

Emonitor 4.0 Install Guide



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This manual describes how to install and configure the Emonitor[®] 4.0 Conditional Monitoring Software (CMS).

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Introduction

This chapter introduces the Emonitor® software and gives an overview of the installation process.

Overview of Emonitor Installation Guide

This installation guide offers information on the entire installation process, including software installation, database server and client installation, and database connection information.

This installation guide is intended for first-time installation or upgrades from earlier versions of Emonitor software. It also contains reference information for later use.

System requirements

The following items are the minimum system requirements to install Emonitor version 4.0.

Hardware Requirements

- Intel Core i5 microprocessor
- 1 GB of RAM
- DVD ROM drive
- 200 MB of space available on the hard drive, or more depending on the size of the database to be used
- Internet access
- SVGA graphics card
- 17 inch computer monitor (screen)

Software Requirements

- Windows® 7 Service Pack 1 (SP1), Professional, Enterprise, or Ultimate edition operating system (32 or 64-bit version)
- Administrator rights on the computer where Emonitor is being installed
- RSLinx® Classic (or Classic Lite) version 3.6, 3.70, or 3.74 must be installed and running as a service
- Microsoft .NET Framework 4.5.1 (If it is not installed, it will be installed as a part of the installation process and a reboot may be required.)
- SQL Server® installed on the server and the client computers
- Device serial number and product key

Minimum recommended disk space

For a guideline, the Emonitor software requires about 200 megabytes (MB) of disk space. There are additional disk space requirements depending on the database setup. Be sure to check with your database administrator about these requirements and about backing up the database.

Internet access

FactoryTalk® Activation requires an activation file, also called a license file. Unless using a hardware dongle (usually a USB key), the FactoryTalk Activation Manager must be used to request one or more license files from the Rockwell software licensing website. If the computer running Emonitor does not have Internet access, Rockwell Automation Technical Support must be contacted in order to get the activation file by phone. Refer to the FactoryTalk Activation document for more information.

Operating System

You must install Emonitor on a computer running either the 32 or 64-bit version of the Windows 7 SP1 operating system. The Professional, Enterprise and Ultimate editions of Windows 7 SP1 are supported for running Emonitor. Emonitor version 4.0 is not supported on any other operating system.

Microsoft SQL Server 2012 data management software

Before installing Emonitor, make sure the computer hosting the database server is running the required version of SQL Server. Consult with your database administrator to verify which version of the database server is being used. The version supported by Emonitor 4.0 is SQL Server 2012. If the database server does not have the required version ask your database administrator for assistance.

All Emonitor client computers must be able to connect to the database server.

Serial number and product key

Emonitor requires activation using license files. As part of the Emonitor installation process, FactoryTalk Activation software must be installed.

The FactoryTalk Activation Manager replaces the old parallel port security keys and the CD Activation Key. The FactoryTalk Activation Manager is installed with Emonitor, and requires the Serial number and Product Key (located on the activation certificate) to activate the software. The Activation Certificate is included with the Emonitor Install DVD.

For more information on viewing the FactoryTalk Activation Manager documentation and installing the application, see [Install FactoryTalk Activation Manager](#) on [page 23](#).

Database system requirements

Microsoft SQL Server 2012 is the only database program supported by this version of Emonitor.

Refer to the database software manufacturer's documentation for the requirements for the computer running the database server software.

Additional information

The following list provides sources of additional information that may be required depending on your system setup.

- To learn about new features and improvements in Emonitor, read the Emonitor Product Release Notes. These are located on the Emonitor Install DVD (insert the DVD and then click **Documentation**).
- To get started quickly, read the Emonitor Quick Start Guide. This provides an introduction to the software and how to use the online help included with the software. This guide is located on the Emonitor Install DVD.
- Refer to the online help for detailed instructions on using all the functions of the software. The online help system also includes explanations for all the commands and controls. Just press **F1** to access the online help at any time in Emonitor.
- If using data collectors with a walk-around system, an additional Data Collector User's Guide may be included for each of those interfaces.

Additional manuals for the hardware used for data collection may also be included. These manuals are delivered as PDF files on the CD that comes with the data collector or other hardware. Reference the data collector online help files installed with Emonitor from the Help menu in Emonitor.

Contact us

If you cannot connect to the Internet or cannot find answers to your questions in this help file or on the [Technical Support Web site](http://www.rockwellautomation.com/support/) <http://www.rockwellautomation.com/support/>, call Technical Support.

- Phone: 440-646-3434 in North America
- Technical Support hours of operation: 8:00 AM - 5:00 PM

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When you call you should be at your computer and be prepared to give the following information:

- The product version number
- The type of hardware you are using
- The exact wording of any messages that appeared on your screen
- A description of what happened and what you were doing when the problem occurred
- A description of how you tried to solve the problem

For information about all Rockwell Automation products or for technical support, select one of the following:

- <http://www.rockwellautomation.com/rockwellsoftware/>
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- <http://rockwellautomation.custhelp.com/>

Install the database components

This chapter describes the database installation process.

This chapter is primarily of use to those performing new installations of Emonitor or those setting up a new Emonitor Microsoft SQL Server 2012 database. Users with existing SQL Server 2012 databases that are upgrading from a previous version of Emonitor can proceed to [Upgrade from a previous version of Emonitor](#), on [page 35](#)

Install Microsoft SQL Server 2012

Emonitor 4.0 requires Microsoft SQL Server 2012.

Tip: When upgrading SQL Server it is advised to back up all database directories to ensure that a copy is available.

Refer to the Microsoft documentation for instructions on installing the database server, including the choice of Microsoft operating systems. The database server installation procedures may require a database administrator to complete the configuration.

Note: TCP/IP for SQL Server Configuration must be enabled on the computer that is running SQL Server.

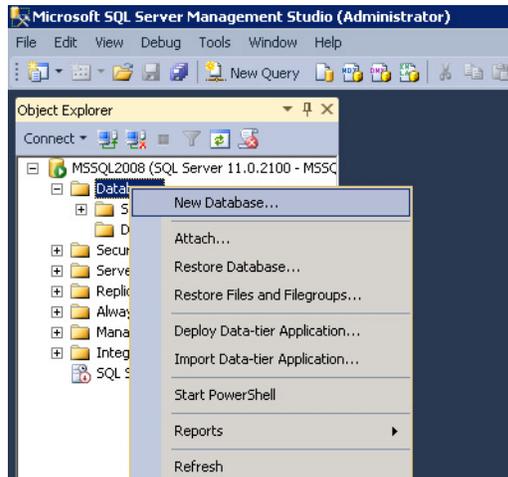
Create the databases

This section describes the process for creating the Emonitor databases and the users, or logins, for those databases. It is recommended that this section be completed before beginning the Emonitor installation process.

The File Group names in the following steps (EmonitorI, EmonitorD, ECONFIGI, ECONFIGD) are recommended but not required; different Group names can be substituted in the steps, but require the database creation scripts to be edited. Information on editing those scripts can be found in the *Configure the databases* section.

