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Introduction

This document describes how to install or upgrade the editions of Microsoft® SQL Server® software currently supported by Metasys® system software. Use it as a guide and reference when installing or upgrading a Metasys software product that requires SQL Server software. Also included are instructions on how to use a special tool called the SQL Installer that is provided on the Licence Portal. Lastly, this document has details about how to configure SQL Server Reporting Services (SSRS) and how to add non-English language support for the Metasys Advanced Reporting System.

Summary of Changes

The following information is new or revised:

• Added SQL Server 2017 Express and SQL Server 2017 to supported versions.

• Added SQL Server 2017 Software and SQL Server 2017 Express Software Installation and Upgrade section.

• Updated SQL Server 2016 and SQL Server 2016 Express versions to SP2 and SQL Server 2014 Express and SQL Server 2014 versions to SP3.

• Updated Verifying Your Computer Has a Supported Version of SQL Server Software Installed for the new version numbers.

• Added references to the new Open Application Server product throughout.

• Replaced references to Branch Purchase Package (BPP) with License Portal throughout this document. The services formerly provided by BPP are now available through the License Portal.

SQL Server Overview

Metasys software can use the following editions of Microsoft SQL Server software:

Express Versions

• SQL Server 2017 Express (64-bit)

• SQL Server 2016 Express with SP2 (64-bit)

• SQL Server 2014 Express with SP3 (64-bit)

• SQL Server 2012 Express with SP4 (64-bit)

Full Versions

• SQL Server 2017 Standard or Enterprise (64-bit)

• SQL Server 2016 Standard or Enterprise with SP2 (64-bit)

• SQL Server 2014 Standard or Enterprise with SP3 (64-bit)

• SQL Server 2012 Standard or Enterprise with SP4 (64-bit)

If your computer already has a version of SQL Server software installed that does not match any of these versions, use this document to help you upgrade the software to a supported version. To
verify the edition, see Verifying Your Computer Has a Supported Version of SQL Server Software Installed. To install SQL Server software through the License Portal, see SQL Installer Tool.

Make sure that you match the version of SQL Server software with the correct version of your Microsoft Windows® operating system. For example, if you are using the Windows 7 64-bit operating system, use only a 64-bit version of SQL Server Express software. Also, if you want to upgrade to a 64-bit version of SQL Server from a 32-bit version of SQL Server, you need to replace the 32-bit operating system with a 64-bit version. This is known as an out-of-place upgrade.

Before installing any edition of SQL Server software, make sure you have installed Microsoft .NET Framework version 3.5.1. This prerequisite is checked as part of the SQL Server software installation process.

If you must purchase a full edition of SQL software, you need the Microsoft SQL Server software installation media. For the Express editions of SQL Server software that are free, you can access the installation files from the Microsoft SQL Server download website. Direct links are provided in this document.

For the SQL Server Express software editions that are supported, installation also includes a background installation of SQL Server Compact 4.0 software. This software is not known to interfere with the Metasys system, so we recommend that you do not manually uninstall SQL Server Compact 4.0 software.

As part of installation, the SQL Server Setup performs a system configuration check on your computer and indicates any potential installation problems. All issues must be resolved before continuing with the SQL Server software installation.

If you upgrade to a newer edition of SQL Server Express software, the same settings from the older version of SQL Server software are used, including the reuse of the existing SA administrator and password, and the selection of Mixed Mode authentication. You cannot change these settings during the upgrade. In addition, the upgrade process prompts you to select the database instance to be upgraded. Be sure to select the instance that is currently in use by Metasys software.

If you install an edition of SQL Server Express software that does not include management tools, add the Microsoft SQL Server Management Studio after a successful installation of SQL Server software. You can obtain SQL Server Management Studio from the Microsoft SQL Server download website. For details, see Appendix: Installing SQL Server Management Studio.

Note: SQL Server 2014 Management Studio Express is not compatible with SQL Server 2016 Express.

For some SQL Server software installation settings, you may need to consult the customer’s IT department to ensure compliance with its processes. If the IT department has no recommendations, use the settings indicated in this document. However, during SQL Server installation, you must select Mixed Mode authentication and select BUILTIN\Administrators as a SQL Server administrator. When you specify SQL Server Authentication for the installation, enter a strong system administrator (SA) password for the Microsoft SQL Server software. Microsoft Corporation recommends a password that contains eight or more letters, numbers, and symbols and that cannot be guessed easily (for example, cannot be found in the dictionary, does not match the name of the user or a person, and changes often). Visit http://www.microsoft.com or consult with the IT department if you have questions about SA passwords.

SQL Installer Tool

A tool called SQL Installer is provided on the License Portal to help you install or upgrade to any supported version of SQL Server software (Figure 1). However, you cannot use the SQL Installer to apply a new Service Pack (SP) to an existing installation of SQL Server software. To apply an SP, refer to the appropriate upgrade section in this document.

To use the SQL Installer to install a full version of SQL Server software (for example, SQL Server 2014 Standard edition), you need the Microsoft SQL Server media. To use SQL Installer to install an express version of SQL Server software (for example, SQL Server 2014 Express), download the
installation file from the Microsoft SQL Server Express website. Direct links are provided in the SQL Server installation sections of this document.

The SQL Installer supports both unified ADS/ADX/ODS/OAS and split ADX installations, with or without the Metasys Advanced Reporting Services. If you have a split ADX with Metasys Advanced Reporting Services, first run the SQL Installer to put down the Database Engine Services component on the database server. Then, run the SQL Installer to put down the Reporting Services component on the web/application server. You may also use the SQL Installer to install SQL Server software on an SCT computer.

Note: The order of installation is a recommendation and is not a required order of installation. Remember to configure the SQL Server Reporting Services (SSRS) component after installing each SQL instance and component. See Configuring SQL Server Reporting Services.

The SQL Installer verifies that your computer has the prerequisites you need to install SQL Server, including Microsoft .NET Framework version 3.5 or greater and Windows Installer 5.0. An error message appears if a prerequisite is not present. Before you can continue, you need to install any missing software prerequisites.

The SQL Installer provides an advanced mode that lets you view the SQL Server command line options before you start the installation. You cannot edit this area of the screen to change the options. However, you may copy and paste them into a command window, edit the options, then run the installation at a command prompt. Use this method only if you are an advanced user who fully understands SQL Server software options.

As part of installation, the SQL Installer may require you to select an instance name. If you are installing a unified ADS/ADX/ODS/OAS, a stand-alone SCT computer, or the database server of a split ADX, we recommend that you use the default instance name. If you are installing the web/application server of a split ADX, you must use the default instance name of MSSQLSERVER. The ADX installation and rename processes require the default instance name of MSSQLSERVER on the web/application server in order to ensure that SQL Server’s Reporting Services feature runs correctly.

The SA password that you specify in the SQL Installer window must follow the rules for Microsoft complex passwords. For more information about complex passwords, refer to the Security Administrator System Technical Bulletin (LIT-1201528).

Figure 1 shows the SQL Installer tool and Table 1 describes its fields and selections. For instructions on how to use the SQL Installer to install a unified or split Metasys server, see Installing or Upgrading SQL Server Software Using the SQL Install Helper.
**Figure 1: SQL Installer Window**

![SQL Installer Window Diagram]

**Table 1: Description of SQL Installer Window**

<table>
<thead>
<tr>
<th>Callout</th>
<th>Attribute</th>
<th>Action</th>
</tr>
</thead>
</table>
| 1       | <File Name Location>      | Click **Find SQL Install Program** to enter the location of the SQL Server software installation or upgrade file.  
**Note:** If you are installing a full version of SQL Server, this file must be the `setup.exe` file located on the SQL Server media. If you are installing an Express version of SQL Server, this file must be the `.exe` file that you downloaded from the Microsoft Software Download Center website (for example, `SQLEXPR_x64_ENU.exe`). |
<p>| 2       | &lt;License Check Box&gt;       | Select the <strong>I accept the Microsoft software Terms and conditions</strong> check box. |
| 3       | Unified ADS/ADX or SCT   | Select this option if you are installing an ADS, ADS-Lite, ODS, SCT, or unified ADX. This selection appears only for a new SQL Server installation. |
| 4       | SA Password               | Specify a secure SA password for the SQL Server administrator account. This selection appears only for a new SQL Server installation. |
| 5       | Software Key              | Enter the software license key required to activate SQL Server software, usually found on the media label. This selection appears only for a new SQL Server installation. |</p>
<table>
<thead>
<tr>
<th>Callout</th>
<th>Attribute</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>Show Advanced Options</td>
<td>Select this check box to enable the advanced options editing window.</td>
</tr>
<tr>
<td>7</td>
<td>Instance Name</td>
<td>Specify a database instance name for SQL Server.</td>
</tr>
<tr>
<td>8</td>
<td>Windows Account Granted SA Access</td>
<td>Select whether the local Administrators group or the local Windows Administrator user is granted administrator rights to SQL Server databases.</td>
</tr>
<tr>
<td>9</td>
<td>Application Installation Path</td>
<td>Indicate where to install the Reporting Services component of SQL Server on the unified ADX or the web/application server of a split ADX. Enter as a full path starting with the drive letter (for example, D:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER\Reporting Services). Leave this field blank for a unified ADX, ADS-Lite, ODS, or SCT computer if all SQL Server components are installed on the C: drive.</td>
</tr>
<tr>
<td>10</td>
<td>Default Database Storage Path</td>
<td>Indicate where to install the Database Engine Services component of SQL Server on the unified ADX or the database server of a split ADX. Enter as a full path starting with the drive letter (for example, D:\Program Files\Microsoft SQL Server\MSSQL11.MSSQLSERVER). Leave this field blank for a unified ADX, ADS-Lite, ODS, or SCT computer if all SQL Server components are installed on the C: drive.</td>
</tr>
<tr>
<td>11</td>
<td>Command Line Options</td>
<td>Contains the full command-line options that reflect the dialog box selections you made. This area of the screen cannot be edited.</td>
</tr>
<tr>
<td>12</td>
<td>Find SQL Install Program</td>
<td>Click to open a browser window from which you can select the location of the SQL Server installation or upgrade file. Select the appropriate SQL Server Setup (setup.exe) or executable file.</td>
</tr>
<tr>
<td>13</td>
<td>Download Management Studio Install Program</td>
<td>Click to access the Microsoft download page to download the latest version of SQL Server Management Studio (SSMS). SSMS is backward-compatible with all earlier versions of SQL Server. SQL Server 2016 and SQL Server 2016 Express do not install SQL Server Management Studio. Other SQL Server versions may not install SQL Server Management Studio. You must manually install SQL Server Management Studio. See Installing SQL Server Management Studio (SSMS). If you are installing a SQL Server software version that includes Management Tool software, you do not need to click this button.</td>
</tr>
</tbody>
</table>
Table 1: Description of SQL Installer Window

<table>
<thead>
<tr>
<th>Callout</th>
<th>Attribute</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>14</td>
<td>Split ADX App Server</td>
<td>Choose Split ADX App Server. If installing SQL Server software on the web/application server, select Split ADX App Server. If installing SQL Server software on the database server, select Split ADX Data Server. These selections appear only for a new SQL Server installation. Do not make this selection for a unified ADX, ADS-Lite, OAS, ODS, or SCT computer.</td>
</tr>
<tr>
<td>15</td>
<td>Install New Instance or Upgrade Existing Instance</td>
<td>Click <strong>Install New Instance</strong> to start the SQL Server software installation or <strong>Upgrade Existing Instance</strong> to start the SQL Server software upgrade. Note: To switch between Upgrade and Install, you can tab out of the Instance Name field or left-click on the Command Line Options area.</td>
</tr>
</tbody>
</table>

**Detailed Procedures**

**Verifying Your Computer Has a Supported Version of SQL Server Software Installed**

1. Open the SQL Server Configuration Manager tool.  
   
   **Note:** If you do not see any version of Microsoft SQL Server on your computer, you do not have this required software. Follow the instructions in this document for installing a supported version of SQL Server software.

