLATION

This chapter describes the P2000 prerequisites and software installation on the server and on the workstation(s).

The P2000 software installation process creates a log file **P2000Install.log**, which is created in the root C:\ directory and allows Johnson Controls Technical Support to debug the installation process.

SOFTWARE INSTALLATION ON THE SERVER

Load the system software on the on the P2000 server *before* it is installed on the P2000 workstations.

After the installation you will have to e-mail Johnson Controls for a Registration Key, and then enter it into the system (see “Registering P2000 Software and Options” on page 4-12). If you do not enter the Registration Key, the communication between the server and with the panels and workstations will terminate on the 10th day after the initial installation.

If your P2000 system also includes one or more options, you will also need Option Key(s).

P2000 Prerequisites Installation on the Server

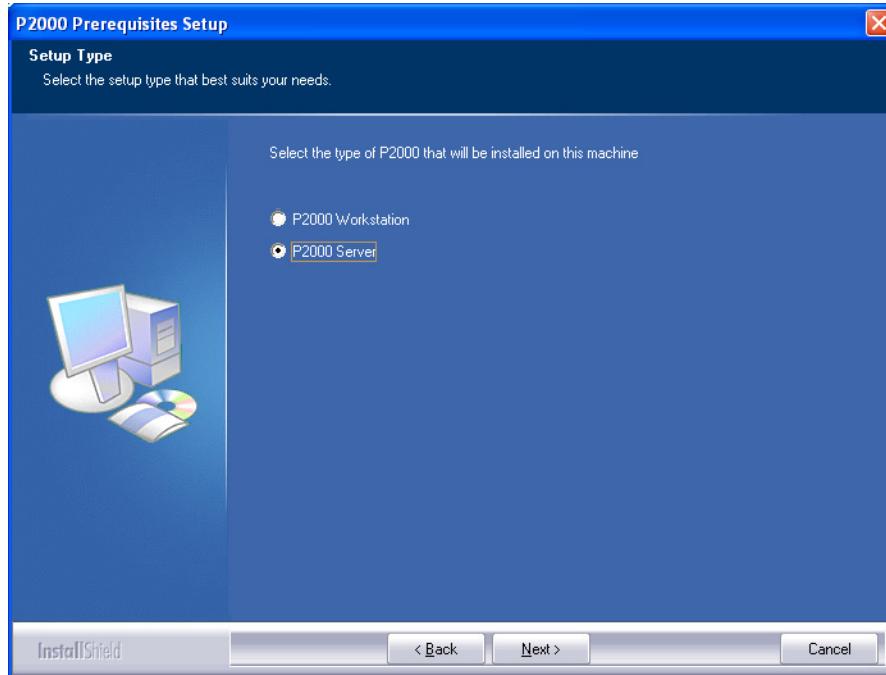
The prerequisite program will check the operating system and the database engine in order to evaluate which of the updates need to be installed. If no database engine is detected, you will be informed that connection to database could not be established, and prompted to install SQL Server 2005 Express Edition. Unless specifically required by your system, do not change the default selections.

You will need:

- P2000 Prerequisites DVD, version 3.11

► **To install the updates:**

1. Log on as the system administrator.
2. Insert the P2000 Prerequisites DVD to start Autorun.
3. In the Welcome screen click **Next**.
4. Select the **P2000 Server** radio button and click **Next**.

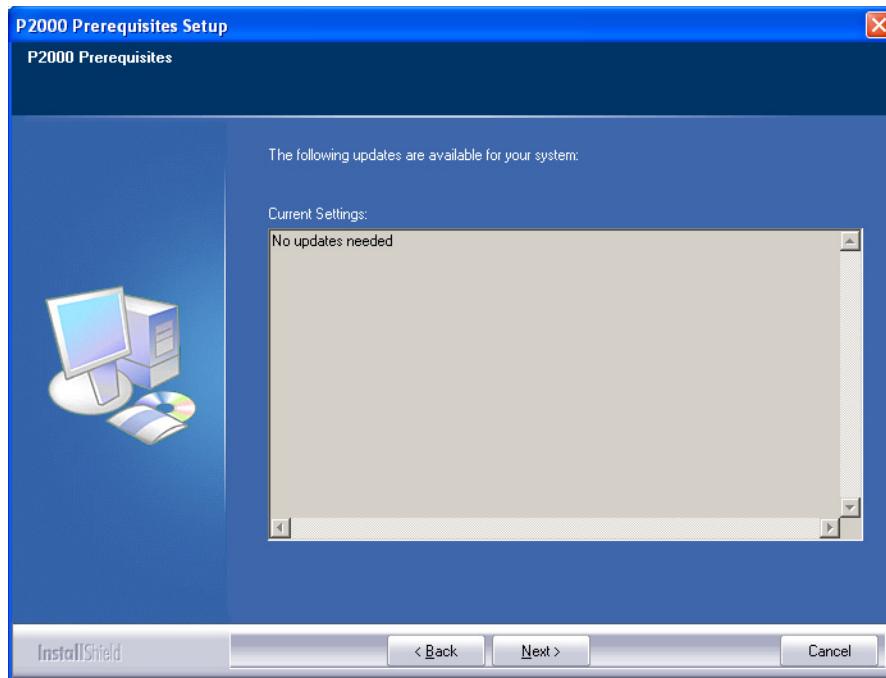


5. The prerequisites program will check the system and evaluate which updates are needed. Only the required updates will be displayed in the selection list. Follow the prompts and accept default selections to complete the installation of prerequisites.

NOTE

If the computer does not have the SQL Server installed, you will be informed that connection to the database could not be established. The SQL Server Express Edition will then be added to the list of required prerequisites.

6. Several reboots may occur during installation. After each reboot, log in as the system administrator. You may need to restart the DVD manually.
7. When all required updates have been installed, the following screen will be displayed:



8. Click **Next**. The installer will close.
9. Remove the DVD.

P2000 Software Installation on the Server

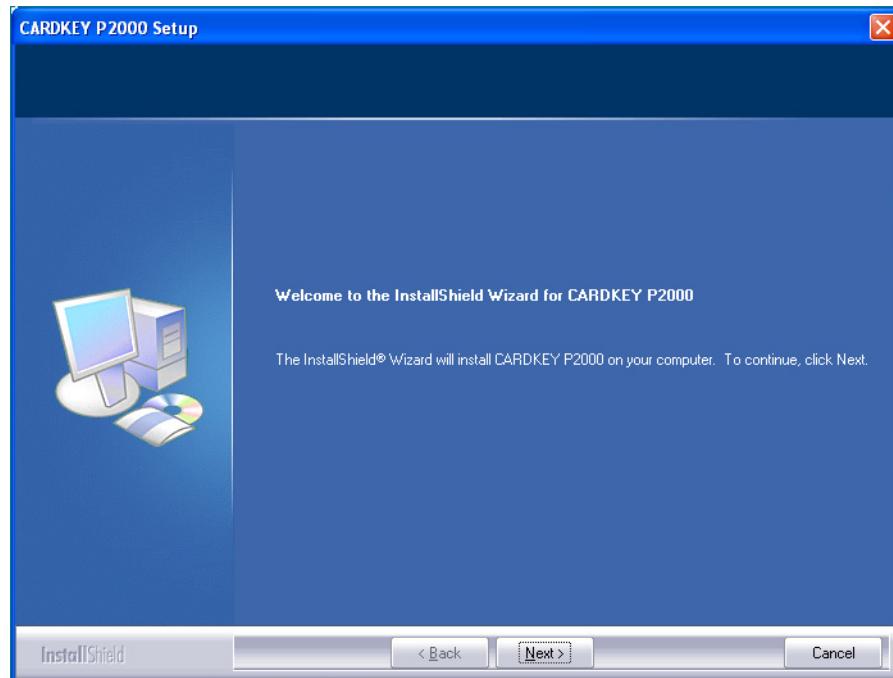
You will need:

- P2000 Software CD, version 3.11

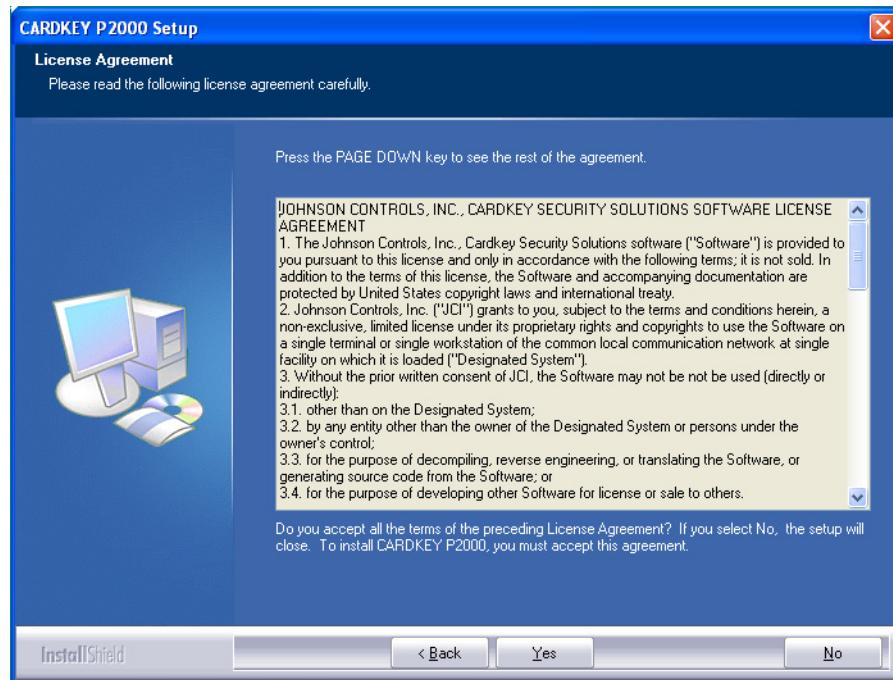
You must be logged on as Administrator.

► **To install the P2000 software on the server:**

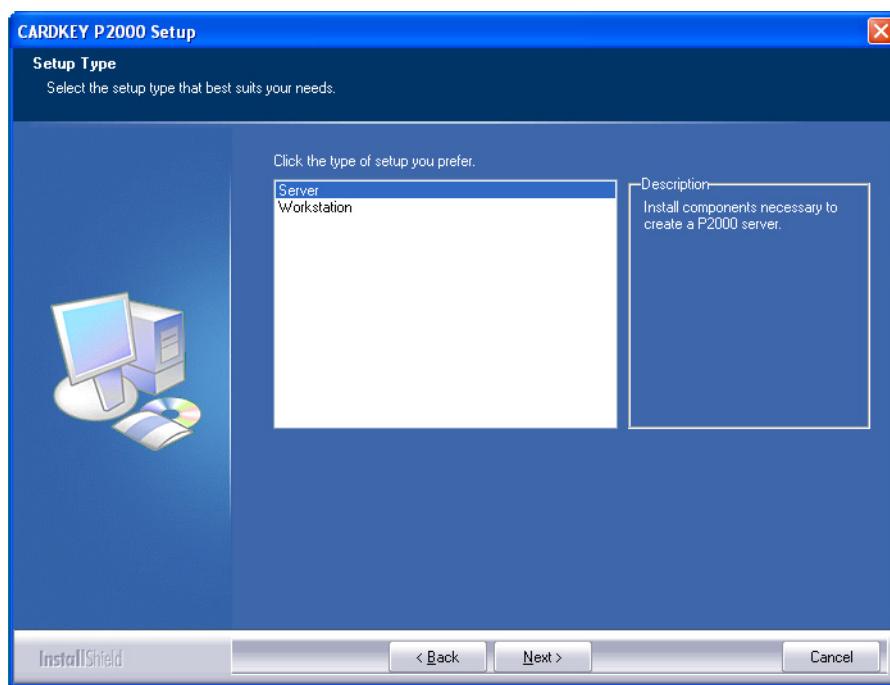
1. Insert the P2000 Software CD into the drive to start Autorun.
2. When the CARDKEY P2000 Setup window appears, click **Next**.



