



FactoryTalk Batch Components Installation and Upgrade Guide

FactoryTalk Batch Components 14.00

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Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards.

Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

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Throughout this manual, when necessary, we use notes to make you aware of safety considerations.



WARNING: Identifies information about practices or circumstances that can cause an explosion in a hazardous environment, which may lead to personal injury or death, property damage, or economic loss.



ATTENTION: Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attentions help you identify a hazard, avoid a hazard, and recognize the consequence.

IMPORTANT Identifies information that is critical for successful application and understanding of the product.

Labels may also be on or inside the equipment to provide specific precautions.



SHOCK HAZARD: Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.



BURN HAZARD: Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.



ARC FLASH HAZARD: Labels may be on or inside the equipment, for example, a motor control center, to alert people to potential Arc Flash. Arc Flash will cause severe injury or death. Wear proper Personal Protective Equipment (PPE). Follow ALL Regulatory requirements for safe work practices and for Personal Protective Equipment (PPE).

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About this manual

This guide provides information and procedures for installing and upgrading a FactoryTalk® Batch system, which includes:

- FactoryTalk Batch
- FactoryTalk eProcedure®
- FactoryTalk® Event Archiver Database, with Batch Reports and Database Management Tool
- FactoryTalk Batch Material Manager
- FactoryTalk® Batch View

This guide is organized into a conceptual overview of a FactoryTalk Batch system that includes information about pre-installation administrative tasks, followed by installation and post-installation procedures for the different system components.

Readers should be familiar with installing Windows applications and configuring operating system options.

Before starting installation or upgrade of FactoryTalk Batch components, review FactoryTalk Batch release notes and product compatibility information at the [Product Compatibility and Download Center \(PCDC\)](#).

Legal Notices

Rockwell Automation publishes legal notices, such as privacy policies, license agreements, trademark disclosures, and other terms and conditions on the [Legal Notices](#) page of the Rockwell Automation website.

End User License Agreement (EULA)

You can view the Rockwell Automation End User License Agreement (EULA) by opening the license.rtf file located in your product's install folder on your hard drive.

The default location of this file is:

C:\Program Files (x86)\Common Files\Rockwell\license.rtf

Open Source Software Licenses

The software included in this product contains copyrighted software that is licensed under one or more open source licenses.

You can view a full list of all open source software used in this product and their corresponding licenses by opening the oss_license.txt file located your product's OPENSOURCE folder on your hard drive. This file is divided into these sections:

- **Components**
Includes the name of the open source component, its version number, and the type of license.
- **Copyright Text**
Includes the name of the open source component, its version number, and the copyright declaration.
- **Licenses**
Includes the name of the license, the list of open source components citing the license, and the terms of the license.

The default location of this file is:

C:\Program Files (x86)\Common Files\Rockwell\Help\<product name>\Release Notes\OPENSOURCE\oss_licenses.txt

You may obtain Corresponding Source code for open source packages included in this product from their respective project web site(s). Alternatively, you may obtain complete Corresponding Source code by contacting Rockwell Automation via the **Contact** form on the Rockwell Automation website: <http://www.rockwellautomation.com/global/about-us/contact/contact.page>. Please include "Open Source" as part of the request text.

Additional resources

Following is a comprehensive list of documentation for the FactoryTalk® Batch products from Rockwell Automation.

Installation, Quick Start, and Getting Results Guides

Resource	Description
FactoryTalk Batch Components Installation and Upgrade Guide (BATCH-IN002)	Provides information and procedures for FactoryTalk Batch system installation. Includes information for FactoryTalk Batch Material Manager, FactoryTalk Event Archiver, and associated FactoryTalk Batch Client and Server components.
FactoryTalk Batch View Quick Start Guide (FTBVS-QS001)	Provides information about using FactoryTalk Batch View to create, view, and command control recipes, acknowledge prompts and signatures, view equipment phases and diagnostic information, and view profile information.
FactoryTalk Batch View HMI Controls Quick Start Guide (BATCH-QS001D)	Provides a general overview of FactoryTalk Batch View HMI Controls.
FactoryTalk Batch eProcedure® Getting Results Guide (BWEPRO-GR011)	Explains the basics of FactoryTalk Batch eProcedure.
FactoryTalk Batch Getting Results Guide (BATCH-GR011)	Introduces the basics of automated batch manufacturing and the FactoryTalk Batch product components.