2. In the left pane, select **SQL Server Services**. In the right pane, double-click the **SQL Server** instance name.

3. Click the **Advanced** tab and scroll down to the Version row.

4. If the version matches any of the listed version numbers, you have a supported version of SQL Server software. Verify that the version number is any one of the following:
   
   - **14.0.3030.0** (SQL Server 2017)
   - **13.0.5026.0** (SQL Server 2016 SP2)
   - **12.0.6024.0** (SQL Server 2014 SP3)
   - **11.x.7001.x** (SQL Server 2012 SP4)

5. If the version does not match any of these version numbers, you need to either apply the required service pack or upgrade to a newer version of SQL Server software. Follow the instructions in this document for installing a supported version of SQL Server software.

**Installing or Upgrading SQL Server Software Using the SQL Install Helper**

**About this task:**
As part of the SQL Server installation and upgrade process, SQL Server Setup checks the configuration of your computer and indicates any potential installation problems. For example, if you do not have the required version of Microsoft .NET Framework installed, SQL Server Setup reports an error. Also, if you try to upgrade an old version of SQL Server software that is not at the minimum service pack level, SQL Server Setup reports an error and cannot continue until you apply the required service pack update. You must resolve all issues before you continue with SQL Server software installation.

If you are installing SQL Server software without any previous versions of SQL Server software, go straight to Step 2.

1. If you are upgrading to a newer edition of SQL Server software, uninstall all Metasys software before you perform the upgrade. Also, make sure you retain all scheduled actions and keep all Metasys databases. After all Metasys software is uninstalled, go to the next step.

2. Obtain the SQL Server Software installation file.

3. Using Windows Explorer or File Explorer, locate the SQL Server Software Installer folder.

4. Double-click the SQLInstallHelper.exe file. The SQL Installer dialog box appears.

   Note: If you are installing SQL Server 2016, SQL Management Studio is not installed with the SQL Server software. Click Download Management Studio Install Program. Your default web browser opens this Microsoft website. You must manually install SQL Server Management Studio. See Installing SQL Server Management Studio (SSMS). You can choose to install this software now or do so after installing SQL Server using the SQL Install Helper.

5. In the SQL Install Helper, click Find SQL Install Program. The Open dialog box appears.

6. Browse to the location of the installation or upgrade file for a supported version of SQL Server software.

7. Select the installation or upgrade file and click Open. The Microsoft Software License Terms window appears.

8. Click Accept. The Microsoft Software License Terms window closes and the I accept the Microsoft software Terms and conditions selection of the SQL Installer window is checked.

   If you are installing or upgrading SQL Server software for a split ADX, skip straight to Step 9.

   If you are installing or upgrading SQL Server software for a unified ADX and SCT, follow these steps:

   a. Type a complex password for the SQL Server administrator (SA) user account in the SA password field.

   b. (Optional) To specify a database default instance, click Show Advanced Options and specify an instance name in the Instance Name field. If not specified, the SQL installer uses the default instance name.

   c. Click Install New Instance (for installations) or Upgrade Existing Instance (for upgrades).

      Note: To switch between Upgrade and Install, you can tab out of the Instance Name field or left-click on the Command Line Options area.

   d. Go to Step 9.
9. To install or upgrade SQL Server software for a split ADX:
   a. Select the split computer type: **Split ADX App Server** or **Split ADX Data Server**.
   b. Type a complex SA password.
   c. If you want to change any SQL Server installation defaults, such as the location where the
      software installs or the database instance name, click **Show Advanced Options**.
   d. Specify an instance name. You must use **MSSQLSERVER** if you plan to install Reporting
      Services on the web/application server computer in a split ADX configuration.
   e. If you are installing the web/application server, optionally specify the full pathname where
      you want to install SQL Server software. Leave this field blank to accept the default location.
   f. If you are installing the database server, optionally specify the full pathname where you want
      to install SQL Server software. Leave this field blank to accept the default location.
   g. Click **Install New Instance** (for installs) or **Upgrade Existing Instance** (for upgrades).

SQL Server software installation occurs in the background. Installation can take over 15 minutes
   to complete. No SQL Server Setup screens appear. When the process is finished, the message box
   **Install Succeeded** appears.

   **Note:** You may be prompted to provide a location for temporary installation files, particularly if
   you are installing SQL Server Express.

10. Click **OK**.

11. Restart the computer only if the SQL Installer prompts you to do so.

For a split ADX only, repeat the steps in this section to install the required SQL Server software com-
   ponents on the second server of the split system. Then, go to **Configuring SQL Server Reporting
   Services for the Metasys Advanced Reporting System** to configure Reporting Services on the web/
   application server of the split ADX.

If you plan to install the **Metasys** Advanced Reporting System, go to **Installing Microsoft Report
   Viewer 2012 Redistributable Package**.

**SQL Server 2017 Software and SQL Server 2017 Express Software Installation and Upgrade**

Follow these steps to install or upgrade to SQL Server 2017 or SQL Server 2017 Express software.
For Branch employees, refer to **Installing or Upgrading SQL Server Software Using the SQL Install
   Helper**.

**Installing SQL Server 2017 Software**

1. Run the SQL Server 2017 software installation file.

   **Note:** If you do not have a required prerequisite, a box appears and indicates what is
   missing. Click **OK**, install the missing prerequisite, and then start over with this procedure.

2. The Planning menu appears. In the right pane, several options are available. To begin, select
   **Installation** in the left pane.
3. Click **New SQL Server stand-alone installation or add features to an existing installation**. The Product Key window appears.

4. If required, enter the product key.

5. Click **Next**.

6. Read the License Terms agreement and then select the **I accept the license terms** check box.

7. Click **Next**.

8. Click **Install** to install the necessary product update files and setup support files. During this step, access to the Internet is required as SQL Server Setup must be online for installation updates.

9. Click **Next** to continue. A report appears that lists the results of a final Install Rules test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. Any Warning report can be ignored at this point.

10. Click **Next**. The Feature Selection screen appears.

    **Note:** Some components may not be visible on the Feature Selection screen, depending on your configuration.

    Make the appropriate selections using the following:

    **Database Engine Services:**

    - Required for the SCT computer
    - Required for the unified ADX/ODS computer
    - Required for the database server of a split ADX

    **Reporting Services - Native:**

    - Required for the unified ADX/ODS with the *Metasys Advanced Reporting System*
    - Required for the web/application server of a split ADX with the *Metasys Advanced Reporting System*

    **Note:** If you want the *Metasys Advanced Reporting System*, you must select Reporting Services now. It is not an available choice if you later apply a service pack.

    This version of SQL Server does not install any Management Tools. You must manually install SQL Server Management Studio. After you complete this procedure, see **Installing SQL Server Management Studio (SSMS)**.

11. Click **Next**.

12. Click **Default instance** (preferred) or click **Named instance** and type the name of the instance you are using with *Metasys* software.

    **Note:** You must use MSSQLSERVER if you plan to install Reporting Services on the web/application server in a split ADX configuration.
13. Click Next.

14. Accept the default Account Name setting for all services shown on the Server Configuration screen. Verify the Collation tab lists SQL_Latin1_General_CP1_CI_AS. Metasys software requires this SQL Collation.

15. Click Next.

16. Click Mixed Mode (SQL Server authentication and Windows authentication). Specify a strong password for the SQL Server administrator (SA) user account and specify the BUILTIN\Administrators account.

   Note: This screen does not appear on the web/application server of a split ADX with the Metasys Advanced Reporting System.

   Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols that cannot be guessed easily. Visit http://www.microsoft.com or consult with the IT department if you question about SA passwords.

   Safeguard this user name and password. Without these credentials, you cannot maintain the database.

   Important: You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.

17. In the Database Engine Configuration screen, under the Specify SQL Server administrators:
   
   a. Click Add. The Select Users or Groups dialog box appears.
   
   b. Click Advanced. A second Select Users or Groups dialog box appears.
   
   c. Click Find Now. If the computer is not a member of a domain, select Administrators in the Search results and click OK. If the computer is a member of a domain, click Locations and select the location from the domain. Type Administrators in the Enter the object name to select box.
   
   d. Click Check Names. The entry <Your Computer Name>\Administrators appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).
   
   e. Click OK to close the box. The entry BUILTIN\Administrators appears in the Specify SQL Server administrators section.

   Note: If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.

   f. Click Next.

   Note: Metasys Advanced Reporting Services ONLY: If this screen does not appear (for example, on the database computer of a split ADX with Metasys Advanced Reporting System), go to the next step.
18. Click **Install and configure** if you are installing a unified ADX. Click **Install only** if you are installing Reporting Services on the web/application server of a split ADX.

19. Click **Next**.

20. An Installation Rules test runs. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing.

21. Click the **Failed cell** for more information.

22. Click **Next**. A summary screen appears with a list of your selections. Verify the list.

23. Click **Install** to begin.

24. SQL Server 2017 software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete. Wait until **Succeeded** appears in the Status column of each component.

25. When the installation is complete. Close all SQL Server installation windows.

26. Start SQL Server Configuration Manager. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

   † **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

27. In the right pane of the window, do the following:

   a. Right-click Named Pipes and select Enable.

   b. Click OK to the SQL Server software restart warning message that appears.

   c. Right-click TCP/IP and select Enable.

   d. Click OK to the warning message.

   e. Close the SQL Server Configuration Manager.

   † **Note:** If you plan to install the Metasys Advanced Reporting System, go to Installing Microsoft Report Viewer 2012 Redistributable Package.

**Installing SQL Server 2017 Express Software**

1. Click this link and download the appropriate file for your version of SQL Server 2017 Express software. Double-click the downloaded SQL Server installation file. The setup files extract to a temporary location on your hard disk, and then installation begins. If a User Account Control dialog box appears, click **Yes**.

2. If you do not have a required prerequisite, a box appears and indicates what is missing. Click **OK**, install the missing prerequisite, and then start over with this procedure.

3. The Select an installation type window appears. Select **Custom**.
4. The Specify SQL Server media download target location window appears. Select a location for the media to download or keep the default location. Click **Install**. The Downloading install package windows appears. After the download completes, the window closes and the **Please wait while Microsoft SQL Server 2017 Setup processes the current operation** appears.

5. The Planning menu is the first screen to appear. In the right pane, several options are available. To begin, select **Installation** in the left pane.

6. Click **New SQL Server stand-alone installation or add features to an existing installation**

7. Read the License Terms agreement and then select the **I accept the license terms** check box. Click **Next**.

8. A report appears that lists the results of a final Install Rules test.
   - **Note:** Your screen may look slightly different from this example. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Any Warning report can be ignored at this point.)

9. Click **Next**.

10. Select the **Database Engine Services** check box. Click **Next**.

11. Click **Named instance** and type MSSQLSERVER in the Named instance field. The Instance ID field fills in for your. MSSQLSERVER is the instance you are going to use with Metasys software. Click **Next**.

12. Accept the default Account Name setting for all services shown on the Server Configuration screen. Verify the Collation tab lists **SQL_Latin1_General_CP1_CI_AS**. Metasys software requires this SQL Collation. Click **Next**.

13. Click **Mixed Mode (SQL Server authentication and Windows authentication)**. Specify a strong password for the SQL Server administrator (SA) user account and specify the BUILTIN\Administrators account.
   - **Note:**
     - Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols that cannot be guessed easily. Visit http://www.microsoft.com or consult with the IT department if you question about SA passwords.
     - Safeguard this user name and password. Without these credentials, you cannot maintain the database.
   - **Important:** You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.

14. In the Database Engine Configuration screen, under the Specify SQL Server administrators section:
   a. Click **Add**. The Select Users or Groups dialog box appears.
   b. Click **Advanced**. A second Select Users or Groups dialog box appears.
c. Click **Find Now**. If the computer is not a member of a domain, select **Administrators** in the Search results and click **OK**. If the computer is a member of a domain, click **Locations** and select the location from the domain. Type **Administrators** in the **Enter the object name to select** box.

d. Click **Check Names**. The entry `<Your Computer Name>\Administrators` appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).

e. Click **OK** to close the box. The entry `BUILTIN\Administrators` appears in the Specify SQL Server administrators section.

