Using the SQL Server 2016 DVD

Use the enclosed DVD to install Microsoft SQL Server 2016 Standard Edition (English) before installing StruxureWare™ Power Monitoring Expert software. See the *StruxureWare Power Monitoring Expert 8.2 Installation Guide* for further information about SQL Server and Power Monitoring Expert installations.

Installing SQL Server 2016

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 2016 Installation DVD in your DVD drive. If the auto-run process does not start automatically, navigate to the root directory on the DVD and double-click `setup.exe` to open the **SQL Server Installation Center**.

2. Select **Installation** in the left pane and **New SQL Server stand-alone installation or add features to an existing installation** on the right. A message indicates that the process is starting.

3. The **Product Key** page: The product key is provided by default. Click **Next**.

4. The **License Terms** page: Read the license terms then select **I accept the license terms** and click **Next** to continue.

   > **NOTE**: The SQL Server edition available from Schneider Electric is a "Per Core" license. This SQL server can only be used with Power Monitoring Expert software.

5. The **Global Rules** page: This page identifies any errors that might occur when you install SQL Server Setup support files. If validation is successful, the next page opens. If validation is not successful, correct the errors before continuing.

6. The **Microsoft Update** page: Select the check box if you want to use Microsoft Update to check for updates. Click **Next**.

7. The **Product Updates** page: Keep the default selection to **Include SQL Server product updates**. The page will indicate if any updates are available. Internet access is required. The installation of the setup files occurs automatically after clicking **Next**.

8. The **Install Setup Files** page: Shows the progress of the setup files installation. If successful, the next page opens. If the update process is not successful, follow the instructions on the page then click **Re-run**. Click **Next** when the process completes successfully.

9. The **Install Rules** page: This page identifies any errors that might occur while running Setup. If successful, the next page opens. If not successful, follow the instructions on the page and click **Re-run**. Click **Next** when the installation is successful.

10. The **Feature Selection** page: Under **Instance Features**, select **Database Engine Services**. Click **Next**. The setup process validates that the installation can proceed.

11. The **Feature Rules** page: This page identifies any errors related to the feature selection validation. If successful, the next page opens. If not successful, follow the instructions on the page and click **Re-run**. Click **Next** when the process completes successfully.

12. The **Instance Configuration** page: 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.) Click in the **Instance ID** field to automatically add your **Instance name** entry. Click **Next**.

13. The **Server Configuration** page: The **Account Name** for SQL Server Agent and SQL Server Database Engine needs to be **NT AUTHORITY\SYSTEM** (your local system account). Highlight the existing entries in the **Account Name** column and enter NT AUTHORITY\SYSTEM for the two services. Click **Next**.

    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 indicates that the service account under which the SQL Server currently runs does not have the required system permissions. To resolve this situation, 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), 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. The **Database Engine Configuration** page: On the **Server Configuration** tab:

    a. Select **Mixed Mode**.

    b. 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.)

    c. Click **Add Current User** to add the SQL Server Administrator.

    d. Click the **Data Directories** tab.

15. The **Database Engine Configuration** page: On the **Data Directories** tab and **TempDB** tab, specify a different drive, if available, for the TempDB directory and Temp DB log directory. Click **Next** to proceed to the **Feature Configuration Rules** 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. See the *Design Guide* for performance and hard drive considerations.

16. The **Feature Configuration Rules** page: The rules are run automatically to validate that the installation can proceed. If validation is successful, the next page opens. If validation is not successful, follow the instructions on the page and click **Re-run**. Click **Next** when the validation is successful.

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

    The **Installation Progress** page provides a visual indication of the progress of the installation. When the installation finishes, the **Complete** page opens.

18. The **Complete** page: Contains information about the Setup operations or possible next steps, as well as supplemental information related to your installation. Click **Close** to close the setup dialog.

19. Go to the **Installation** page in the **SQL Server Installation Center** and click **Install SQL Server Management Tools** to launch the download Web page for the installation of SQL Server Management Studio. Follow the instructions to install SQL Server Management Studio. A system reboot is required after installing SQL Server Management Studio.

    NOTE: Internet access is required. If Internet access is not possible from this server, download the SQL Server Management Studio setup file on a different computer and copy it to the SQL Server computer for installation.

20. Go to the **Maintenance** page in the **SQL Server Installation Center** and click **Launch Windows Update to search for product updates** that you can install.

21. Close the **SQL Server Installation Center**.

NOTE:

- It is recommended that you assess the software security requirements of your organization. The potential risks to a SQL Server installation to your organization should be carefully evaluated. Use Microsoft's Web site to search for and consult best practices on securing a SQL Server installation.

- If you decide 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.

- For performance reasons, it is recommended that you set memory options for your SQL Server. See "Setting SQL Server memory options" in the *Installation Guide* for a description of the required steps.