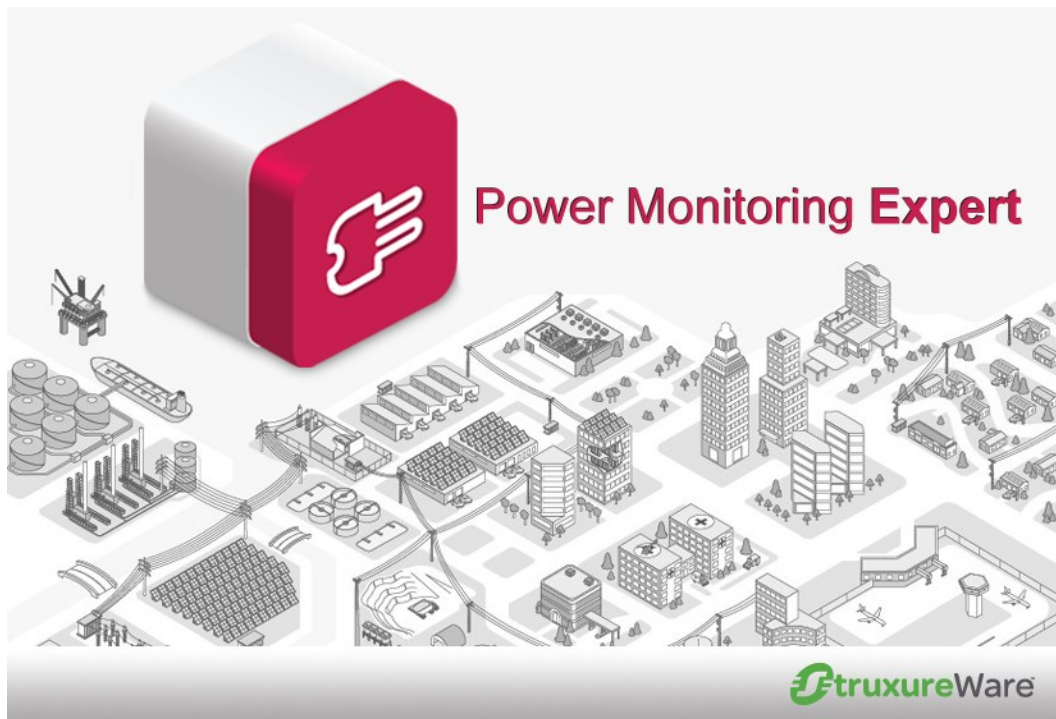


# StruxureWare Power Monitoring Expert 7.2

## Installation Guide

7EN02-0329-00

05/2013





# Safety information

## Important information

Read these instructions carefully and look at the equipment to become familiar with the device before trying to install, operate, service or maintain it. The following special messages may appear throughout this bulletin or on the equipment to warn of potential hazards or to call attention to information that clarifies or simplifies a procedure.



The addition of either symbol to a "Danger" or "Warning" safety label indicates that an electrical hazard exists which will result in personal injury if the instructions are not followed.



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

### **DANGER**

**DANGER** indicates an imminently hazardous situation which, if not avoided, **will result in** death or serious injury.

### **WARNING**

**WARNING** indicates a potentially hazardous situation which, if not avoided, **can result in** death or serious injury.

### **CAUTION**

**CAUTION** indicates a potentially hazardous situation which, if not avoided, **can result in** minor or moderate injury.

### **NOTICE**

**NOTICE** is used to address practices not related to physical injury. The safety alert symbol shall not be used with this signal word.

## Please note

Electrical equipment should be installed, operated, serviced and maintained only by qualified personnel. No responsibility is assumed by Schneider Electric for any consequences arising out of the use of this material.

A qualified person is one who has skills and knowledge related to the construction, installation, and operation of electrical equipment and has received safety training to recognize and avoid the hazards involved.

# Safety precautions

During installation or use of this software, pay attention to all safety messages that occur in the software and that are included in the documentation. The following safety messages apply to this software in its entirety.

## WARNING

### UNINTENDED EQUIPMENT OPERATION

- Do not use the software for critical control or protection applications where human or equipment safety relies on the operation of the control action.
- Do not use the software to control time-critical functions because communication delays can occur between the time a control is initiated and when that action is applied.
- Do not use the software to control remote equipment without securing it with an authorized access level, and without including a status object to provide feedback about the status of the control operation.

**Failure to follow these instructions can result in death or serious injury.**

## WARNING

### INACCURATE DATA RESULTS

- Do not incorrectly configure the software, as this can lead to inaccurate reports and/or data results.
- Do not base your maintenance or service actions solely on messages and information displayed by the software.
- Do not rely solely on software messages and reports to determine if the system is functioning correctly or meeting all applicable standards and requirements.
- Consider the implications of unanticipated transmission delays or failures of communications links.

**Failure to follow these instructions can result in death, serious injury, equipment damage, or permanent loss of data.**

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# Introduction

This guide is intended for Application Engineers, third-party integrators, or other qualified personnel who are responsible for configuring and installing StruxureWare™ Power Monitoring Expert software and preparing the servers on which it is installed. Experience using previous versions of the software is preferable.

The guide contains information about installing SQL Server 2008 editions and a Power Monitoring Expert system, incorporating best practices and factory-recommended procedures to help reduce the need for ongoing support and to improve the reliability of the installation.

A typical installation consists of a computer or network of computers running Power Monitoring Expert software and one or more networks of devices (such as basic energy meters, multi-function monitoring/analysis/control devices, and/or intelligent relays).

Review the *StruxureWare Power Monitoring Expert Version 7.2 System Design Guide* for information about planning for and setting up your system.

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## Note

Services personnel and fully-commissioned Power Monitoring Expert servers are also available — please contact Schneider Electric for details.

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## Summary of topics in this guide

The topics in this guide provide the following information:

- **Required software**

Summarizes the combinations of 32-bit and 64-bit Windows operating systems and SQL Server editions required for Power Monitoring Expert installations. (See the *System Design Guide* at [www.schneider-electric.com](http://www.schneider-electric.com) for information about hardware requirements.) It also summarizes the other software components used by the product.

- **Preparing the server**

Describes the steps required to install a supported Windows operating system and SQL Server edition, and the settings required for each. Note that this information is common for Power Monitoring Expert installations of a Standalone Server, a Database Server, a Primary Server, a Secondary Server, and for an Engineering Client.

- **Power Monitoring Expert installation**

Describes the different setup types that you can install and then describes the steps for installing the software for the setup types.

- **Using a Web Client**

Describes how to access the Web Applications component of the product from a Web Client.

- **Post-installation tasks**

Describes the tasks that you need to perform after completing the installation of the software.

# Required software

The following tables summarize the combinations of 32-bit and 64-bit versions of Microsoft Windows operating systems and SQL Server editions that support Power Monitoring Expert installations. You need to install an edition of SQL Server 2008 R2 before installing Power Monitoring Expert software. Note that SQL Server 2008 R2 Express is available when you install a Standalone Server even if an existing SQL Server instance is detected.

32-bit Windows Operating Systems	32-bit Microsoft SQL Server Editions	Standalone Server	Distributed Database Server
Windows 7 Professional/Enterprise, SP1	SQL Server 2008 R2 Express, SP2	Yes	No
	SQL Server 2008 R2 Standard/Enterprise, SP2	Yes	No
Windows Server 2008 Standard/Enterprise, SP2	SQL Server 2008 R2 Express, SP2	Yes	No
	SQL Server 2008 Standard/Enterprise, SP3	Yes	Yes
	SQL Server 2008 R2 Standard/Enterprise, SP2	Yes	Yes

64-bit Windows Operating Systems	64-bit Microsoft SQL Server Editions	Standalone Server	Distributed Database Server
Windows 7 Professional/Enterprise, SP1	SQL Server 2008 R2 Express, SP2	Yes	No
	SQL Server 2008 R2 Standard/Enterprise, SP2	Yes	No
Windows Server 2008 Standard/Enterprise, SP2	SQL Server 2008 R2 Express, SP2	Yes	No
	SQL Server 2008 Standard/Enterprise, SP3	Yes	Yes
	SQL Server 2008 R2 Standard/Enterprise, SP2	Yes	Yes
Windows Server 2008 R2 Standard/Enterprise, SP1	SQL Server 2008 R2 Express, SP2	Yes	No
	SQL Server 2008 Standard/Enterprise, SP3	Yes	Yes
	SQL Server 2008 R2 Standard/Enterprise, SP2	Yes	Yes

Localized versions of the software are supported as follows:

- A localized version of Power Monitoring Expert software is expected to be installed on an operating system and SQL Server of the same locale. For example, a Spanish version of the product and SQL Server should be installed on an operating system with a regional setting of Spanish.
- The English version of Power Monitoring Expert software is expected to work with non-English operating systems and SQL Server versions. For example, an English version of the product can be installed on an operating system with a regional setting of German with a German version of SQL Server.

Engineering Client computers require one of the Windows operating systems summarized in the tables above.

Power Monitoring Expert can be installed in virtual environments configured with one of the supported Windows operating system and SQL Server edition combinations summarized in the tables above. It is recommended that you copy the content of the Power Monitoring Expert DVD to a local drive in your virtual environment and double-click `MainSetup.exe` to



start the installation process.

Web Client computers provide access to the Web Applications component of Power Monitoring Expert. Web Client computers require network connectivity to a Power Monitoring Expert primary server. The browsers that can be used on Web Client computers are listed below.

To access Web Applications from a Web Client, enter the address as `http://domain_name/Web` in the browser, where *domain\_name* is the fully-qualified name of the server hosting Power Monitoring Expert, and *Web* is the default root directory, which can be changed during installation. For example, for server name **srv1**, company name **MyCompany**, and a root directory of **Web**, enter the address in the browser as `http://srv1.MyCompany.com/Web`

### Other software used by the product

- Microsoft Excel 2007 or 2010, which is required for reports exported in Excel format, or for the Reporting application.
- Browsers supported on Web Client workstations for the applications included in the Web Applications component (Dashboards, Diagrams, Tables, Alarms, Reports):
  - Microsoft Internet Explorer versions 8, 9, or 10.
  - Google Chrome version 20 or later.
  - Apple Safari version 5 or later on Mac computers.
- Browsers supported on tablets to access the Diagrams application only:
  - Safari on iPad tablets using iOS 5 or iOS 6.1 operating systems.
  - Browsers on tablets using Android operating systems JB 4.1 or ICS 4.0.
  - Microsoft Silverlight version 4 or later.

The following operating system, SQL Server, and Internet Explorer versions are not supported on Power Monitoring Expert servers or on Engineering Client computers:

- Windows XP, Windows Vista, and Windows Server 2003, or earlier versions.
- SQL Server 2005.
- Internet Explorer 6.0 and 7.0 (also not supported on Web Clients).

# Preparing the server

The software Installer performs many of the setup and configuration tasks during installation to ensure that the prerequisites for your Power Monitoring Expert system are met. Complete the following before proceeding with the installation.

## Configuring your operating system

Ensure that you log on to Windows 7 or Windows Server 2008 as the Administrator of the system and not just as a user with administrator privileges.

Run the Windows Update service to install the latest security patches and hotfixes from Microsoft.

## Naming your server

Verify that the computer name for the server conforms to Windows naming conventions. A computer name can be up to 15 alphanumeric characters with no blank spaces, and it must not contain any prohibited characters such as:

\ \* + = | : ; < > ? , \_

For compatibility with Power Monitoring Expert software, use only letters and numbers, starting the name with a letter for the first character in the name.

The computer name should not be changed after you install the Power Monitoring Expert software.

## Additional information for consideration

- The Reports application (in the Web Applications component) and the Reporter component of the product can be used for generating and managing reports. See the "Reporter" topic in the *StruxureWare Power Monitoring Expert Version 7.2 User Guide* for more information.
- If you install SQL Server 2008 R2 Express SP2, the maximum database size is 10GB. Alarm notification for database size is configured to generate an alert notification when 85% of 9GB is reached. See the "Alarm Configuration" topic in Database Manager's online help.
- Scheduled database backup, maintenance, and trim jobs for the Application Modules, Data, Network, and System databases are available through Windows Task Scheduler and not through Database Manager. Only users with administrative privileges can use the Task Scheduler.
- The ION™ DDE Service does not work on Windows 7 or Windows Server 2008 operating systems because the required NetDDE service is not provided on these operating systems.
- Install and configure the Terminal Server component if Terminal Server connection to the Power Monitoring Expert Primary Server is required. Refer to the "Terminal Server Licensing Overview" topic in your Microsoft Windows documentation to learn about

Terminal Server Licence requirements. Perform typical setup such as ending a disconnected or stale session and installing programs.

Configure the Remote Desktop Connection if you require remote connection to a Power Monitoring Expert primary server, see support information provided by Microsoft.

- If you plan to use TAPI modem drivers for Windows (WinModems) in your Power Monitoring Expert system, install and configure the WinModems. Additional WinModem information is available in the *StruxureWare Power Monitoring Expert Version 7.2 User Guide*.
- Additional information about modem use:
  - Note that the Serial Bus in Windows 64-bit operating systems (Windows 7, Windows Server 2008 Standard/Enterprise, Windows Server 2008 R2 Standard/Enterprise) may cause serial communication ports to lockup. If this occurs, a system reboot is required. Consult Microsoft support for an update to address this situation. When an update becomes available, install it on all Power Monitoring Expert systems where data modems are used.
  - Contact Technical Support for recommended serial expansion hardware. Note that any of the Prolific type USB to Serial dongles are not recommended.

## Firewall configuration

Use the Microsoft knowledgebase to learn about Well Known Ports and Registered Ports required for certain networks.

### Power Monitoring Expert TCP port assignments

The following tables contain the TCP port assignments that Power Monitoring Expert and associated applications or services use to communicate with PowerLogic™ devices, Power Monitoring Expert clients, and other Power Monitoring Expert servers.