**Note:** If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.

f. Click **Next**.

15. SQL Server 2017 Express software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete. Wait until **Succeeded** appears in the Status column of each component.

16. Installation is complete. Close all SQL Server installation windows. This version of SQL Server does not install any Management Tools. You must manually install SQL Server Management Studio. After you complete this procedure, see Installing SQL Server Management Studio (SSMS).

17. Start SQL Server Configuration Manager. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

**Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

18. In the right pane of the window, do the following:

   a. Right-click **Named Pipes** and select **Enable**.

   b. Click **OK** to the SQL Server software restart warning message that appears.

   c. Right-click **TCP/IP** and select **Enable**.

   d. Click **OK** to the warning message.

   e. Close the SQL Server Configuration Manager.

**Upgrading SQL Server Software to SQL Server 2017 Software or SQL Server 2017 Express Software**

The steps in this section apply to upgrading any of the following version of SQL Server software:

- SQL Server 2008
- SQL Server 2008 R2
• SQL Server 2012
• SQL Server 2014
• SQL Server 2016

For more information on upgrading to SQL Server 2017, refer to the Microsoft documentation.
The steps in this section also apply to upgrading any of the following version of SQL Server Express software
• SQL Server 2008 Express
• SQL Server 2008 R2 Express
• SQL Server 2012 Express
• SQL Server 2014 Express
• SQL Server 2016 Express

1. Run the SQL Server 2017 software installation file.

2. Click Yes if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2016 software. The message Please Wait While SQL Server 2017 Setup processes the current operation appears as the installation begins.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To continue, click Installation in the left pane. The selections in the right pane change.

4. To begin installation, click the Upgrade from [SQL versions listed] option in the right pane of the screen. The License Terms screen appears.

5. In the License Terms screen, read the License Terms agreement and then click I accept the license terms. Click Next. The Install Setup Files screen appears, showing the download and installation progress of any necessary setup files.

6. A report may appear that lists the results of a setup support files test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Warning reports can be ignored at this point.) Click Next.

7. The Select Instance screen appears, indicating the names of the SQL Server instances currently installed. Select the instance used by Metasys software, which is typically MSSQLSERVER. You cannot rename the database instance during an upgrade. Click Next. The Select Features screen is skipped because during an upgrade, you cannot select any additional features.

8. If the Feature Rules screen appears, the results of a Feature Rules test are given. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing. Click the Failed cell for more information. Click Next.

9. The Ready to Upgrade screen appears. Click Upgrade.
10. The Installation Progress screen appears as the SQL Server 2017 software installs. This part of the procedure can take over 15 minutes to complete. When Setup process complete appears above the progress bar, click Next. The Complete screen appears.

11. In the Complete screen, click Close.

12. Start SQL Server Configuration Manager.

13. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.
   
   🔄 Note: If you have a different named instance, that name appears instead of MSSQLSERVER.

14. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click Named Pipes and select Enable. Click OK to the SQL Server software restart warning message that appears.

15. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click TCP/IP and select Enable. Click OK to the warning message.

16. Close SQL Server Configuration Manager.

17. Restart the computer only if the SQL Installer prompts you to do so.

For a split ADX only, repeat the steps in this section to install the required SQL Server software components on the second server of the split system. Then, go to Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System to configure Reporting Services on the web/application server of the split ADX.

If you plan to install the Metasys Advanced Reporting System, go to Installing Microsoft Report Viewer 2012 Redistributable Package.

SQL Server 2016 Software and SQL Server 2016 Express Software Installation and Upgrade

Follow these steps to install or upgrade to SQL Server 2016 SP2 Software or SQL Server 2016 Express SP2 Software. For Branch employees, see Installing or Upgrading SQL Server Software Using the SQL Install Helper.

Installing SQL Server 2016 SP2 Software

About this task:

1. Run the SQL Server 2016 SP2 software installation file.

   🔄 Note: If you do not have a required prerequisite, a box appears and indicates what is missing. Click OK, install the missing prerequisite, and then start over with this procedure.

2. The Planning menu appears. In the right pane, several options are available. To begin, select Installation in the left pane.

3. Click New SQL Server stand-alone installation or add features to an existing installation. The Product Key window appears.

4. If required, enter the product key.

5. Click Next.
6. Read the License Terms agreement and then select the **I accept the license terms** check box.

7. Click **Next**.

8. Click **Install** to install the necessary product update files and setup support files. During this step, access to the Internet is required as SQL Server Setup must be online for installation updates.

9. Click **Next** to continue. A report appears that lists the results of a final Install Rules test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. Any Warning report can be ignored at this point.

10. Click **Next**. The Feature Selection screen appears.

   **Note:** Some components may not be visible on the Feature Selection screen, depending on your configuration.

Make the appropriate selections using the following:

**Database Engine Services:**
- Required for the SCT computer
- Required for the unified ADX/ODS computer
- Required for the database server of a split ADX

**Reporting Services - Native:**
- Required for the unified ADX/ODS with the *Metasys* Advanced Reporting System
- Required for the web/application server of a split ADX with the *Metasys* Advanced Reporting System

   **Note:** If you want the *Metasys* Advanced Reporting System, you must select **Reporting Services** now. It is not an available choice if you later apply a service pack.

This version of SQL Server does not install any Management Tools. You must manually install SQL Server Management Studio. After you complete this procedure, see [Installing SQL Server Management Studio (SSMS)](#).

11. Click **Next**.

12. Click **Default instance** (preferred) or click **Named instance** and type the name of the instance you are using with *Metasys* software.

   **Note:** You must use MSSQLSERVER if you plan to install Reporting Services on the web/application server in a split ADX configuration

13. Click **Next**.

14. Accept the default Account Name setting for all services shown on the Server Configuration screen. Verify the Collation tab lists **SQL_Latin1_General_CP1_CI_AS**. *Metasys* software requires this SQL Collation.

15. Click **Next**.
16. Click **Mixed Mode (SQL Server authentication and Windows authentication)**. Specify a strong password for the SQL Server administrator (SA) user account and specify the **BUILTIN \Administrators** account.

   ☢️ **Note:** This screen does not appear on the web/application server of a split ADX with the **Metasys** Advanced Reporting System.

Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols that cannot be guessed easily. Visit [http://www.microsoft.com](http://www.microsoft.com) or consult with the IT department if you question about SA passwords.

Safeguard this user name and password. Without these credentials, you cannot maintain the database.

   ➤ **Important:** You must specify the **BUILTIN\Administrators** account as a SQL Server administrator to permit the **Metasys** software to create SQL Server users through Windows authentication. You add this account in the next step.

17. In the Database Engine Configuration screen, under the Specify SQL Server administrators section:

   a. Click **Add**. The Select Users or Groups dialog box appears.

   b. Click **Advanced**. A second Select Users or Groups dialog box appears.

   c. Click **Find Now**. If the computer is not a member of a domain, select **Administrators** in the Search results and click **OK**. If the computer is a member of a domain, click **Locations** and select the location from the domain. Type **Administrators** in the **Enter the object name to select** box.

   d. Click **Check Names**. The entry `<Your Computer Name>\Administrators` appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).

   e. Click **OK** to close the box. The entry **BUILTIN\Administrators** appears in the Specify SQL Server administrators section.

   ☢️ **Note:** If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the **BUILTIN\Administrators** user, request that the IT department select a different SQL Server administrator user.

   f. Click **Next**.

   ☢️ **Note:** **Metasys Advanced Reporting Services ONLY:** If this screen does not appear (for example, on the database computer of a split ADX with **Metasys** Advanced Reporting System), go to the next step.

18. Click **Install and configure** if you are installing a unified ADX. Click **Install only** if you are installing Reporting Services on the web/application server of a split ADX.

19. Click **Next**.

20. An Installation Rules test runs. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing.

21. Click the **Failed cell** for more information.

22. Click **Next**. A summary screen appears with a list of your selections. Verify the list.
23. Click **Install** to begin.

24. SQL Server 2016 software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete. Wait until **Succeeded** appears in the Status column of each component.

25. When the installation is complete. Close all SQL Server installation windows.

26. Start SQL Server Configuration Manager. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

   ① **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

27. In the right pane of the window, do the following:
   a. Right-click **Named Pipes** and select **Enable**.
   b. Click **OK** to the SQL Server software restart warning message that appears.
   c. Right-click **TCP/IP** and select **Enable**.
   d. Click **OK** to the warning message.
   e. Close the SQL Server Configuration Manager.

   ① **Note:** If you plan to install the **Metasys** Advanced Reporting System, go to **Installing Microsoft Report Viewer 2012 Redistributable Package**.

Installing SQL Server 2016 Express SP2 Software

**About this task:**

1. Click this link and download the appropriate file for your version of SQL Server 2016 Express SP2 software. Double-click the downloaded SQL Server installation file. The setup files extract to a temporary location on your hard disk, and then installation begins. If a User Account Control dialog box appears, click **Yes**.

2. If you do not have a required prerequisite, a box appears and indicates what is missing. Click **OK**, install the missing prerequisite, and then start over with this procedure.

3. The Select an installation type window appears. Select **Custom**.

4. The Specify SQL Server media download target location window appears. Select a location for the media to download or keep the default location. Click **Install**. The Downloading install package windows appears. After the download completes, the window closes and the Please wait while Microsoft SQL Server 2016 Setup processes the current operation appears.

5. The Planning menu is the first screen to appear. In the right pane, several options are available. To begin, select **Installation** in the left pane.

6. Click **New SQL Server stand-alone installation or add features to an existing installation**.

7. Read the License Terms agreement and then select the I accept the license terms check box. Click **Next**.
8. A report appears that lists the results of a final Install Rules test.

   Note: Your screen may look slightly different from this example. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Any Warning report can be ignored at this point.)

9. Click Next.

10. Select the Database Engine Services check box. Click Next.

11. Click Named instance and type MSSQLSERVER in the Named instance field. The Instance ID field fills in for your. MSSQLSERVER is the instance you are going to use with Metasys software. Click Next.

12. Accept the default Account Name setting for all services shown on the Server Configuration screen. Verify the Collation tab lists SQL_Latin1_General_CP1_CI_AS. Metasys software requires this SQL Collation. Click Next.

13. Click Mixed Mode (SQL Server authentication and Windows authentication). Specify a strong password for the SQL Server administrator (SA) user account and specify the BUILTIN \Administrators account.

   Notes:
   - Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols that cannot be guessed easily. Visit http://www.microsoft.com or consult with the IT department if you question about SA passwords.
   - Safeguard this user name and password. Without these credentials, you cannot maintain the database.

   Important: You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.

14. In the Database Engine Configuration screen, under the Specify SQL Server administrators section:
   a. Click Add. The Select Users or Groups dialog box appears.
   b. Click Advanced. A second Select Users or Groups dialog box appears.
   c. Click Find Now. If the computer is not a member of a domain, select Administrators in the Search results and click OK. If the computer is a member of a domain, click Locations and select the location from the domain. Type Administrators in the Enter the object name to select box.
   d. Click Check Names. The entry <Your Computer Name>\Administrators appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).
   e. Click OK to close the box. The entry BUILTIN\Administrators appears in the Specify SQL Server administrators section.
Note: If the customer's IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.

f. Click Next.

15. SQL Server 2016 Express software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete. Wait until Succeeded appears in the Status column of each component.

16. Installation is complete. Close all SQL Server installation windows. This version of SQL Server does not install any Management Tools. You must manually install SQL Server Management Studio. After you complete this procedure, see Installing SQL Server Management Studio (SSMS).

17. Start SQL Server Configuration Manager. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

Note: If you have a different named instance, that name appears instead of MSSQLSERVER.

18. In the right pane of the window, do the following:
   a. Right-click Named Pipes and select Enable.
   b. Click OK to the SQL Server software restart warning message that appears.
   c. Right-click TCP/IP and select Enable.
   d. Click OK to the warning message.
   e. Close the SQL Server Configuration Manager.