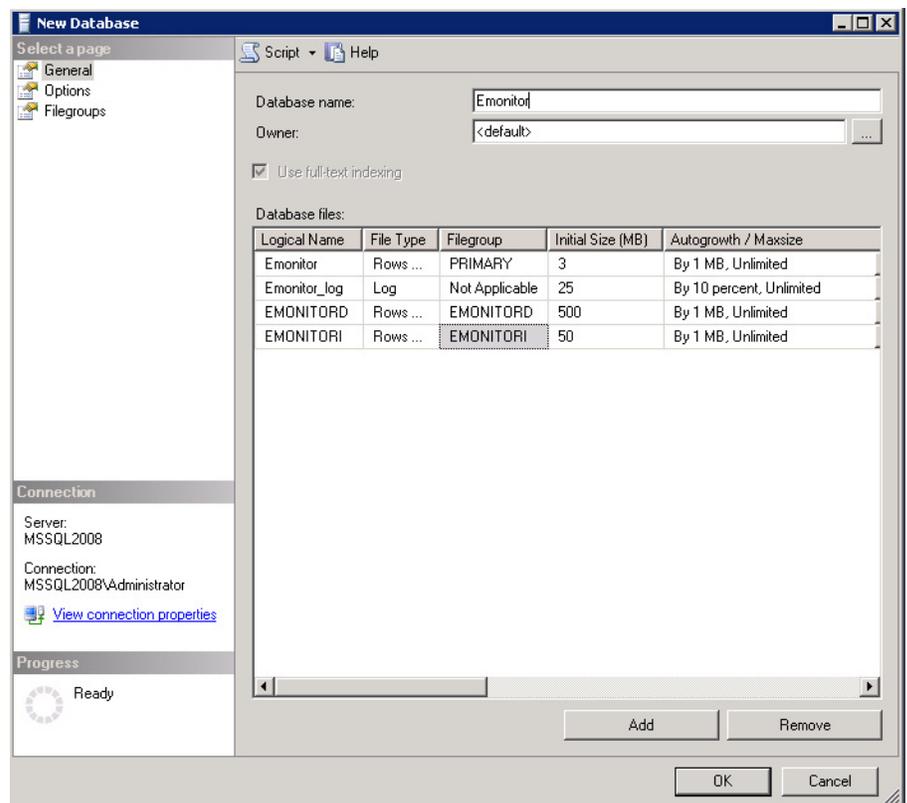
To create the Emonitor databases:

1. Click **Start** and then select **Microsoft SQL Server Management Studio**.
2. In the Object Explorer, alternate-click the **Databases** folder and select **New Database**.



3. Emonitor database
 - a. Name the new database **Emonitor**.
 - b. Set the **Initial Size** for Emonitor_log database file to 25 MB.
4. EmonitorD database
 - a. Click **Add** to create a new Database file in the table.
 - b. Change the Logical Name of this new file to **EmonitorD**.
 - c. Set the **Initial Size** for the EmonitorD database file to 500 MB.
 - d. Click the Filegroup column and use the pull-down to select **<new filegroup>**.
 - e. Name the new file group **EmonitorD**.

5. EmonitorI database
 - a. Click **Add** to create another new Database file.
 - b. Change the Logical Name of this file to **EmonitorI**.
 - c. Set the **Initial Size** of EmonitorI to 50 MB.
 - d. Click the Filegroup column and use the pull-down to select **<new filegroup>**.
 - e. Name this new file group **EmonitorI**.



6. In the **Select a page** window, select the **Options**.
7. Set the **Compatibility level** to SQL Server 2008 (100).
8. Click **Ok** to create the database.

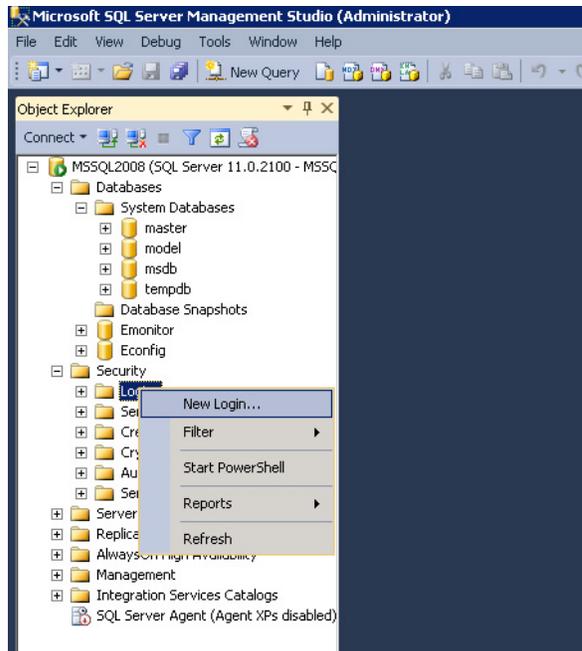
To configure the Econfig databases:

1. Econfig database
 - a. Name the new database Econfig.
 - b. Set the **Initial Size** for Econfig_log database file to 5 MB.
2. ECONFIGD database
 - a. Click **Add** to create a new Database file in the table.
 - b. Change the Logical Name of this new file to ECONFIGD.
 - c. Set the **Initial Size** for the ECONFIGD database file to 40 MB.
 - d. Click the **Filegroup** column and use the pull-down to select <**new filegroup**>.
 - e. Name the new file group ECONFIGD.
3. ECONFIGI database
 - a. Click **Add** to create another new Database file.
 - b. Change the Logical Name of this file to ECONFIGI.
 - c. Set the **Initial Size** of ECONFIGI to 10 MB.
 - d. Click the **Filegroup** column and use the pull-down to select <**new filegroup**>.
 - e. Name this new file group **ECONFIGI**.
4. Set the compatibility level to SQL 2008 (100)

To create users:

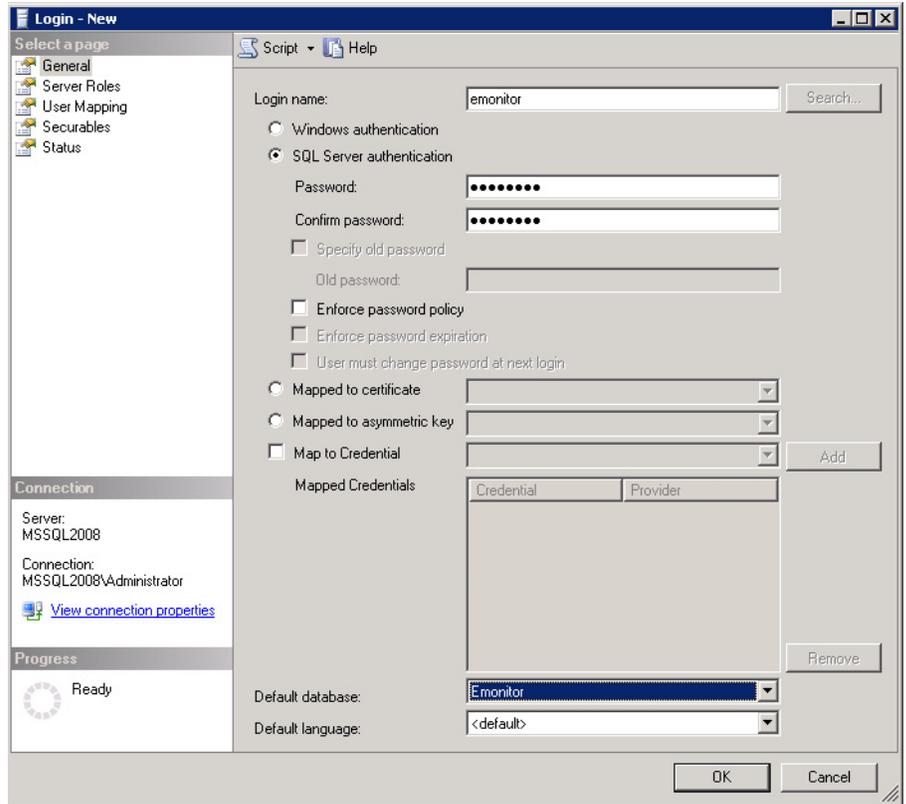
Once both databases are completed you can create users.