Resource	Description
FactoryTalk Batch Material Manager Getting Results Guide (BWMTR-GR011)	Introduces the basics of FactoryTalk Batch Material Manager.

User Guides

Resource	Description
FactoryTalk Batch ActiveX Controls User Guide (BATCH-UM013)	Provides information and instructions for using the FactoryTalk Batch ActiveX Custom Controls.
FactoryTalk Batch Material Editor User Guide (BWMTR-UM001)	Provides access to information and procedural instructions required to configure materials and the containers to hold them. The material data is stored in the material database, which is used to create material-based recipes. This information is intended as a reference for the formulator.
FactoryTalk Batch Equipment Editor User Guide (BATCH-UM004)	Provides information on creating and maintaining an equipment database (area model). The area model is stored in a file with a .cfg file extension and is available to all other FactoryTalk Batch programs, including the Recipe Editor, View, and Phase Simulator.
FactoryTalk Batch PhaseManager™ User Guide (BATCHX-UM011)	Describes the integration of the FactoryTalk Batch software with the Studio 5000 Logix Designer® application and the Logix 5000™ family of controllers. The integration simplifies the configuration and maintenance of the FactoryTalk Batch automation system, provides better communication between the FactoryTalk Batch Server and the Logix 5000 controller, and significantly reduces the programming effort required to develop the phase logic code that resides in your Logix 5000 controller.
FactoryTalk Batch Recipe Editor User Guide (BATCH-UM006)	Provides instructions on using FactoryTalk Batch Recipe Editor to create and configure master recipes for use in batch automation. The interface is based on IEC 61131-3 sequential function charts to graphically organize recipes into procedures, unit procedures, operations, and phases. Build recipes using either the SFC format or a table-based format.
FactoryTalk Batch View HMI Controls User Manual (FTBVS-UM003)	Provides details about using FactoryTalk Batch View HMI Controls to monitor and interact with the production process within a FactoryTalk View SE Display Client.
FactoryTalk Batch View User Manual (FTBVS-UM002)	Provides information and procedural instructions for using FactoryTalk Batch View in a modern and intuitive portal into a comprehensive batching solution for effective operations, leveraging its own web server using HTML5 technology to provide native connectivity into a FactoryTalk Batch Server.
FactoryTalk eProcedure Client User Guide (BWEPRO-UM001)	Provides information and procedural instructions required to create and command batches using the FactoryTalk eProcedure Client, and can be used as a reference information by the operator.

Resource	Description
FactoryTalk Event Archiver User Guide (BATCH-UM012)	Provides information and instructions specific to the FactoryTalk Event Archiver. Intended for use by the system administrator and production supervisor.
FactoryTalk Batch View User Guide (legacy) (FTBVS-UM001)	Provides information and instructions on how to use FactoryTalk Batch View to initiate and execute FactoryTalk Batch automation processing. FactoryTalk Batch View secured objects are located in the FactoryTalk Diagnostics and are modified using the FactoryTalk Administration Console. A system administrator can customize FactoryTalk Batch View security to meet the needs of the facility. FactoryTalk Batch View is used in conjunction with a Human-Machine Interface (HMI).

Administrator Guides

Resource	Description
FactoryTalk Batch Administrator Guide (BATCH-UM003)	Provides instructions for configuring security and services, and implementation and use of components not typically accessed or used by batch operators, such as the FactoryTalk Batch Server.
FactoryTalk Batch eProcedure Administrator Guide (BWEPRO-UM011)	Provides procedures specific to FactoryTalk Batch eProcedure, such as implementing security and configuring the user-defined area Active Server Page. Included are instructions for tasks specific to FactoryTalk Batch, such as configuring security and services to support FactoryTalk Batch eProcedure. Provides instructions on the implementation and use of components not typically accessed or used by batch operators, such as the FactoryTalk Batch Server.
FactoryTalk Batch Material Manager Administrator Guide (BWEPRO-UM011)	Provides information and instructions specific to FactoryTalk Batch Material Manager. Intended for use by the system administrator and database administrator.