Applying Service Packs to SQL Server 2016 Software or SQL Server 2016 Express Software

About this task:
We support SQL Server 2016 software with SP2 or SQL Server 2016 Express software with SP2. Use these steps to apply the service pack update to an older version of SQL Server 2016 or SQL Server 2016 Express software that is currently installed. If you do not have SQL Server 2016 software installed, go to Installing SQL Server 2016 SP2 Software. If you do not have SQL Server 2016 Express software installed, go to Installing SQL Server 2016 Express SP2 Software. Verify your version of SQL Server 2016 before running through this update.


1. Double-click the downloaded file to extract the contents and begin the update.
2. Click Yes if a User Account Control dialog box appears.
3. The SQL Server 2016 Update screen appears. Verify that all update rules pass before continuing. Click Next.
4. Read the end user license agreement and then select the **I accept the license terms** check box. Click **Next**.

5. The Select Features screen indicates the Instance ID that is ready to be updated. Click the **instance name** to refresh the Description fields. For an update, you cannot select any additional features. Click **Next**.

6. The SQL Server 2016 SP2 update checks to see if any required SQL Server files are in use. If you have SQL Server files in use when you install SP2, restart your computer after the installation is complete. Click **Next**.

7. SQL Server 2016 SP2 software is ready to update. Click **Update**. During the update, a progress screen indicates the status of the update. This part of the procedure can take up to 15 minutes to complete.

8. The update operation is complete. Click **Close**.

9. Start SQL Server Configuration Manager.

10. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

    **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

11. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click **Named Pipes** and select **Enable**. Click **OK** to the SQL Server software restart warning message that appears.

12. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click **TCP/IP** and select **Enable**. Click **OK** to the warning message.

13. Close SQL Server Configuration Manager.

14. Restart the computer only if the SQL Installer prompts you to do so.

For a split ADX only, repeat the steps in this section to install the required SQL Server software components on the second server of the split system. Then, go to **Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System** to configure Reporting Services on the web/application server of the split ADX.

If you plan to install the Metasys Advanced Reporting System, go to **Installing Microsoft Report Viewer 2012 Redistributable Package**.

Upgrading SQL Server Software to SQL Server 2016 SP2 Software or SQL Server 2016 SP2 Express Software

**About this task:**
The steps in this section apply to upgrading any of the following versions of SQL Server software:

- SQL Server 2008
- SQL Server 2008 R2
- SQL Server 2012
- SQL Server 2014
For more information on upgrading to SQL Server 2016 SP2, refer to the Microsoft documentation. The steps in this section also apply to upgrading any of the following versions of SQL Server Express software:

- SQL Server 2008 Express
- SQL Server 2008 R2 Express
- SQL Server 2012 SP2 Express
- SQL Server 2014 Express

1. Run the SQL Server 2016 SP2 software installation file.

   **Note:** For upgrading a SQL Server Express software product to SQL Server 2016 Express SP2, click this link and download the appropriate file. Double-click the downloaded SQL Server installation file. The setup extracts to a temporary location on your hard disk, and then installation begins.

2. Click Yes if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2016 software. The message Please Wait While SQL Server 2016 Setup processes the current operation appears as the installation begins.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To continue, click Installation in the left pane. The selections in the right pane change.

4. To begin installation, click the Upgrade from [SQL versions listed] option in the right pane of the screen. The License Terms screen appears.

5. In the License Terms screen, read the License Terms agreement and then click I accept the license terms Click Next. The Install Setup Files screen appears, showing the download and installation progress of any necessary setup files.

6. A report may appear that lists the results of a setup support files test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Warning reports can be ignored at this point.) Click Next.

7. The Select Instance screen appears, indicating the names of the SQL Server instances currently installed. Select the instance used by Metasys software, which is typically MSSQLSERVER. You cannot rename the database instance during an upgrade. Click Next. The Select Features screen is skipped because during an upgrade, you cannot select any additional features.

8. If the Feature Rules screen appears, the results of a Feature Rules test are given. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing. Click the Failed cell for more information. Click Next.

9. The Ready to Upgrade screen appears. Click Upgrade.

10. The Installation Progress screen appears as the SQL Server 2016 software installs. This part of the procedure can take over 15 minutes to complete. When Setup process complete appears above the progress bar, click Next. The Complete screen appears.
11. In the Complete screen, click Close.

12. Start SQL Server Configuration Manager.

13. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

   Note: If you have a different named instance, that name appears instead of MSSQLSERVER.

14. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click Named Pipes and select Enable. Click OK to the SQL Server software restart warning message that appears.

15. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click TCP/IP and select Enable. Click OK to the warning message.

16. Close SQL Server Configuration Manager.

17. Restart the computer only if the SQL Installer prompts you to do so.

For a split ADX only, repeat the steps in this section to install the required SQL Server software components on the second server of the split system. Then, go to Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System to configure Reporting Services on the web/application server of the split ADX.

If you plan to install the Metasys Advanced Reporting System, go to Installing Microsoft Report Viewer 2012 Redistributable Package.

SQL Server 2014 Software Installation and Upgrade

Follow these steps to install or upgrade to SQL Server 2014 software. For Branch employees, refer to Installing or Upgrading SQL Server Software Using the SQL Install Helper.

Installing SQL Server 2014 SP3 Software

About this task:

1. Run the SQL Server 2014 SP3 software installation file.

   Note: If you do not have a required prerequisite, a box appears and indicates what is missing. Click OK, install the missing prerequisite, and then start over with this procedure.

2. The Planning menu is the first screen to appear. In the right pane, several options are available. To begin, select Installation in the left pane.

3. Click New SQL Server stand-alone installation or add features to an existing installation.

4. The Product Key window appears. If required, enter the product key. Click Next.

5. Read the License Terms agreement and then select the I accept the license terms check box. Click Next.

6. Click Install to install the necessary product update files and setup support files. During this step, access to the Internet is required as SQL Server Setup looks online for installation updates. If the computer does not have access to the Internet and Windows Update service, then you may get an error message. Click Next to continue.
7. A report appears that lists the results of a final Install Rules test. Your screen may look slightly different from this example. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Any Warning report can be ignored at this point.) Click Next.

8. A Setup Role selection screen appears that enables you to select a default installation of SQL Server Feature components. Click SQL Server Feature Installation. Click Next. The Feature Selection screen appears.

Note: Some components may not be visible on the Feature Selection screen, depending on your configuration. Make the appropriate selections using the following:

Database Engine Services:
- Required for the SCT computer
- Required for the unified ADX/ODS computer
- Required for the database server of a split ADX

Reporting Services - Native:
- Required for the unified ADX/ODS with the Metasys Advanced Reporting System
- Required for the web/application server of a split ADX with the Metasys Advanced Reporting System

Note: If you want the Metasys Advanced Reporting System, you must select Reporting Services now. It is not an available choice if you later apply a service pack.

Management Tools - Basic: Required
Management Tools - Complete: Required
Click Next.

9. Click Default instance (preferred) or click Named instance and type the name of the instance you are using with Metasys software. You must use MSSQLSERVER if you plan to install Reporting Services on the web/application server in a split ADX configuration. Click Next.

10. Accept the default Account Name settings for all services shown on the Server Configuration screen. Verify the Collation tab lists SQL_Latin1_General_CP1_CI_AS. Metasys software requires this SQL Collation. Click Next.

Note: This screen does not appear on the web/application server of a split ADX with the Metasys Advanced Reporting System.

11. Click Mixed Mode (SQL Server authentication and Windows authentication). Specify a strong password for the SQL Server administrator (SA) user account and specify the BUILTIN \Administrators account.

Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols that cannot be guessed easily. Visit http://www.microsoft.com or consult with the IT department if you have questions about SA passwords. Safeguard this user name and password. Without these credentials, you cannot maintain the database.

Important: You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.
12. In the Database Engine Configuration screen, under the Specify SQL Server administrators section:

a. Click Add. The Select Users or Groups dialog box appears.

b. Click Advanced. A second Select Users or Groups dialog box appears.

c. Click Find Now. If the computer is not a member of a domain, select Administrators in the Search results and click OK. If the computer is a member of a domain, click Locations and select the location from the domain. Type Administrators in the Enter the object name to select box.

d. Click Check Names. The entry <Your Computer Name>\Administrators appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).

e. Click OK to close the box. The entry BUILTIN\Administrators appears in the Specify SQL Server administrators section.

Note: If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.

f. Click Next.

Metasys Advanced Reporting Services Only:

Note: If this screen does not appear (for example, on the database server of a split ADX with the Metasys Advanced Reporting System), go to the next step.

13. Click Install and configure if you are installing a unified ADX. Click Install only if you are installing Reporting Services on the web/application server of a split ADX. Click Next.

14. SQL Server Setup runs an Installation Rules test. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing. Click the Failed cell for more information. Click Next.

15. A summary screen appears with a list of your selections. Verify the list. Click Install to begin.

16. SQL Server 2014 software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete. Wait until Succeeded appears in the Status column of each component.

17. Installation is complete. Close all SQL Server installation windows.

18. Start SQL Server Configuration Manager. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

Note: If you have a different named instance, that name appears instead of MSSQLSERVER.
19. In the right pane of the window, do the following:

   a. Right-click **Named Pipes** and select **Enable**.

   b. Click **OK** to the SQL Server software restart warning message that appears.

   c. Right-click **TCP/IP** and select **Enable**.

   d. Click **OK** to the warning message.

   e. Close the SQL Server Configuration Manager.

If you plan to install the *Metasys* Advanced Reporting System, go to **Installing Microsoft Report Viewer 2012 Redistributable Package**.

**Applying SP3 to SQL Server 2014 Software**

**About this task:**

Note: We support SQL Server 2014 software with SP3. Use these steps to apply the SP3 update to an older version of SQL Server 2014 software that is currently installed. If you do not have SQL Server 2014 software installed, go to **Installing or Upgrading SQL Server Software Using the SQL Install Helper**.

1. Click this link and download the appropriate file for your version of SQL Server 2014 SP3 software. Double-click the downloaded file to extract the contents and begin the update.

2. Click **Yes** if a User Account Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2014 SP3 software. The message **Please Wait While SQL Server 2014 Setup processes the current operation** may appear as the installation begins.

3. The SQL Server 2014 Update screen may appear. Verify that all update rules passed before continuing. Click **Next**.

   Note: If any rule fails, click the **Failed** cell for more information. Exit the update and fix the issue before continuing.
4. Read the end user license agreement and then select the **I accept the license terms** check box. Click **Next**.

5. The Select Features screen indicates the Instance ID that is ready to be updated. Click the **instance name** to refresh the Description fields. For an update, you cannot select any additional features. Click **Next**.

6. The SQL Server 2014 SP3 update checks to see if any required SQL Server files are in use. If you have SQL Server files in use when you install SP3, restart your computer after the installation is complete. Click **Next**.

7. SQL Server 2014 SP3 software is ready to update. Click **Update**. During the update, a progress screen indicates the status of the update. This part of the procedure can take up to 15 minutes to complete.

8. The update operation is complete. Click **Close**.

9. Start the SQL Server Configuration Manager.

**Figure 3: Starting SQL Server Configuration Manager**

10. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

    ☛ **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

11. In the right pane of the window, do the following:

    a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click **Named Pipes** and select **Enable**.

    b. Click **OK** to the SQL Server software restart warning message that appears.

    c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click **TCP/IP** and select **Enable**.

    d. Click **OK** to the warning message.

    e. Close the SQL Server Configuration Manager.

12. Restart the computer only if the SQL Installer prompts you to do so.
For a split ADX only, repeat the steps in this section to install the required SQL Server software components on the second server of the split system. Then, go to Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System to configure Reporting Services on the web/application server of the split ADX.

If you plan to install the Metasys Advanced Reporting System, go to Installing Microsoft Report Viewer 2012 Redistributable Package.