1. In the Object Explorer, expand the **Security** folder.
2. Right-click **Logins** and choose **New Login**.



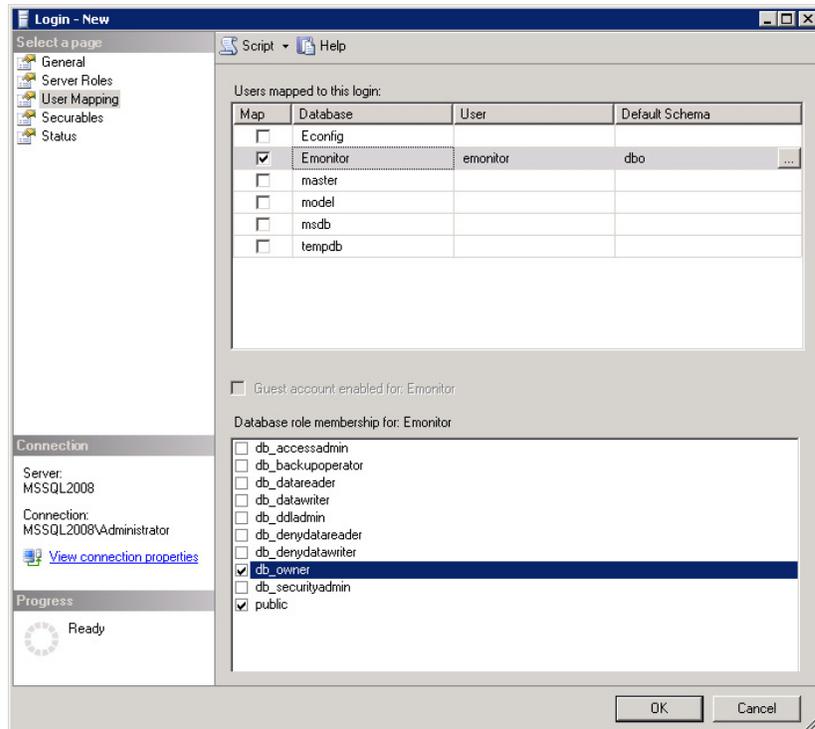
3. On the **General** page, in Login name, type **Emonitor**.
4. Select **SQL Server authentication**.
5. In **Password**, type the password for the Emonitor Login name.
6. In **Confirm password**, type the password again.
7. Clear the **Enforce password policy** check box.

8. In **Default database** select Emonitor.



9. Select the **User Mapping** page.
10. In the **Map** column, select the check box corresponding to the **Emonitor** database.

11. In the **Database role membership for: Emonitor** area, select **db_owner**.



12. Click **OK**.
13. Repeat this process to create an **econfig** user, mapped to the Econfig database, with a database role of **db_owner** for the EConfig database.

Important: Before you can complete the rest of the database configuration steps you must install Emonitor.
See [Install Emonitor](#) on [page 25](#).

Next, follow the instructions to install Emonitor, which will eventually lead to [Configure the databases](#) on [page 17](#).

Configure the databases

A database creation script must be run in order to configure the structure of the Emonitor and EConfig databases. If the two databases already exist, these steps can be ignored.

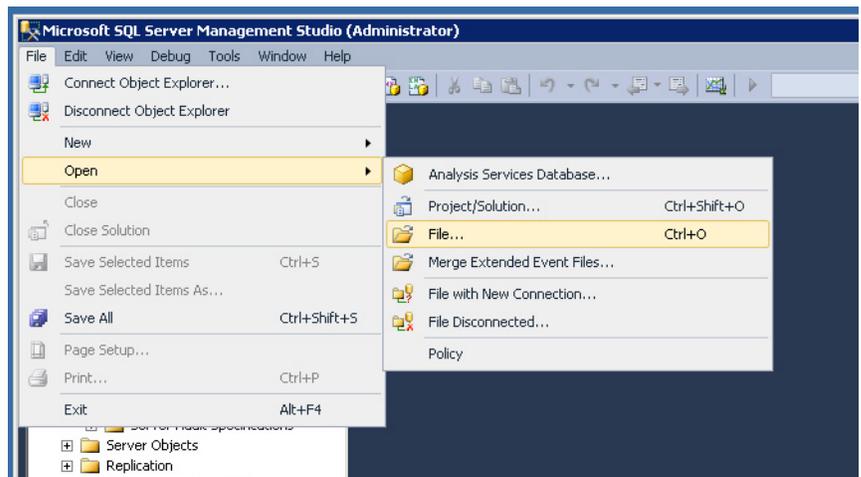
Important: The database creation scripts are installed with the Emonitor software. Emonitor must be installed before the database creation scripts are run.

To run the database creation script:

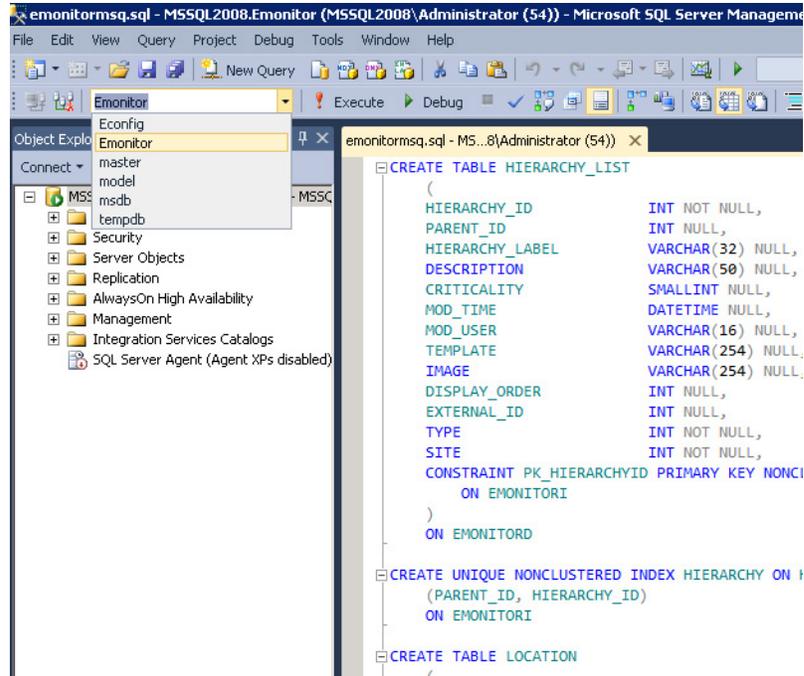
The scripts may need to be modified to use the correct Group names. Change all references to "ON EmonitorI", "ON EmonitorD", "ON ECONFIGI", and "ON ECONFIGD" to their appropriate names. If your database administrator chooses not to use file groups, the database creation scripts must be edited in order to remove these references entirely.

1. Click **Start** and then select **Microsoft SQL Server Management Studio**.
2. Select **File > Open > File...** and then select **SQL Server files** for **Files of type**. Then select the Emonitormsq.sql script file, located in the Emonitor program directory:

```
C:\Program Files\Rockwell  
Software\Emonitor\Emonitormsq.sql
```



- On the toolbar, select **Emonitor** as the database from the **Available Databases** pull-down menu as shown in the following image.



- Select **Query > Execute**, or press **F5**. This creates the Emonitor database structure.
- Next, open and run the EConfig creation script, `cfgmsq.sql`, located in the following directory. This creates the EConfig database structure.

```
C:\Program Files\Rockwell
Software\Emonitor\cfgmsq.sql
```

- On the toolbar, select Econfig as the database from the **Available Databases** pull-down menu.
- Select **Query > Execute**, or press **F5**. This creates the Econfig database structure.

The databases have now been structured. See the section [Import initial database data](#) on [page 19](#) to continue the installation.

Import initial database data

After running the database creation scripts, the data must be imported into the tables.

If upgrading from a previous version of Emonitor with a pre-existing Emonitor database, do not import the data files as described in this section, the Emonitor data files already exist in the database.