#### TCP ports for device communications

Port	Protocol	Port	Protocol
23	Telnet (used for meter diagnostics)	7701	Modbus™ RTU
25	SMTP (Required for email communications)	7800	EtherGate simultaneously through available COM ports
502	Modbus™ TCP	7801	EtherGate through the meter's COM1
3721	Ethernet access for the 3720 ACM meter	7802	EtherGate through the meter's COM2/COM4
7700	ION	7803	EtherGate through the meter's COM3

#### Note

Some networks may contain devices that require the use of alternate ports (for example, third-party Ethernet gateway devices).

**Other required ports**

Port	Purpose
13666	Power Monitoring Expert services use these ports. These ports are used if a client machine needs to access the Designer and/or Vista components of Power Monitoring Expert.
13670	
13668	This port is used when the Power Monitoring Expert system contains a Secondary Server.
1433	Microsoft SQL Server uses this port. <sup>1</sup>
1434	Microsoft SQL Monitor uses this port to identify named database instances.
3389	Terminal Server uses this port.
139	NetBIOS and Windows "File and Printer Sharing" use this port.
80	HTTP (required for Diagrams, Reports and Internet access) uses this port. The EWS server also use this port.
57777	Real-time Data Service uses this port to transfer real-time data to Power Monitoring Expert clients. <sup>2</sup>
<p><sup>1</sup> SQL Server uses this port if you use the default instance when you install Power Monitoring Expert. If you use a named instance when you install Power Monitoring Expert, it is recommended that you configure the named instance to use port 1433.</p> <p><sup>2</sup> You can configure the ION Real Time Data Service to use a different port.</p>	

# Installing SQL Server

The following information describes the settings that are required when you install one of the prerequisite SQL Server editions prior to installing the Power Monitoring Expert software.

If you do not want to use a separate SQL Server Standard instance, you can skip this section and choose to install SQL Server Express as part of the Power Monitoring Expert software Standalone Server installation. See "[Installing Power Monitoring Expert software](#)" on page 35 for more information.

The topics described in this section are:

- "[Installing SQL Server 2008 R2 from the available DVD](#)" on page 15.
- "[Installing SQL Server 2008 R2 Standard/Enterprise Edition](#)" on page 23.
- "[Adding an instance to an existing SQL Server installation](#)" on page 26.
- "[Adding an instance to an existing SQL Server Express installation](#)" on page 30.

SQL Server 2008 must be installed before installing Power Monitoring Expert.

## Running anti-virus software on your SQL Server

It is recommended that you assess the software security requirements of your organization, and specifically the potential risks to your SQL Server installation. If you determine that you need to run anti-virus software on your SQL Server as a result of your assessment, follow the recommendations described in Microsoft Support article (ID: 309422) at <http://support.microsoft.com/kb/309422>.

## Setting SQL Server memory options

Note the following recommendations for setting SQL server memory options on the server where you install a supported edition of SQL Server 2008 SP2, 2008 R2 SP1, or 2008 R2 Express.

For installations using a supported edition of SQL Server 2008 SP2 or 2008 R2 SP1:

- Where only SQL Server is running on the host server, set the SQL Server maximum memory at the system physical memory less at least 2GB for the Windows operating system. For example, if your server has 8GB of memory, set the SQL Server maximum memory to no more than 6GB. This leaves at least 2GB for the operating system.
- Where the SQL Server is sharing the host server with other server processes, including IIS, and ION services, set the SQL Server maximum memory to no more than half the physical memory on the server. For example, if you server has 8GB of memory, set the SQL Server memory to no more that 4GB. This leaves at least 4GB for the operating system and all other server processes.

For installations using a supported edition of SQL Server 2008 R2 Express:

- Where the Standalone Server has 4GB of memory, set the SQL Server maximum memory to 2GB.

- Where the Standalone Server has 2GB of memory, set the SQL Server maximum memory to 1.5GB.

In addition to setting the maximum memory option, consult with your site administrator to determine whether or not to enable the **Lock pages in memory** permission setting in Windows for the SQL service account on all SQL Server 2008 SP2 or 2008 R2 SP1 instances.

To set the maximum memory setting for your SQL Server:

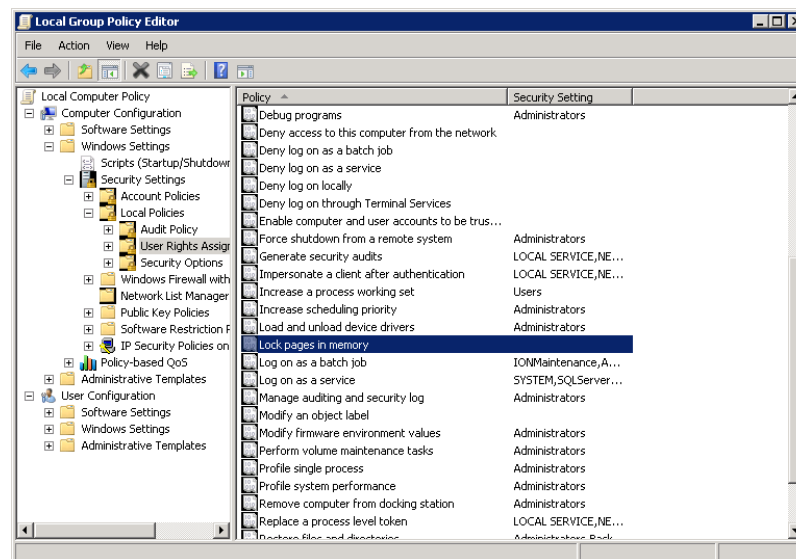
1. Start **SQL Server Management Studio** and log in to your SQL Server instance.
2. Right-click the SQL Server name and click **Properties** in the menu to open the **Server Properties** dialog.
3. Select **Memory** in the left pane and adjust the value in the **Maximum server memory** field.
4. Click **OK** to apply the changes and close the dialog.
5. Close **SQL Server Management Studio**.

A server reboot or a restart of the SQL Server service is not required.

To enable the lock pages in memory option:

1. Click **Start > Run** and type `gpedit.msc` in the **Run** dialog to open the **Local Group Policy Editor**.
2. In the left pane, navigate to **Computer Configuration > Windows Settings > Security Settings > Local Policies**.
3. Expand **Local Policies** and select **User Rights Assignment**.

The policies are listed in the right pane.



4. Locate **Lock pages in memory** in the list and double click the policy name to open the **Lock pages in memory Properties** dialog.
5. Click **Add User or Group** on the **Local Security Setting** tab.
6. Add an account with the privileges to run `sqlserver.exe` and click **OK** to close the dialog.

7. Click **OK** to close the **Local Group Policy Editor**.

A server reboot or a restart of the SQL Server service is not required.

## Installing SQL Server 2008 R2 from the available DVD

The DVD available from Schneider Electric installs Microsoft SQL Server 2008 R2 Standard Edition (English) with Service Pack 2. If you intend to use a supported SQL Server Express edition, it is included with the Standalone Server installation of Power Monitoring Expert. Otherwise, a SQL Server 2008 edition must be installed before Power Monitoring Expert.

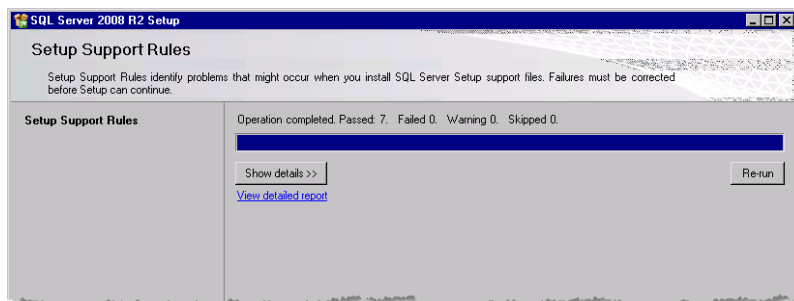
Before starting the SQL Server installation, you must be logged in as a user with administrative privileges for installing and configuring software applications. Make sure that no other programs are running, save your work, and close any open applications.

Complete the following steps to install the software:

1. Insert the SQL Server 2008 R2 Installation DVD in your DVD drive, then navigate to and double-click `setup.exe` in the root directory on the DVD to open the **SQL Server Installation Center**.
2. Select **Installation** in the left pane and **New installation or add features to an existing installation** on the right.



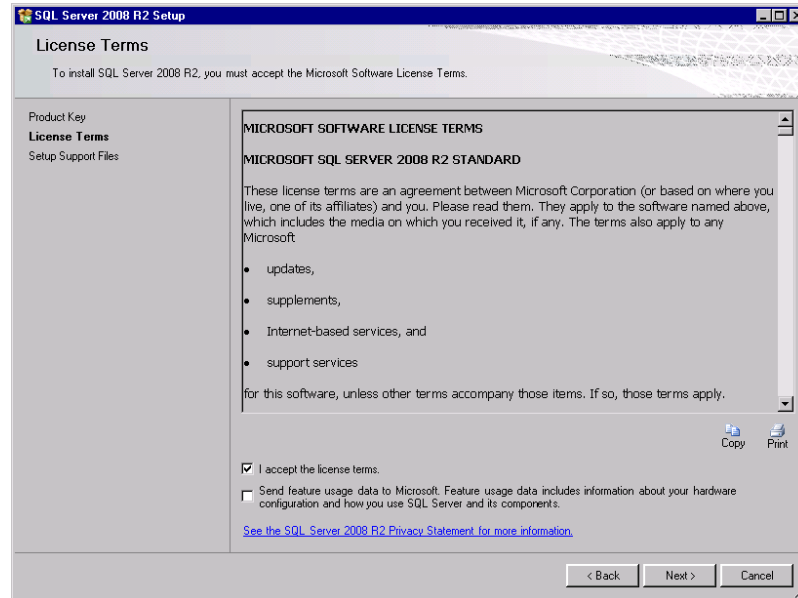
A message indicates that the process is starting followed by the **Setup Support Rules** page showing validation results. If validation is not successful, follow the instructions on the page and click **Rerun**. Click **OK** when the validation is successful.



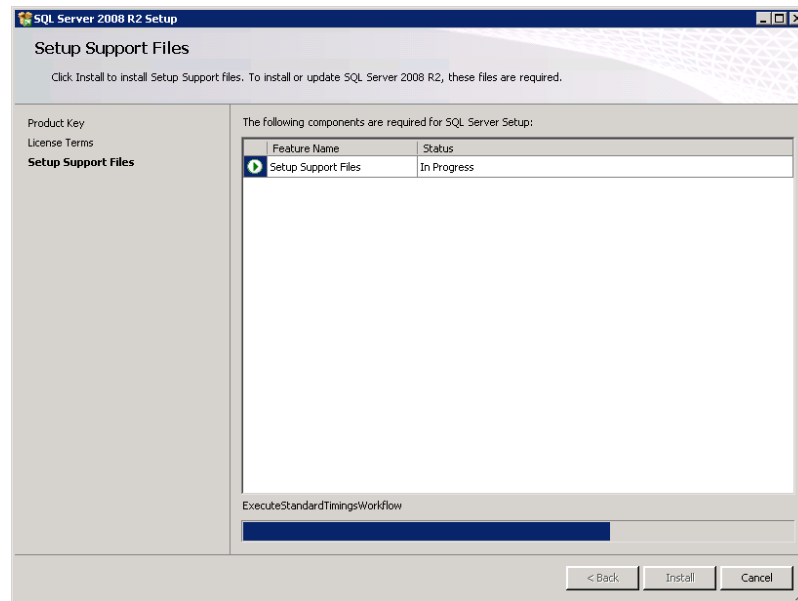
The **Product Key** page with the default product key opens. Click **Next**.

3. Read the license agreement on the **License Terms** page, then select **I accept the license terms** and click **Next** to continue.

Note that this is a "Per Processor" license and that this SQL server can only be used with Power Monitoring Expert software.

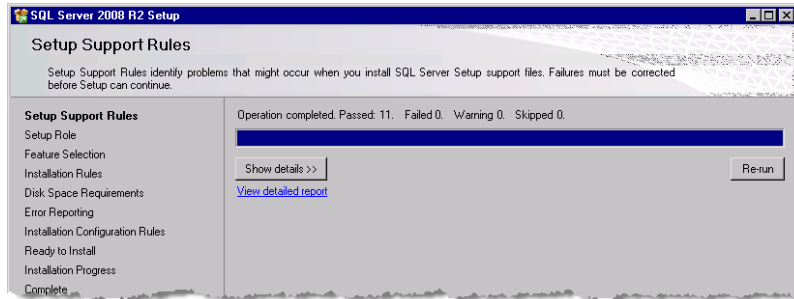


4. Click **Install** on the **Setup Support Files** page to install the setup support files listed under the **Feature Name** column on the page.