13. Close this window and return to the wizard overview steps.

Upgrading SQL Server Software to SQL Server 2014 SP3 Software

About this task:
The steps in this section apply to upgrading any of the following versions of SQL Server software:

- SQL Server 2005
- SQL Server 2008
- SQL Server 2008 R2
- SQL Server 2012

1. Run the SQL Server 2014 SP3 software installation file.

2. Click Yes if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2014 software. The message Please Wait While SQL Server 2014 Setup processes the current operation appears as the installation begins.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To continue, click Installation in the left pane. The selections in the right pane change.


5. In the License Terms screen, read the License Terms agreement and then click I accept the license terms. Click Next. The Install Setup Files screen appears, showing the download and installation progress of any necessary setup files.

6. A report may appear that lists the results of a setup support files test. If any prerequisite fails, you need to exit the installation, and fix that issue. For more information, click the Failed cell. (Warning reports can be ignored at this point.) Click Next.

7. The Select Instance screen appears, indicating the names of the SQL Server instances currently installed. This figure below is an example.

8. Select the instance used by Metasys software, which is most likely MSSQLSERVER. You cannot rename the database instance during an upgrade. Click Next. The Select Features screen is skipped because during an upgrade, you cannot select any additional features.

9. If the Feature Rules screen appears, the results of a Feature Rules test are given. Verify that no tests fail. If a test failed, you need to exit the install and correct the issue before continuing. Click the Failed cell for more information. Click Next.
10. The Ready to Upgrade screen appears. Click **Upgrade**.

11. The Installation Progress screen appears as the SQL Server 2014 software installs. This part of the procedure can take over 15 minutes to complete. When **Setup process complete** appears above the progress bar, click **Next**. The Complete screen appears.

12. In the Complete screen, click **Close**.

13. Open the SQL Server Configuration Manager.

**Figure 4: SQL Server Configuration Manager**

![Sql Server Configuration Manager](image)

14. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

   - **Note**: If you have a different named instance, that name appears instead of MSSQLSERVER.

15. In the right pane of the window, do the following:
   
   a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click **Named Pipes** and select **Enable**.
   
   b. Click **OK** to the SQL Server software restart warning message that appears.
   
   c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click **TCP/IP** and select **Enable**.
   
   d. Click **OK** to the warning message.
   
   e. Close the SQL Server Configuration Manager.

   - **Note**: If you need to upgrade another SQL Server instance, go to Step 4 and rerun the upgrade process. If you do not need to upgrade another instance, installation is complete.

**SQL Server 2014 Express SP3 Software Installation and Upgrade**

Follow these steps to install or upgrade to SQL Server 2014 Express SP3 software. For Branch employees, refer to **Installing or Upgrading SQL Server Software Using the SQL Install Helper**.
Installing SQL Server 2014 SP3 Express Software

About this task:

1. Click this link and download the appropriate file for your version of SQL Server 2014 Express SP3 software. Double-click the downloaded SQL Server installation file. The setup files extract to a temporary location on your hard disk, and then installation begins.

2. If you do not have a required prerequisite, a box appears and indicates what is missing. Click OK, install the missing prerequisite, and then start over with this procedure.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To begin, click Installation in the left pane.

4. Click New SQL Server stand-alone installation or add features to an existing installation.

5. Read the License Terms agreement and then select the I accept the license terms check box. Click Next.

6. Click Install to install the necessary product update files and setup support files. During this step, access to the Internet is required as SQL Server setup looks online for installation updates. If the computer does not have access to the Internet and Windows Update service, then you may get an error message. You can ignore the error message and skip the step of obtaining SQL Server updates. Click Next to continue.

7. A report appears that lists the results of a final Setup Support Rules test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Any Warning report can be ignored at this point.) Click Next to continue.

8. Select the Database Engine Services and Management Tools - Basic check boxes. Click Next.

9. Click Named instance and type MSSQLSERVER in the Named Instance field. The Instance ID field fills in for you. MSSQLSERVER is the instance you are going to use with Metasys software. Click Next.

10. Accept the default Account Name settings for all services shown on the Server Configuration screen. Verify the Collation tab lists SQL_Latin1_General_CP1_CI_AS. Metasys software requires this SQL Collation. Click Next.

11. Click Mixed Mode and define a strong password for the SQL Server administrator (SA) user account. Specify the BUILTIN\Administrators account.

Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols and that cannot be guessed easily. Visit www.microsoft.com or consult with the IT department if you have questions about SA passwords. Safeguard this user name and password pair. You cannot maintain the database without it.

Important: You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.
12. On the Database Engine Configuration window, under the Specify SQL Server administrators section:
   a. Click Add. The Select Users or Groups dialog box appears.
   
   b. Click Advanced. A second Select Users or Groups dialog box appears.
   
   c. Click Find Now. If the computer is not a member of a domain, select Administrators in the Search results and click OK.
      
      If the computer is a member of a domain, click Locations and select the location from the domain. Type Administrators in the Enter the object names to select box.
   
   d. Click Check Names. The entry <Your Computer Name>\Administrators appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).
   
   e. Click OK to close the box. The entry BUILTIN\Administrators appears in the Specify SQL Server administrators section.
      
      Note: If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.
   
   f. Click Next.

13. SQL Server 2014 SP3 Express software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete.

14. The Complete screen appears. Verify that each component reports a successful installation. Click Close.

15. Start SQL Server Configuration Manager.

16. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

   Note: If you have a different named instance, that name appears instead of MSSQLSERVER. In the right pane of the window, do the following:
   
   a. Right-click Named Pipes and select Enable.
   
   b. Click OK to the SQL Server software restart warning message that appears.
   
   c. Right-click TCP/IP and select Enable.
   
   d. Click OK to the warning message.
   
   e. Close the SQL Server Configuration Manager.

Applying SP3 to SQL Server 2014 Express Software

About this task:

   Note: We support SQL Server 2014 Express software with SP3. You must apply SP3 if you installed the initial release of SQL Server 2014 Express software.

1. Click this link and download the appropriate file for your version of SQL Server 2014 Express SP3 software. Double-click the downloaded file to extract the contents and begin the update.
2. Click **Yes** if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2014 software. The message **Please Wait While SQL Server 2014 Setup processes the current operation** appears as the installation begins.

3. The SQL Server 2014 Update screen appears. Verify that all update rules passed before continuing. If any rule fails, click the **Failed** cell for more information. Exit the update and fix the issue before continuing. Click **Next**.

4. Read the End User License agreement and then select the **I accept the license terms** check box. Click **Next**.

5. The Select Features screen indicates the Instance ID that is ready to be updated. Click the **instance name** to refresh the Description fields. During an upgrade, you cannot select any additional features. Click **Next**.

6. The SQL Server 2014 SP3 update checks to see if any required SQL Server files are in use. If you have SQL Server files in use when you install SP3, you must restart your computer after the installation is complete. Click **Next**.

7. SQL Server 2014 SP3 software is ready to update. Click **Update**. During the update, a progress screen indicates the status of the update. This part of the procedure can take up to 15 minutes to complete.

8. The update operation is complete. Click **Close**.

9. Start the SQL Server Configuration Manager.

10. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

    **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

11. In the right pane of the window, do the following:
    
    a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click **Named Pipes** and select **Enable**.
    
    b. Click **OK** to the SQL Server software restart warning message that appears.
    
    c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click **TCP/IP** and select **Enable**.
    
    d. Click **OK** to the warning message.
    
    e. Close the SQL Server Configuration Manager.

12. Delete the service pack file you saved to your computer.

Upgrading SQL Server Software to SQL Server 2014 Express SP3 Software

**About this task:**
The steps in this section apply to upgrading any of the following versions of SQL Server software:

- SQL Server 2005 Express
- SQL Server 2008 Express
• SQL Server 2008 R2 Express
• SQL Server 2012 Express

Note: If SQL Server Management Studio is installed on your computer, uninstall it before you upgrade, then install an updated version of the tool after you install SQL Server 2014 Express software.

1. Click this link and download the appropriate file for your version of SQL Server 2014 Express SP3 software. Double-click the downloaded SQL Server installation file. The setup files extract to a temporary location on your hard disk, and then installation begins.

2. Click Yes if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2014 software. The message Please Wait While SQL Server 2014 Setup processes the current operation appears as the installation begins.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To continue, click Installation in the left pane. The selections in the right pane change.


5. In the License Terms screen, read the License Terms agreement and then click I accept the license terms. Click Next. The Setup Support Files screen appears.

6. In the Setup Support Files screen, click Install to install the necessary support files.

7. A report appears that lists the results of this setup support files test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Warning reports can be ignored at this point.) Click Next.

8. The Select Instance screen appears, indicating the names of the SQL Server instances currently installed. The example is of a SQL Server 2012 Express SP2 software instance. Select the instance used by Metasys software, which is most likely MSSQLSERVER. You cannot rename the database instance during an upgrade. Click Next. The Select Features screen appears.

9. The Select Features screen may appear to indicate the Instance ID that is ready to be upgraded. During an upgrade, you cannot select any additional features. Click Next. The Feature Rules screen appears.

10. A Feature Rules test is run. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing. Click the Failed cell for more information. Click Next. The Installation Progress screen appears.

11. The Installation Progress screen appears as the SQL Server 2014 Express software installs. This part of the procedure can take over 15 minutes to complete. When Setup process complete appears above the progress bar, click Next. The Complete screen appears.

12. From the Start menu, select Programs or All Programs > Microsoft SQL Server 2014 > Configuration Tools > SQL Server Configuration Manager.

13. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.
Note: If you have a different named instance, that name appears instead of MSSQLSERVER.

14. In the right pane of the window, do the following:
   a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click Named Pipes and select Enable.
   b. Click OK to the SQL Server software restart warning message that appears.
   c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click TCP/IP and select Enable.
   d. Click OK to the warning message.
   e. Close the SQL Server Configuration Manager.

SQL Server 2012 SP4 Software Installation and Upgrade

Follow these steps to install SQL Server 2012 SP4 software. If you have SQL Server 2012 already installed, follow the steps for applying SP4 to your SQL Server 2012 installation. For Branch employees, refer to Installing or Upgrading SQL Server Software Using the SQL Install Helper.

Installing SQL Server 2012 SP4 Software

About this task:
1. Insert the SQL Server 2012 SP4 software product disc. If the installation program does not run automatically, use Windows File Explorer and double-click setup.exe to start the installation.
2. If you do not have a required prerequisite, a box appears and indicates what is missing. Click OK, install the missing prerequisite, and then start over with this procedure.
3. The Planning menu is the first screen to appear. In the right pane, several options are available. To begin, select Installation in the left pane.
4. Click New SQL Server stand-alone installation or add features to an existing installation.
5. A report appears that lists the results of the Setup Support Rules test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. Click Next.
6. The Product Key window appears. If required, enter the product key. Click Next.
7. Read the License Terms agreement and then select the I accept the license terms check box. Click Next.
8. If your computer is connected to the Internet, click Next to download the SQL Server product updates listed. If your computer is not connected to the Internet, clear the Include SQL Server product updates option. Click Next.
9. Click Install to install the necessary product update files and setup support files. During this step, access to the Internet is required as SQL Server setup looks online for installation updates. If the computer does not have access to the Internet and Windows Update service, you may receive an error message. Click Next to continue.
10. A report appears that lists the results of a final Setup Support Rules test. Your screen may look slightly different from this example. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Any Warning report can be ignored at this point.) Click Next.

11. A Setup Role selection screen appears that enables you to select a default installation of SQL Server Feature components. Click SQL Server Feature Installation. Click Next.

The Feature Selection screen appears.

Note: Some components may not be visible on the Feature Selection screen, depending on your configuration. Make the appropriate selections using the following:

**Database Engine Services:**
- Required for the SCT computer
- Required for the unified ADX/ODS computer
- Required for the database server of a split ADX

**Reporting Services - Native:**
- Required for the unified ADX/ODS with the Metasys Advanced Reporting System
- Required for the web/application server of a split ADX with the Metasys Advanced Reporting System

Note: If you want the Metasys Advanced Reporting System, you must select Reporting Services now. It is not an available choice if you later apply a service pack.

**Management Tools - Basic:** Required
**Management Tools - Complete:** Required

Click Next.