3. Read the license agreement; click Yes to accept it.



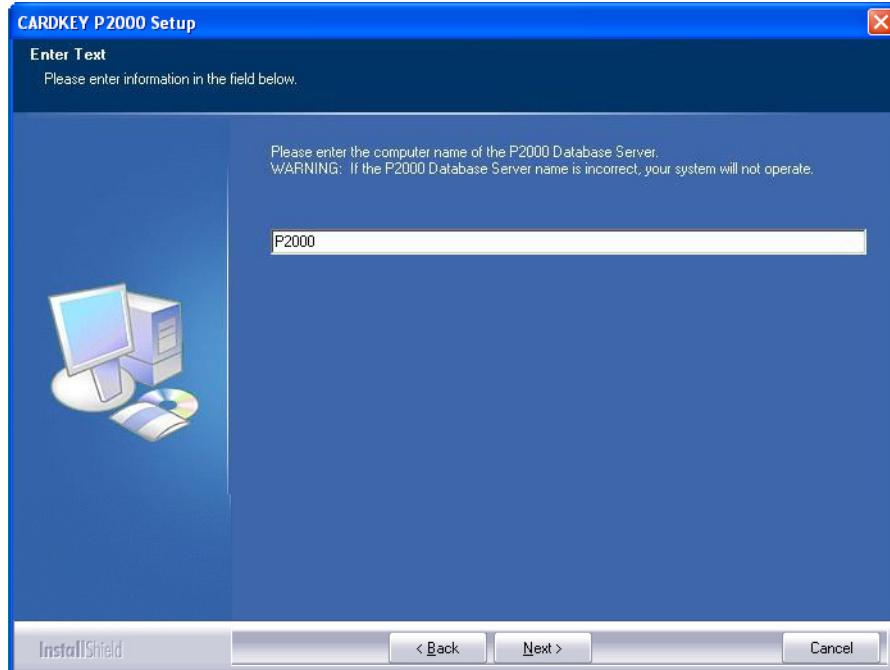
4. In the next window, select **Server** and click **Next**.



5. Enter the name for the P2000 Database Server; click **Next**.

NOTE

Depending on your system configuration, you may be asked to enter this information later in the installation process.

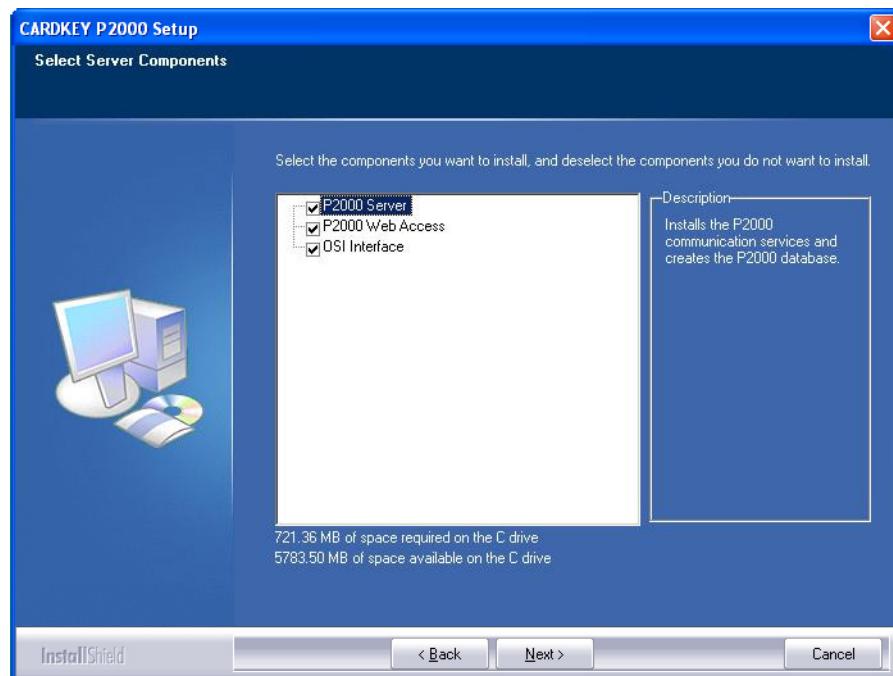


6. Verify that the **P2000 Server** check box is selected. Make remaining selections depending on the server features you intend to use and the purchased options:
- **P2000 Web Access** - Select this check box to install files required for Web Access.
 - **OSI Interface** - Select this check box to install the OSI elements.

Click **Next**.

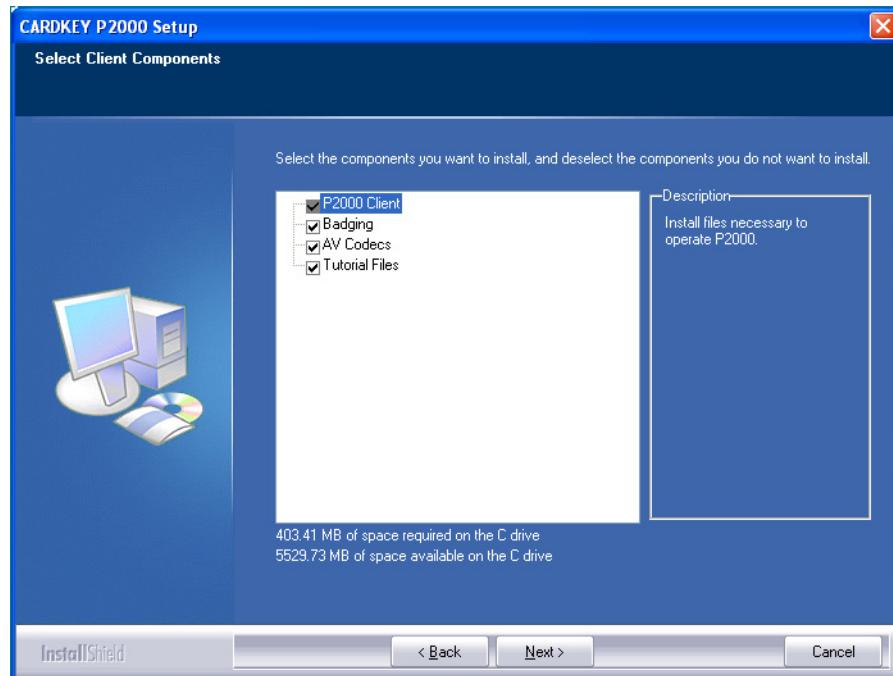
NOTE

Support for OSI panels requires IIS version 6.0 (as provided, for example, with Microsoft Windows XP, Windows Server 2003, and Windows Server 2008) and therefore is not available in systems using Windows 7.



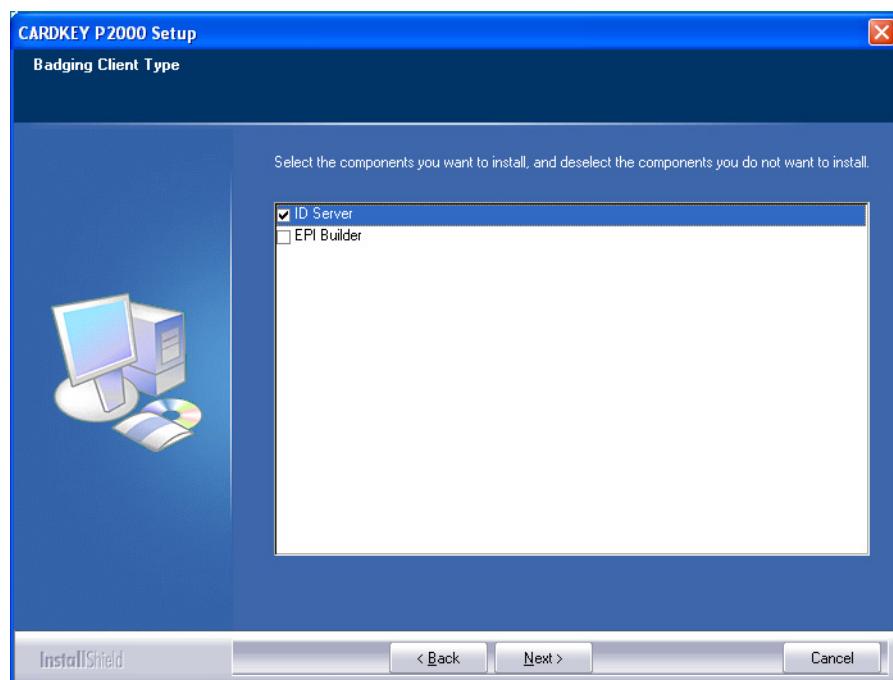
7. Verify that the **P2000 Client** check box is selected. In addition, if *this* computer is also to be used as a workstation, select the check boxes for the components you intend to use on this workstation:
- **Badging** - This selection will install the Integrated Video Imaging option along with all other workstation capabilities.
 - **AV Codecs** - This selection will install the files necessary for integration between P2000 and Digital Video Recording (DVR).
 - **Tutorial Files** - This selection will install the files necessary to view the P2000 Tutorial, which presents an overview of the P2000 security system's major features and options. It also covers a number of system configuration, installation, and troubleshooting tips.

Click **Next**.



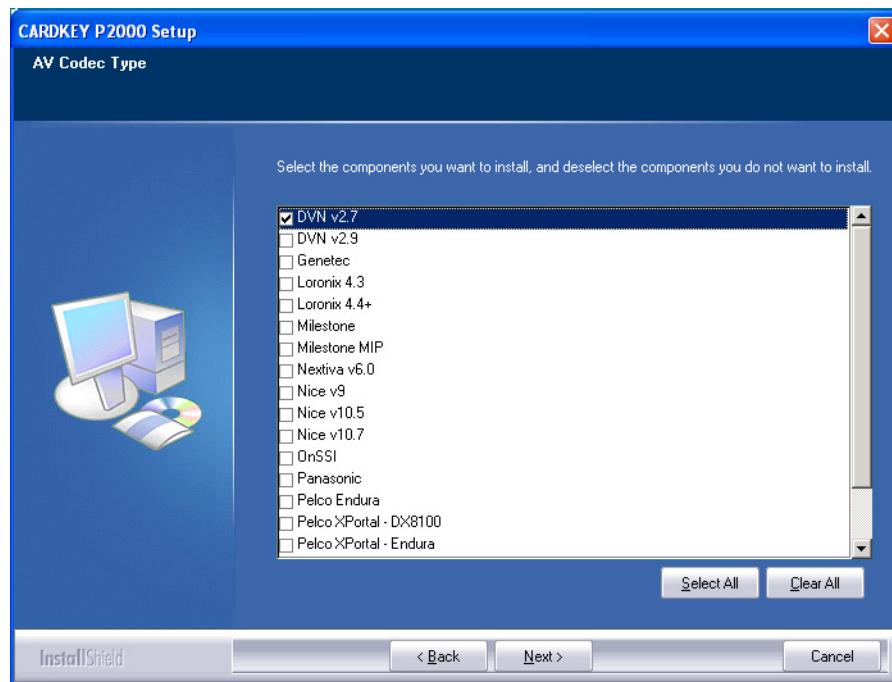
8. If you have selected **Badging** in step 7, choose the Video Imaging software: **ID Server** or **EPI Builder**:
 - If you select **ID Server**, the Integrated Video Imaging option using the ID Server software will be installed.
 - If you select **EPI Builder**, the Integrated Video Imaging option using the EPI Builder software will be installed.

Click **Next**.