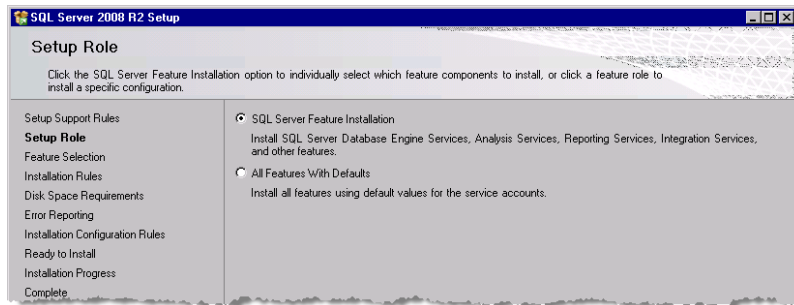




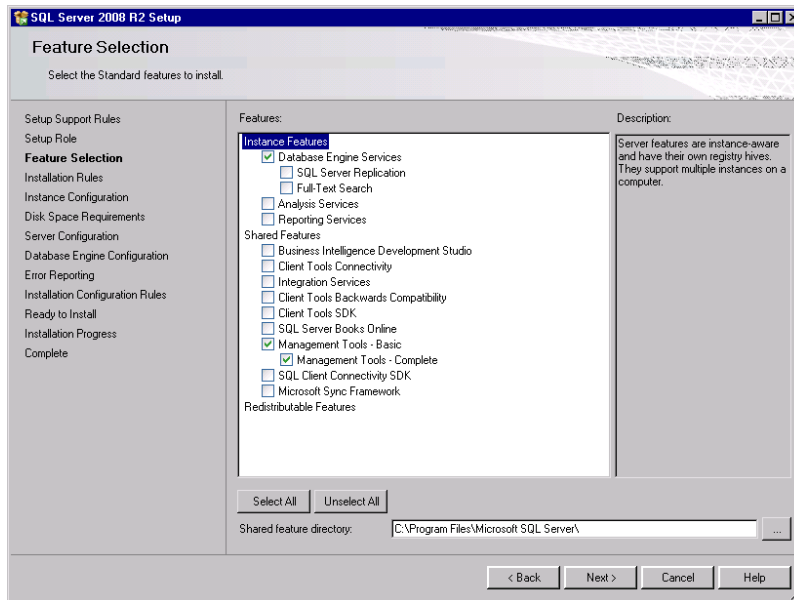
The **Setup Support Rules** page opens after the installation of the files showing the validation results. You can click **Show details** to view a list of the rules that were validated. If validation is not successful, follow the instructions on the page and click **Rerun**. Click **Next** when the validation is successful.



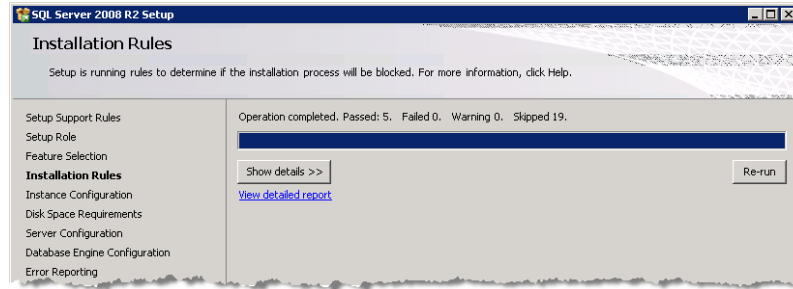
5. Leave **SQL Server Feature Installation** selected on the **Setup Role** page and click **Next**.



6. On the **Feature Selection** page under **Instance Features**, select **Database Engine Services**. Note that **Reporting Services** is no longer required. Under **Shared Features**, select **Management Tools - Basic** and **Management Tools - Complete**.
  - **Database Engine Services** is required if you are installing on a server that is used as a Standalone Server or on a Database Server in a distributed system.

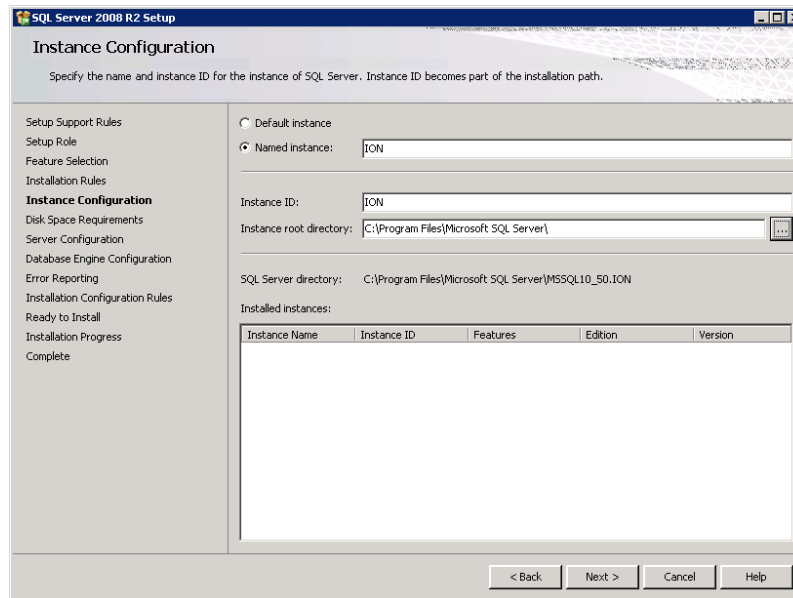


Click **Next** when you complete your selections. The setup process validates that the installation can proceed and shows the results on the **Installation Rules** page.



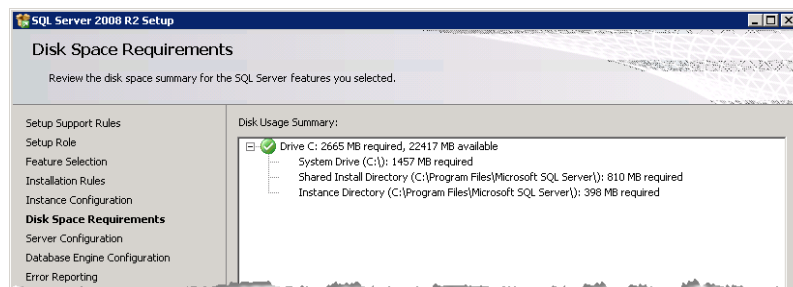
If validation is not successful, follow the instructions on the page and click **Rerun**. Click **Next** to proceed to the **Instance Configuration** page when the validation is successful.

7. Select **Named instance** and enter a name in the **Instance Name** field, for example **ION**. (Do not use an underscore character ( **\_** ) within the instance name.) The same name is automatically added to the **Instance ID** field and it should not be changed. Click **Next**.

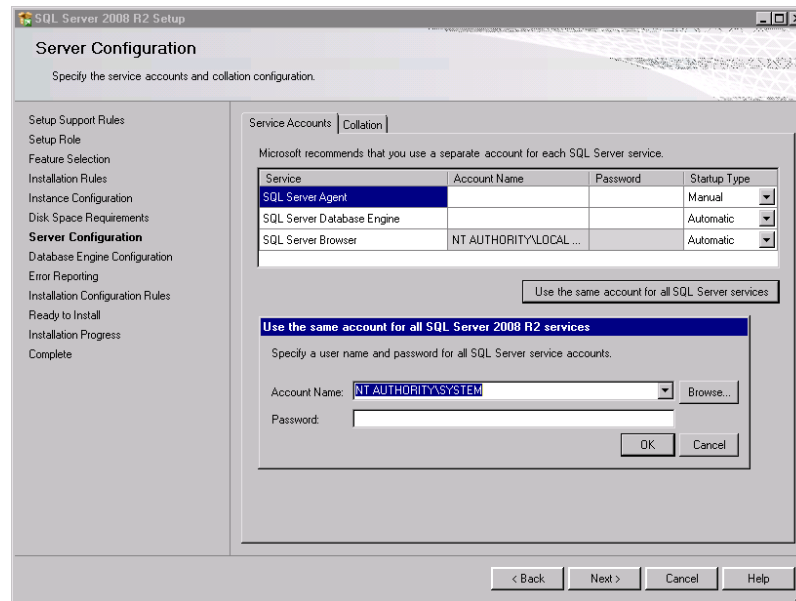


8. Review the information on the **Disk Space Requirements** page and click **Next**.

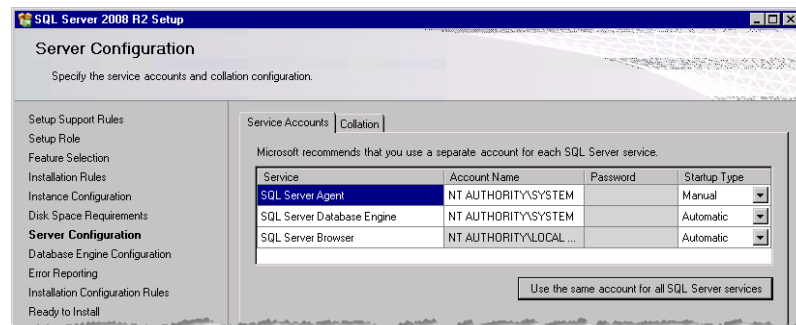
The disk space required for the installation is summarized in the **Disk Usage Summary** area on this page.



9. Select **Use the same account for all SQL Server services** to open the dialog.



10. Select **NT AUTHORITY\SYSTEM** (your local system account) in the **Account Name** list. A password is not required. Click **OK** to apply your selection and close the dialog.



Note that if you specify a Windows account other than the local system account, when you begin installing Power Monitoring Expert, the **Check System** page in the Installer will indicate that the service account under which the SQL Server currently runs does not have the required system permissions. To resolve this situation you need to do one of the following:

- Temporarily change the SQL Server service to run under an account that has Write permissions to (1) the folder created for the product's databases (the default is the install location for ... \Schneider Electric\Power Monitoring Expert\Database, and (2), for the current logged-in user's Temp folder. (To find the full path to the Temp folder, click **Start > Run**, enter %Temp% and click **OK**.) The default local system account is an example of an account with these privileges.
- Temporarily grant Write permission for the two folders mentioned above to the Windows account that the SQL Server service runs under. Use the Windows Services control panel to identify this account. (Click **Start > Administrative Tools > Services**, right-click **SQL Server**, click the **Log On** tab in the **SQL Server Properties** dialog.)

You can revert the temporary changes after the installation of Power Monitoring Expert completes.

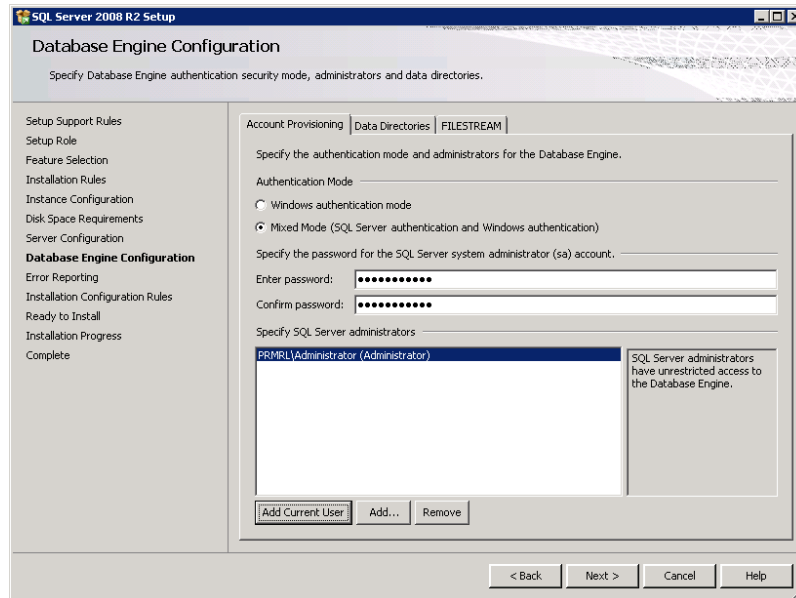
11. Click **Next** to proceed to the **Database Engine Configuration** page.
12. On the **Account Provisioning** tab of the **Database Engine Configuration** page, select **Mixed Mode**. Type a password for the SQL Server system administrator (sa) account in the **Enter password** and **Confirm password** fields. (Keep a record of the password for future use.) Click **Add Current User** to add the SQL Server Administrator, then click the **Data Directories** tab.

## NOTICE

### LOSS OF DATA

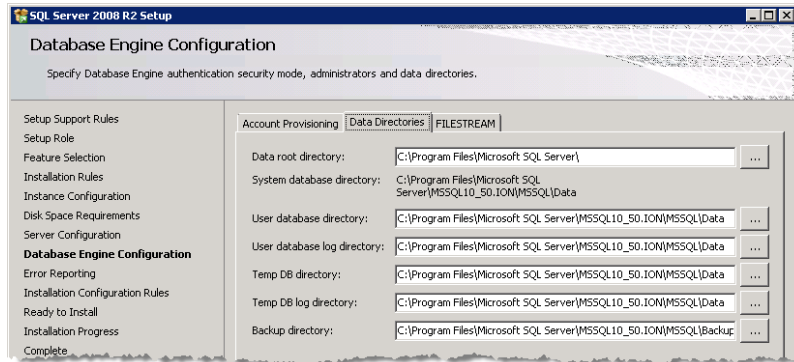
- Use a strong password for the System Administrator account consisting of at least 6 characters that are a combination of uppercase and lowercase letters, numbers, and symbols such as @, #, \$, %.
- Only allow users with advanced knowledge of SQL Server databases access to the SQL Server.

**Failure to follow these instructions can result in unauthorized access to SQL Server databases.**

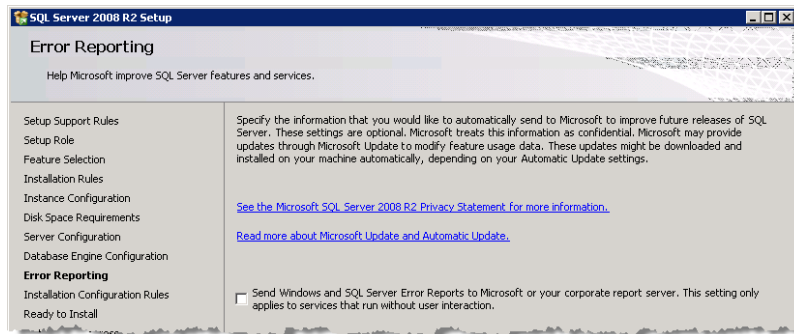


- 13. If additional drives are available on your server, you can specify a different drive for the TempDB directory and Temp DB log directory fields. Click **Next** to proceed to the **Error and Usage Reporting** page.