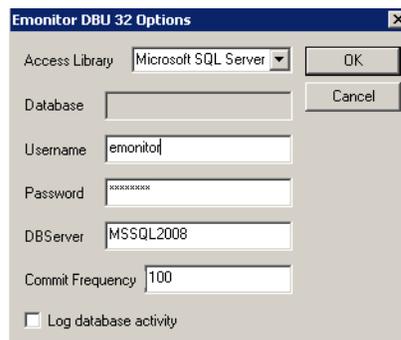
Important:

This procedure must be done **after** installing Emonitor because the data import utility provided with the installation is required. It must be done **before** starting Emonitor for the first time, but after the database creation scripts have been run.

See the section [Install Emonitor and supporting applications](#) on [page 23](#) for information on installing Emonitor.

To import the data:

1. On the Emonitor client machine, select **Start > All Programs > Rockwell Software > Emonitor > Utilities > Emonitor Import-Export Utility**.
2. From the **Options** menu, choose **Import**. Choose the following settings for each field and then click **Ok**.
 - a. Leave **Database** blank.
 - b. For **Username**, enter the username associated with the Emonitor database (which defaults to 'Emonitor').
 - c. For **Password**, enter the password for the chosen username.
 - d. For **DBServer**, enter the connection string for the database. This is the "Server alias" from the Microsoft SQL Server Client Network Utility.



The screenshot shows the 'Emonitor DBU 32 Options' dialog box. The 'Access Library' dropdown is set to 'Microsoft SQL Server'. The 'Database' field is empty. The 'Username' field contains 'emonitor'. The 'Password' field is masked with asterisks. The 'DBServer' field contains 'MSSQL2008'. The 'Commit Frequency' field contains '100'. There are 'OK' and 'Cancel' buttons. At the bottom, there is a checkbox labeled 'Log database activity' which is currently unchecked.

3. From the **File** menu, choose **Import Database**. Select Emonitor.dbu and choose **Open**. The file is located here:

C: Program File\Rockwell Software\Emonitor\

4. Once the import processes completes (which may take some time), repeat steps 1 through 3 for the econfig.dbu file (using the 'econfig' username and the matching password in step 2).

Tip: If the database server is installed on a separate computer from the Emonitor computer, this will be the first time that the client computer will attempt to contact the server. If the client computer cannot connect to the server, ensure that the correct credentials are being used and that the database server is configured to allow TCP/IP connections. Consult the SQL Server 2012 documentation for more information.

When both imports are complete, Emonitor can connect to the database after it launches.

Install Emonitor and supporting applications

This section describes the process for a new installation of Emonitor 4.0. If upgrading from an existing version, refer to the section [Upgrade from a previous version of Emonitor](#) on [page 35](#).

Install FactoryTalk Activation Manager

Emonitor is activated using license files. As part of the Emonitor installation process, FactoryTalk Activation Manager must be installed. For more information on FactoryTalk Activation, refer to the FactoryTalk Activation documentation. To display the documentation, follow these steps:

1. Insert the Emonitor Installation DVD into the DVD drive of the computer. It should auto-start and display the Autorun screen. If the Autorun screen does not appear, start Windows Explorer and navigate to the DVD drive. Double-click **autorun.exe** on the Emonitor DVD to run the installation program.

Tip: If the installation DVD drive is on another computer, that drive must be mapped to a drive on the local computer.

2. After the Autorun screen appears, click **Documentation**. The list of available documentation appears in the computer's default HTML browser.
3. Click **FactoryTalk Activation**.
4. After reviewing the FactoryTalk Activation documentation, return to the Autorun screen.

Tip: Documentation included on the Emonitor Install DVD is in PDF format. To view PDF files, an appropriate viewer, such as Adobe® Reader®, must be installed. Adobe Reader can be installed by clicking **Extras** on the Emonitor Install DVD Autorun screen and then clicking **Adobe® Reader®**.

5. From the Autorun screen, click **FactoryTalk Activation** to install the FactoryTalk Activation Manager from the DVD drive.
6. When finished, click **Back** to return to the main Autorun screen.

Install RSLinx Classic

Emonitor requires RSLinx Classic or Classic Lite to import measurements from certain online instruments:

Use XM/DYN Online Data to import data from XM® and XM DYN modules into the Emonitor database

Use Logix Online Data to import data from the Logix family of controllers into the Emonitor database.

Tip: Install RSLinx Classic before installing Emonitor. RSLinx Classic installs the FactoryTalk Services Platform, which includes the latest Windows Firewall Configuration Utility. This utility configures the Windows firewall to work with Rockwell Automation products.

To install the RSLinx software:

Note: If RSLinx Classic or Classic Lite version 3.6, 3.70, or 3.74 is already installed, these steps may be skipped.

1. From the Autorun screen, click **RSLinx Classic**.
2. Follow the steps as directed by the RSLinx Classic installation wizard.
3. Click **RSLinx Classic** and follow the directions that appear on the screen.
4. When the installation is complete, return to the Autorun screen and continue the installation process.

Install the CMMS XML Gateway prerequisites

When installing Emonitor version 4.0 on the Windows 7 Professional, Enterprise, or Ultimate operating system, no additional software is required for the CMMS XML Gateway.

Install Emonitor

This installation is intended for first-time installations. If upgrading from a previous version of Emonitor, see the section [Upgrade from a previous version of Emonitor](#) on [page 35](#)

Tip: The CD Activation Key that was used to define the available features in Emonitor 3.00 and earlier versions has been replaced by FactoryTalk Activation described in the section [Install FactoryTalk Activation Manager](#) on [page 23](#).

Portable systems use walk-around data collectors for collecting data, and all Emonitor components can be installed on one computer. Online systems use networked systems that monitor and collect data, and Emonitor can be installed on different computers to increase efficiency. Installations may also use a combination of portable and online systems, and use different computers for each part.

This section describes the installation step-by-step with specific information available when needed. This section goes through a typical installation for a portable system.

To install the Emonitor system:

1. Exit any running applications before starting the Emonitor installation program.

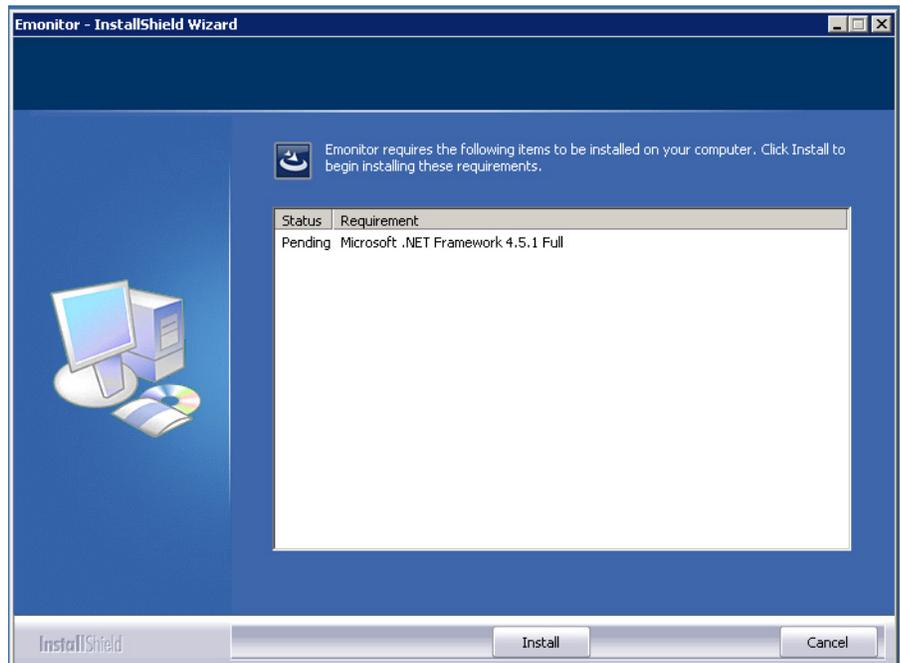
Important: The Emonitor installation program requires a reboot of the computer after installing the software.