Reference Guides

Resource	Description
FactoryTalk Batch ActiveX Controls Library Reference Guide (BATCH-RM001)	Provides reference information and procedural instructions for the FactoryTalk Batch ActiveX Custom Controls.
FactoryTalk Batch Material Server API Technical Reference (BWMTR-RM001)	Provides access to information regarding the interface between the FactoryTalk Batch Material Server and the FactoryTalk Batch Material Editor and FactoryTalk Batch. It is intended to be used as a reference information by those who want to develop custom interfaces.
FactoryTalk Batch PCD Programming Reference Manual (BATCH-RM004)	Provides information and instructions about the FactoryTalk Batch PCD interface design. It is intended to be used as a reference guide.

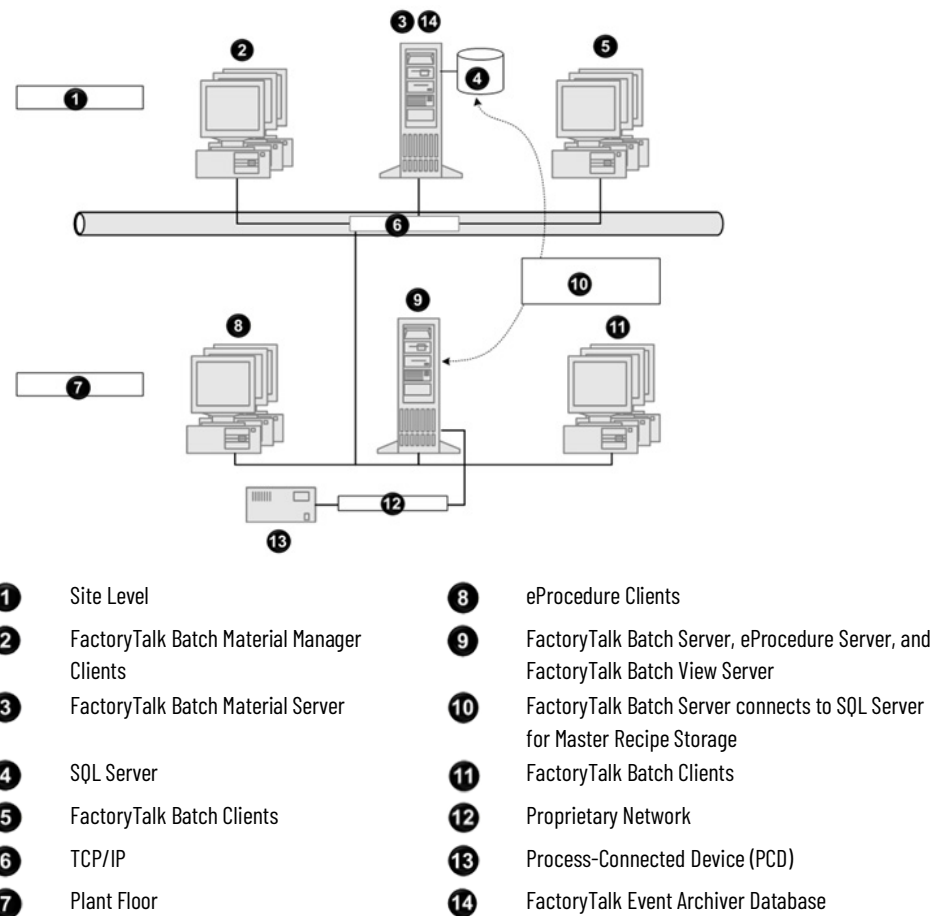
Resource	Description
FactoryTalk Batch Server API Reference Manual (BATCH-RM003)	Provides information regarding the interface between the FactoryTalk Batch Server and FactoryTalk Batch View — the Server Application Programming Interface (API). It is intended to be used as a reference guide by those who want to develop custom interfaces.
FactoryTalk Batch System Files Reference Manual (BATCH-RM005)	Provides the technical information for configuration and maintenance of a FactoryTalk Batch system. It can be used as a reference information for implementation engineers and the system administrator.
FactoryTalk Batch eProcedure Instruction File Design Reference Manual (BWEPRO-RM001)	Includes information about the building of instruction files for use in equipment database creation and recipe development. This information is intended to be used as a reference by the instruction file author.

View or download publications at <http://www.rockwellautomation.com/literature>. To order paper copies of technical documentation, contact your local Allen-Bradley® distributor or sales representative.