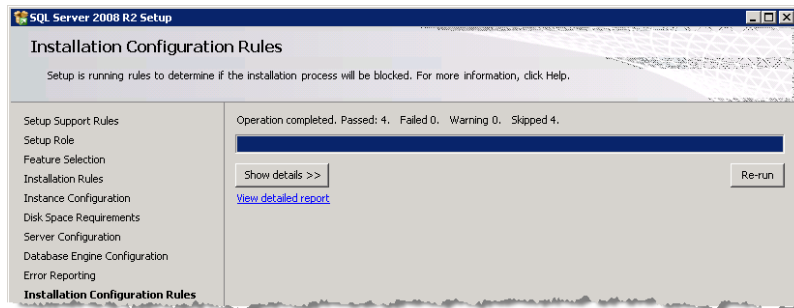
The specification of different drives is for performance reasons. If all of the files are located on the same drive, data that is being inserted, updated, or deleted can potentially result in slower write operations than if the Temp DB directories are located on a separate drive. The specification of different drives is dependent on your hardware configuration and may not be possible in all cases.



- 14. Selections are optional on the **Error and Usage Reporting** page.

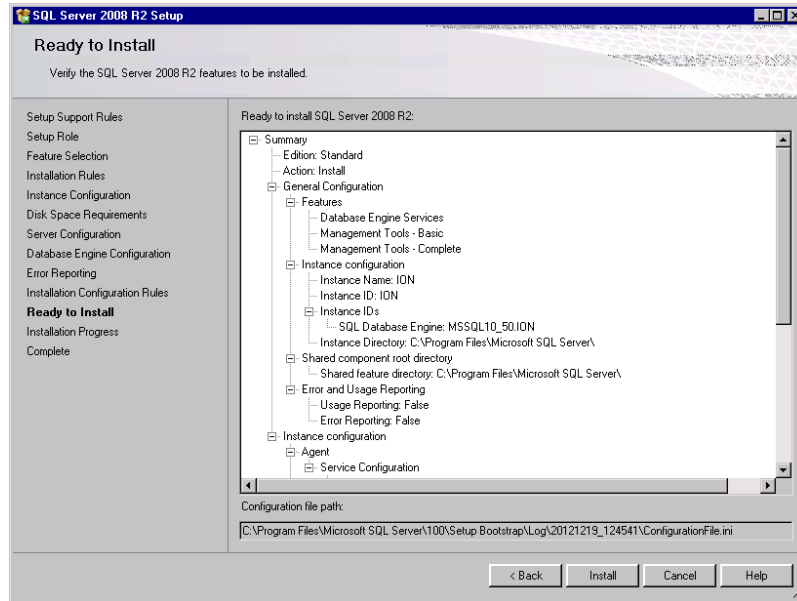


- 15. Click **Next** to validate that the installation can proceed. The results are shown on the **Installation Configuration Rules** page. If validation is not successful, follow the instructions on the page and click **Rerun**. Click **Next** when the validation is successful.

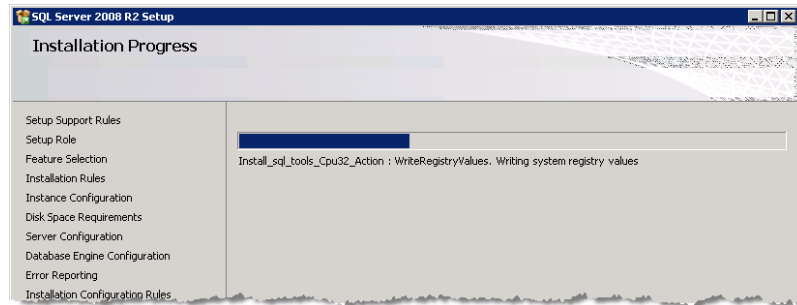


- 16. Click **Install** on the **Ready to Install** page.

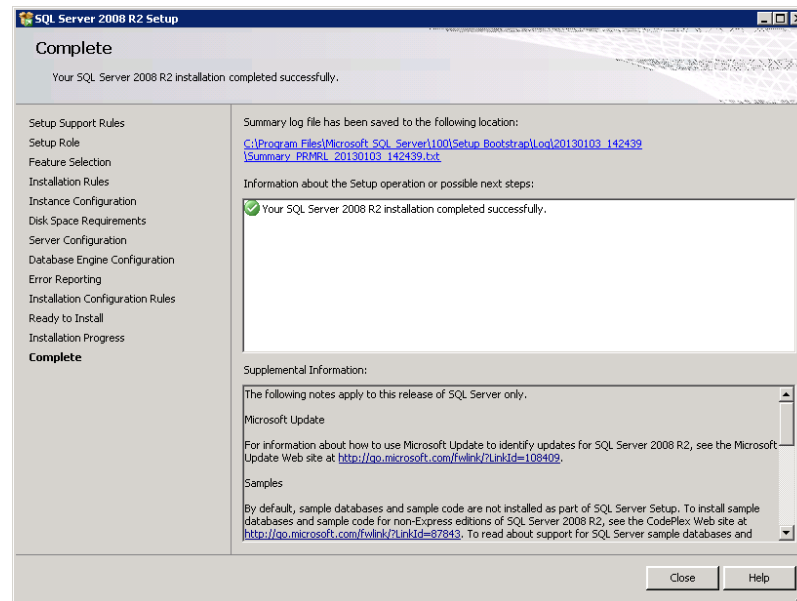
The **Ready to Install** page shows the SQL Server features that are about to be installed.



The **Installation Progress** page provides a visual indication of the progress of the installation.



When the installation finishes, the **Complete** page opens.



The **Complete** page contains a link to the Summary log. It also provides information about the Setup operations or possible next steps, as well as supplemental information related to your installation.

17. Click **Close** on the **Complete** page to close the setup dialog.

You can select **Search for product updates** in the **SQL Server Installation Center**. Close the dialog after any updates are installed.

## Next step

You can now install Power Monitoring Expert software on a Standalone Server or in a distributed configuration consisting of a Database Server and Primary Server. For a description of the installation process, see "[Power Monitoring Expert installation](#)" on page 32.

# Installing SQL Server 2008 R2 Standard/Enterprise Edition

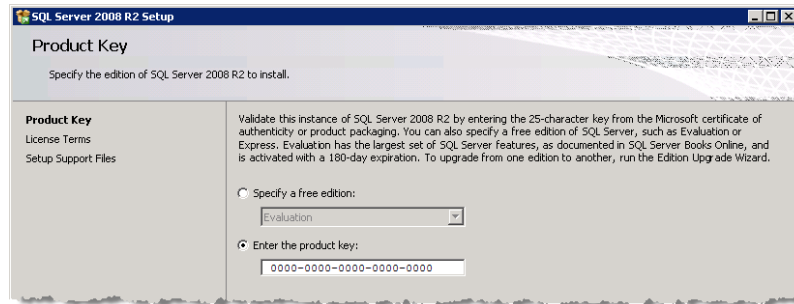
Before starting the SQL Server installation, you must be logged in as a user with administrative privileges for installing and configuring software applications. Make sure that no other programs are running, save your work, and close any open applications.

The steps for installing SQL Server 2008 R2 are the same as those for "[Installing SQL Server 2008 R2 from the available DVD](#)" on page 15. The exceptions are the steps for the following Setup pages:

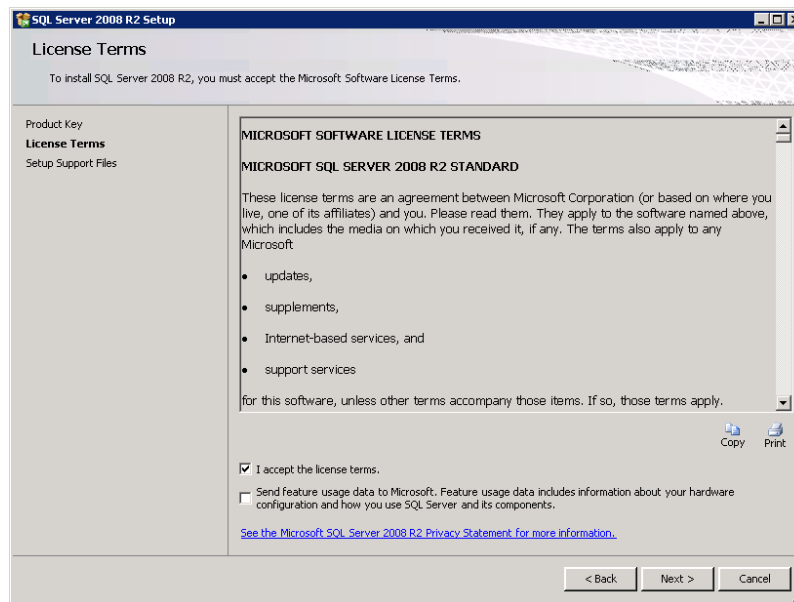
- **Product Key** page, which provides a default product key or requires that you enter a product key.
- **Complete** page, which contains a link for the Microsoft Update Web site where checking for updates identifies Microsoft SQL Server 2008 R2 Service Pack 2 for installation.

The input required for the Setup pages listed above is described in more detail where the pages occur in the following sequence of steps.

1. See "[Installing SQL Server 2008 R2 from the available DVD](#)" on page 15 for the directions for the following Setup pages:
  - **SQL Server Installation Center.**
  - **Setup Support Rules.**
2. If the product key is applied by default, click **Next**. Otherwise, select **Enter the product key**, type the product key in the field and click **Next**.



3. Read the license agreement on the **License Terms** page, then select **I accept the license terms** and click **Next** to continue.

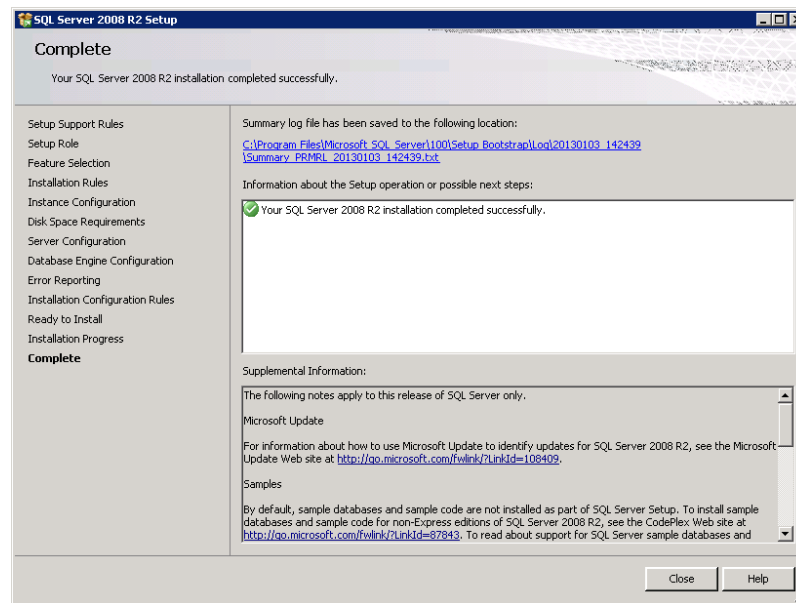


4. See "[Installing SQL Server 2008 R2 from the available DVD](#)" on page 15 for the directions for the following Setup pages:
  - **Setup Support Files and Setup Support Rules.**
  - **Setup Role.**
  - **Feature Selection and Installation Rules.**
  - **Instance Configuration and Disk Space Requirements.**
  - **Server Configuration.**



- **Database Engine Configuration – Account Provisioning and Data Directories** tabs.
- **Error and Usage Reporting.**
- **Installation Configuration Rules.**
- **Ready to Install and Installation Progress.**

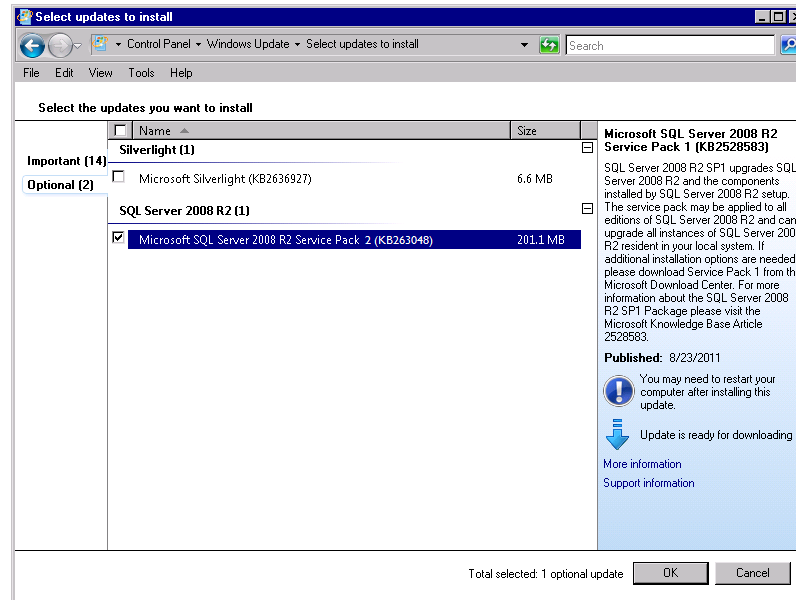
When the installation finishes, the **Complete** page opens.



The **Complete** page contains a link to the Summary log. It also provides information about the Setup operations or possible next steps, as well as supplemental information related to your installation.

5. To install Service Pack 2 for your SQL Server 2008 R2 installation, select the link on the **Complete** page for the Microsoft Update Web site and follow the instructions for checking for updates.

**Microsoft SQL Server 2008 R2 Service Pack 2** should be identified as one of the optional updates. Select it and any other updates that you want, and proceed with their installation. (Alternatively, you can search the Internet for Microsoft SQL Server 2008 R2 SP2 software, and download and install it.)



- After the updates are installed, click **Close** on the **Complete** page and then close the **SQL Server Installation Center**.