2. If they do not already exist, create the Emonitor vibration and configuration databases. For more information on how to do so, see [Create the databases](#).

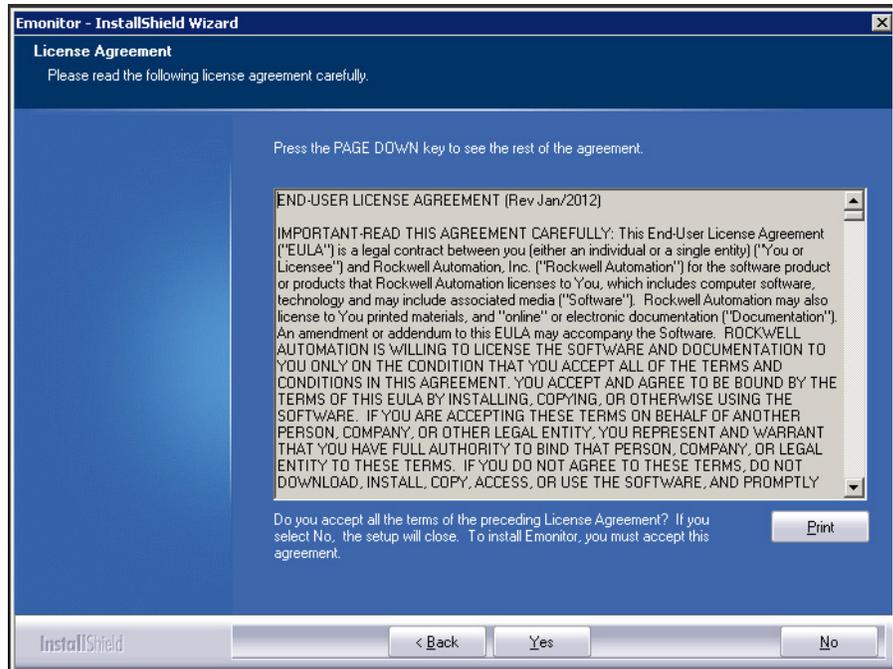
- From the main Autorun screen click **Emonitor**. Follow the instructions on the screen. Alternatively, navigate to the installation media, right-click on the **setup.exe** file, and select **Run as Administrator**.

Name ^	Date modified	Type	Size
Documentation	11/16/2015 11:30 AM	File folder	
ISSetupPrerequisites	11/16/2015 11:31 AM	File folder	
WFCU	11/16/2015 11:31 AM	File folder	
0x0409	3/23/2010 5:44 PM	Configuration settings	22 KB
autorun	1/31/2013 9:23 AM	Application	635 KB
data1	11/13/2015 7:04 AM	Cabinet File	5,626 KB
data1.hdr	11/13/2015 7:04 AM	HDR File	175 KB
data2	11/13/2015 7:05 AM	Cabinet File	69,649 KB
ISSetup.dll	4/24/2012 7:55 PM	Application extension	610 KB
layout.bin	11/13/2015 7:05 AM	BIN File	1 KB
setup	11/13/2015 7:04 AM	Application	789 KB
setup	11/13/2015 7:04 AM	Configuration settings	3 KB
setup.	11/13/2015 7:04 AM	INX File	637 KB
setup.	4/24/2012 9:38 PM	ISN File	254 KB

- The installer will automatically check for the presence of Microsoft.NET Framework 4.5.1.
 - If the required version of .NET Framework is detected, the installer will proceed directly to the next relevant step.
 - If the required version of .NET Framework is not installed, the following window will be displayed. Click **Install**.



5. The End User License Agreement will be displayed. Review the agreement and, if agreeing to the terms, select **Yes**.



6. The next dialog shows the results of a system requirements test. Click **Next**. See [System requirements](#) on [page 7](#) for more information.
7. Choose the directory where Emonitor will be installed. Click **Browse** to change the destination directory.
8. Select the program folder on the Start menu for Emonitor, then click **Next**.
9. Click **Next** to accept the configuration. The installation program begins copying files to the computer.

- The installation program installs the Windows Firewall Configuration Utility. The Firewall Configuration program then runs to automatically modify the Windows Firewall settings to allow the following components to communicate with Emonitor: Emonitor OPC Enumerator, SQL Server, DCOM, Enlive, and the Emonitor Online programs (Enwatch Setup, Online Data Console, Create Loadfile, Load and Unload). Then the DCOM Security configuration program runs to complete the modifications.

Tip: The message "The Windows Firewall configuration interface is unavailable" might appear if the Windows Firewall is disabled. If another software or hardware firewall is being used, it might need to be manually configured it to allow the Emonitor programs to communicate.

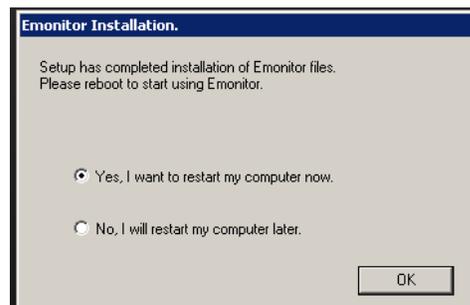
- On the Vibration database screen, enter the connection information for the Emonitor database. Click **Next** to continue.

The screenshot shows a window titled "Emonitor - InstallShield Wizard" with a subtitle "MS SQL Server: Vibration database." The main content area contains the following text: "Please fill in the following information about the database your Emonitor components will be connecting to. If you do not know these values, contact your database administrator to get them." Below this text are three input fields: "Connect" with the value "MSSQL2008", "Username" with the value "emonitor", and "Password" with the value "emonitor". At the bottom of the window, there is a navigation bar with the "InstallShield" logo on the left and three buttons: "< Back", "Next >", and "Cancel".

12. On the Configuration database screen, enter the connection information for the EConfig database. Click **Next** to continue.

Important: If incorrect information is entered in step 10 or 11, the next time Emonitor is started, the program will display a database connection error message. Click **Retry** and enter the correct information (connect string, username, and password). Due to enhanced security in Emonitor versions 3.40 and later, the password is encrypted and can no longer be edited in the Registry.

13. After a few processes run, the following warning will be displayed. Allow the system to reboot by selecting **OK**.



At this point, the installation of Emonitor is complete. However, before running Emonitor for the first time, the databases must be configured and loaded with data. If working Emonitor databases already exist, these steps do not need to be followed. The scripts to create the databases are installed with Emonitor, so they can only be run after installing Emonitor. See [Configure the databases](#) on [page 17](#) and [Import initial database data](#) on [page 19](#) for further details.

Install the EDS files

To import data from XM or XM DYN modules into Emonitor, the EDS files must be properly registered in RSLinx. EDS files are simple text files that are used by network configuration Tools such as the Emonitor Online Configuration Utility to describe products so that they can be easily commissioned on a network. EDS files describe a product device type, revision, and configurable parameters.

To install the EDS files:

1. Start the EDS Hardware Installation Tool. Click **Start > All Programs > Rockwell Software > RSLinx > Tools > EDS Hardware Installation Tool**.
2. In the EDS Hardware Installation Tool, click **Add**.
3. Select **Register a directory of EDS files**.
4. Click **Browse**, and navigate to the Emonitor program directory and click **OK**. The default directory is:

C:\Program Files\Rockwell Software\Emonitor

Set up scheduler to automate tasks

5. Click **Next**. The Tool installs all the EDS files in the Emonitor program directory. Some EDS files may show minor errors that do not have any functional impact, such as "The help string has exceeded the maximum length." Click **Next**.
6. Continue to click **Next** to complete the EDS Wizard, and finally click **Finish**.