12. An Installation Rules test is run. Your screen may look slightly different from this example. Verify that no tests fail. If a test failed, you need to exit the installation and correct the issue before continuing. Click the Failed cell for more information. Click Next.

13. Click Default instance (preferred) or click Named instance and type the name of the instance you are using with Metasys software. You must use MSSQLSERVER if you plan to install Reporting Services on the web/application server in a split ADX configuration. Click Next.

14. A Disk Space Requirements summary appears. Verify that your hard disk has the capacity to store SQL Server 2012 Server software. A message appears if the computer does not have the required capacity. Click Next.

15. Accept the default Account Name settings for all services shown on the Server Configuration screen. Verify that the Collation tab lists SQL_Latin1_General_CP1_CI_AS. Metasys software requires this SQL Collation. Click Next.

Note: This screen does not appear on the web/application server of a split ADX with the Metasys Advanced Reporting System.
16. Click **Mixed Mode (SQL Server authentication and Windows authentication)**. Specify a strong password for the SQL Server administrator (SA) user account and specify the BUILTIN \ Administrators account.

**Note:**
- Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, symbols, and that cannot be guessed easily. Visit [http://www.microsoft.com](http://www.microsoft.com) or consult with your IT department if you have questions about SA passwords.
- Safeguard this user name and password. Without these credentials you cannot maintain the database.

**Important:** You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.

17. In the Database Engine Configuration screen, under the Specify SQL Server administrators section:

   a. Click **Add**. The Select Users or Groups dialog box appears.

   b. Click **Advanced**. A second Select Users or Groups dialog box appears.
c. Click **Find Now**. If the computer is not a member of a domain, select **Administrators** in the Search results and click **OK**. If the computer is a member of a domain, click **Locations** and select the location from the domain. Type **Administrators** in the **Enter the object name to select** box.

d. Click **Check Names**. The entry <Your Computer Name>\Administrators appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).

e. Click **OK** to close the box. The entry BUILTIN\Administrators appears in the Specify SQL Server administrators section.

   ✋ **Note:** If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.

f. Click **Next**.

**Metasys Advanced Reporting Services Only:**

   ✋ **Note:** If this screen does not appear (for example, on the database server of a split ADX with the Metasys Advanced Reporting System), go to the next step.

18. Click **Install and configure** if this option is available (not dimmed). Click **Install only** if you are installing Reporting Services on the web/application server of a split ADX. Click **Next**.

19. The Error Reporting screen appears. You can skip the option for sending error reports. Click **Next**.

20. An Installation Rules test is run. Verify that no tests fail. If a test failed, exit the install and correct the issue before continuing. Click the **Failed** cell for more information. Click **Next**.

21. A summary screen appears with a list of your selections. Verify the list. Click **Install** to begin.

22. SQL Server 2012 software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete. Wait until **Succeeded** appears in the Status column of each component.

23. Installation is complete. Close all SQL Server installation windows.

24. Start SQL Server Configuration Manager. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

   ✋ **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

25. In the right pane of the window, do the following:

   a. Right-click **Named Pipes** and select **Enable**.

   b. Click **OK** to the SQL Server software restart warning message that appears.

   c. Right-click **TCP/IP** and select **Enable**.

   d. Click **OK** to the warning message.

   e. Close the SQL Server Configuration Manager.

26. The installation is complete.
If you plan to install the *Metasys* Advanced Reporting System, go to Installing Microsoft Report Viewer 2012 Redistributable Package.

**Applying SP4 to SQL Server 2012 Software**

**About this task:**

1. **Note:** We support SQL Server 2012 SP4 software. Use these steps to apply the SP4 update to an older release of SQL Server 2012 software that is currently installed. If you do not have SQL Server software installed, go to Installing or Upgrading SQL Server Software Using the SQL Install Helper.

2. Click this link and download the appropriate file for your version of SQL Server 2012 SP4 software. Double-click the downloaded file to extract the contents and begin the update.

3. Click **Yes** if a User Account Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2012 SP4 software. The message **Please Wait While SQL Server 2012 Setup processes the current operation** may appear as the installation begins.

4. The SQL Server 2012 Update screen appears. Verify that all update rules passed before continuing. If any rule fails, click the **Failed** cell for more information. Exit the update and fix the issue before continuing. Click **Next**.

5. Read the end user license agreement and then select the **I accept the license terms** check box. Click **Next**.

6. The Select Features screen indicates the Instance ID that is ready to be updated. Click the **instance name** to refresh the Description fields. For an update, you cannot select any additional features. Click **Next**.

7. The SQL Server 2012 SP4 update checks to see if any required SQL Server files are in use. If you have SQL Server files in use when you install SP4, you must restart your computer after the installation is complete. Click **Next**.

8. SQL Server 2012 SP4 software is ready to update. Click **Update**. During the update, a progress screen indicates the status of the update. This part of the procedure can take up to 15 minutes to complete.

9. The update operation is complete. Click **Close**.

10. Start the SQL Server Configuration Manager:

11. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

   **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER.

   In the right pane of the window, do the following:

   a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click **Named Pipes** and select **Enable**.

   b. Click **OK** to the SQL Server software restart warning message that appears.

   c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click **TCP/IP** and select **Enable**.
d. Click **OK** to the warning message.

e. Close the SQL Server Configuration Manager.

11. Restart the computer only if the SQL Installer prompts you to do so.

For a split ADX only, repeat the steps in this section to install the required SQL Server software components on the second server of the split system. **Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System**

If you plan to install the Metasys Advanced Reporting System, go to Installing Microsoft Report Viewer 2012 Redistributable Package.

**Upgrading SQL Server Software to SQL Server 2012 SP4 Software**

**About this task:**
The steps in this section apply to upgrading any of the following versions of SQL Server software:

- SQL Server 2005 SP3 or later
- SQL Server 2008 SP2 or later
- SQL Server 2008 R2 SP2 or later

1. Insert the SQL Server 2012 SP4 software product disc. If the installation program does not run automatically, use Windows File Explorer and double-click `setup.exe` to start the installation.

2. Click **Yes** if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2012 software. The message **Please Wait While SQL Server 2012 Setup processes the current operation** appears as the installation begins.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To continue, click **Installation** in the left pane. The selections in the right pane change.

4. To begin installation, click **Upgrade from SQL Server 2005, SQL Server 2008, or SQL Server 2008 R2** in the right pane of the screen. The License Terms screen appears.

5. In the License Terms screen, read the License Terms agreement and then click **I accept the license terms.** Click **Next.** The Install Setup Files screen appears, that shows the download and installation progress of any necessary setup files.

6. A report may appear that lists the results of a setup support files test. If any prerequisite fails, you need to exit the install and fix that issue. For more information, click the **Failed** cell. (Warning reports can be ignored at this point.) Click **Next.**

7. The Select Instance screen appears, indicating the names of the SQL Server instances currently installed. Select the instance used by Metasys software, which is most likely MSSQLSERVER. You cannot rename the database instance during an upgrade. Click **Next.** The Select Features screen is skipped because during an upgrade, you cannot select any additional features. The Disk Space Requirements screen is also skipped.

8. In the Error Reporting screen, skip the option for sending error reports. Click **Next.** The Upgrade Rules screen may appear.
9. If the Upgrade Rules screen appears, the results of an Upgrade Rules test are given. Verify that no tests fail. If a test failed, you need to exit the install and correct the issue before continuing. Click the Failed cell for more information. Click Next.

10. The Installation Progress screen appears as the SQL Server 2012 SP4 software installs. This part of the procedure can take over 15 minutes to complete. When Setup process complete appears above the progress bar, click Next. The Complete screen appears.

11. In the Complete screen, click Close.

12. Open the SQL Server Configuration Manager. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

   Note: If you have a different named instance, that name appears instead of MSSQLSERVER.

   In the right pane of the window, do the following:
   a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click Named Pipes and select Enable.
   b. Click OK to the SQL Server software restart warning message that appears.
   c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click TCP/IP and select Enable.
   d. Click OK to the warning message.
   e. Close the SQL Server Configuration Manager.

13. If you need to upgrade another SQL Server instance, go to Step 4 and rerun the upgrade process. If you do not need to upgrade another instance, installation is complete.

SQL Server 2012 Express SP4 Software Installation and Upgrade

Follow these steps to install or upgrade to SQL Server 2012 Express SP4 software. For Branch employees, refer to Installing or Upgrading SQL Server Software Using the SQL Install Helper.

Installing SQL Server 2012 Express SP4 Software

About this task:
1. Click this link and download the appropriate file for your version of SQL Server 2012 Express SP4 software.
2. Double-click the downloaded SQL Server installation file. The setup files extract to a temporary location on your hard disk, and then installation begins.
3. If you do not have a required prerequisite, a box appears and indicates what is missing. Click OK, install the missing prerequisite, and then start over with this procedure.
4. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To begin, click Installation in the left pane.
5. Click New SQL Server stand-alone installation or add features to an existing installation.
6. A report appears that lists the results of the Setup Support Rules test. The example shown on the left is the Details view. If any prerequisite fails, you need to exit the install and fix that issue. For more information, click the Failed cell. To continue, click Next.

7. Read the License Terms agreement and then select the I accept the license terms check box. Click Next.

8. Click Install to install the necessary product update files and setup support files. During this step, access to the Internet is required as SQL Server setup looks online for installation updates. If the computer does not have access to the Internet and Windows Update service, then you may get an error message. You can ignore the error message and skip the step of obtaining SQL Server updates. Click Next to continue.

9. A report appears that lists the results of a final Setup Support Rules test. If any prerequisite fails, you need to exit the install and fix that issue. For more information, click the Failed cell. (Any Warning report can be ignored at this point.) Click Next to continue.

10. Select the Database Engine Services and Management Tools - Basic check boxes. Click Next.

11. Click Named instance and type MSSQLSERVER in the Named Instance field. The Instance ID field fills in for you. MSSQLSERVER is the instance you are going to use with Metasys software. Click Next.

12. The Disk Space Requirements summary appears. Verify that your hard disk has the capacity to store SQL Server 2012 Express software. A message appears if the computer does not have the required capacity. Click Next.

13. Accept the default Account Name settings for all services shown on the Server Configuration screen. Verify the Collation tab lists SQL_Latin1_General_CP1_CI_AS. Metasys software requires this SQL Collation. Click Next.

14. Click Mixed Mode and define a strong password for the SQL Server administrator (SA) user account. Specify the BUILTIN\Administrators account.

Note:

- Safeguard this user name and password pair. You cannot maintain the database without it.

- Microsoft Corporation recommends a complex password that contains eight or more letters, numbers, and symbols and that cannot be guessed easily. Visit www.microsoft.com or consult with the IT department if you have questions about SA passwords.

Important: You must specify the BUILTIN\Administrators account as a SQL Server administrator to permit the Metasys software to create SQL Server users through Windows authentication. You add this account in the next step.
15. On the Database Engine Configuration window, under the Specify SQL Server administrators section:

   a. Click Add. The Select Users or Groups dialog box appears.

   b. Click Advanced. A second Select Users or Groups dialog box appears.

   c. Click Find Now. If the computer is not a member of a domain, select Administrators in the Search results and click OK.

   If the computer is a member of a domain, click Locations and select the location from the domain. Type Administrators in the Enter the object names to select box.

   d. Click Check Names. The entry <Your Computer Name>\Administrators appears in the box. Make sure the entry contains Administrators (plural), and not Administrator (singular).

   e. Click OK to close the box. The entry BUILTIN\Administrators appears in the Specify SQL Server administrators section.

      Note: If the customer’s IT department is involved with SQL Server software installation and does not permit the use of the BUILTIN\Administrators user, request that the IT department select a different SQL Server administrator user.

   f. Click Next.
16. The Error Reporting screen appears. Skip the option for sending error reports. Click **Next**.

17. An Installation Rules test is run. Verify that each test reports either a **Passed** or **Not applicable** status. If a test reports a **Failed** status, you need to exit the install and correct the issue before continuing. Click the **Failed** cell for more information. Click **Next**.