## Next step

You can now install Power Monitoring Expert software on a Standalone Server or in a distributed configuration consisting of a Database Server and Primary Server. For a description of the installation process, see ["Power Monitoring Expert installation" on page 32](#).

# Adding an instance to an existing SQL Server installation

To configure a SQL Server instance specifically for use by Power Monitoring Expert, you need to rerun the SQL Server 2008 R2 Setup wizard.

Before starting the SQL Server installation, ensure that you:

- Are logged in with a user account that has administrative privileges.
- Stop any other programs that are running, save your work, and close any open applications.
- Have the SQL Server 2008 R2 installation media.

The steps to add and configure a new server instance are the same as those for ["Installing SQL Server 2008 R2 from the available DVD" on page 15](#). The exceptions are the steps related to the following SQL Server 2008 Setup pages:

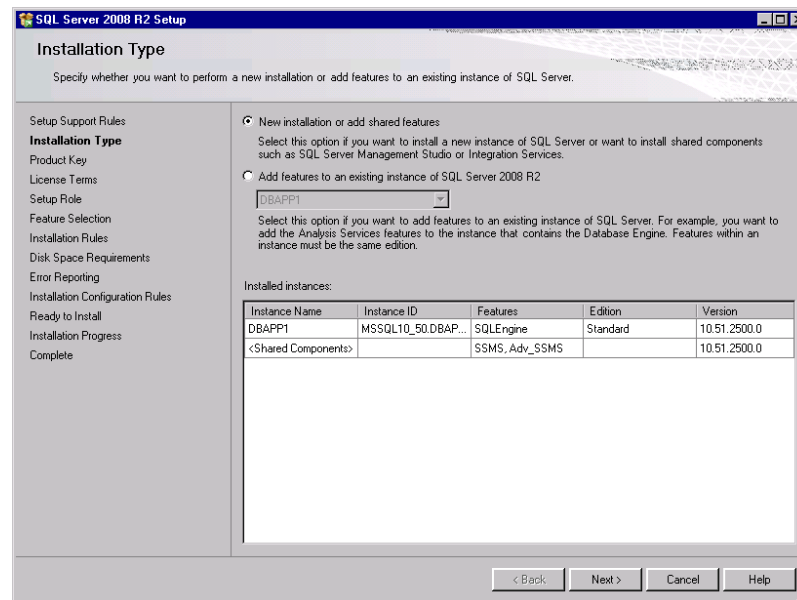
- **Installation Type.**
- **Feature Selection.**
- **Instance Configuration.**
- **Database Engine Configuration.**

The input required for the Setup pages listed above is described in more detail where the pages occur in the following sequence of steps.

1. See "[Installing SQL Server 2008 R2 from the available DVD](#)" on page 15 for the directions for the following SQL Server 2008 Setup pages:
  - **SQL Server Installation Center.**
  - **Setup Support Rules.**
2. When you click **Next** on the initial **Setup Supports Rules** page, a **Setup Support Files** page opens. Click **Install** to install the setup support files listed under the **Feature Name** column on the page.

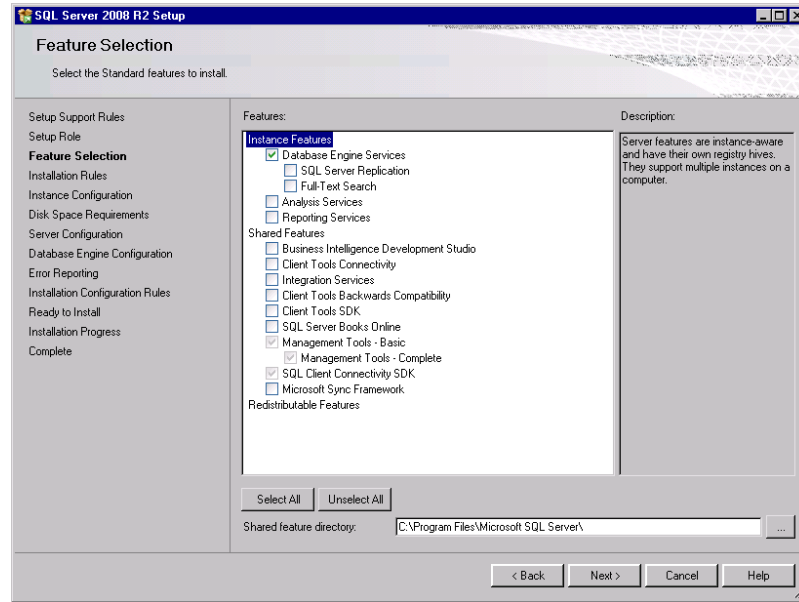
The **Setup Support Rules** page opens after the installation of the files showing the validation results. You can click **Show details** to view a list of the rules that were validated. If validation is not successful, follow the instructions on the page and click **Rerun**. Click **Next** when the validation is successful.

3. Select **New installation or add shared features** on the **Installation Type** page and click **Next**.



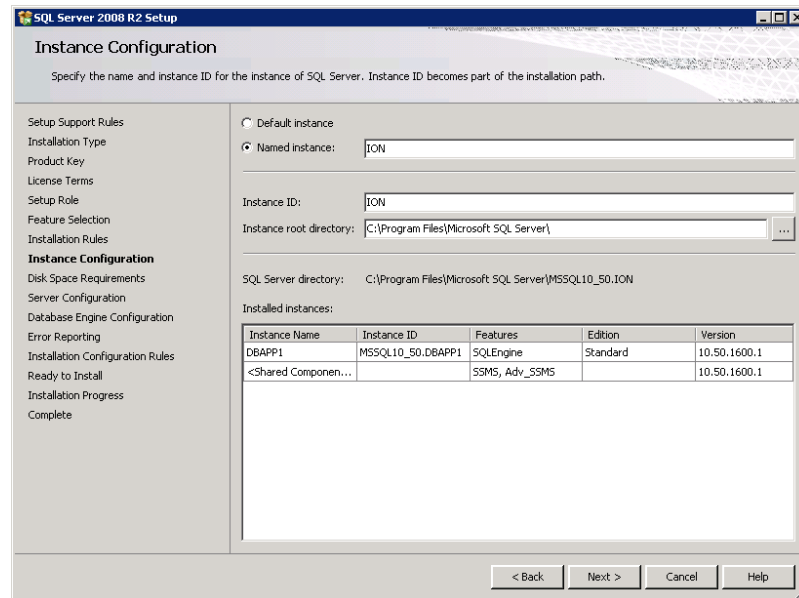
4. If the product key is displayed by default, click **Next**. Otherwise, select **Enter the product key**, type the product key in the field and click **Next**.
5. See "[Installing SQL Server 2008 R2 from the available DVD](#)" on page 15 for the directions for the following SQL Server 2008 Setup pages:
  - **License Terms.**
  - **Setup Role.**
6. On the **Feature Selection** page under **Instance Features**, select **Database Engine Services**. Note that **Reporting Services** is no longer required. Under **Shared Features**, select **Management Tools - Basic** and **Management Tools - Complete** if they are not already selected. Select any of the other shared features that you want to install.
  - **Database Engine Services** is required if you are installing on a server that is used as a Standalone Server or on a Database Server in a distributed system.

Click **Next** when you complete your selections. The setup process validates that the installation can proceed and shows the results on the **Installation Rules** page. If validation is not successful, follow the instructions on the page and click **Rerun**. Click **Next** to proceed to the **Instance Configuration** page when the validation is successful.



7. Select **Named instance** and enter a name in the **Instance Name** field, for example **ION**. (Do not use an underscore character ( \_ ) within the instance name.) The same name is automatically added to the **Instance ID** field and it should not be changed. Click **Next**.

Any existing instance names appear in the **Installed Instances** area on the page.



8. See ["Installing SQL Server 2008 R2 from the available DVD"](#) on page 15 for the directions for the following SQL Server 2008 Setup pages:

- **Disk Space Requirements.**
- **Server Configuration.**

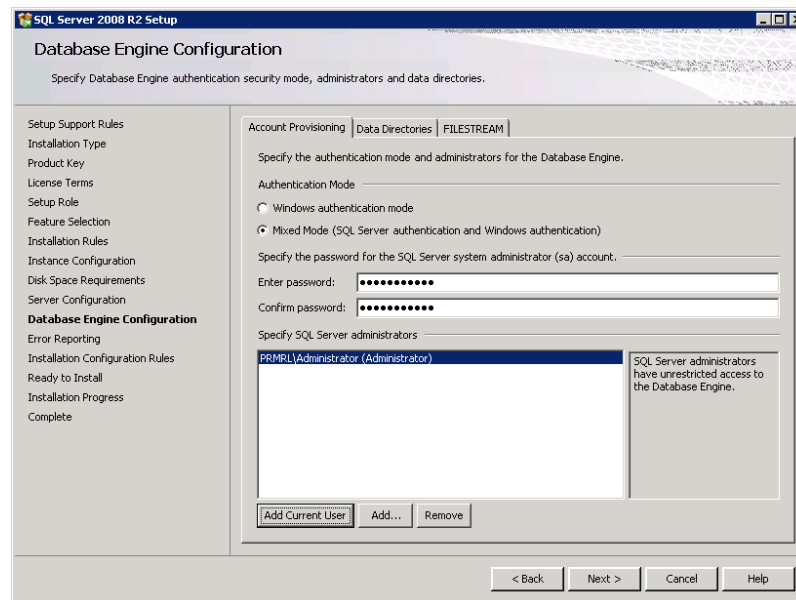
9. On the **Account Provisioning** tab of the **Database Engine Configuration** page, select **Mixed Mode**. Type a password for the SQL Server system administrator (sa) account in the **Enter password** and **Confirm password** fields. Click **Add Current User** to add the SQL Server Administrator, then click the **Data Directories** tab.

## NOTICE

### LOSS OF DATA

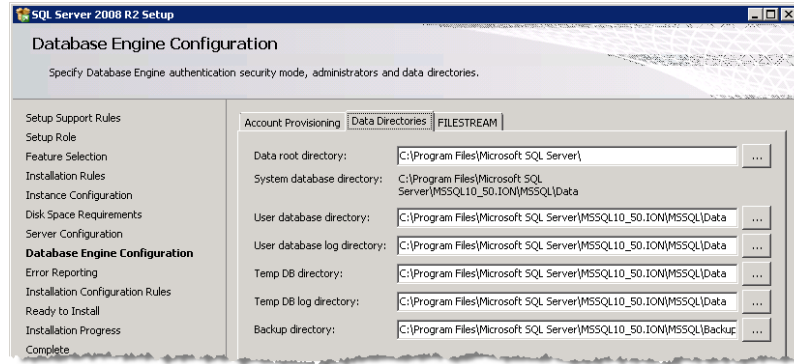
- Use a strong password for the System Administrator account consisting of at least 6 characters that are a combination of uppercase and lowercase letters, numbers, and symbols such as @, #, \$, %.
- Only allow users with advanced knowledge of SQL Server databases access to the SQL Server.

**Failure to follow these instructions can result in unauthorized access to SQL Server databases.**



10. If additional drives are available on your server, you can specify a different drive for the TempDB directory and Temp DB log directory fields. Click **Next** to proceed to the **Error Reporting** page.

The specification of different drives is for performance reasons. If all of the files are located on the same drive, data that is being inserted, updated, or deleted can potentially result in slower write operations than if the Temp DB directories are located on a separate drive. The specification of different drives is dependent on your hardware configuration and may not be possible in all cases.



11. See ["Installing SQL Server 2008 R2 from the available DVD"](#) on page 15 for the directions for the following SQL Server 2008 Setup pages:
  - **Error Reporting.**
  - **Installation Configuration Rules.**
  - **Ready to Install.**
  - **Installation Progress.**
  - **Complete.**
12. You can select **Search for product updates** in the **SQL Server Installation Center**. Close the dialog after any updates are installed.

## Next step

You can now install Power Monitoring Expert software on a Standalone Server or in a distributed configuration consisting of a Database Server and Primary Server. For a description of the installation process, see ["Power Monitoring Expert installation"](#) on page 32.

## Adding an instance to an existing SQL Server Express installation

If you have previously installed SQL Server 2008 R2 Express, you can add a SQL Server Express instance for use with Power Monitoring Expert by following the directions for ["Installing Power Monitoring Expert software"](#) on page 35.

# Tasks performed by the product Installer

Depending on your operating system version, your SQL Server edition, and the setup type (server or client) that you select for installation, the Power Monitoring Expert Installer performs some or all of the following tasks prior to the installation of the software:

- Checks for the appropriate version of .NET Framework and initiates its installation if required.
- Validates the Product Key.
- Checks that adequate disk space is available for the files that are written to the hard disk.
- Verifies that the SQL Server Agent is installed.
- Validates that a supported SQL Server edition and service pack level are installed.
- Verifies the connection to the SQL Server.
- Checks for 32-bit SQL Server edition.
- Checks for the presence of ASP.NET.
- Validates that a supported Windows operating system version and service pack level are installed.
- Verifies that the appropriate account permissions are defined, for example, that the SQL Server system administrator (sa) account is set with Administrator as the user.
- Verifies that the Windows account that the SQL Server service runs under has the proper folder permissions to proceed.

The Installer performs configuration tasks during the installation process. Some of these tasks are listed below. See the Installation log that is available at the conclusion of the installation process to view all of the actions performed by the Installer.

- Installs SQL Server backwards compatibility.
- Configures the SQL Server Agent.
- Configures ASP.NET.
- Configures SQL Server.
- Registers, verifies the registration of, and starts services.
- Installs and configures Internet Information Services (IIS).

# Power Monitoring Expert installation

The Power Monitoring Expert installation consists of running the Installer and selecting options as you proceed through the installation process. This topic describes the different setup types that are available during installation and also provides a step-by-step description of the installation process.