The Scheduler program can be used to automate many data-related tasks. A task automated in Scheduler is called an event. A Scheduler profile defines not only the event, but also when and how often the event should occur. The Scheduler has two parts:

- The Scheduler program allows for the creation and editing of profiles.
- The Scheduler service that runs in the background and launches (executes) the scheduled profiles. The Scheduler service must be running in order to execute scheduled profiles.

The Emonitor Scheduler service is disabled by default. In order to launch (run) scheduled tasks, including importing data, it must be enabled.

To start the Scheduler service:

Note: The following steps require Administrator rights on the machine that will run the Scheduler service.

1. Click **Start > Control Panel > Administrative Tools > Services**.
2. Select **Services (local)** in the left side of the Services window.
3. Select **EmonitorScheduler** in the right side of the Services window.
4. The EmonitorScheduler **Startup Type** should be **Automatic**. If it is **Manual** or **Disabled**, right-click on EmonitorScheduler and select **Properties**. In the Properties dialog box, set **Startup Type** to **Automatic**, and then click **OK**.
5. The EmonitorScheduler Status should be **Started**. If it is **Stopped** (or not showing a status), right-click on **EmonitorScheduler** and select **Start**.

Tip: It is strongly recommended that the Startup Type for the Emonitor Scheduler be set to "Automatic" in the services console. This starts the Scheduler service automatically when Windows starts.

After enabling the Scheduler service it will start when Windows starts. Scheduled events are executed only when the Scheduler service is running.

Scheduler can be used on any computer in an Emonitor Online system (both Viewing station and Unload station computers).

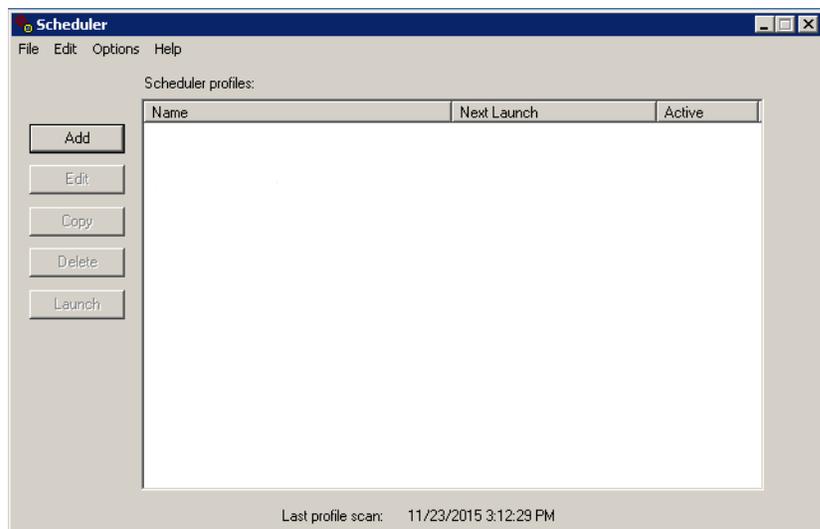
The Emonitor Scheduler is installed as part of the Emonitor software. Since Scheduler profiles are stored in the central Emonitor database, all scheduler profiles are launched on all computers in an Emonitor Online system that are running the Scheduler service. This may not be a problem when using Scheduler only for data import tasks on one or two computers. However, if Scheduler is used for additional kinds of tasks, such as Emonitor database maintenance, running the same scheduled task from multiple computers can place a significant load on the Database Server computer. Refer to the Scheduler help for more information (**Start > All Programs > Rockwell Software > Emonitor > Help > Scheduler**).

To set up additional online profiles:

These steps show how to set up two different online profiles. The first is the Online Import Event, which looks for unload files (containing data from the data collection instruments) in the unload directory and sends the information to the Emonitor database. The second is the Storage Limit Updater, which allows the limiting of data storage to specific parameters and specify a time during low database usage, saving dis space and time (a database maintenance task). Follow these steps to set up online profiles using Scheduler.

Tip: For more information on setting up different kinds of Scheduler profiles, refer to the Scheduler online help.

1. Start Scheduler (**Start > All Programs > Rockwell Software > Emonitor > Utilities > Scheduler**) and click **Add**.



2. On the Profile dialog, enter the **Profile Name**, such as Storage Limit Updater or Online Import Event. If desired, enter notes about the profile as well. Check the box beside **Enable profile for scheduling**. Click **Next** to continue.
3. On the Response dialog, select **Scheduled time/date/frequency**.
 - For the Storage Limit Updater, click **Next** and then skip to step 7.
 - For the Online Import Event, select **File change notification** and click **Settings**.
4. Click **Add File**. Select the UD directory under the Emonitor program directory. In the **File name** box, enter *.ulf. This tells Scheduler to look for unload files in the unload directory. Click **Open**.
5. The unload files appear in the **Monitored Files** list. Click **OK** to continue.
6. Click **Next** on the Response dialog.
7. On the Events dialog, click **Add Event**.
8. Enter the Executable file and the Command line using the following guidelines, then click **OK**.

Note: This example used the default Emonitor installation directory. If Emonitor was installed in a different directory, use the path of the Emonitor program directory.

For Online Import Event

Executable file:

```
C:\Program Files\Rockwell  
Software\Emonitor\did daemon.exe
```

Command line:

```
C:\Program Files\Rockwell  
Software\Emonitor\odonline.edi
```

For Storage Limit Updater

Executable file:

```
C:\Program Files\Rockwell  
Software\Emonitor\stglimit.exe
```

Command line (must be one of the following):

/all	Remove all measurement data, system event log data and alarm event log data outside the storage limits.
/list "list name"	Remove measurement data which are saved to a list with "list name" and are outside the storage limits.
/alarm	Remove alarm event log data outside the storage limits.
/system	Remove system event log data outside the storage limits.

9. Click **Next** to continue.
10. On the Frequency dialog, set the **Date** and **Time** desired for launching the profile. Click **Finish**.

The profile is now added to Scheduler. The executable file and command line information for the various database import and update programs is also included in the online help for the Scheduler program. Scheduler help can be displayed by pressing F1, or from the Start menu (**Start > Programs > Rockwell Software > Emonitor > Help > Scheduler**).

More information on using the Scheduler in an Emonitor Online system can be found in the help for the Online Data Management Console. Click **Start > Programs > Rockwell Software > Emonitor > Help > Online Data Management Console** to access this help.

Upgrade from a previous version of Emonitor

This chapter describes the process of upgrading from an earlier version of the Emonitor software to Emonitor 4.0.

Upgrade from Emonitor 3.6 or 3.7

When upgrading from Emonitor 3.60 or 3.70 running on Windows 7, much of the work required to preserve settings and configuration files is performed automatically by the installer.

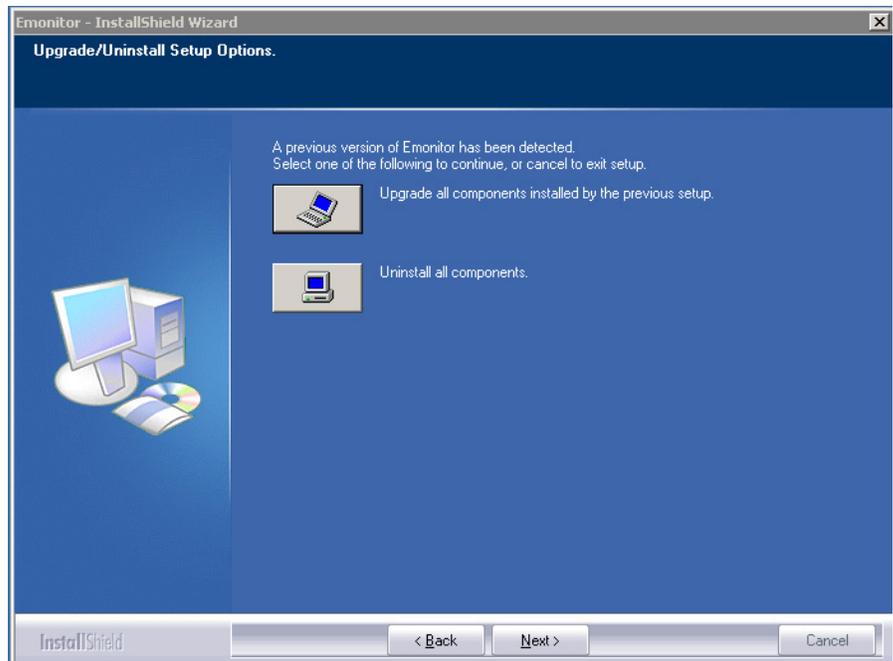
Important: Emonitor 3.7 users that have previously installed the Emonitor RTA and DDM utilities must uninstall that software and reboot their computer prior to installing Emonitor 4.0.