18. A summary screen appears with a list of your selections. Verify the list. Click **Install** to begin.

19. SQL Server 2012 Express software installs as indicated by the Installation Progress screen. This part of the procedure can take over 15 minutes to complete.

20. The Complete screen appears. Verify that each component reports a successful installation. Click **Close**.

21. Start the newly installed SQL Server Configuration Manager:
   - For Windows 7, click the **Start** button and select **All Programs > Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager**.
   - For Windows 8.1 or Windows 8, click the **SQL Server Configuration Manager** tile on the desktop.

22. Expand SQL Server Network Configuration and select **Protocols for MSSQLSERVER**.

   **Note:** If you have a different named instance, that name appears instead of MSSQLSERVER. In the right pane of the window, do the following:
   a. Right-click **Named Pipes** and select **Enable**.
   b. Click **OK** to the SQL Server software restart warning message that appears.
   c. Right-click **TCP/IP** and select **Enable**.
   d. Click **OK** to the warning message.
   e. Close the SQL Server Configuration Manager.

**Applying SP4 to SQL Server 2012 Express Software**

**About this task:**

**Note:** We support SQL Server 2012 Express software with SP4. You must apply SP4 if you installed the initial release of SQL Server 2012 Express software or have installed SQL Server 2012 with SP1 or SP2.

1. Click this link and download the appropriate file for your version of SQL Server 2012 Express SP4 software.

2. Double-click the downloaded file to extract the contents and begin the update.

3. Click **Yes** if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2012 software. The message **Please Wait While SQL Server 2012 Setup processes the current operation** appears as the installation begins.
4. The SQL Server 2012 Update screen appears. Verify that all update rules passed before continuing. If any rule fails, click the Failed cell for more information. Exit the update and fix the issue before continuing. Click Next.

5. Read the End User License agreement and then select the I accept the license terms check box. Click Next.

6. The Select Features screen indicates the Instance ID that is ready to be updated. Click the instance name to refresh the Description fields. During an upgrade, you cannot select any additional features. Click Next.

7. The SQL Server 2012 SP3 update checks to see if any required SQL Server files are in use. If you have SQL Server files in use when you install SP2, you must restart your computer after the installation is complete. Click Next.

8. SQL Server 2012 SP3 software is ready to update. Click Update. During the update, a progress screen indicates the status of the update. This part of the procedure can take up to 15 minutes to complete.

9. The update operation is complete. Click Close.

10. Start the SQL Server Configuration Manager:
    - For Windows 7, click Start and select All Programs > Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager.
    - For Windows 8.1, click the SQL Server Configuration Manager tile on the desktop.

11. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

   Note: If you have a different named instance, that name appears instead of MSSQLSERVER.

12. In the right pane of the window, do the following:
    a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click Named Pipes and select Enable.
    b. Click OK to the SQL Server software restart warning message that appears.
    c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click TCP/IP and select Enable.
    d. Click OK to the warning message.
    e. Close the SQL Server Configuration Manager.

13. Delete the service pack file you saved to your computer.

Upgrading SQL Server Software to SQL Server 2012 Express SP4 Software

About this task:
The steps in this section apply to upgrading any of the following versions of SQL Server software:

- SQL Server 2005 Express
- SQL Server 2008 Express
• SQL Server 2008 R2 Express

Note: If SQL Server Management Studio is installed on your computer, uninstall it before you upgrade, then install an updated version of the tool after you install SQL Server 2012 Express SP4 software.

1. Click this link and download the appropriate file of SQL Server 2012 Express SP4 software. Double-click on the downloaded file. The setup files extract to a temporary location on your hard disk, and then installation begins.

2. Click Yes if a User Access Control dialog box prompts you for permission to make changes to the computer related to installing SQL Server 2012 software. The message **Please Wait While SQL Server 2012 Setup processes the current operation** appears as the installation begins.

3. The Planning menu is the first screen to appear. In the right pane, several options are available for you to explore. To continue, click **Installation** in the left pane. The selections in the right pane change.

4. To begin installation, click **Upgrade from SQL Server 2005, SQL Server 2008, or SQL Server 2008 R2** in the right pane of the screen. The License Terms screen appears.

5. In the License Terms screen, read the License Terms agreement and then click **I accept the license terms**. Click Next. The Setup Support Files screen appears.

6. In the Setup Support Files screen, click **Install** to install the necessary support files.

Note: A report appears that lists the results of this setup support files test. If any prerequisite fails, you need to exit the installation and fix that issue. For more information, click the Failed cell. (Warning reports can be ignored at this point.)

7. Click **Next**.

The Select Instance screen appears, indicating the names of the SQL Server instances currently installed.

8. Select the instance used by **Metasys** software, which is most likely MSSQLSERVER. You cannot rename the database instance during an upgrade.

9. Click **Next**. The Select Features screen appears.

The Select Features screen may appear to indicate the Instance ID that is ready to be upgraded. During an upgrade, you cannot select any additional features.

10. Click **Next**. The Disk Space Requirements screen appears.

11. The Disk Space Requirements screen containing a Disk Usage Summary report may appear. Verify that your hard disk has the capacity to store SQL Server 2012 Express SP4 software. A message appears if the computer does not have the required capacity.

12. Click **Next**. The Error Reporting screen appears.

13. In the Error Reporting screen, skip the option for sending error reports.

14. Click **Next**. The Upgrade Rules screen appears.
15. An Upgrade Rules test is run. Verify that no tests fail. If a test failed, exit the installation and correct the issue before continuing. Click the Failed cell for more information.

16. Click Next. The Ready to Upgrade screen appears.

17. In the Ready to Upgrade screen, click Upgrade. The Installation Progress screen appears.

18. When Setup process complete appears above the progress bar, click Next. The Complete screen appears.

19. In the Complete screen, click Close.

20. From the Start menu, select Programs or All Programs > Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager.

21. Expand SQL Server Network Configuration and select Protocols for MSSQLSERVER.

22. In the right pane of the window, do the following:
   a. Verify that Named Pipes is set to Enabled. If it is Disabled, right-click Named Pipes and select Enable.
   
   b. Click OK to the SQL Server software restart warning message that appears.
   
   c. Verify that TCP/IP is set to Enabled. If it is Disabled, right-click TCP/IP and select Enable.
   
   d. Click OK to the warning message.
   
   e. Close the SQL Server Configuration Manager.

Installing Microsoft Report Viewer 2012 Redistributable Package

About this task:

Notes:

- This component is required for the Metasys Advanced Reporting System if SQL Server 2017, SQL Server 2016, SQL Server 2014, or SQL Server 2012 software is used. Install this component after you have installed the SQL Server software.

- During Report Viewer installation, you may receive a message that CLR Types for SQL Server 2012 are missing. To add this prerequisite, download the Microsoft System CLR Types for Microsoft SQL Server 2012 at this location: http://go.microsoft.com/fwlink/?LinkID=239644. Run the SQLSysClrTypes.msi file on your computer to install the required components.

To install Microsoft Report Viewer 2012 Redistributable Package:

2. Click Download.

3. Double-click ReportViewer.msi once the download is complete.

4. Click Run to start the installation. If a message appears that tells you that an earlier version of this product has been detected, click Yes to upgrade the existing installation. The Microsoft Report Viewer 2012 Runtime window appears.

5. Click Next to continue. The End-User License Agreement window appears.

6. Click the option to accept the terms of the license agreement. Click Next.

7. Click Install to begin the installation.

8. Click Finish when the Setup Complete window appears.

Verifying SQL Server Reporting Services Configuration

About this task:
This section applies if you have SQL Server software with the Reporting Services component installed on your computer. The steps verify SQL Server Reporting Services (SSRS) is configured properly.

Note: Only SQL Server 2014 screen examples are used; those for other editions of SQL Server software are similar.

1. Start the SQL Server Reporting Services Configuration Manager. The Instance Selection screen appears.

Note: If the instance selection does not appear, you do not have Reporting Services installed. Go back and install a supported edition of SQL Server software with SQL Server Reporting Services.

2. Select the correct instance name. Click Connect.
3. In the right pane, verify that **Report Service Status** is **Started**. If not, click **Start**.

**Figure 8: Report Server Status**
4. In the left pane, click **Web Service URL** and verify a Virtual Directory name is listed and no Warning icon appears on the screen. If you used a named instance other than MSSQLSERVER, the instance name is in either of these formats: `Reports$instancename` or `Reports_instancename`.

5. In the right pane, locate the URLs field and click the **Report Server** hyperlink. **Web Service URL**.

6. The Windows® Internet Explorer® web browser opens and loads the Report Server window. The version shown depends on which edition of SQL Server software you have installed. Ignore the Intranet settings user prompt that may appear in the lower portion of the browser window. **Report Server Window**.

   **Note:**
   - This window may take up to 30 seconds to appear.
   - If you are prompted for a user name and password, specify the administrator user and password, then click **OK**. Or exit the Internet Explorer web browser and access this page by running the browser as Administrator. You can also avoid the prompt by logging in to the computer with the Administrator user account.
   - If the Report Server window does not appear or appears with an error, the Report Server is not configured properly. For assistance, see SQL Server Reporting Services Troubleshooting. For additional troubleshooting information related to SQL Server Reporting Services, go to [http://msdn.microsoft.com/en-us/library/ms159135.aspx](http://msdn.microsoft.com/en-us/library/ms159135.aspx).

7. Close the Internet Explorer web browser window.

**Figure 9: Success: http://localhost/reportserver**

8. In the left pane, click **Database**. Verify that the Database and Credential fields contain values (entries may vary depending on SQL Server version) and that no Warning icon appears on the screen.

9. In the left pane, click **Report Manager URL** and verify a Virtual Directory name is shown and no Warning icon appears on the screen. If you used a named instance other than MSSQLSERVER, the instance name is in either of these formats: `Reports$instancename` or `Reports_instancename`. **Report Manager URL**

   **Note:** Only SQL Server 2014 screen examples are used; those for other editions of SQL Server software are similar. In SQL Server 2016, the Report Manager URL now appears as Web Portal URL.

10. In the URLs field, click the **Report Manager** hyperlink.
11. The Internet Explorer Web browser opens and loads the Report Manager window. This window appears slightly different for other versions of SQL Server software. Also, ignore the Intranet settings user prompt that may appear in the lower portion of the browser window.

**Note:**
- This window may take up to 30 seconds to appear.
- If you are prompted for a user name and password, specify the administrator user and password, then click OK. Or exit the Internet Explorer Web browser and access this page by running the browser as Administrator. You can also avoid the prompt by logging in to the computer with the Administrator user account.
- If the Report Manager window does not appear or appears with an error, the Report Manager is not configured properly. For additional troubleshooting information related to SQL Server Reporting Services, go to http://msdn.microsoft.com/en-us/library/ms159135.aspx.

12. Close the Internet Explorer web browser window.

**Figure 10: Report Manager - Success: http://localhost/reports**

Report Services is running correctly and properly configured. You can skip the next section, Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System.

Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System

**About this task:**

**Note:**
- You must follow the steps in this section to configure the web/application server of a split ADX or to configure Reporting Services if added to a previous installation of SQL Server software. If you are installing a unified ADX and selected the Reporting Services component when you installed SQL Server, the component was pre-configured for you, so you can skip this section.
- This section uses Microsoft software default values in many cases. These settings are considered sufficient for network security. Advanced users who desire enhanced network security may deviate from the default values presented in this section using instructions on http://www.microsoft.com as a guide.
Two steps are required for installing Reporting Services as an added component to SQL Server software:

1. Create a new SQL Server software user for the *Metasys* Advanced Reporting System. (If this is a split ADX, create the user on the web/application server.) See Creating a New SQL Server User.

2. Configure the SQL Server software for the *Metasys* Advanced Reporting System. See Configuring SQL Server Reporting Services.