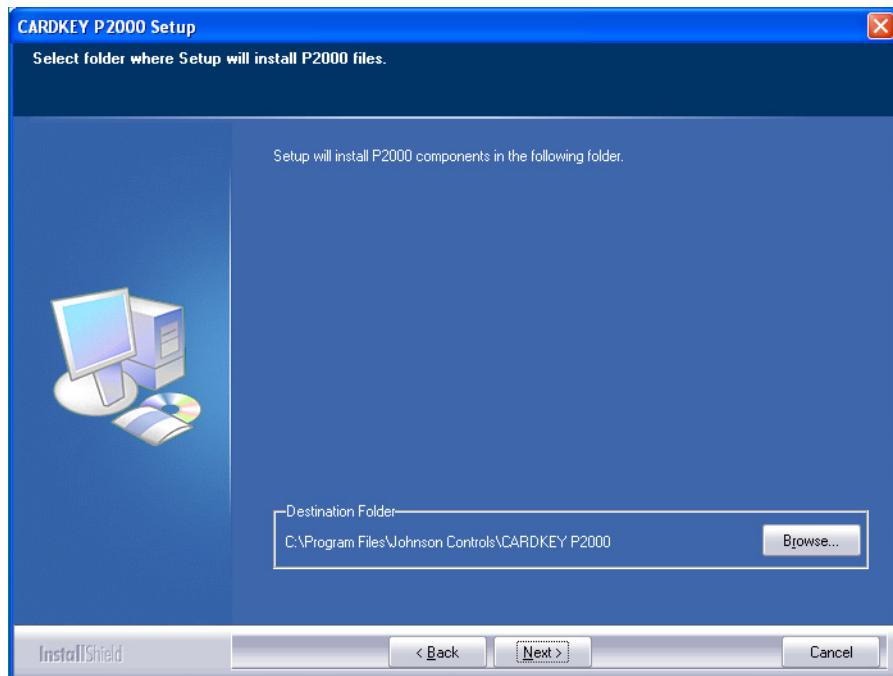


9. Select the protocol(s) to be used with the AV option. Note that:

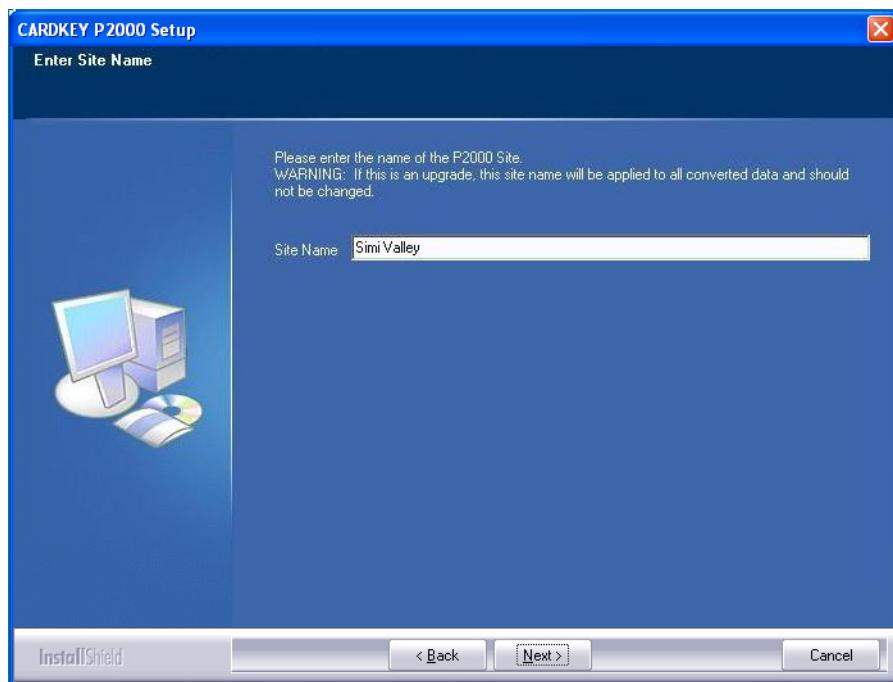
- You can install only one version of each protocol at a time (for example, if you select **Loronix 4.3**, you cannot select **Loronix 4.4+** at the same time).
- Select the **Milestone** check box for P2000 integration with supported Milestone protocol versions prior to 4.0. Those versions are not using the Milestone Integration Platform (MIP).
Select the **Milestone MIP** check box for P2000 integration with supported Milestone protocol versions 4.0+. Those versions are using the Milestone Integration Platform (MIP).
- Select the **Pelco Endura** check box for P2000 integration with Endura protocol without Pelco 1.0 SDK.
Select the **Pelco XPortal - Endura** check box only when using Endura with Pelco 1.0 SDK.



10. To accept the default installation folder for the P2000 components, click **Next**.



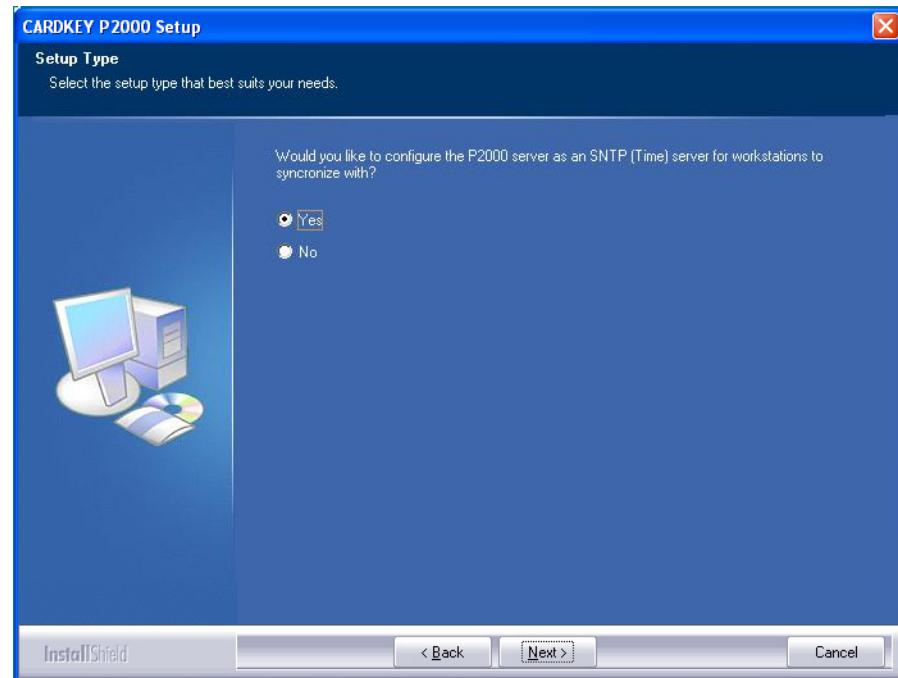
11. Enter the **Site Name** (the name will uniquely identify the P2000 site within the P2000 Enterprise System); click **Next**.



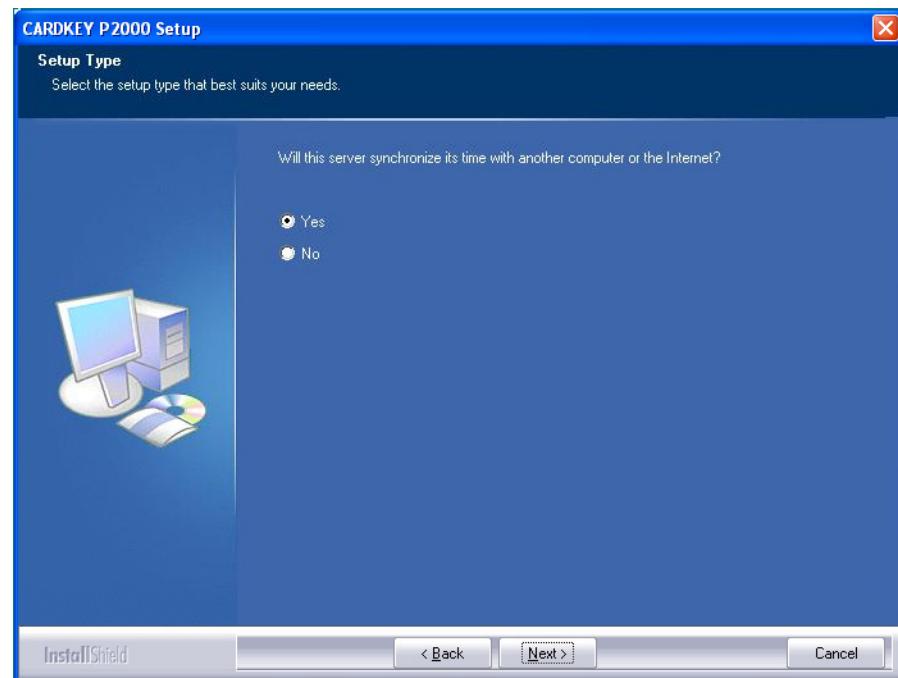
12. The P2000 system requires either configuring the P2000 server as SNTP server, or using a custom mechanism to synchronize time between the server and the workstations.

To configure the P2000 server as SNTP server, verify that **Yes** is selected; if you are using a different time server, select **No**.

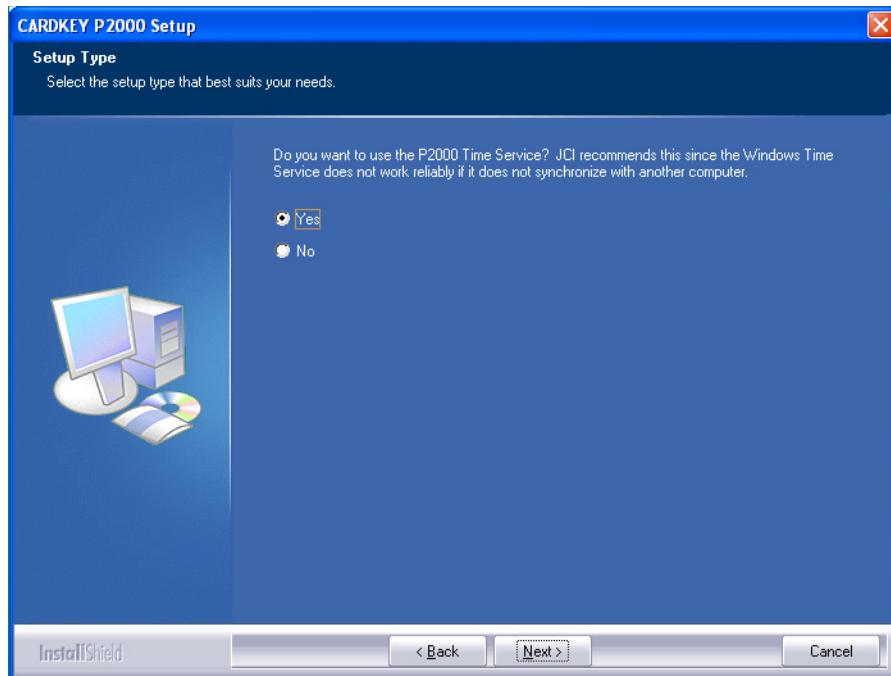
Click **Next**.



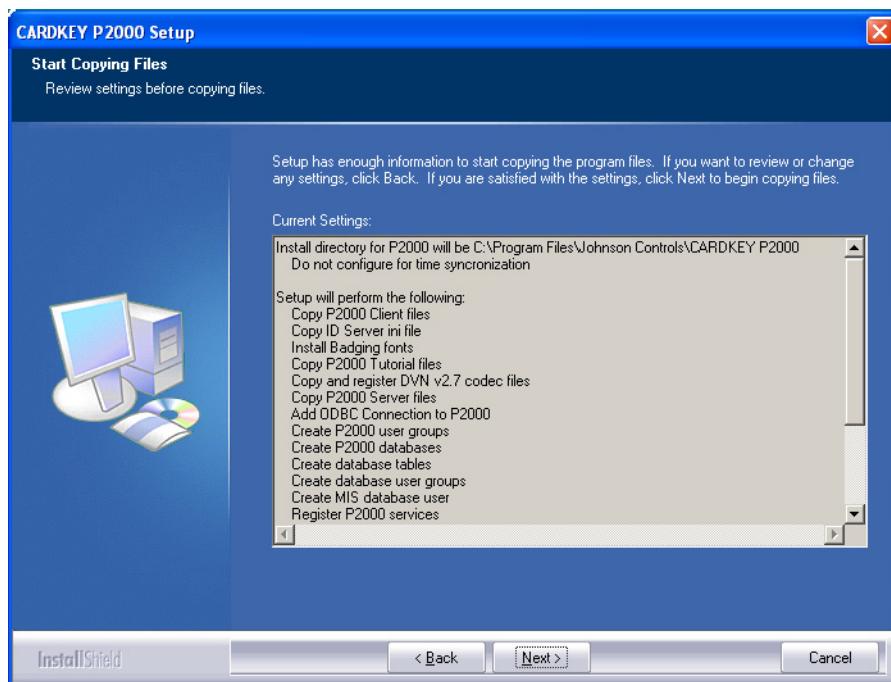
13. To set this server as the Authoritative Time Server (for synchronizing time with another computer or the internet), select **Yes** and click **Next**.



14. *Some operating systems:* If you had **not** selected this server as the Authoritative Time Server, you will be asked to use the P2000 Time Service. Verify that **Yes** is selected and click **Next**.



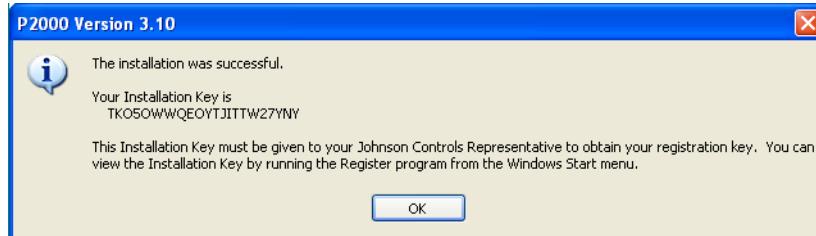
15. The system will display current settings. Click **Next** to begin copying files. This will take a few minutes.