Upgrading from a previous version of Emonitor is very similar to the process outlined in [Install Emonitor](#) on [page 25](#) with a few minor differences.

Tip: During the installation of Emonitor 4.0, the instructions refer to the vibration database as the Emonitor database. Note that in Emonitor version 3.7 and earlier, this database was referred to as the Entek database. Simply substitute the login credentials for the already established Entek database any time the Emonitor database is referenced. There is no need to rename the database.

To upgrade the software:

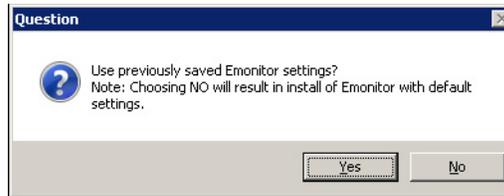
After Microsoft.NET Framework 4.5.1 has been installed, the following screen will be displayed with options for how to perform the upgrade.



To upgrade all components:

1. Select **Upgrade all components installed by the previous setup** to proceed automatically.
2. On the next screen, enter a location for the old Emonitor configuration files to be backed up to. Click **Next**.
3. The following screen will list the files to be backed up. Click **Next**.
4. The next screen will show the results of the backup operation and list any errors. Click **Next**.
5. The older version of Emonitor will now be uninstalled. Once this is complete, the computer will need to be rebooted.

6. Upon rebooting, a message should appear asking whether to proceed with the upgrade. Choose **Yes**. Choosing **No** will require settings to be restored manually at the end of the installation.

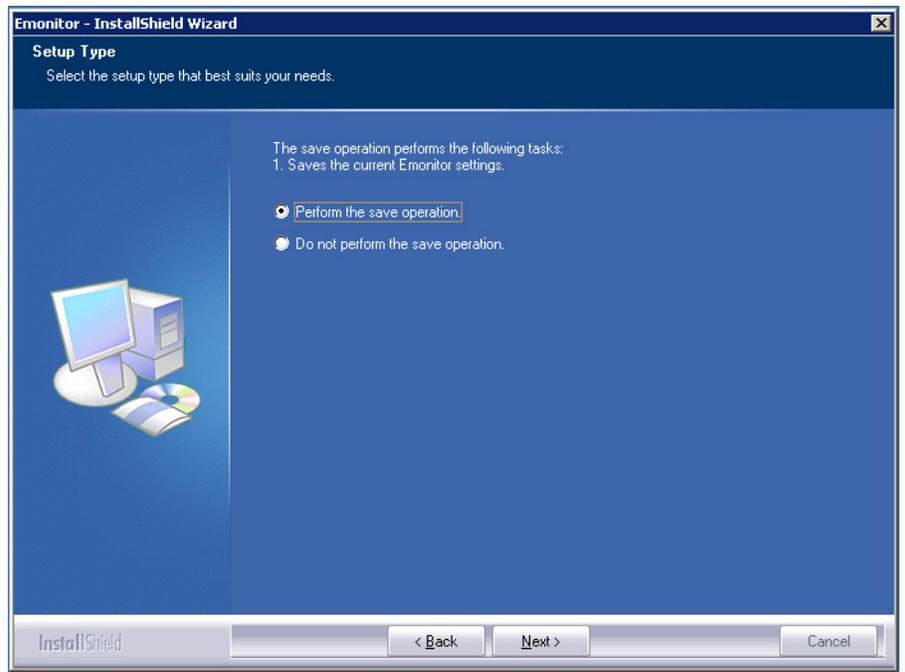


7. Installation will proceed as outlined in [Install Emonitor](#) on [page 25](#). If you opted to use the previous Emonitor settings the system will automatically restore the configuration files as a part of the process.
8. After installation is complete, the database will need to be restructured before the new version of Emonitor can be used. See the section [Restructure the database](#).

To uninstall all components:

1. Select **Uninstall all components** to remove the old Emonitor without automatically upgrading.

After selecting this option, the option will be given to back up the old configuration files, as shown below. If the save operation is not performed the uninstall will proceed and the computer will reboot.



2. On the next screen, enter a location for the old Emonitor configuration files to be backed up to. **Click Next.**
3. The following screen will list the files to be backed up. **Click Next.**
4. The next screen will show the results of the backup operation and list any errors. **Click Next.**
5. The computer will reboot.
6. After the reboot, proceed as outlined in the section [Install Emonitor](#) on [page 25](#). If old configuration files were backed up, they can be manually restored after the database has been restructured.

See [Restructure the database](#) on [page 40](#) and [Restore Emonitor configuration files](#) on [page 42](#) for more information on reinstalling Emonitor.

Upgrade from Emonitor 3.50 or earlier

Emonitor version 4.0 runs only on 32-bit versions of the Windows 7 operating system. This means that a direct upgrade from versions 3.50 and earlier of Emonitor is not possible; instead, Emonitor version 4.0 must be installed on a computer running Windows 7 and the configuration files copied over.

Scheduler, Enwatch Online Data, XM/DYN Online Data, Enterprise Online Configuration Utility, and Emonitor OPC Client configuration files from previous versions of Emonitor should work with the new version of Emonitor. New data sources will need to be created in the Online Data Management Console after the upgrade. For more information, refer to the Online Data Management Console after completing the upgrade (click **Start > Programs > Rockwell Software > Emonitor > Help > Online Data Management Console**).

To upgrade from Emonitor 3.50 or earlier:

Note: If upgrading from a version of Emonitor prior to 3.20, please contact Customer Support for assistance. See [Contact us](#) on [page 10](#) for contact information.

1. Migrate older Emonitor SQL databases to a Microsoft SQL Server 2012 implementation accessible from the Windows 7 PC on which Emonitor 4.0 will be installed.
2. Install Emonitor version 4.0 on a computer running Windows 7. See [Install Emonitor](#) on [page 255](#) for more information. Note that in older versions of Emonitor, the vibration database was referred to as the Entek database. There is no need to rename this database for Emonitor 4.0. Instead, simply substitute the Entek database connection information whenever the Emonitor database connection information is called for.
3. Move the existing Emonitor configuration files to the computer where Emonitor version 4.0 is installed. See [Manually back up Emonitor configuration files](#) on [page 39](#) and [Restore Emonitor configuration files](#) on [page 42](#).

Manually back up Emonitor configuration files

Emonitor uses configuration files that are stored outside of the Emonitor database.

These files contain the settings for a number of Emonitor programs, including:

- Scheduler
- Emonitor Online Hardware Setup
- XM Emonitor Gateway
- Enterprise Online Configuration Utility
- Emonitor OPC Client

To use these configuration files with Emonitor version 4.0, they must be copied from their current Emonitor installation to the computer running Emonitor version 4.0.

The default directories for the configuration files are listed below. If different directories have been used, make sure that those directories are backed up, as well.