FactoryTalk Batch system overview

FactoryTalk Batch components are configurable products that help define, manage, monitor, and control manufacturing at local or remote sites. A typical FactoryTalk Batch architecture consists of one or more computers on a single network; there can be up to ten FactoryTalk Batch servers in a FactoryTalk Batch system that includes Material Manager. Review the application release notes, manuals, installation information for the FactoryTalk Batch components planned for your architecture before setting up the FactoryTalk Batch system.

This diagram illustrates an example of a FactoryTalk Batch network.



Server placement guidelines

Use these guidelines to decide where to place FactoryTalk Batch system servers on the network:

- Install the eProcedure Server and the FactoryTalk Batch Server on the same computer.



Tip: The FactoryTalk Batch View Server is installed automatically with the FactoryTalk Batch Server.

- Install the FactoryTalk Batch Material Manager Server on a computer with SQL Server.
- Do not install the FactoryTalk Batch Material Manager Server on the same computer as the FactoryTalk Batch Server.
- A maximum of ten FactoryTalk Batch Servers can exist in a FactoryTalk Batch network that includes FactoryTalk Batch Material Manager Server.
- Install the FactoryTalk Event Archiver Database and Management Tool on a computer with SQL Server.
- For best performance, install the FactoryTalk Event Archiver Database and Management Tool on a different computer than the FactoryTalk Batch Server.

FactoryTalk Batch View

FactoryTalk Batch View is a modern, browser-based interface that allows you to initiate and control the batch process anywhere there is an internet connection. The FactoryTalk Batch View interface adapts across smartphones, such as iOS and Android, to tablets and PCs. Users can access real-time information and interact with their process from the plant floor to the production office.

FactoryTalk Batch View is well-suited for large industrial facilities that have workstation infrastructure limitations and require multiple access points across the plant. With personalized user profiles that are tailored to the user, such as language switching options, workers at different levels of the organization can stay mobile yet connected to their process operations.

Key capabilities of the solution include:

- A modern web interface offers adaptation to new or existing platforms and environments with backward compatibility to previous versions of FactoryTalk Batch software; single-server architecture allows for new features and functions to be added with minimal impact to operations.
- Information-enabled and secure. Uses common system security policies for access control similar to any workstation, as a node on the plant network.
- Interfaces support multiple mobile devices and are easily integrated with HMI screens onto workstations.

Installation information about FactoryTalk Batch View

The FactoryTalk Batch View Server is installed automatically with the FactoryTalk Batch Server. The FactoryTalk Batch View web client does not require any additional installation.



Tip: FactoryTalk Batch View performs best with Chromium-based browsers such as Google Chrome or Microsoft Edge.

If you are using a FactoryTalk View SE Display Client, install the FactoryTalk® Batch View HMI controls to provide an interface that allows users to monitor and interact with the production process. The FactoryTalk Batch View HMI controls consist of:

- **BatchesList** control: Creates control recipes, displays current control recipes, and commands a control recipe. In FactoryTalk View SE, maps to **BatchViewHMI.BatchesList** in the **Insert an ActiveX Control** dialog box and the **Property Panel**.
- **PromptsList** control: Displays a list of prompts that are waiting to be acknowledged, a list of electronic signatures associated with a batch that are waiting for signoff, and instructions waiting to be acknowledged. In FactoryTalk View SE, maps to **BatchViewHMI.PromptsList** in the **Insert an ActiveX Control** dialog box and the **Property Panel**.
- **SFC** control: Enables the ability to command batches during FactoryTalk View SE run-time on the Details and Summary pages of the SFC. In FactoryTalk View SE, maps to **BatchViewHMI.SFC** in the **Insert an ActiveX Control** dialog box and the **Property Panel**.
- **Full** control: Accesses the entire FactoryTalk Batch View site. In FactoryTalk View SE, maps to **BatchViewHMI.FullView** in the **Insert an ActiveX Control** dialog box and the **Property Panel**.

For more information about FactoryTalk Batch View, see the FactoryTalk Batch View online help.

System requirements and supported software overview

Review these minimum and recommended system requirements for installing, configuring, and running FactoryTalk Batch components. Unless noted these requirements assume that no other applications are installed on the computer. Preferred operating systems and software applications are prioritized for support, testing, and post-release patch qualifications.