## Setup types available in the Installer

The Installer lets you select a setup type for your Power Monitoring Expert installation. The setup types are:

- Standalone Server.
- Database Instance (for a distributed installation).
- Primary Server (for a distributed installation).
- Secondary Server.
- Engineering Client.
- Reporting Client Only.

## Standalone Server setup type

A Standalone Server hosts Power Monitoring Expert configuration files, the services that are required for the system to function, and a SQL Server instance for the Power Monitoring Expert databases.

Make sure your computer meets the operating system and SQL Server requirements summarized in ["Required software" on page 8](#). It is recommended that you run the Windows Update service before and after installing the software.

To ensure that client computers and Secondary Servers can be installed and will operate successfully, the Standalone Server (or Primary Server in a distributed installation) must meet the following requirements:

- Exists on the Local Area Network (LAN).
- Shares full Read and Write permissions on the Power Monitoring Expert folder.
- Enables file and printer sharing on the LAN properties.

Perform the software installation directly on the server. Remote installation is not recommended.

## Considerations for a Standalone installation

Before proceeding with the Standalone Server installation, ensure that you complete the following tasks:

- ["Configuring your operating system" on page 10](#).
- ["Installing SQL Server" on page 13](#), or if applicable, ["Adding an instance to an existing SQL Server installation" on page 26](#).



If you intend to use a supported SQL Server Express edition, it is installed at the same time as Power Monitoring Expert on a Standalone Server.

## Database Instance and Primary Server setup types

The Database Instance and Primary Server setup types comprise a distributed installation.

The server used for the Database Instance in a distributed installation hosts an edition of Microsoft SQL Server and your Power Monitoring Expert databases. This network configuration requires that you install the server hosting your Database Instance on your network before installing the Primary Server.

A Primary Server in a distributed installation hosts Power Monitoring Expert configuration files and the services that are required for the system to function. The Primary Server communicates with a separate Database Server to access Power Monitoring Expert databases.

See the *System Design Guide* for information about planning for and setting up your system. The guide also provides information about a Database Server deployed in a clustered SQL Server environment.

### Distributed installation considerations

Before proceeding with the installation of your distributed system, ensure that you complete the following tasks:

- ["Configuring your operating system" on page 10.](#)
- ["Installing SQL Server" on page 13](#), or if applicable ["Adding an instance to an existing SQL Server installation" on page 26.](#)
- Prior to beginning the installation, ensure that all of the servers on the network can communicate with each other. For example, to test for this, open a command prompt on each server and type `ping computer_name`, where *computer\_name* is the name of the computer you want to contact. A successful response shows 4 attempts to contact the computer, lists the IP Address, indicates `Packets: Sent = 4. Received = 4, Lost = 0 (0% loss)`, plus timing data. If this is not the case, it indicates that the computers cannot communicate and that you need to resolve the connectivity situation. Note that the ping utility requires that Internet Control Message Protocol (ICMP) be enabled on your network. Contact your Network Administrator if ping does not work.
- Run the Windows Update service on both the server hosting the Database Instance and the Primary Server to install the latest security patches and hotfixes from Microsoft.
- For a distributed installation, you need to install the server hosting the Database Instance on your network before installing the Primary Server.

## Secondary Server setup type

Secondary Server installations are not common, and are used only in exceptional circumstances. For example, an intermediary Secondary Server may be required when you have a large number of devices that use software-based logging. Secondary Server installations require advanced network configuration.

For additional information about Secondary Servers, see the *System Design Guide*.

## Engineering Client setup type

An Engineering Client workstation provides administrators and power users access to the Power Monitoring Expert graphical user interface components (Management Console, Vista, Designer). You can use these components to add and configure devices, troubleshoot your system, edit graphics, or perform ION programming tasks. An Engineering Client needs to be installed after a Standalone Server or a Primary Server is installed and running.

## Reporting Client Only setup type

A Reporting Client workstation provides administrators and power users with the ability to generate reports using the Reporter component of Power Monitoring Expert. A Reporting Client needs to be installed after a Standalone Server or a Primary Server is installed and running.

## Setup Types and applicable Installer pages

The following table indicates the pages in the Installer associated with each setup type. Because Secondary Server installations are not common, the Secondary Server setup type is excluded from the table. The "Y" indicates that the Installer page appears during the installation of that setup type, and the "n/a" indicates that the page is not applicable and does not appear during the installation process.

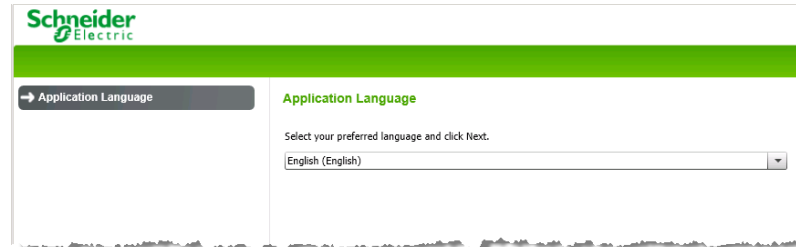
Installer pages	Setup Types				
	Standalone	Distributed Installation		Engineering Client	Reporting Client Only
		Database Instance	Primary Server		
Application Language	Y for all setup types				
Welcome	Y for all setup types				
License Agreement	Y for all setup types				
Setup Type	Y for all setup types				
User Information	Y for all setup types				
Supervisor Account	Y	n/a	Y	n/a	n/a
Web Application	Y	n/a	Y	n/a	n/a
File Destination	Y for all setup types				
Primary Server	n/a	n/a	n/a	Y	Y
Database Software	Y	Y	n/a	n/a	n/a
Database Instance	n/a	n/a	Y	n/a	n/a
Check System	Y for all setup types				
Ready to Configure	Y for all setup types				
Copy Files	Y for all setup types				
Configure System	Y for all setup types				
Complete	Y for all setup types				

# Installing Power Monitoring Expert software

Start the installation process by inserting the Power Monitoring Expert DVD into the DVD drive. If the installation does not start automatically, use Windows Explorer to navigate to the DVD drive and double-click `MainSetup.exe`.

1. Install Microsoft .NET Framework if prompted.
2. **Application Language** page for all setup types:

Select the **Application Language** from the list and click **Next**.



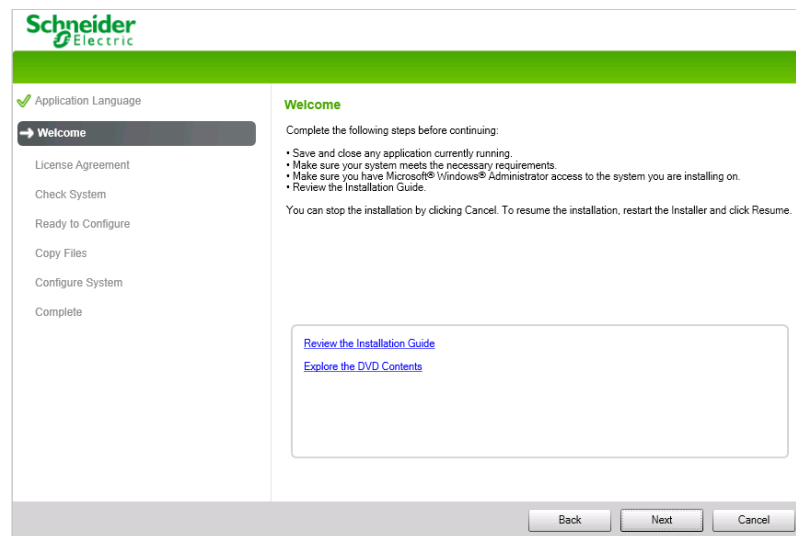
## Note

National language releases for the software are supported as follows:

- The same language versions of Power Monitoring Expert, the SQL Server, and the operating system. For example, Spanish versions of the product and SQL Server installed on an operating system with a regional setting of Spanish.
- English language versions of Power Monitoring Expert and the SQL Server installed on an operating system with a regional setting other than English. For example, English versions of the product and SQL Server installed on a operating system with a regional setting of German.

3. **Welcome** page for all setup types:

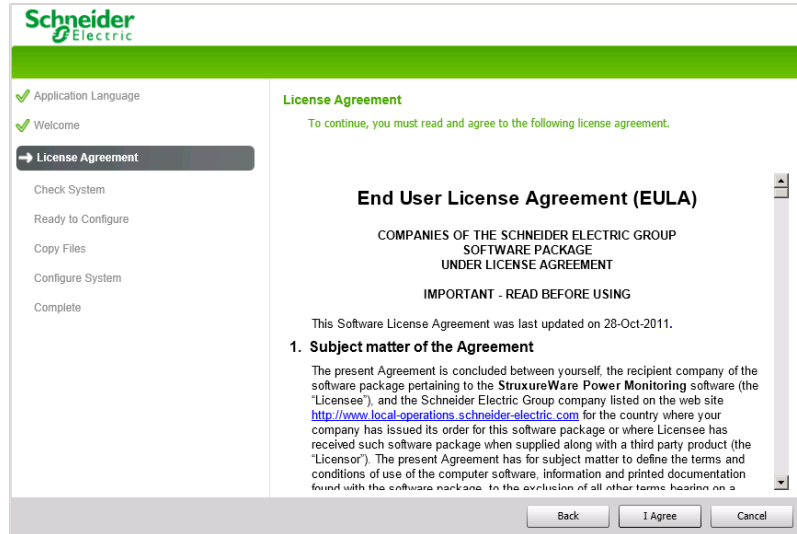
Click **Next** on the **Welcome** page to proceed to the **License Agreement** page.



The **Welcome** page provides reminders for tasks to complete before continuing with the installation.

4. **License Agreement** page for all setup types:

Read the End User License Agreement (EULA) on the **License Agreement** page.



If you accept the terms of the license agreement, click **I Agree** to proceed to the **Setup Type** page.

5. Select the setup type you want to install from the list if it is not already selected, and click **Next**.

For **Standalone Server**:

**Setup Type**

Standalone Server

In this configuration, one server handles all the functions, data storage and interaction with networked devices. If a valid instance of SQL Server 2008 is not found in this computer, SQL Express will be installed.

For **Database Instance**:

**Setup Type**

Standalone Server  
Standalone Server  
Database Instance  
Primary Server  
Secondary Server  
Engineering Client  
Reporting Client Only

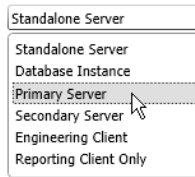
**Setup Type**

Database Instance

This setup type installs the Database Server as part of a distributed system. Use this setup type to install the SPM databases and maintenance jobs on a separate server. If the SPM databases reside on a separate database server, you must install the Database Server before installing the Primary Server.

### For Primary Server:

#### Setup Type



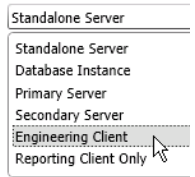
#### Setup Type



This setup type installs the Primary Server as part of a distributed system. If the SPM Databases reside on a separate Database Server, you must install the database server before installing the Primary Server.

### For Engineering Client:

#### Setup Type



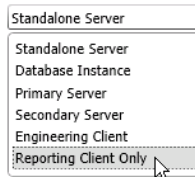
#### Setup Type



This setup type is for Administrators and Power Users that require the ability to add meters, troubleshoot their system, edit graphics, or perform ION programming. You must install SPM on the Primary Server before installing an Engineering Client.

### For Reporting Client Only:

#### Setup Type



#### Setup Type



This setup type is for Administrators and Power Users who require the ability to use Reporter only. You must install SPM on the Primary Server before installing a Reporting Client.

### 6. User Information page for all setup types:

Enter the user-related information in the **User Name** and **Company Name** fields on the **User Information** page and click **Next**.

7. **Supervisor Account** page for **Standalone Server** and **Primary Server** setup types only:

Use the **Supervisor Account** page to enter and confirm a password of the supervisor account for the software. Select **Show characters** to see the password in alpha/numeric format. Click **Next**.

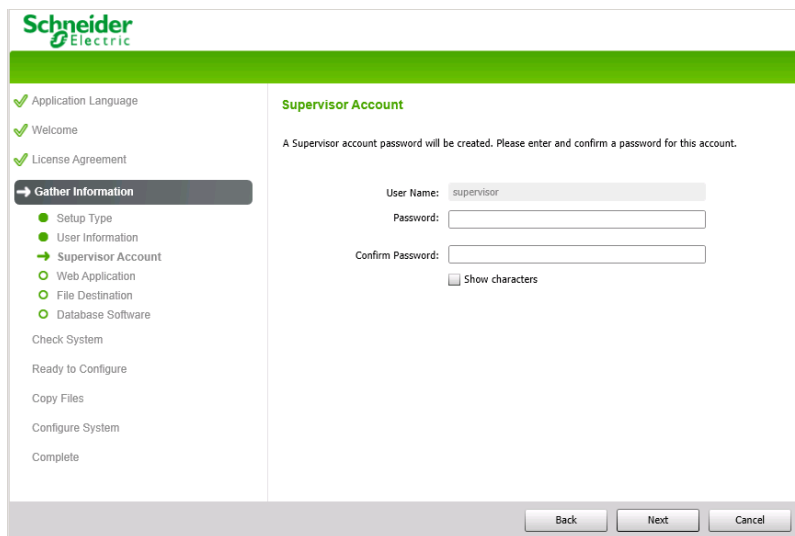
## NOTICE

**LOSS OF DATA**

- Use a strong password for the supervisor account consisting of at least 6 characters that are a combination of uppercase and lowercase letters, numbers, and symbols such as @, #, \$, %.
- Only allow users with advanced knowledge of site administration supervisor account access.

**Failure to follow these instructions can result in unauthorized access to Power Monitoring Expert system components.**

The supervisor account has the highest level of access to the system.



After installation of the software, you can open **User Manager** to add additional users, assign passwords, and select the appropriate access level for each user. Open **Management Console** and select **Tools > User Manager**.