Creating a New SQL Server User

**About this task:**

1. Start SQL Server Management Studio for your version of SQL Server software.

**Figure 11: SQL Server Management Studio Login**

2. Enter the following:
   - **Server type:** Database Engine
   - **Server name:** This is the name of the database server (not the web/application server). If you are using a SQL Server instance other than MSSQLSERVER, include the SQL Server instance name in this format: computername\instancename.
   - **Authentication:** SQL Server Authentication
   - **Login:** existing SQL Server sa login (or another valid SQL Server login)
   - **Password:** existing SQL Server password for sa user (or another valid SQL Server password)

3. Click **Connect**.

4. Press **F7** if the Object Explorer Details window in the right pane does not appear.
5. In the tree in the left pane, under the database server, expand the **Security** folder and **Logins** folders.

6. Right-click the **Logins** folder and select **New Login**.

7. Check the SQL Server authentication method. Configure the parameters for the new SQL Server user according to your company policies and preferences. We offer the following recommendations:

   - Specify **SSRSServiceAccount** as the new user name.
   - Use a complex password for the SSRSServiceAccount user.
   - Make sure the **Enforce password expiration** is cleared.
   - Keep the **Enforce password policy** selection selected.
8. Click OK. The new user is created.

9. Close all windows.

10. Go to Configuring SQL Server Reporting Services.

Configuring SQL Server Reporting Services

About this task:
Follow these steps to start the SQL Server Reporting Services Configuration Manager.

1. For SQL Server 2016, start the Reporting Services Configuration Manager. The Reporting Services Configuration Connection dialog box appears.

2. Select the correct SQL Server software instance name. Click Connect. The Reporting Services Configuration window appears showing the current status of the Report Server.
3. In the left pane, click **Service Account**. The Service Account screen appears.
Note: SQL 2016 uses a Virtual Service Account in place of ReportServer.

4. In the left pane, click **Web Service URL**. The Web Service URL screen appears.

The Web Service URL screen indicates that the Report Server Web Service is not yet configured. With the ReportServer virtual directory entered, click **Apply**. The outcome of the action appears in the Results window.

5. In the left pane, click **Database**. The Report Server Database screen appears.
6. In the right pane, click **Change Database**. The Change Database window appears.

7. Select **Create a new report server database**.

8. Click **Next**. The Database Server Connection dialog box appears.
9. Do the following in the Database Server Connection dialog box (Figure 20):

a. In the Server Name field, enter the name of the unified ADX server, or the database server if this is a split ADX. If you are using a SQL Server named instance other than MSSQLSERVER, add the SQL Server instance name in this format: \computername\instancename.

b. In the Authentication Type drop-down list box, select one of the following:

   - **Current User - Integrated Security** if you are logged in to the computer with the Administrator account. The Username and Password fields are dimmed.

   - **SQL Server Account** if you are logged in to the computer with a user in the Administrative group. This selection is required on the web/application server of a split ADX with the Metasys Advanced Reporting System.

c. If you selected SQL Server Account, specify the Username and Password for the SQL server administrator (sa) account.

d. Click **Next**. The Specify Database Name dialog box appears.

10. Do the following in the Specify Database Name dialog box (Figure 21):

a. Specify **ReportServer** in the Database Name field. If you are using a SQL Server named instance other than MSSQLSERVER, add the instance name to the database name in this format:

   ReportServer_<instancename>.

b. Select **Native** for the Report Server Mode.

c. Click **Next**.
11. Do the following in the Credentials dialog box (Figure 22):
   
   a. From the Authentication Type drop-down list box, select **SQL Server Credentials**.
   
   b. In the Username and Password fields, enter the user name and password you created in Step 4 of [Creating a New SQL Server User](#). (The recommended user name is SSRSServiceAccount.)
   
   c. Click **Next**. A summary of your selections appears.

12. Click **Next** to continue.
13. The configuration process begins and completes in a few minutes. Make sure that each configuration reports a Success result. If any configuration is not successful, go to http://msdn.microsoft.com/en-us/library/ms159135.aspx for Reporting Services troubleshooting.


15. Click **Report Manager URL** in the left pane.
16. The Report Manager URL screen indicates that the Report Manager virtual directory name is not yet configured. With the Reports virtual directory entered, click **Apply**. The outcome of the action appears in the Results window.

**Note:** The configuration of SQL Server software for the *Metasys* Advanced Reporting System is complete.

### SQL Server Reporting Services Troubleshooting

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<th>Table 2: SQL Server Reporting Services Troubleshooting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Problem</strong></td>
</tr>
<tr>
<td>One of the following messages appears</td>
</tr>
<tr>
<td>when you are browsing to <a href="http://localhost/reportserver">http://localhost/reportserver</a></td>
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<tr>
<td>OR <a href="http://localhost/reports">http://localhost/reports</a>:</td>
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<td>Cannot find the server or DNS error.</td>
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<td></td>
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<tr>
<td>The page cannot be found.</td>
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<tr>
<td>The report server is not responding.</td>
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<td></td>
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<tr>
<td>When you attempt to verify that SQL Server</td>
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<tr>
<td>Reporting Services is running, the following</td>
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<td>message appears (where 20xx is 2016, 2014, or 2012):</td>
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</tbody>
</table>

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### Table 2: SQL Server Reporting Services Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
</table>
| When you attempt to verify that SQL Server Reporting Services is running, you are presented with a Windows Security login prompt. | Enhanced security in the browser is preventing you from loading the page. Run the Internet Explorer web browser as an administrator (right-click the Internet Explorer icon, select Run or Run as Administrator). Then, try to load the Reporting Services page. If the Reporting Services page still does not appear, log in to the operating system with the Administrator account and run the Internet Explorer web browser as an administrator. When the Windows Security login prompt appears, enter Administrator as the user name and the Administrator’s password. Wait for the Reporting Services page to appear. If the Reporting Services page still does not appear, turn off IE Enhanced Security for the server operating system by following these steps:  
1. Start **Server Manager**.  
2. On the Server Manager window, click **Local Server**.  
3. In the right column, set the parameter IE Enhanced Security Configuration to **Off**. |
| When you attempt to verify that SQL Server Reporting Services is running, you see this message:  
The report server has encountered a configuration error. (rsServerConfigurationError) | The Reporting Services log file contains the error **No DSN present in configuration file**. A database connection to Reporting Services has not been created. Start the Reporting Services Configuration Manager. This tool is located under the program group for your edition of SQL Server software (for example, *Microsoft SQL Server 2014 > Configuration Tools > SQL Server Reporting Services Configuration Manager*). Perform the steps in Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System. |
<table>
<thead>
<tr>
<th>Problem</th>
<th>Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you attempt to verify that SQL Server Reporting Services is running, a scripting error occurs.</td>
<td>Enhanced security in the browser is preventing you from loading the page. Add the computer as a trusted site. For example, if the computer is called ADX-01, add <a href="http://ADX-01">http://ADX-01</a> to the list of trusted sites under security options for the browser. Alternatively, turn off IE Enhanced Security for the server operating system by following these steps: 1. Start <strong>Server Manager</strong>. 2. On the Server Manager window, click <strong>Local Server</strong>. 3. In the right column, set the parameter IE Enhanced Security Configuration to <strong>Off</strong>.</td>
</tr>
<tr>
<td>You configured SQL Server Reporting Services, but you cannot connect to <a href="http://localhost/reportserver">http://localhost/reportserver</a> or <a href="http://localhost/reports">http://localhost/reports</a>.</td>
<td>Make sure you are verifying SQL Server Reporting Services on the correct computer. In a split ADX, this computer is the web/application server. Also, if you are using a SQL Server named instance other than MSSQLSERVER, use a web address that includes the suffix _instancename, where instancename is the SQL Server instance name. For example: <a href="http://localhost/ReportServer?ThisInstance">http://localhost/ReportServer?ThisInstance</a> <a href="http://localhost/ReportServer_ThisInstance">http://localhost/ReportServer_ThisInstance</a>. Lastly, on a split ADX, the Reporting Services Database Setup/Database Connection might not be configured properly. See <strong>Verifying SQL Server Reporting Services Configuration</strong>.</td>
</tr>
<tr>
<td>When you have the Reporting Configuration Manager open for SQL Server software, and make a change under Service Manager, the following Backup Encryption Key dialog box appears:</td>
<td>The backup encryption key is not used by <strong>Metasys</strong> software. However, to satisfy Reporting Services configuration, click the browse button (...), specify a file name for the encryption key, and click <strong>OK</strong>. Specify a password for the file and click <strong>OK</strong>.</td>
</tr>
<tr>
<td>You are installing SQL Server software with Reporting Services, but the <strong>Install the native mode default configuration</strong> option is unavailable.</td>
<td>This problem may occur when SQL Server software is already installed on the ADX and you install the software again to add Reporting Services. To resolve this problem, follow these steps: 1. Complete the installation. 2. Configure Reporting Services manually. See <strong>Configuring SQL Server Reporting Services for the Metasys Advanced Reporting System</strong>.</td>
</tr>
</tbody>
</table>
Appendix: Reporting Services Language Support for *Metasys* Advanced Reporting System

The *Metasys* Advanced Reporting System displays reporting information in languages other than United States English when you install the correct language support for the ADX/ODS computer and you define a language in your Security Administrator System profile. This functionality is the same as using a non-English language on the ADX/ODS without the reporting system.

In addition to the language file installation and profile change for a non-English ADX/ODS, you also must download several supporting components to translate the main Toolbar, Report Toolbar, and Report is being generated message that appears in the Report screen. The supporting components are available for the following languages:

- Chinese (Simplified)
- Chinese (Traditional)
- French
- German
- Italian
- Japanese
- Korean
- Spanish

If you are installing a split ADX, perform the steps in this section on the web/application server only. You can perform these steps before or after you install the ADX/ODS software with the *Metasys* Advanced Reporting System. If you do not follow this procedure, some of the menus and options do not appear in the desired language.

Adding Language Support for Reporting Services

1. Using a supported web browser, browse to the Microsoft Download Center website: www.microsoft.com/downloads

2. Download the language-specific Microsoft Report Viewer Language Pack from the Microsoft Download Center website for your particular version of SQL Server software by following these steps:
   b. After you click Search, select the appropriate Microsoft Report Viewer Language Pack for your version of SQL Server software.
   c. On the Microsoft Report Viewer Language Pack page, select a language from the Select Language drop-down list box.
   d. Click Download. The page now appears in the language you selected in Step c.
   e. Click Download and save the file to a location on your computer. The language pack that downloads matches the language you selected in Step c.
   f. Run the downloaded file to install the language pack.
   g. Repeat Step c through Step f for any service packs (if available) and any other languages you...
want to support.
h. Restart the computer.

3. If the computer has the ADX/ODS software installed, log in to the Metasys Advanced Reporting System with the credentials of a non-English user.

If the computer does not have the ADX/ODS software installed, come back to this section after the ADX/ODS is installed to perform the verification step (Step 4).

4. Verify the language appears correctly in the reporting system main Toolbar and Report Toolbar. Also verify the Report is being generated message that appears in the Report screen is in the desired language.

Note: For content to appear in a language other than English, you also must have the correct language files on the ADX/ODS and the language defined in the non-English user’s Security Administrator System profile. These requirements are the same for an ADX/ODS without the reporting system.

Appendix: Installing SQL Server Management Studio

Follow the steps in this section to install Microsoft SQL Server Management Studio for either SQL Server 2016, SQL Server 2016 Express, SQL Server 2014 Express software, or SQL Server 2012 Express software. Skip this section if you already have a version of SQL Server Management Studio installed that works with your version of SQL Server software.

Installing SQL Server Management Studio (SSMS)

About this task:

Note: If you have installed a version of SQL Server 2016 or SQL 2016 Express software, Management Tools are not installed automatically.


2. Download SQL Server Management Studio.


An Open File - Security Warning dialog box may appear, click Run to permit the installation to continue. A User Access Control dialog box may appear. Click Yes to proceed.

4. Click Install. A progress screen appears. After installation is complete, you may be prompted to restart.

5. Click Restart.

After restart, SQL Server Management Studio is available for use.

Related Documentation

Use the following table to find documents that are related to SQL Server installation and upgrades.
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<td>• Extended Application and Data Server (ADX)</td>
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