Hardware requirements

- **Server requirements**
 - 8 GB of RAM memory
 - 100 GB free hard disk space
 - Intel® Core™ i5 standard power processor or greater
- **Client requirements**

- 4 GB of RAM memory
- 30 GB free hard disk space
- Intel Core i5 standard power processor or greater

Supported operating systems

- Windows Server®
 - Windows Server 2019 Standard Edition (preferred)
 - Windows Server 2016 Standard Edition (preferred)
 - Windows Server 2019 DataCenter Edition
 - Windows Server 2016 DataCenter Edition
 - Windows Server 2012 R2 Standard Edition or DataCenter
 - Windows Server 2012 Standard Edition or DataCenter
- Windows®
 - Windows 10 Professional (64-bit) Build 1909 or later (preferred)
 - Windows 10 Enterprise (64-bit) Build 1909 or later

Supported database applications

(for storing recipes, materials, reports, and journal archives)

- SQL Server®
 - SQL Server 2019 (English version only)
 - SQL Server 2017 (English version only)
 - SQL Server 2016 Service Pack 1 (English version only)
 - SQL Server 2014 Service Pack 3 (32-bit and 64-bit, English version only)
 - SQL Server 2012 Service Pack 4 (32-bit and 64-bit, English version only)

Web browsers

(for eProcedure Client only)

- Internet Explorer® 11(32-bit)

(for FactoryTalk Batch View only)

- Google® Chrome™ browser (preferred)
- Microsoft Edge™ based on Chromium version: 80.0.361.50 or higher
- Apple® Safari®
- Firefox®

Logix firmware requirements

(for FactoryTalk Batch only)

- Firmware version 18 or later on ControlLogix 5570 and CompactLogix 5370 family of controllers – for integration of PhaseManager with FactoryTalk Batch
- Firmware version 32 or later on ControlLogix 5580 and CompactLogix 5380 family of controllers – for integration of PhaseManager with FactoryTalk Batch
- Firmware version 29 or later - for integration of SequenceManager with FactoryTalk Batch

Logix Designer requirements

(for FactoryTalk Batch only)

- Logix Designer version 18 or later - for synchronization of PhaseManager with FactoryTalk Batch Equipment Editor

FactoryTalk View SE requirements

(for integration of FactoryTalk Batch View HMI Controls and legacy FactoryTalk Batch ActiveX controls only)

- FactoryTalk View SE version 12.0 (preferred)
- FactoryTalk View SE version 11.0

FactoryTalk Services requirements

- FactoryTalk Services Platform version 6.20 (CPR 9 SR 12) or later
- FactoryTalk Linx version 6.20 (CPR 9 SR 12) or later
- FactoryTalk Activation Manager version 4.04 or later

Rockwell Automation Test Environment

Rockwell Automation tests software products under a standard configuration of operating systems and antivirus software. For additional information see the Knowledgebase Document ID: [PN24 - Rockwell Software Products and Antivirus Software](#).

Warranty

The warranty does not cover systems that do not meet the minimum requirements for the version of software.

IMPORTANT FactoryTalk Batch components for version 14.00 support only the *U.S. English* versions of operating systems. For more information about supported operating systems and other Rockwell Software product version support, refer to the [Product Compatibility and Download Center \(PCDC\)](#).

- The FactoryTalk Batch Server computer cannot be configured as a:
 - Domain controller
 - DHCP server
 - WINS server
 - RAS server
 - DNS server
 - Master Browser
- The FactoryTalk Batch Server computer does not support replication.
- Install FactoryTalk Batch software on an NTFS formatted hard drive, as Windows security features are available only for drives formatted to use NTFS.
- Warranty does not cover systems with modified DCOM configuration settings. Configuring settings using DCOMCNFG may stop the FactoryTalk Batch Server and prevent the FactoryTalk Batch Service Manager from functioning correctly.

IMPORTANT FactoryTalk Batch version 14.00 components do not support touch screen technology.

Select installation instructions for each computer

After completing the pre-installation administrative tasks, follow the installation instructions for each computer in the system, or repeat the installation instructions for several computers based on your FactoryTalk Batch system configuration. For example, if the FactoryTalk Batch system includes a FactoryTalk Batch Server and several FactoryTalk Batch Clients, determine which components to install on each computer. Each set of installation instructions includes a checklist of all related tasks and specific post-installation tasks for the component.