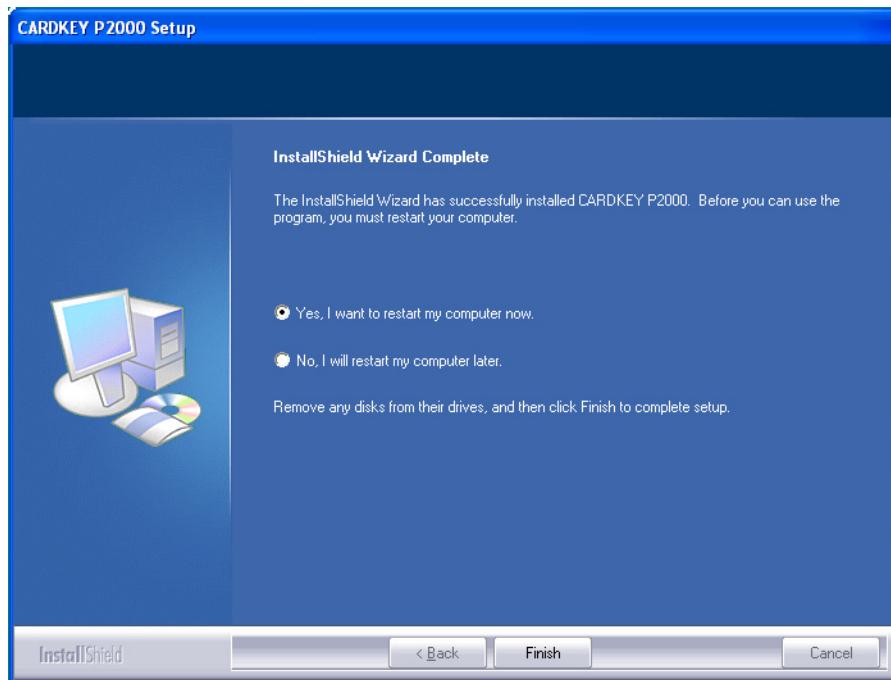
➤ **To complete the P2000 installation:**

1. The following window informs you about successful installation and displays the Installation Key number. (You can also access the number later, as

described in “Registering P2000 Software and Options” on page 4-12.) Click **OK**.



2. Remove the P2000 Software CD and click **Finish** to restart the computer.



3. When the computer restarts, log on as the system administrator and continue with the startup.

Registering P2000 Software and Options

All P2000 systems require Registration Key. If your P2000 system also includes one or more options, you will also need Option Key(s).

NOTE

In addition to the Option Key(s), some options require components to be selected during the P2000 software installation.

P2000 version 3.11 supports the following Option Keys:

- Aritech Intrusion

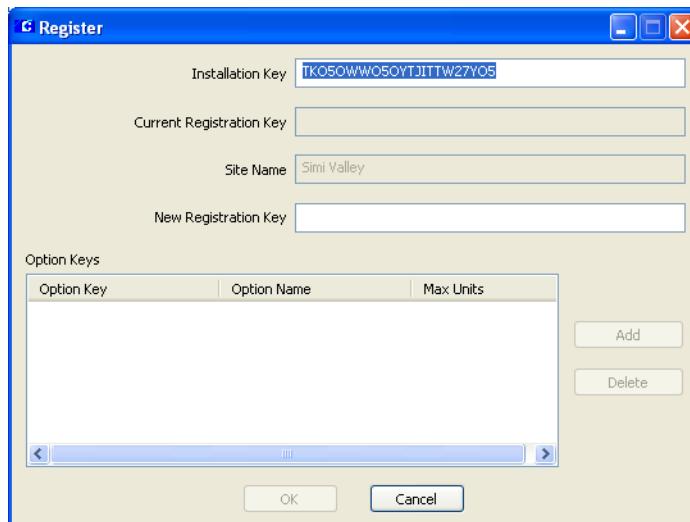
- ASSA ABLOY Panels
- Bosch Intrusion
- Change Tracking (FDA)
- Cardkey Legacy Serial Panels
- Cardkey S321 Serial Panels
- Command Intercom
- Enterprise
- Fire Alarm Panel Interface
- HID Controllers
- Isonas Controllers
- SmartSight DVRs
- OSI Panels
- Otis Compass Elevator
- P900 Panels
- SIA Interface
- Zenitel Intercom
- DVR protocols (for a list of supported DVR protocols refer to the *P2000 DVR Integration Manual*)

NOTE

The Installation Key and Option Keys are connected to the hardware, and therefore a computer failure could result in having to request a new license.

➤ **To obtain P2000 software Registration Key and/or Option Key(s):**

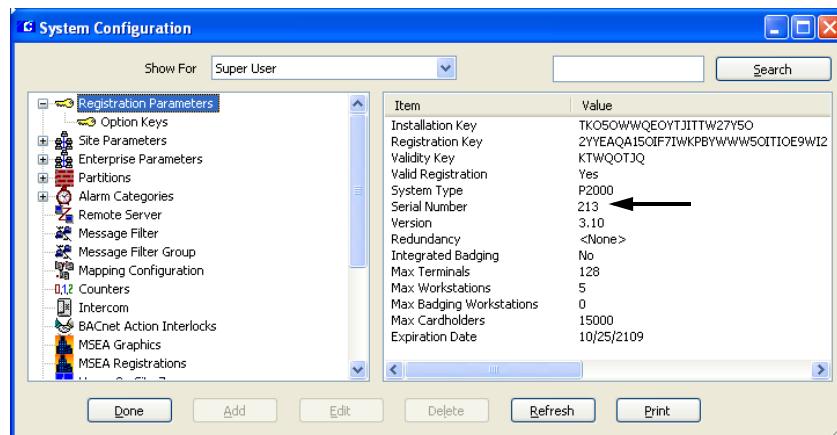
1. First, retrieve the Installation Key. To do so, go to **Start>Programs>Johnson Controls>P2000>Register**.



2. E-mail the following information to software.manufacturing@jci.com:
 - The Installation Key number (it is recommended that you *cut and paste* the number to avoid mistakes).
 - The 7-digit AOMS number, as found on the Registration of Options form.
 - End user name, city, and state.
 - Serial number (see instructions below).

➤ **To view the serial number:**

1. From the P2000 Main menu select **Config>System**.
2. Specify the password (master) and click **OK**.
3. Click on the **Registration Parameters** icon. The serial number is displayed in the right window pane. (The screen capture below shows a registered system so Registration Key and options are also displayed).



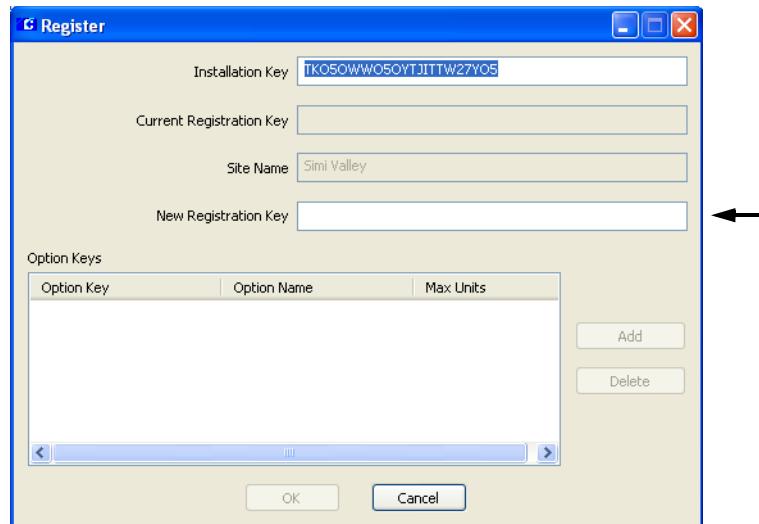
4. Copy the serial number (for use in obtaining the Installation Key) and close the window.

Registering P2000 Software and Options

Once you have received the keys, you can proceed with registration. You must register P2000 software first, before entering the Option Key(s).

➤ **To register P2000 software:**

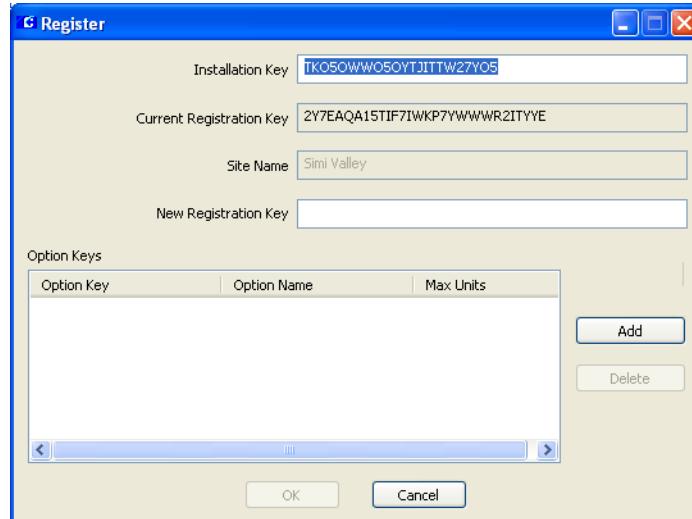
1. When you receive the Registration Key, go to **Start>Programs>Johnson Controls>P2000>Register**.
2. *Cut and paste* the number you have received into the **New Registration Key** field in the Register dialog box, click **OK**.



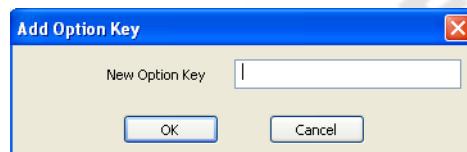
- Click Yes to restart the computer.

► **To register P2000 option(s):**

- When you receive the Option Key(s), go to **Start>Programs>Johnson Controls>P2000>Register**.

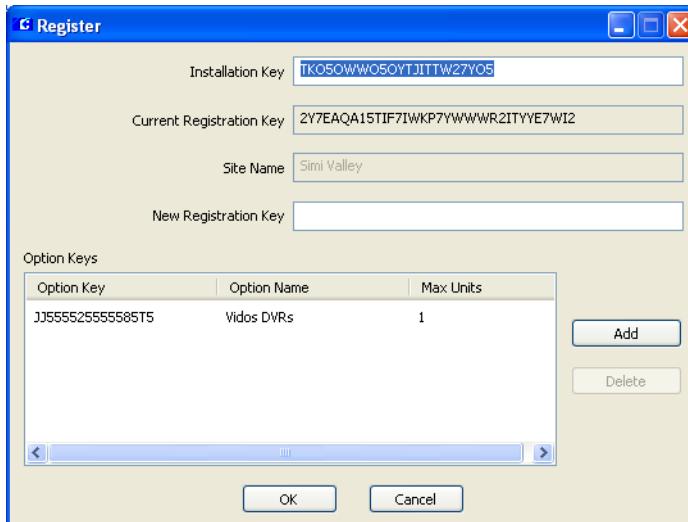


- Click the **Add** button.
- In the Add Option Key window, *cut and paste* the number you have received into the **New Option Key** field in the Register dialog box. You can enter only one number at a time. Click **OK**.



4. If you have more than one option to register, repeat steps 2 and 3 until all numbers are listed in the Register window. To delete an Option Key, select it from the list and click **Delete**.

Click **OK**.



5. Click **Yes** to restart the computer.

Starting Up P2000

Until the software is properly registered, every time you restart the computer and launch the P2000 software you will receive a message about the number of days left for registration.

► To start up P2000:

1. Log on as the system administrator.
2. Double-click the **P2000** icon.
3. In the Login window, log on as Cardkey and use the password master; click **OK**.

Your new P2000 software is now ready to configure and operate. If you are using BACnet, see the section below. Otherwise, refer to your *P2000 Software User Manual* for full configuration and programming instructions.

BACnet

If you are using BACnet, perform the following procedures after installing P2000 software:

- Enable the P2000 BACnet Service to auto-start
- Enable BACnet interface in Site Parameters

For detailed instructions refer to the *P2000 Metasys Integration* manual.