8. **Web Application** page for **Standalone Server** and **Primary Server** setup types only:

Use the **Web Application** page to change the default URL path for the Web Applications component of the product or use the default values and click **Next**.

The screenshot shows the 'Web Application' configuration page. On the left, a navigation pane lists steps: Application Language, Welcome, License Agreement, Gather Information (selected), Setup Type, User Information, Web Application, File Destination, Database Software, Check System, Ready to Configure, Copy Files, Configure System, and Complete. The main area is titled 'Web Application' and contains the following text: 'Create a path name to the virtual root directory for the Web Application URL.' Below this, it says 'Path to form the URL:' followed by a text input field containing 'Web'. Underneath, it says 'The Web Application URL:' followed by 'http://SRVR3/Web'. At the bottom right, there are 'Back', 'Next', and 'Cancel' buttons.

9. **File Destination** page for **Standalone Server** and **Database Instance** setup types only:

The **File Destination** page indicates the default installation locations for the product folders and files, and for the location of the databases. Use the browse button to select different locations. Click **Next**.

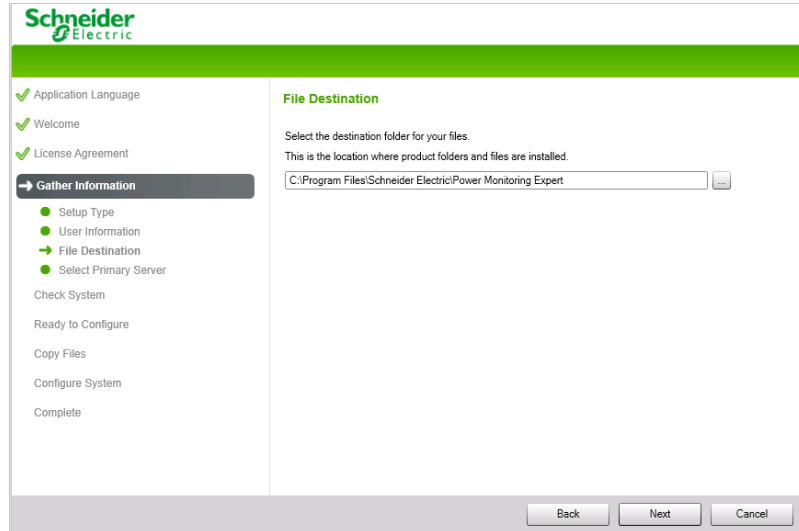
Click **Yes** if you are prompted to create the folders.

The screenshot shows the 'File Destination' configuration page. The navigation pane on the left is similar to the previous page, but 'File Destination' is now selected. The main area is titled 'File Destination' and contains the following text: 'Select the destination folder for your files.' Below this, it says 'This is the location where product folders and files are installed.' followed by a text input field containing 'C:\Program Files\Schneider Electric\Power Monitoring Expert' and a browse button (...). Underneath, it says 'This is the location where the datatables are installed.' followed by another text input field with the same path and a browse button (...). At the bottom right, there are 'Back', 'Next', and 'Cancel' buttons.

10. **File Destination** page for **Primary Server**, **Engineering Client**, and **Reporting Client Only** setup types:

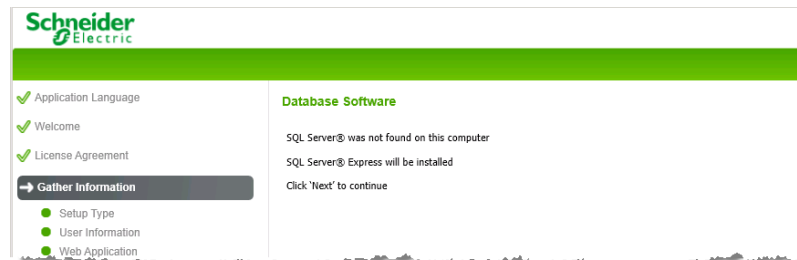
The **File Destination** page indicates the default installation location for the product folders and files. Use the browse button to select a different location. Click **Next**.

Click **Yes** if you are prompted to create the folder.



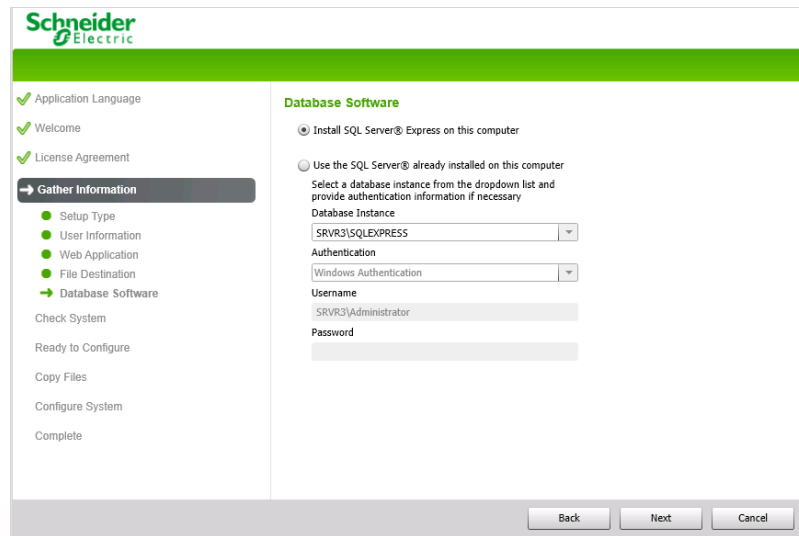
11. The contents of the **Database Software** page is dependent on the following:

- If a SQL Server instance is **not** found on your Standalone Server, the **Database Software** page indicates that SQL Server Express will be installed. Click **Next** to continue with the installation.

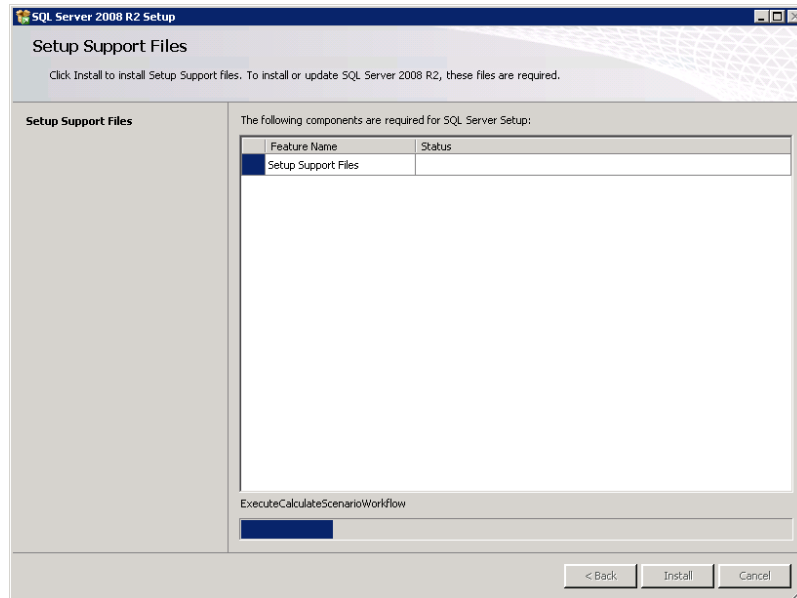




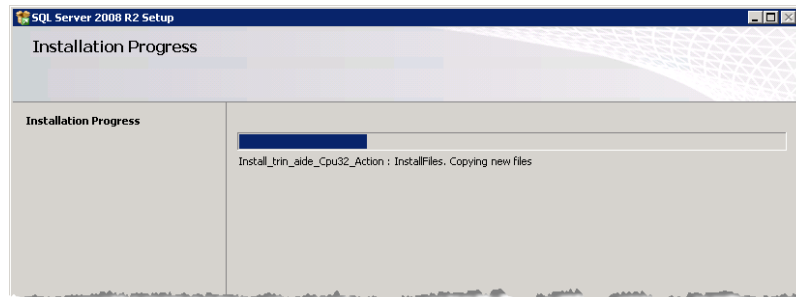
- If a SQL Server instance is found on your Standalone Server, you need to select the **Install SQL Server Express on this computer** option to install SQL Server Express for use with Power Monitoring Expert. Click **Next**.



The **SQL Server 2008 R2 Setup** wizard opens at the **Setup Support Files** page and the files are installed automatically.



The installation of SQL Server Express begins automatically after the Setup Support files are installed. The **Installation Progress** page visually indicates the progress of the installation.



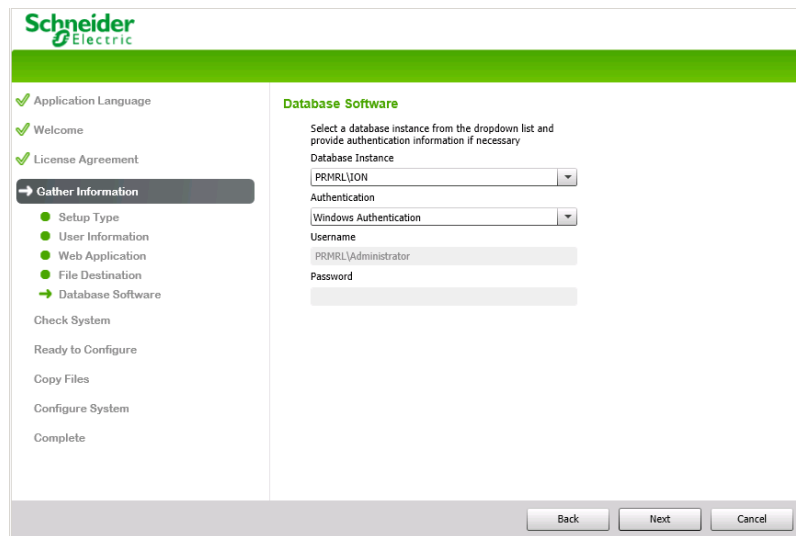
Upon completion of the SQL Server Express installation, a system check is performed to verify that the mandatory prerequisites have been met. The results of the verification are shown on the **Check System** page.

12. **Database Software** page for **Standalone Server** setup type when SQL Server Standard/Enterprise is already installed:

Select the database instance for your SQL Server on the **Database Software** page, provide the necessary authentication values, and click **Next**.

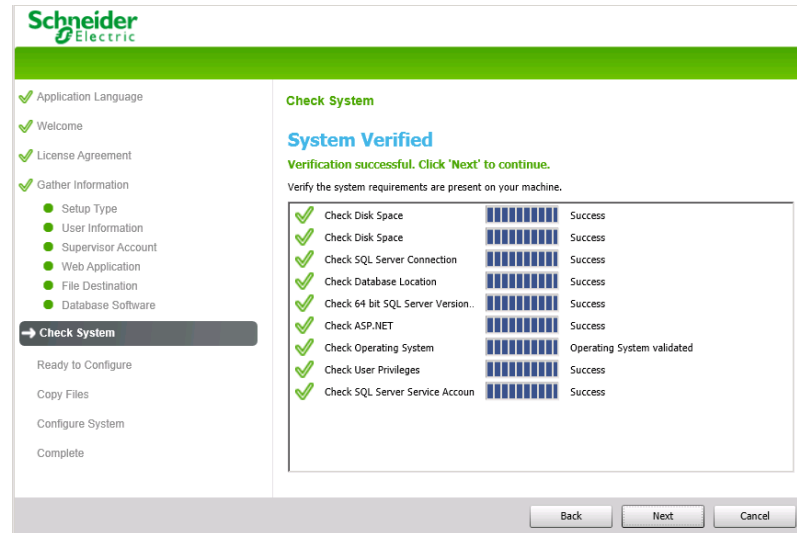
Note that this step assumes that you have a supported SQL Server 2008 Standard or Enterprise edition installed on your Standalone Server.

The SQL Server instance that you want to select is the one that you specified for use with Power Monitoring Expert when you installed or reconfigured the SQL Server.



### 13. Check System for all setup types:

The **Check System** page verifies that the mandatory prerequisites have been met before proceeding. If a problem occurs during the system check, the item is identified and clicking on it displays additional information about the situation. Click **Next**.



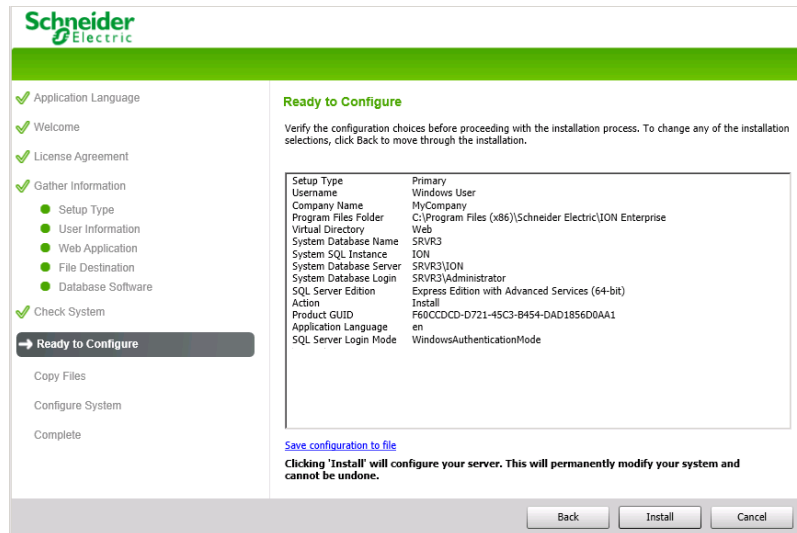
Note that if you specified a Windows account other than the local system account when you installed a supported edition of SQL Server Standard or Enterprise, the **Check System** page will indicate that the service account under which the SQL Server currently runs does not have the required system permissions. To resolve this situation you need to do one of the following:

- Temporarily change the SQL Server service to run under an account that has Write permissions to (1) the folder created for the product's databases (the default is the install location for ...\\Schneider Electric\\Power Monitoring Expert\\Database, and (2), for the current logged-in user's Temp folder. (To find the full path to the Temp folder, click **Start > Run**, enter %Temp% and click **OK**.) The default local system account is an example of an account with these privileges.
- Temporarily grant Write permission for the two folders mentioned above to the Windows account that the SQL Server service runs under. Use the Windows Services control panel to identify this account. (Click **Start > Administrative Tools > Services**, right-click **SQL Server**, click the **Log On** tab in the **SQL Server Properties** dialog.)