- [Install FactoryTalk Batch Server, FactoryTalk eProcedure Server, and FactoryTalk Event Archiver](#) on [page 35](#)
- [Install FactoryTalk Batch Client components](#) on [page 51](#)
- [Install FactoryTalk Batch Material Manager Server components](#) on [page 53](#)
- [Install FactoryTalk Batch Material Manager Client components](#) on [page 57](#)
- [Install eProcedure Client components](#) on [page 77](#)

If you are upgrading your system from a previous version of FactoryTalk Batch use the [Upgrade FactoryTalk Batch](#) instructions.

Pre-installation administrative tasks

This section describes administrative tasks to perform before installing FactoryTalk Batch components. Tasks include:

- [Obtain administrator privileges on target computer](#) on [page 21](#)
- [Prepare the operating system](#) on [page 21](#)
- [Create users and user groups](#) on [page 24](#)
- [Update Windows Firewall settings](#) on [page 25](#)
- [Configure the Remote Registry service](#) on [page 27](#)
- [Set the system date and time](#) on [page 27](#)
- [Prepare the SQL Server installation](#) on [page 27](#)

Obtain administrator privileges on target computer

To install each of these software applications on the target computer, you must be logged onto the computer using an account that has administrator privileges on the computer and that has been granted permission to create databases, stored procedures, and logins on SQL Server.

- FactoryTalk Batch Server
- FactoryTalk Batch Client
- FactoryTalk Event Archiver
- FactoryTalk eProcedure Server
- FactoryTalk eProcedure Client
- FactoryTalk Batch Material Manager Server
- FactoryTalk Batch Material Manager Client

Before starting the installation procedure close any open applications.

Prepare the operating system

Before installing FactoryTalk Batch Server, FactoryTalk Material Manager Server, or FactoryTalk eProcedure Server components make sure that the operating system for the target computer is properly configured.

Server operating systems and desktop operating systems have different configuration requirements.

Pre-installation configuration task include:

- Configure the Windows Server operating system
- Configure the Windows desktop operating system

Windows configuration requirements

If setting up new computers for the FactoryTalk Batch system, install the operating system using the default settings. Then configure the operating system as described for the components.



Tip: All supported operating systems are tested and warrantied for FactoryTalk Batch version 14.00.

Configure the Windows Server operating system

Configure the Windows Server operating system features to support FactoryTalk Batch Server, FactoryTalk Batch Material Manager Server, or FactoryTalk eProcedure Server.



Tip: FactoryTalk Batch Server does not require any additional configuration of Windows Server 2016 or 2019.

To configure the Windows Server operating system

1. If installing FactoryTalk Batch Server enable the required server features:
 - In **Server Manager**, select **Add Roles and Features**.
 - In **Add Roles and Features Wizard**, select **Next**.
 - For **Installation Type**, select **Role-based or feature-based installation**.
 - For **Server Selection**, choose **Select a server from the server pool**, and then choose the appropriate server from the **Server Pool** list and then select **Next**.
 - (Windows Server 2012) For **Server Roles**, select **Application Server**.
2. If installing FactoryTalk Batch Material Manager Server go to **Features**, and select **Message Queuing**.
3. If installing FactoryTalk eProcedure Server, enable these additional settings under **Web Server (IIS) > Role Services**.
 - **IIS6 Management Compatibility**
 - IIS6 Metabase compatibility
 - IIS6 Management Console
 - **Web Server > Application Development:**
 - For Windows Server 2012:
 - ASP
 - ASP.NET 3.5
 - ASP.NET 4.5
 - For Windows Server 2016 or Windows Server 2019
 - ASP
 - ASP .NET 3.5
 - ASP .NET 4.7
 - **Web Server**

- Common HTTP Features

IMPORTANT Enabling some features automatically selects new required additional features and updates the feature list accordingly. Select **Add Feature** to accept the default selections for these options.

4. Verify the selections, and then select **Install**.
5. When the installation process is complete, select **Close**.

Configure the Windows desktop operating system

Perform this procedure to configure the Windows desktop operating system for the FactoryTalk Batch Material Manager Server, and FactoryTalk eProcedure Server. Use the **Turn Windows features on or off** control panel item for this configuration process.



Tip: FactoryTalk Batch Server and Client components do not require any additional configuration for Windows desktop operating systems.