SOFTWARE INSTALLATION ON THE WORKSTATION

When installing the Workstation software, follow the sequence below:

- P2000 Prerequisites Installation on the Workstation
- P2000 Software Installation on the Workstation

P2000 Prerequisites Installation on the Workstation

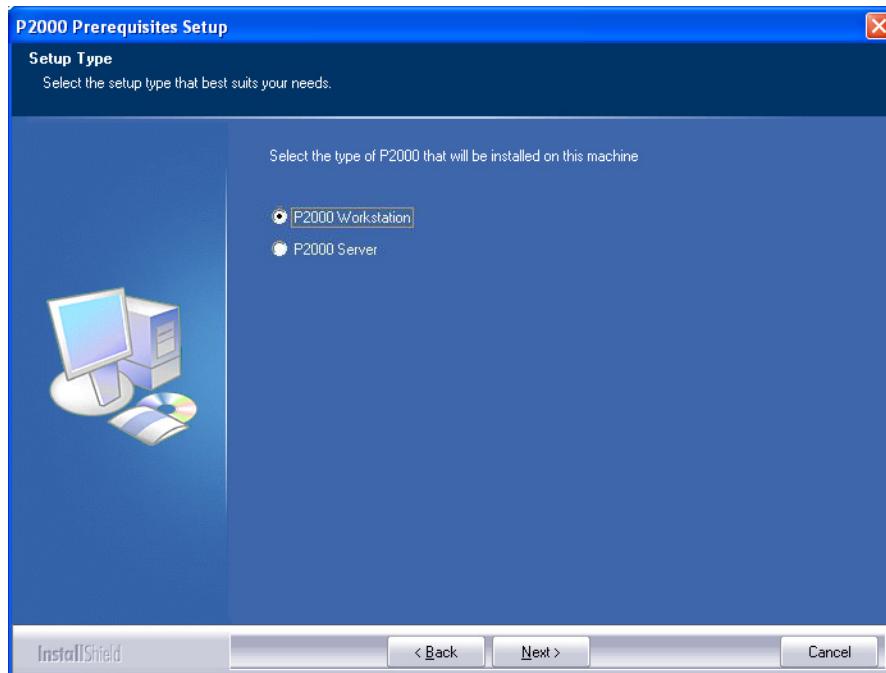
The prerequisite program will check the operating system in order to evaluate which of the updates need to be installed. Unless specifically required by your system, do not change the default selections.

You will need:

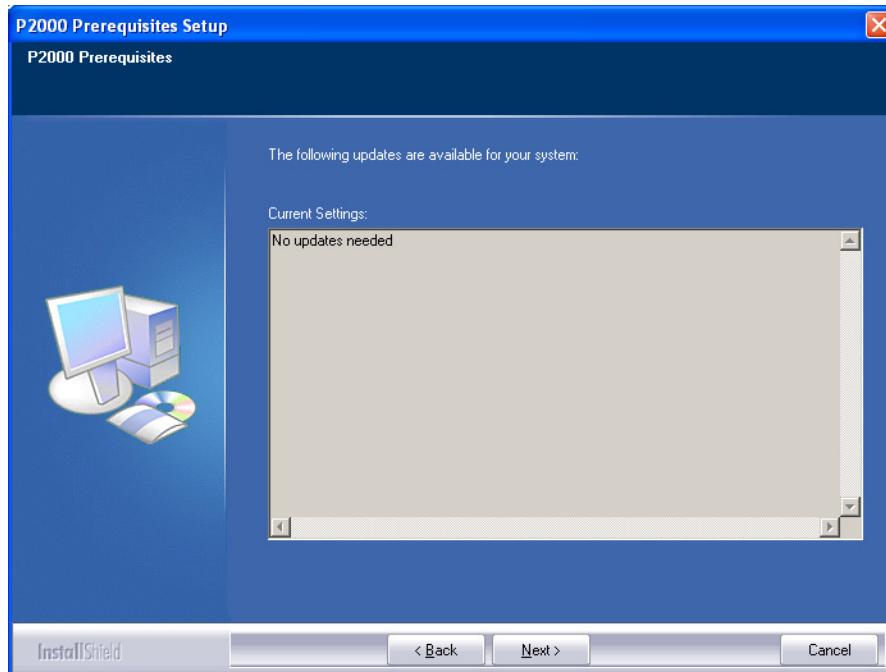
- P2000 Prerequisites DVD, version 3.11

➤ To install the updates:

1. Log on as the system administrator.
2. Insert the P2000 Prerequisites DVD to start Autorun.
3. In the Welcome screen click **Next**.
4. Select the **P2000 Workstation** radio button and click **Next**.



5. The prerequisites program will check the system and evaluate which updates are needed. Only the required updates will be displayed in the selection list. Follow the prompts and accept default selections to complete the installation of prerequisites.
6. Several reboots may occur during installation. After each reboot, log in as the system administrator. You may need to restart the DVD manually.
7. When all required updates have been installed, the following screen will be displayed:



8. Click **Next**. The installer will close.
9. Remove the DVD.

Proceed to “P2000 Software Installation on the Workstation” below.

P2000 Software Installation on the Workstation

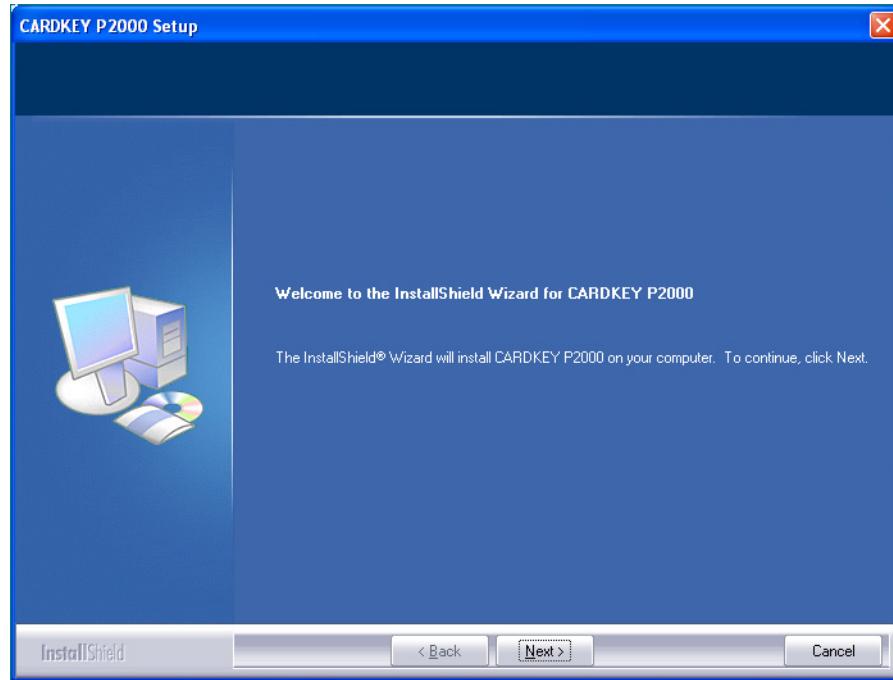
You will need:

- P2000 Software CD, version 3.11

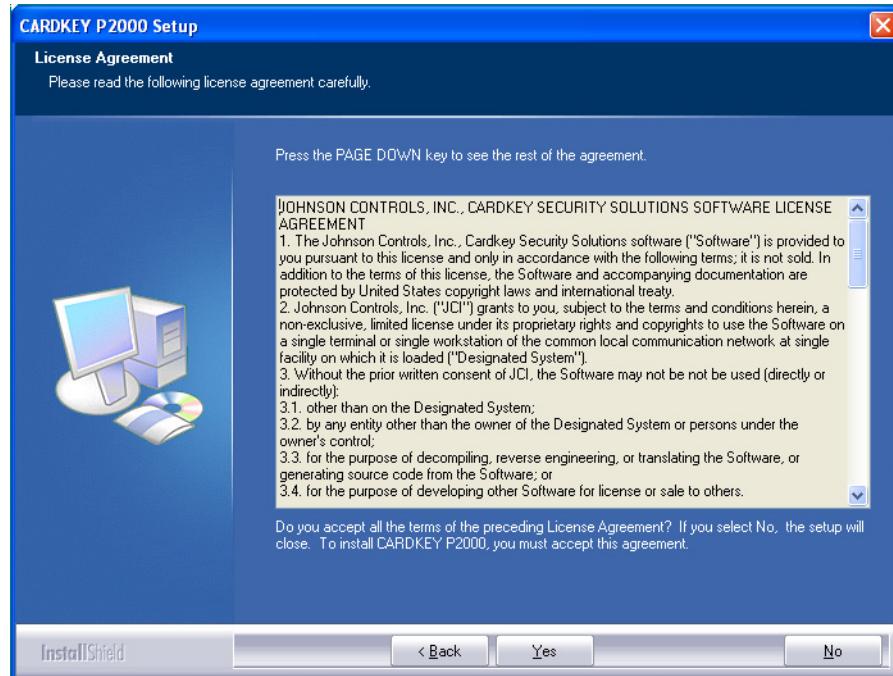
► **To install P2000 on the Workstation:**

1. Insert the P2000 Software CD into the drive to start Autorun.

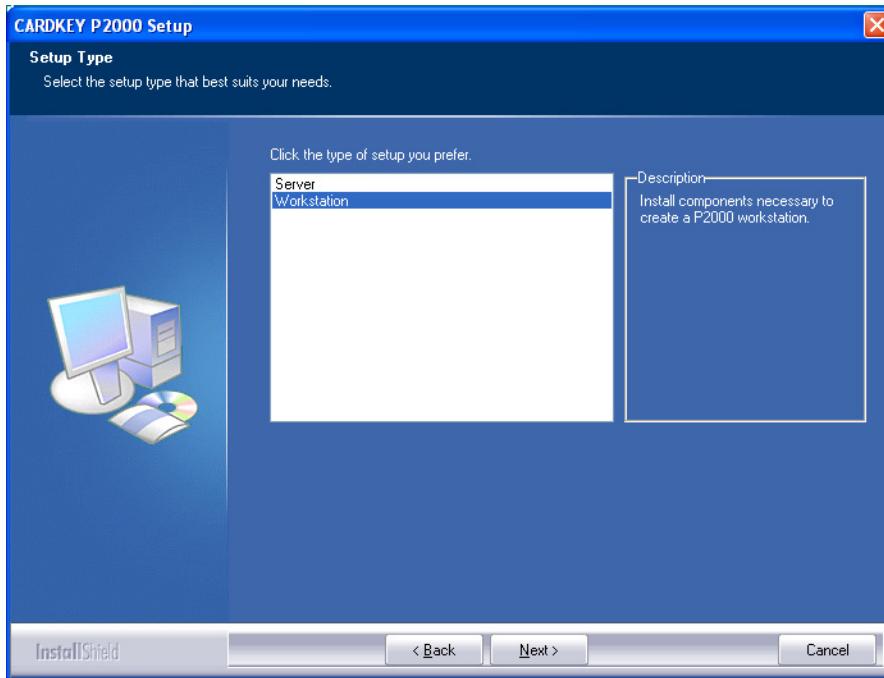
2. When the CARDKEY P2000 Setup window appears, click **Next**.



3. Read the license agreement; click **Yes** to accept it.

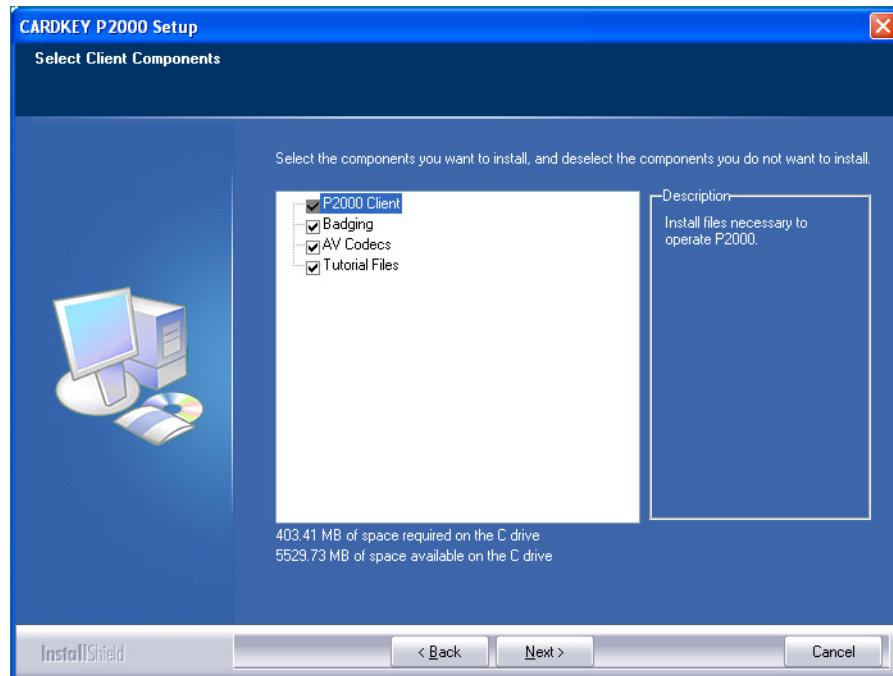


4. In the next screen, select **Workstation** and click **Next**.



5. Verify that the **P2000 Client** check box is selected. Select the check boxes for the components you intend to use on this workstation:
- **Badging** - This selection will install the Integrated Video Imaging option along with all other workstation capabilities.
 - **AV Codecs** - This selection will install the files necessary for integration between P2000 and Digital Video Recording (DVR).
 - **Tutorial Files** - This selection will install the files necessary to view the P2000 Tutorial, which presents an overview of the P2000 security system's major features and options. It also covers a number of system configuration, installation, and troubleshooting tips.