You can revert the temporary changes after the installation of Power Monitoring Expert completes.

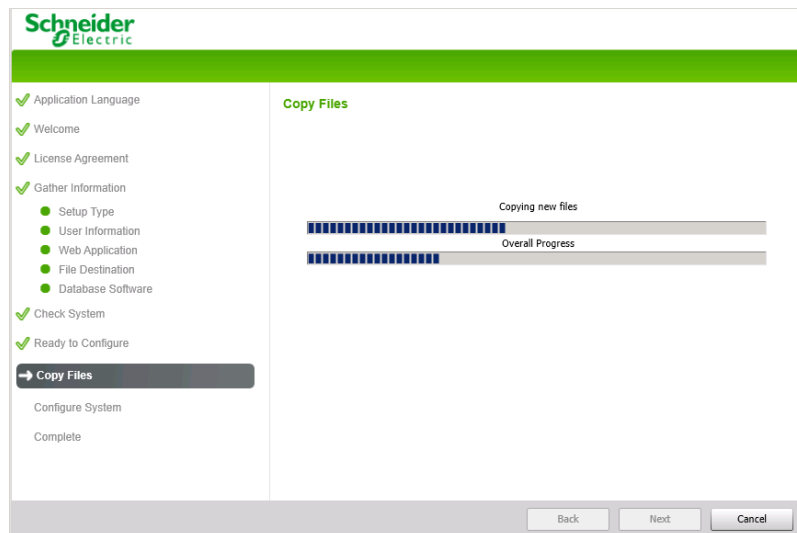
14. **Ready to Configure** page for all setup types:

The **Ready to Configure** page summarizes your configuration for the installation of the software. Click **Install** to begin the installation.

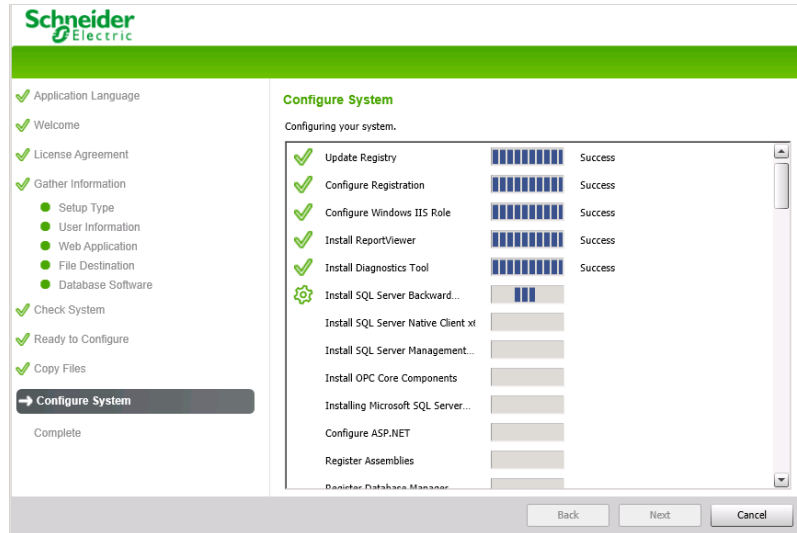


15. **Copy Files** page for all setup types:

The **Copy Files** page indicates the progress as files are copied to the server as part of the installation.



When the copying operation is complete, the **Configure System** page opens.

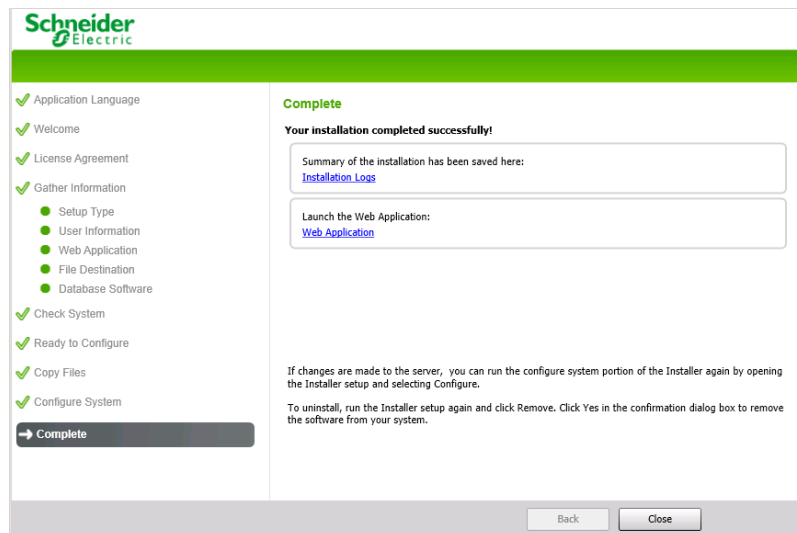


The **Configure System** page indicates each of the configuration actions taking place during the installation. If a configuration step is not successful, an X appears in a column to the left of the item and you are given an option to continue with the installation or to cancel the install process. You can also click the link on the message text on the right of the item to display instructions for resolving the error.

Click **Next** when the configuration process ends to open the **Complete** page.

16. **Complete** page for all setup types:

The **Complete** page contains links that open the Installation Log and start the Web Applications component, respectively.



The Installation Log summarizes the processing that took place during the installation process. (The installation log can be accessed at a later time in the install location within ...\\Schneider Electric\\Power Monitoring Expert\\SetupLogs.) Click the Web Application link to verify that Web Applications component launches successfully in a browser.

17. Click **Close** to close the installer.

## Verify that IIS is working

Ensure that IIS is working by typing the URL `http://localhost/` in the address field of Internet Explorer.

The following is displayed in the browser:



# Using a Web Client

A Web Client can be used by operators and others to access the Web Applications component of Power Monitoring Expert on a day-to-day basis. Web Applications encompass Dashboards, Diagrams, Tables, Alarms, and Reports.

The browsers supported on Web Client computers are:

- Microsoft Internet Explorer versions 8, 9, or 10.
- Google Chrome version 20 or later.
- Apple Safari version 5 or later on Mac computers.

To access Web Applications from a Web Client, enter an IP address or an address in the following format in your browser:

```
http://domain_name/Web
```

where *domain\_name* is the fully-qualified name of the server hosting Power Monitoring Expert and *Web* is the default root directory, which can be changed during installation. For example, for server name **srv1**, company name **MyCompany**, and a root directory of **Web**, enter the address in the browser as:

```
http://srv1.MyCompany.com/Web
```

By default, the first application on the Navigation Bar in Web Applications opens in the browser. To specify which application should open first, add one of the following application query parameters to the Web address. Note that `?application` is case-sensitive.

```
/?application=Diagrams  
/?application=Tables  
/?application=Alarms  
/?application=Reports
```

## Silverlight support

Any computer that you use to access the browser-based Web Applications component requires Silverlight version 4.0 or later. If Silverlight is not installed, a Web page indicates that you need to install it before you can proceed. Click **Click now to install** to open a download pop-up. Select **Run** to install it over the Internet.



[Unable to install Silverlight?](#)

If your site restricts access to the Internet, you should contact your System Administrator, as indicated when you click **Unable to install Silverlight?**.



Unable to install Silverlight?

You must have internet access to install Silverlight. If you require access to this application and your corporate policy restricts either internet access or application installations, contact your System Administrator.

Your System Administrator can use an Internet-enabled computer to review the Silverlight deployment methods described in the Microsoft Silverlight Deployment Guide at

[http://download.microsoft.com/download/C/D/5/CD5AAAE3-21F7-47A8-B7D5-39E36BAF9AC8/Silverlight\\_Deployment\\_Guide.docx](http://download.microsoft.com/download/C/D/5/CD5AAAE3-21F7-47A8-B7D5-39E36BAF9AC8/Silverlight_Deployment_Guide.docx)



# Post-installation tasks

Perform the following procedures after you install the Power Monitoring Expert software.

## Activate software licenses

The installed software includes a 90-day trial license for all features of the product. You must activate valid purchased software licenses within 90 days, otherwise some software functionality is disabled.

### **NOTICE**

#### **LOSS OF COMMUNICATION**

- Be sure to activate product and component licenses prior to the expiry of the trial license.
- Ensure that you activate sufficient licenses for the servers and devices in your system.

**Failure to follow these instructions can result in loss of data.**

You need to purchase and activate licenses for the following software features:

- Communications Server – requires Server and Device licenses.
- Vista/Designer – requires an Engineering Client license.
- OPC Server – requires an OPC DA Server license.
- Billing Report – requires a Billing Report Module license.
- Web Clients – require Web Client licenses.

When your order is processed, a software license Entitlement Certificate is sent by email from [licensing@schneider-electric.com](mailto:licensing@schneider-electric.com). (You may need to change the settings in your email application to ensure that this email arrives in your inbox and is not routed to your spam folder.)

To activate your software licenses:

1. Locate your Entitlement Certificate email.
2. Follow the instructions in the email to activate your licenses:
  - a. Open the **Schneider Electric License Manager** or the **Schneider Electric Floating License Manager** (as instructed in the email) from **Start > All Programs > Schneider Electric**.
  - b. Click **Activate** to open the **Activation Method** dialog.
  - c. Choose one of the available activation methods and follow the detailed instructions provided in the dialog.

Note that you can activate Power Monitoring Expert software licenses over the Internet or by email. Phone activation is not available at this time.

- d. Follow the directions on the **Activation ID** page of the dialog and enter the Activation IDs referenced in your Entitlement Certificate email.
- e. Click **Finish** to complete the process.

For Secondary communication servers or Engineering Client computers, additional steps may need to be completed before the software detects the licenses. It is recommended that you contact Technical Support for instructions in completing these steps.

Contact the Software Registration Center if you experience any problems activating your software licenses. Click **Help > Support** in either **Schneider Electric License Manager** or **Schneider Electric Floating License Manager** for the contact information.

Refer to the online help in **Schneider Electric License Manager** for additional information.

## Check services

Open the Windows Services dialog and ensure that all of the necessary ION and Schneider Electric services are started. The services run under the Local System account, by default. You can change the **Log On As** attribute of a service by specifying the account and password. Use the **Log On** tab on the service properties dialog to do this. The **Log On As** account must have read/write permissions on the product's installation directory, which by default is `...\Schneider Electric\Power Monitoring Expert`.

For more information see the "ION Services" topic in the online *Power Monitoring Expert Help*.

## Create local user groups

You can create Microsoft Windows local user groups on a Power Monitoring Expert primary server (that is, on the Standalone Server or the Primary Server) as a way to manage user access through group permissions. The table below shows the permissions assigned to an administrator group and a user group:

Group Name	Access to ...\ <b>Power Monitoring Expert</b> system <sup>1</sup>	Access to ...\ <b>Power Monitoring Expert</b> config <sup>1</sup>
<i>Administrator_Group_Name</i> , which is the name you create for your administrator group.	Full Control	Full Control
<i>User_Group_Name</i> , which is the name you create for your user group.	Read	Change
<sup>1</sup> On a 32-bit server, this is under ...\ <code>Program Files\Schneider Electric</code> . On a 64-bit server, this is under ...\ <code>Program Files (x86)\Schneider Electric</code> .		

## Review Windows Task Scheduler

The Windows Task Scheduler has preconfigured scheduled jobs for performing backups, maintenance, size notification, and trims on the Power Monitoring Expert databases. Review these schedules and make any modifications that you require.

For more information refer to the Database Manager and Windows Task Scheduler section in the online *Power Monitoring Expert Help*.

## Security considerations

This section outlines specific security considerations after the Power Monitoring Expert installation.

### Power Monitoring Expert software security

Select **Help** in **User Manager** for further information about creating users and groups, and in setting system access levels.

For more information refer to the "User Manager" section under "Management Console Tools" in *Power Monitoring Expert Help*.

### Using HTTP SSL to secure Web-site communications

The Secure Socket Layer (SSL) protocol allows you to establish an encrypted link between your Web server and a browser to protect login credentials and data from interception by a 3rd party on the network.

The Web Applications component (consisting of Dashboards, Diagrams, Alarms, Tables, and Reports) can be accessed via SSL by specifying "https" instead of "http" in a Web browser on a client computer. For example:

```
https://domain_name/Web
```

where *domain\_name* is the fully-qualified name of the server hosting Power Monitoring Expert and *Web* is the default root directory, which can be changed during installation.

Alternatively, you can use the IP address of the server.

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#### Notes

Although SSL functions out-of-the-box with Power Monitoring Expert software, Web browsers on client computers may issue a message to users indicating that the SSL certificate has not been issued by a trusted certificate authority. To remove this warning and improve the security of your system, it is recommended that you purchase and install a certificate from a certificate authority.

To enforce the use of SSL with Power Monitoring Expert, a network-level HTTP filter must be applied.

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### Default passwords for SQL Server

The default user identification and password for some of the database accounts need to be preserved for the proper operation of Power Monitoring Expert. Contact Technical Support for details before you attempt to modify user IDs and passwords.

### NTFS and Share permissions on the product directory

All share permissions are automatically set to "Read" permissions for the "Everyone" group; this includes the Power Monitoring Expert share (the product's installation directory).

Change the product directory's share permission to Read/Write for users of Engineering Client computers who need to modify files, such as Vista diagrams, and for users of Reporting Client computers who need to generate reports.



## StruxureWare Power Monitoring Expert 7.2 Installation Guide

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