Files	Default directories
DCF Files (Windows XP)	For Emonitor Online: C:\Program Files\Rockwell Software\Emonitor\[PROFILE_NAME].DCF
EOL Files (Windows XP)	For Emonitor Online: C:\Program Files\Rockwell Software\Emonitor\[PROFILE_NAME].EOL
OnlineDataConsole.XML (Windows XP)	C:\Windows\system32\OnlineDataConsole.XML
Templates (Windows XP)	C:\Program Files\Rockwell Software\Emonitor\English Templates C:\Program Files\Rockwell Software\Emonitor\Metric Templates
Load and Unload directories (Windows XP)	C:\Program Files\Rockwell Software\Emonitor\LD C:\Program Files\Rockwell Software\Emonitor\UD
Online directory (Windows XP)	C:\Program Files\Rockwell Software\Emonitor\Online
INI, EDI and EAX Files (Windows XP)	C:\Program Files\Rockwell Software\Emonitor\LD C:\Program Files\Rockwell Software\Emonitor\UD
Online directory (Windows XP)	C:\Program Files\Rockwell Software\Emonitor\

New EDS files are installed with Emonitor 3.6 or later on a computer running Windows 7; however, any custom EDS files must be backed up manually.

Restructure the database

After any upgrade, the database must be restructured. This adds the necessary data and structure information to the current database, allowing it to run the new version of the program. When first starting Emonitor, the restructure program automatically starts if it is needed.

Important: Make sure to follow these steps before restructuring the databases.

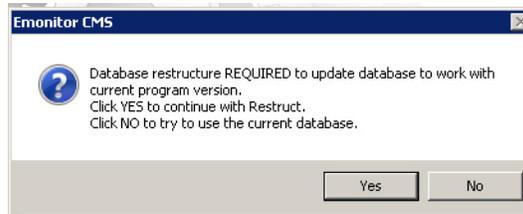
- Back up the databases.
 - Unload any data collectors.
 - Disconnect all users from the database.
-

If upgrading from Emonitor version 3.30 or earlier, the files in the \Restruct folder must be renamed from *.msq to *.sql (on the computer where Emonitor was installed). Failing to rename the restructure files will cause the database restructure process to fail.

To restructure the database:

1. Start the Emonitor software from the Start menu on any client computer (Start > Programs > Rockwell Software > Emonitor > Emonitor). Click **Yes** to update the database.

The default Admin username and password are "admin" and "password".



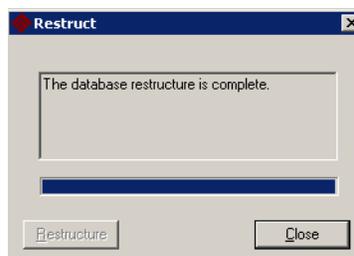
2. Click **Restructure** to begin the update process.



3. Make sure the database has been backed up, then click **OK** to continue.
4. Make sure that no users are still attached to the database, then click **OK** to continue.

Important: Allow plenty of time to restructure the database. It might appear to stop or be locked up, and stay at 99% for a long time. Do not try to restart the computer during restructure – just be patient and let the program finish.

5. When the process is finished, click **Close**. The new version of Emonitor can now be run.



Restore Emonitor configuration files

After restoring the Emonitor database files, restore the Emonitor configuration files.

Important: Note that the default directories for Emonitor configuration files on Windows 7 are different than they were on previous versions.

DCF Files (Windows 7):

```
C:\Users\Public\Documents\Rockwell
Software\Emonitor\[PROFILE_NAME].DCF
```

OnlineDataConsole.XML (Windows 7):

```
C:\Users\Public\Documents\Rockwell
Software\Emonitor\OnlineDataConsole.XML
```

Tip:

Edit the XML files and change all instances in the document from:

```
<XMProfile>C:\Program Files\Rockwell
Software\Emonitor\
```

to:

```
<XMProfile>C:\Users\Public\
Documents\Rockwell Software\Emonitor\
```

Templates (Windows 7)

```
C:\Users\Public\Documents\Rockwell
Software\Emonitor\Templates\English
C:\Users\Public\Documents\Rockwell
Software\Emonitor\Templates\Metric
```

Load and Unload directories (Windows 7)

```
C:\Users\Public\Documents\Rockwell Software\Emonitor\UD
C:\Users\Public\Documents\Rockwell Software\Emonitor\ld
```

Online directory (Windows 7)

```
C:\Users\Public\Documents\Rockwell Software\Emonitor\Online
```

EDS files are installed with Emonitor 3.60. If any custom EDS files were backed up, restore them to:

```
C:\Program Files\Rockwell Software\Emonitor\
```

INI, EDI and EAX Files (Windows 7)

```
C:\Program Files\Rockwell Software\Emonitor\
```

Note: This is the same directory as for Emonitor 3.5

Change paths in odonline.edi

After restoring the `odonline.edi` file, it must be edited to update the path information.

To edit the `odonline.edi` file:

1. Shut down Emonitor if it is running.
2. Open `C:\Program Files\Rockwell Software\Emonitor\odonline.edi` with Windows Notepad or another text editor.
3. Edit `C:\Program Files\Rockwell Software\Emonitor\odonline.edi` as follows:

```
[Source]
DataFileConfigFile=C:\Program Files\Rockwell
Software\Emonitor\odonline.ini
DataFileDir=C:\Users\Public\Documents\Rockwell
Software\Emonitor\ud
DataFiles=C:\Users\Public\Documents\Rockwell
Software\Emonitor\ud\*.ulf
[Options]
BackupPathnameOnError=C:\Users\Public\Documents\Rockwell
Software\Emonitor\online\backup\
LogFilePathname=C:\Users\Public\Documents\Rockwell
Software\Emonitor\online\online.log
```

To restart the Scheduler and Emonitor Online services:

1. Click **Start > Control Panel > Administrative Tools > Services** to open the Services snap-in.
2. In the **Navigation** pane, select **Services (local)**.
3. In the **Details** pane, select **EmonitorScheduler**.
4. If the EmonitorScheduler status is **Started**, right-click **EmonitorScheduler** and select **Restart**.
5. In the **Details** pane, select **EmonitorOnline**.
6. If the EmonitorOnline status is **Started**, right-click **EmonitorOnline** and select **Restart**.
7. After restarting, both services should have a status of **Running**.

Rockwell Automation support

Rockwell Automation provides technical information on the web to assist you in using its products.

At <http://www.rockwellautomation.com/support> you can find technical and application notes, sample code, and links to software service packs. You can also visit our Support Center at <https://rockwellautomation.custhelp.com> for software updates, support chats and forums, technical information, FAQs, and to sign up for product notification updates.

In addition, we offer multiple support programs for installation, configuration, and troubleshooting. For more information, contact your local distributor or Rockwell Automation representative, or visit <http://www.rockwellautomation.com/services/online-phone>.

Installation assistance

If you experience a problem within the first 24 hours of installation, review the information that is contained in this manual. You can contact Customer Support for initial help in getting your product up and running.

United States or Canada	1.440.646.3434
Outside United States or Canada	Use the Worldwide Locator available at http://www.rockwellautomation.com/locations , or contact your local Rockwell Automation representative.

New product satisfaction return

Rockwell Automation tests all of its products to ensure that they are fully operational when shipped from the manufacturing facility. However, if your product is not functioning and needs to be returned, follow these procedures.

United States	Contact your distributor. You must provide a Customer Support case number (call the phone number above to obtain one) to your distributor to complete the return process.
Outside United States	Please contact your local Rockwell Automation representative for the return procedure.

Documentation feedback

Your comments will help us serve your documentation needs better. If you have any suggestions on how to improve this document, complete the feedback form, publication [RA-DU002](http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002_-en-e.pdf) http://literature.rockwellautomation.com/idc/groups/literature/documents/du/ra-du002_-en-e.pdf.

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