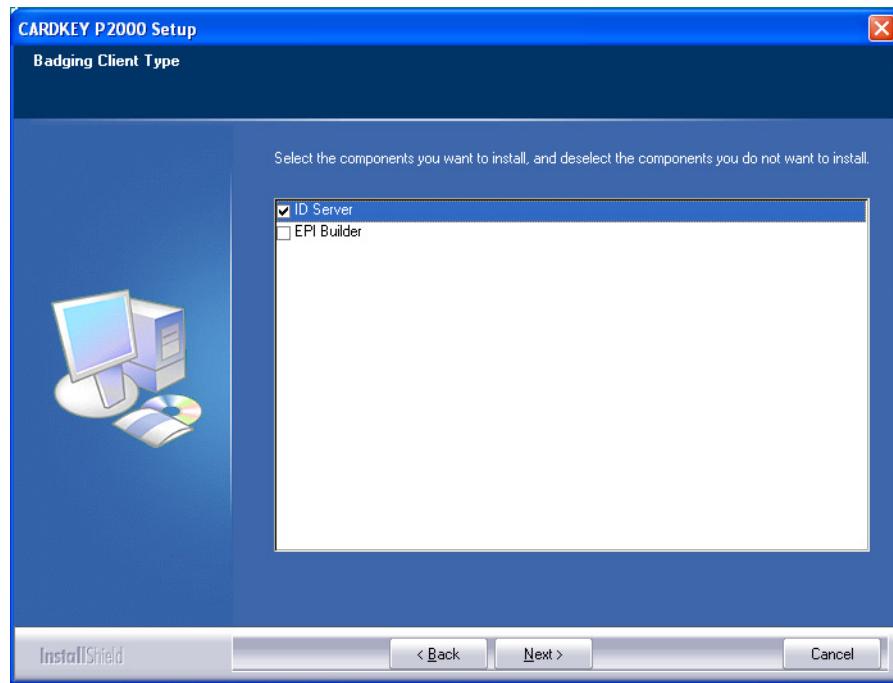
Click **Next**.



6. If you have selected **Badging** in step 5, choose the Video Imaging software: **ID Server** or **EPI Builder**.

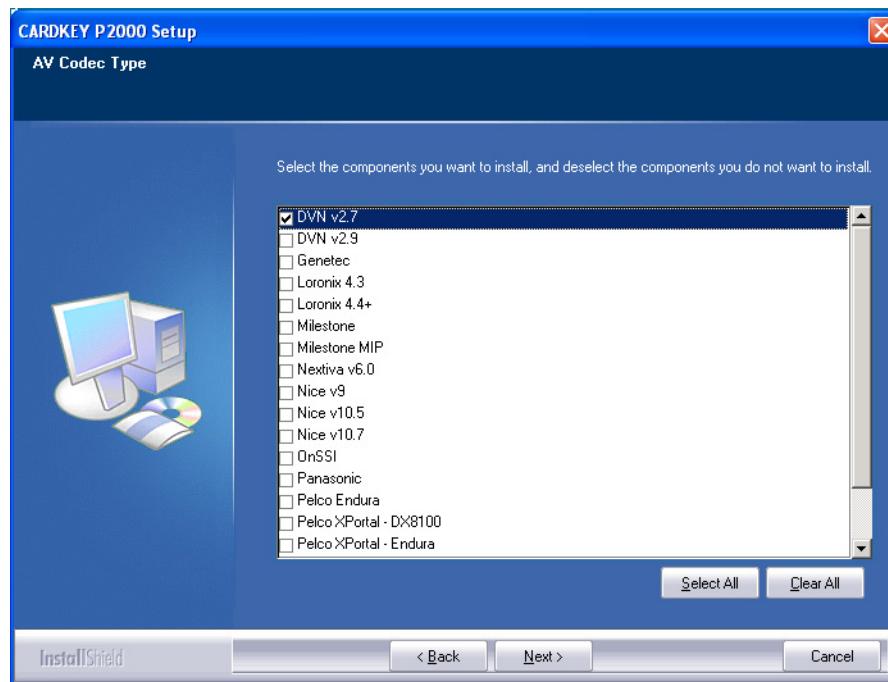
If you select **ID Server**, the Integrated Video Imaging option using the ID Server software will be installed.

If you select **EPI Builder**, the Integrated Video Imaging option using the EPI Builder software will be installed.

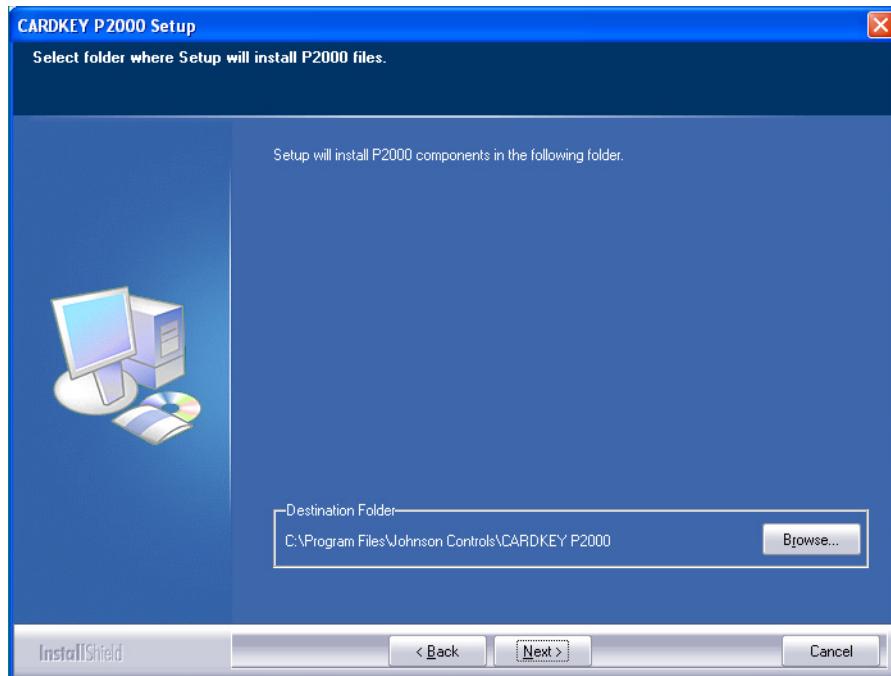


7. Select the protocol(s) to be used with the AV option. Note that:

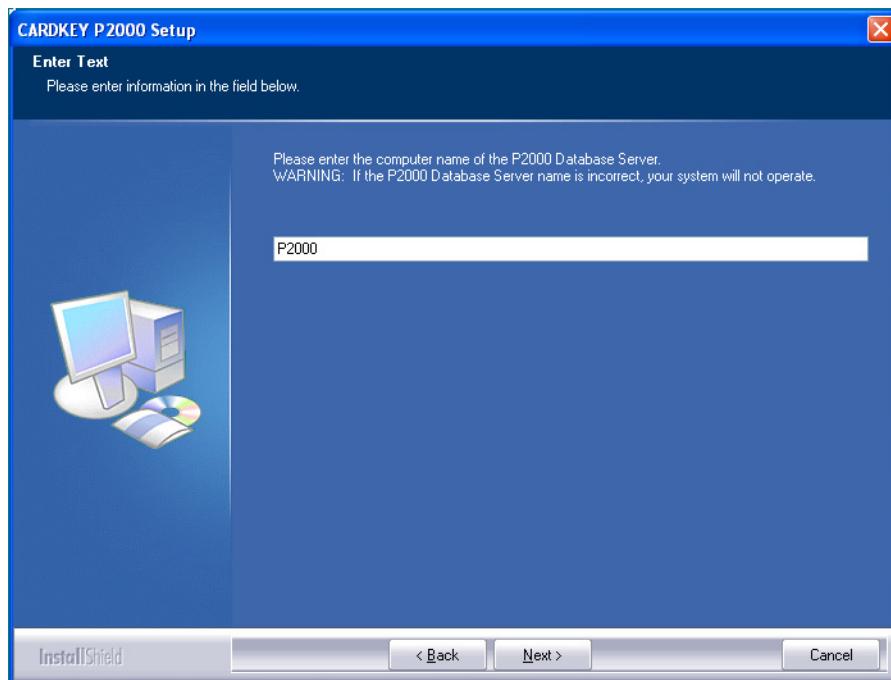
- You can install only one version of each protocol at a time (for example, if you select **Loronix 4.3**, you cannot select **Loronix 4.4+** at the same time).
- Select the **Milestone** check box for P2000 integration with supported Milestone protocol versions prior to 4.0. Those versions are not using the Milestone Integration Platform (MIP).
Select the **Milestone MIP** check box for P2000 integration with supported Milestone protocol versions 4.0+. Those versions are using the Milestone Integration Platform (MIP).
- Select the **Pelco Endura** check box for P2000 integration with Endura protocol without Pelco 1.0 SDK.
Select the **Pelco XPortal - Endura** check box only when using Endura with Pelco 1.0 SDK.



8. Verify the installation path for the P2000 files; click **Next**



9. Enter the name of the P2000 Database Server; click **Next**.



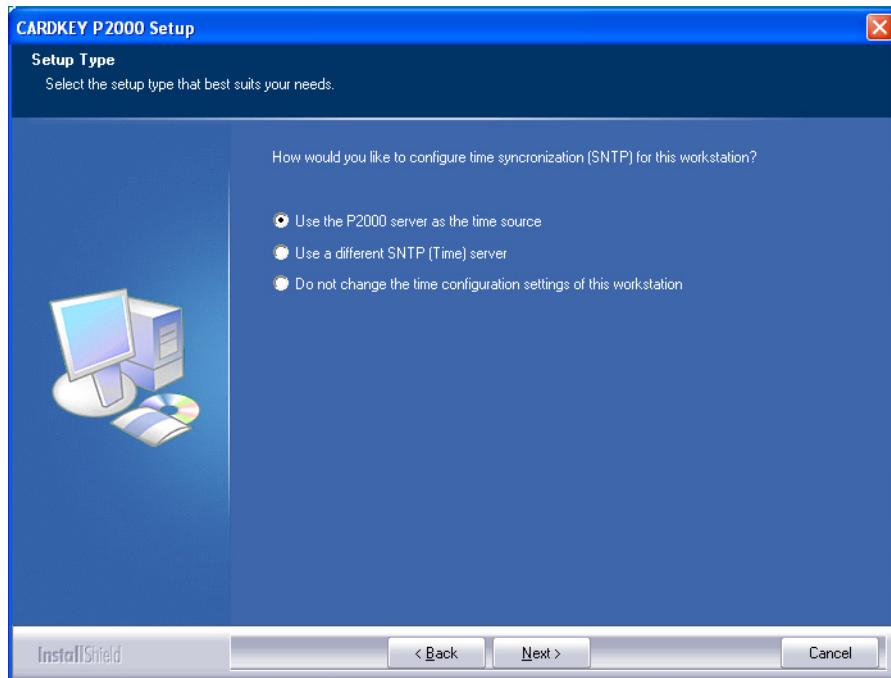
10. The P2000 system requires a mechanism to synchronize time between the server and the workstations.

If the P2000 server had been configured as the SNTP server, select **Use the P2000 server as the time source**; otherwise select **Use a different SNTP (Time) server**.

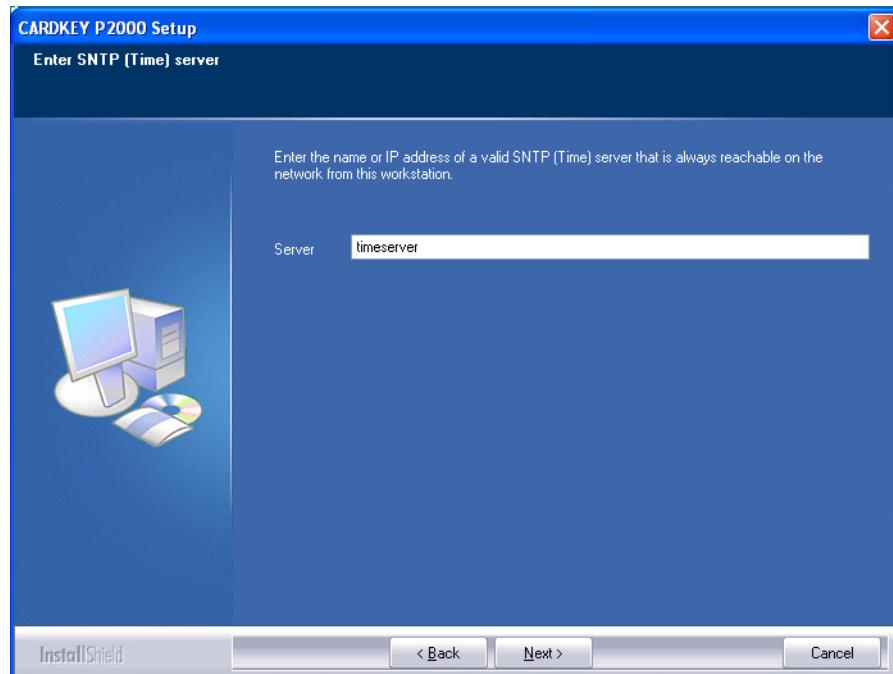
Click **Next**.

NOTE

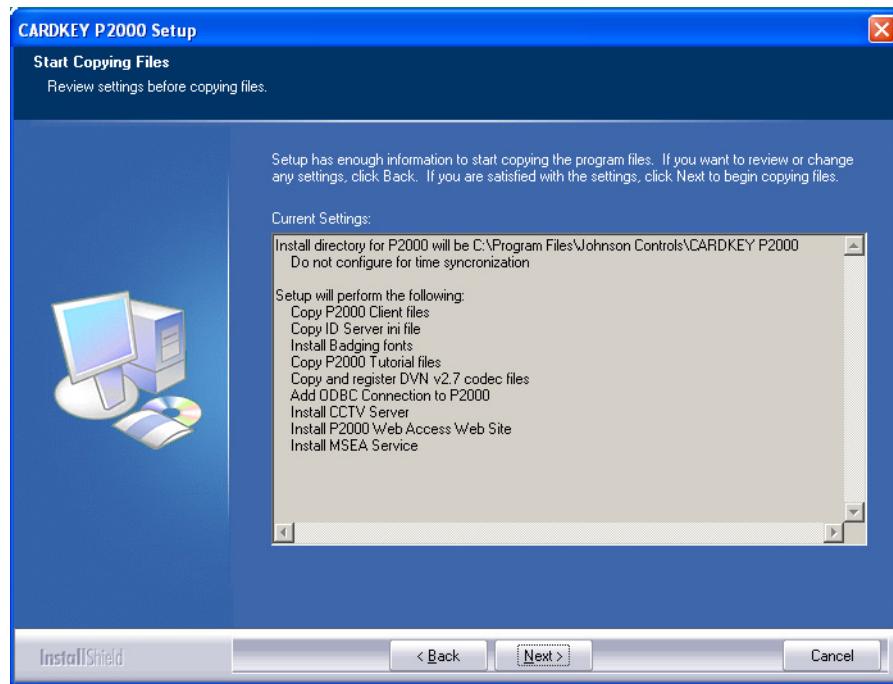
You can select **Do not change the time configuration settings for this workstation** and proceed with the installation. However, you must later manually configure this workstation with time synchronization method. If you select this option, two information screens will be displayed to confirm your choice and remind you of time synchronization requirement.



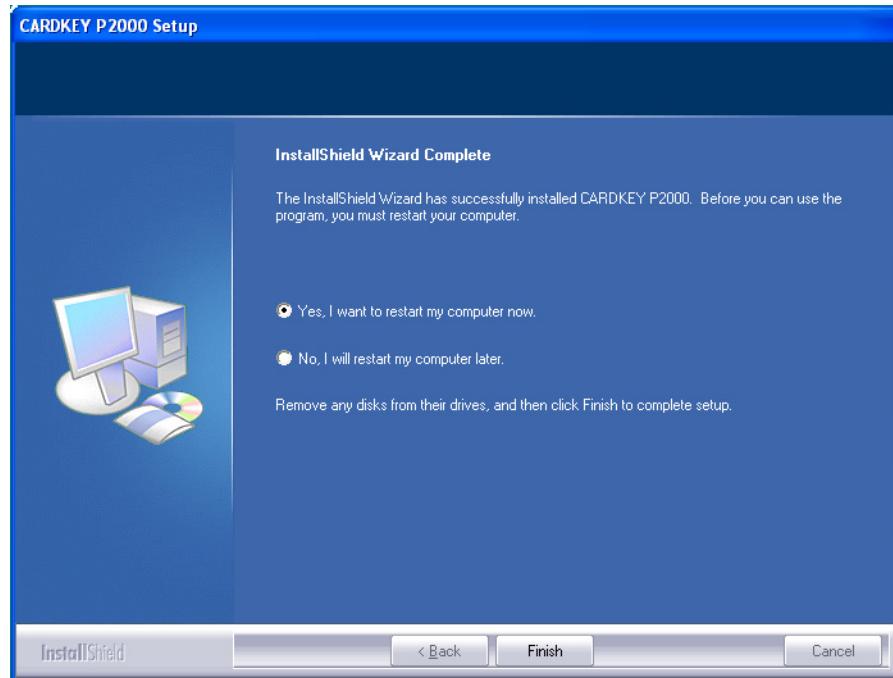
11. If you had selected **Use a different SNTP (Time) server** in previous step, you will be asked to specify the name or IP address of an SNTP server to be used for time synchronization. Enter the server's name or IP address and click **Next**.



12. The system will display current settings. Click **Next** to begin copying files. This will take a few minutes.



13. Verify that the **Yes, I want to restart my computer now** radio button is selected and click **Finish**.



14. Remove the P2000 Software CD.

The installation process makes changes to the DCOM settings. For further details on DCOM configuration, please refer to the *P2000 Software User Manual*.

Logging on to FDA-Compliant P2000 Workstations

If your P2000 system is in compliance with the FDA requirements, the first time you log on to the P2000 Workstation, you will get a message about the required change of screen saver settings. Click **Yes** to this message.

FDA compliance requires that the workstation be protected from unauthorized access by a P2000 screen saver with a password policy.

Notes on P2000 Workstations Running Windows XP

- Windows XP operating system allows users to have accounts without a password. However, only accounts with password can connect to the P2000 server. For instructions on setting up user accounts in Windows XP, refer to the Microsoft documentation.
- Windows XP operating system allows for multiple logins. Each concurrent login requires a separate license.
- When using a Windows XP workstation, the operating system settings are overridden by P2000 to allow “guest user” login.

Workstations Supplied by Johnson Controls

Workstations supplied by Johnson Controls and pre-loaded with P2000 software will have been programmed to connect with a server named “P2000.” If your system server is named something other than “P2000,” you must redirect the workstation to communicate with that server name.

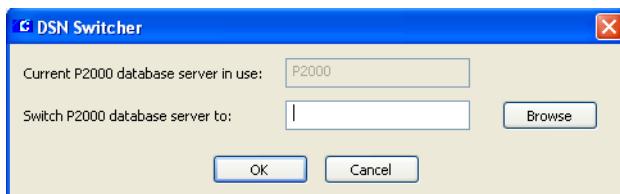
NOTE

It is recommended that a copy of the operating system be made and stored in case of hard drive failure.

► To change the name of the Server in the Workstation Settings:

This procedure changes the name of P2000 Database and Communications Server as well as CCTV Server.

1. Go to C:\Program Files\Johnson Controls\CARDKEY P2000\bin.
2. Double-click the icon for the **dsnswitcher.exe**.
3. The DSN Switcher dialog box appears.



4. In the **Switch P2000 database server to:** field, change the **Server Name** from “P2000” to the computer name of your P2000 Server.
5. Click **OK** to save your settings.

UN-INSTALLING P2000 AND RELATED SOFTWARE

NOTE

For instructions specific to a redundant system, refer to the documentation provided with this option.

Un-Installing P2000

Prior to un-installing P2000:

- Backup the database. Refer to the *P2000 Software User Manual* for instructions.
- Back up the Web Access files located in webroot/p2ktc/config directory and its subdirectories.

- Log off from P2000.

NOTE

Un-installing the P2000 software does not remove the EPI Builder Run-Time 6 component. It has to be un-installed separately.

➤ To un-install P2000 on the Server:

1. Go to **Start>Settings>Control Panel**, double-click **Add/Remove Programs**, select **Cardkey P2000** and click **Change/Remove**.
2. When the Wizard starts, click **Yes** to proceed with un-installing.
3. *Database*: Decide whether you want to un-install P2000 database; choose **Yes** or **No**. To un-install the P2000 database, P2000 services need to be stopped.
4. *Badge image layouts*: Decide whether you want to delete badge image layouts; choose **Yes** or **No**.
5. *User Groups*: Decide whether you want to delete P2000 user groups; choose **Yes** or **No**.
6. *Dial-Up accounts*: Decide whether you want to un-install accounts created by P2000 Dial-Up; choose **Yes** or **No**.
7. Wait while the system completes the un-install.
8. When asked whether to delete shared files, select the **Don't display this message again** check box and click **Yes**.
9. Verify that the **Yes, I want to restart my computer now** radio button is selected and click **Finish**.

➤ To un-install P2000 on the Workstation:

1. Go to **Start>Settings>Control Panel**, double-click **Add/Remove Programs**, select **Cardkey P2000** and click **Change/Remove**.
2. When the Wizard starts, click **Yes** to proceed with un-installing.
3. Wait while the system completes the un-install.
4. Click **Finish** to restart the computer.

Un-Installing Related Software

The following software needs to be un-installed separately:

- EPI Builder
- OSI Web Services
- Third-party Software Development Kits (SDKs)

For un-installing, use the Add/Remove Programs utility.

ASSA ABLOY INTEGRATION

ASSA ABLOY Intelligent Locks provide a wired and wireless door locking security solution that can be integrated with the P2000 SMS. Integration between these two systems is possible via the ASSA ABLOY Door Service Router (DSR), which is installed on the DSR server, and the P2000 ASSA ABLOY DSR Interface Service, which runs on the P2000 server.

The DSR can be on a separate server or on a virtual computer on the P2000 server, and must have network access to the P2000 server. For large ASSA ABLOY installations, P2000 can also connect to multiple DSR servers, as needed. See Figure A-1 and Figure A-2.

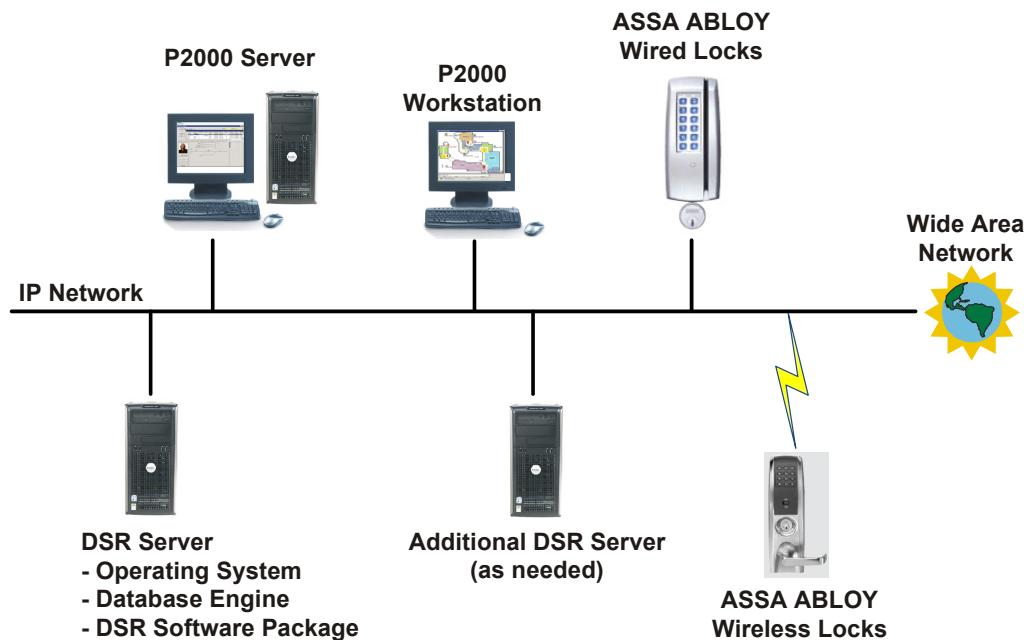


Figure A-1: DSR Running on Physical Computers

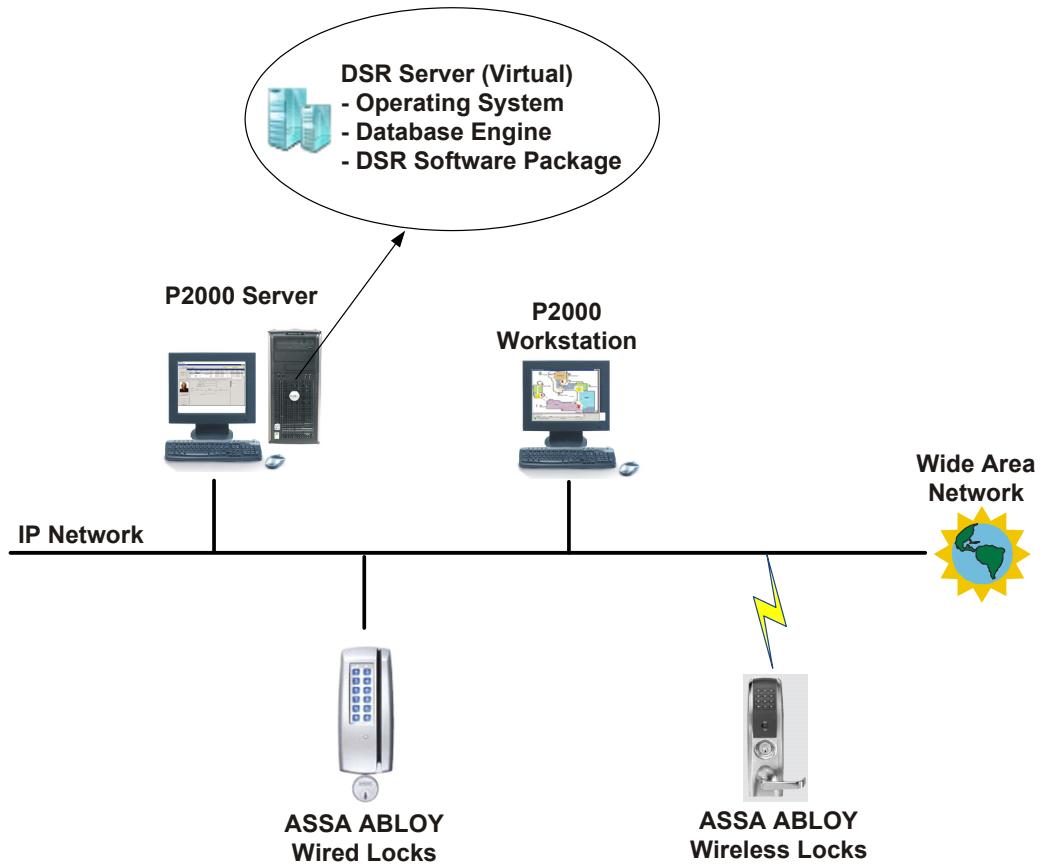


Figure A-2: DSR Running in Virtual Environment

For information on creating and configuring virtual computers, refer to the Microsoft® Hyper-V™ documentation.

DSR SERVER SOFTWARE REQUIREMENTS

The following software must be installed on the DSR server:

- Microsoft Windows Server 2008 R2 Operating System (OS) or Windows 7 Professional (64-bit) OS
- Microsoft SQL Server 2008 R2
- DSR Software Installer Version 2.1.17 or later

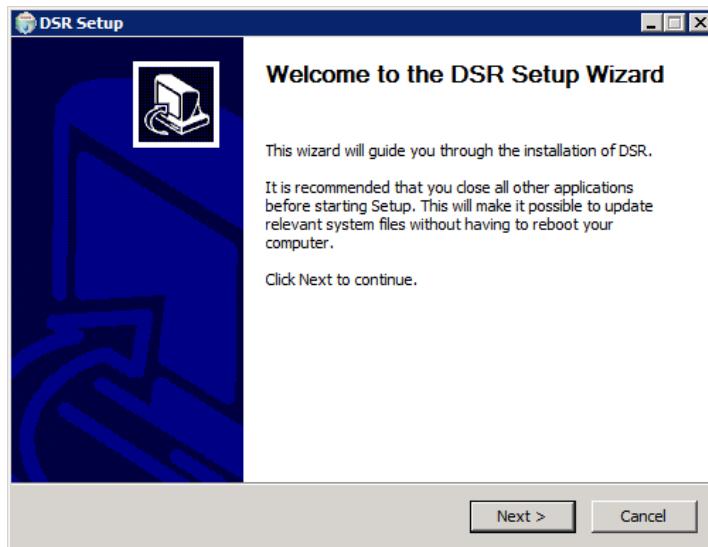
NOTE

To acquire the DSR Software Installer, please contact your local ASSA ABLOY representative for assistance.

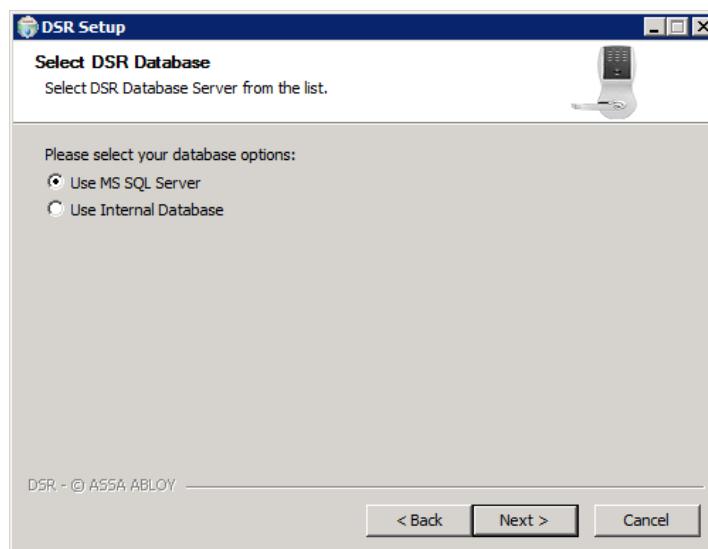
DSR SOFTWARE PACKAGE INSTALLATION

► **To install the DSR software package:**

1. Launch the DSR Software Installer. The Welcome screen appears.



2. Click **Next**.
3. On the Select DSR Database screen, select the **Use MS SQL Server** check box.

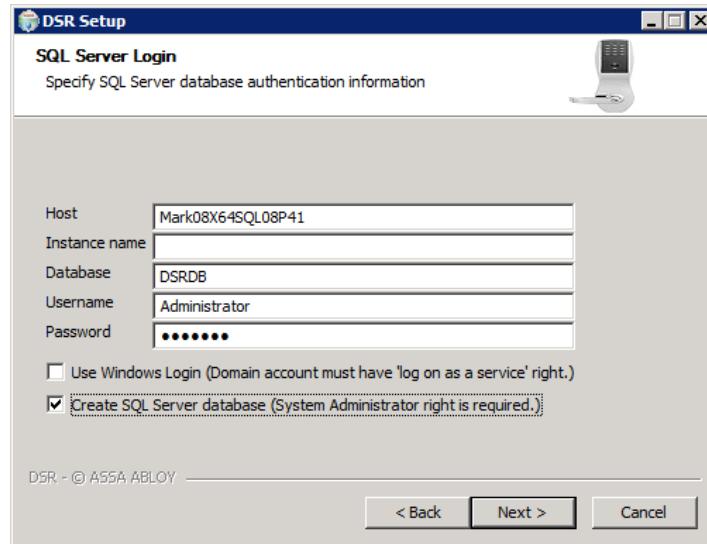


4. Click **Next**.
5. On the Choose Components screen, click **Next**.
6. On the Choose Install Location screen, click **Next**.
7. If the computer does not currently have the required Java® Runtime Engine, the JRE Installation Required screen appears. Click **Next**.

8. On the SQL Server Login screen, enter information according to Table A-1.

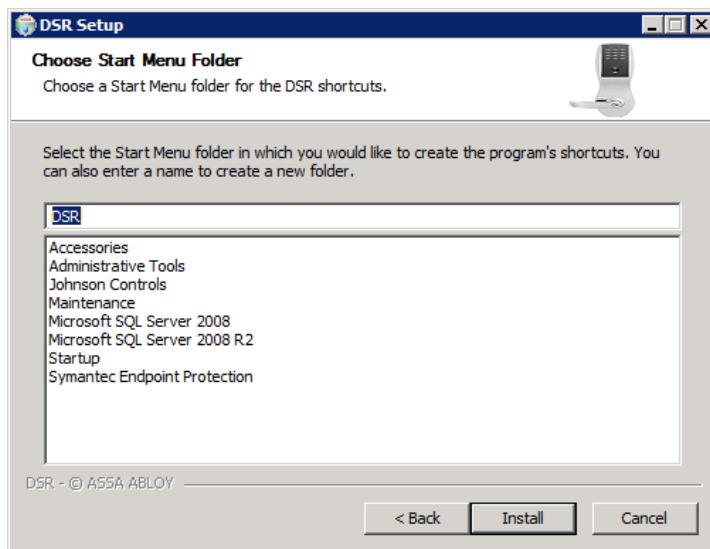
Table A-1: SQL Server Login Fields

Field	Action
Host	Enter the name of the computer where you are installing the DSR software.
Instance name	Leave blank.
Database	Enter the name you wish to assign to the DSR database. This name cannot include spaces.
Username	Enter the username currently used for SQL Server authentication.
Password	Enter the password currently used for SQL Server authentication.
Use Windows Login	Do not select this check box.
Create SQL Server Database	Select this check box.

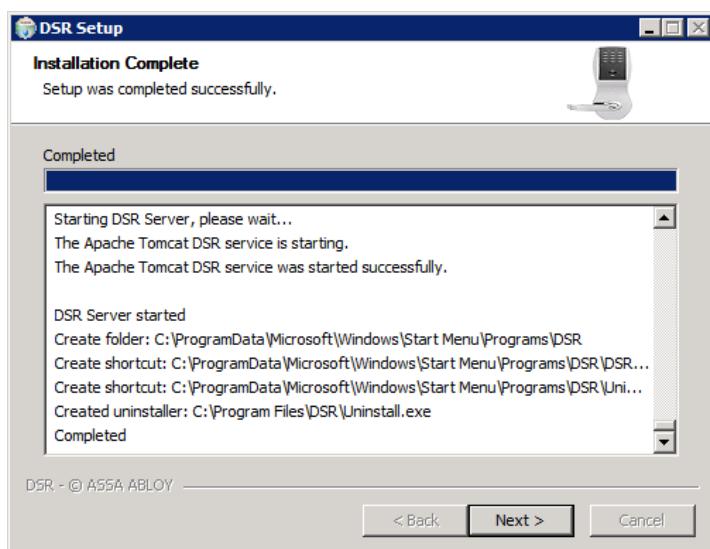


9. Click **Next**.

10. On the Choose Start Menu Folder screen, click **Install**.



11. When the installer completes the installation, click **Next**.



12. Click **Finish**.

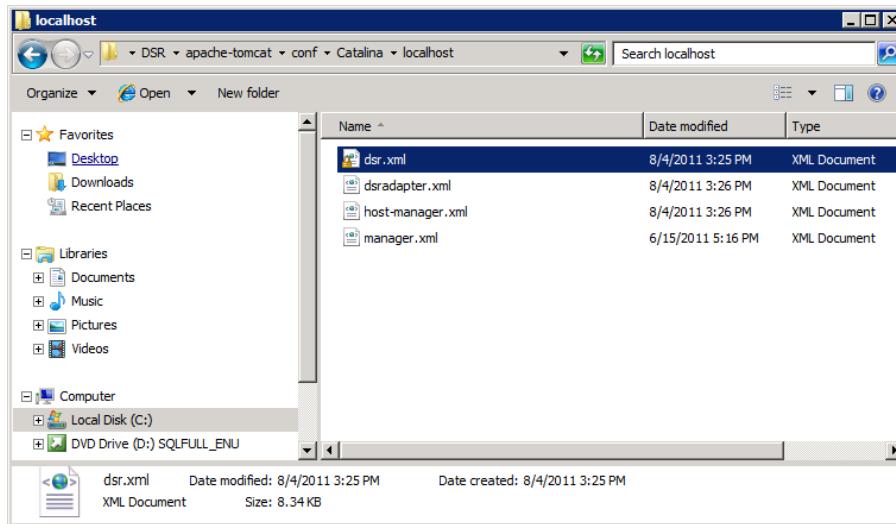
13. Complete the configuration instructions in the following section.

DSR SERVER CONFIGURATION

► To configure the DSR server:

1. Launch Windows Explorer.
2. Navigate to the following folder:

<Local Disk>\Program Files\DSR\apache-tomcat\conf\Catalina\localhost



3. Right-click over the **dsr.xml** file and open in Microsoft Notepad or other text editor.
4. Locate the following text:
<Environment name="dsr.ws-security.enabled" value="true"
5. Change the value to **false**.
<Environment name="dsr.ws-security.enabled" value="**false**"
6. Click **File>Save**.
7. Close the text editor.