To configure Windows desktop operating system

1. On the computer where the FactoryTalk Batch Material Manager Server or FactoryTalk eProcedure Server will be installed, select **Control Panel > Programs > Turn Windows features on or off**.

Windows Features opens.



Tip: In **Windows Features** the box next to the feature name represents the installation status of the feature:

- A checkmark represents a fully installed feature.
 - A black square represents an installed feature with optional features that are not enabled.
 - Empty boxes represent uninstalled features.
2. If installing FactoryTalk Batch Material Manager Server select **Microsoft Message Queue (MSMQ) Server**. **Microsoft Message Queue (MSMQ) Server Core** is selected by default.
 3. If installing FactoryTalk Batch eProcedure Server select these features:
 - **Internet Information Services**
 - Web Management Tools
 - IIS 6 Management Compatibility
 - IIS 6 Management Console
 - IIS 6 Metabase and IIS 6 configuration compatibility
 - IIS Management Console
 - **Internet Information Services > World Wide Web Services**
 - Application Development Features
 - .Net Extensibility 3.5
 - .Net Extensibility 4.6
 - ASP
 - ASP .NET 3.5

- ASP .NET 4.6
- ISAPI Extensions
- ISAPI Filters
- Common HTTP Features
- Static Content

4. Select **OK** to enable the features and close the dialog box.

DEP settings

Data Execution Prevention (DEP) uses hardware and software security features to prevent the execution of malicious code in Windows operating systems.

Rockwell Automation supports DEP OptIn and OptOut settings. For more information, see [Microsoft KB article 875352](#).

Create users and user groups

Before installing FactoryTalk Batch, you must create at least one domain user account that serves as the FactoryTalk Batch Server user account. If your installation includes FactoryTalk Batch Material Manager Server you must also create several domain user groups. When you run the installation program you will need to provide the FactoryTalk Batch Server user account and password for the FactoryTalk Batch Server and FactoryTalk Batch Material Manager Server to run under.

FactoryTalk Batch users/user groups

The installation of the FactoryTalk Batch Server creates the Windows user group **batchsvr_group** on the FactoryTalk Batch Server. This group is automatically assigned all the user rights and default access permissions required for the FactoryTalk Batch Server to function correctly.

The installation adds the FactoryTalk Batch Server user account to the following:

- Administrators group
- batchsvr_group
- Batch COM+ Application
- FactoryTalk Batch Server service
- FactoryTalk Event Archiver service
- FactoryTalk eProcedure Server service (eProcedure Server installation)

The services for the FactoryTalk Batch Server, FactoryTalk Event Archiver, FactoryTalk eProcedure Server, and the Batch COM+ Application require identical user accounts to support the FactoryTalk Batch Server functionality.

FactoryTalk Batch Material Manager user groups

For FactoryTalk Batch Material Manager, you must create these required domain user groups.

Required domain user groups

- **MTBatchServer**

Add the FactoryTalk Batch user account under which the FactoryTalk Batch Server service is running to the **MTBatchServer** group. This is the group that the FactoryTalk Batch Server uses to access the material database.

- **MTGeneral**

Required to use Material Editor.

- **MTLotAuthor**

Add any domain users that require the ability to add, edit, and delete material lots in the Material Editor.

- **MTMaterialAuthor**

Add any domain users that require the ability to add, edit, and delete materials and containers in the Material Editor.

- **MTMaterialViewer**

Add any domain users that require read-only access to materials and containers in the Material Editor. The installation adds the five domain groups and domain user account for the FactoryTalk Batch Material Manager Server to the appropriate COM+ roles and/or local user groups. For more information about security settings, see **Security settings** in the *FactoryTalk Batch Material Manager Administrator Guide*.

Update Windows Firewall settings

To allow the installation program to configure the firewall exceptions automatically, enable the Windows Firewall Service prior to installation. The installation program uses the **Rockwell Software Windows Firewall Configuration Utility** to add the necessary exceptions.

IMPORTANT When managing the Windows Firewall settings externally, the installation program cannot change the Windows Firewall settings.

The installation program updates Windows Firewall settings to allow these applications to communicate through the firewall:

- FactoryTalk Batch Server
- FactoryTalk Batch Client
- FactoryTalk Event Archiver
- FactoryTalk eProcedure Server
- FactoryTalk eProcedure Client
- FactoryTalk Batch Material Manager Server
- FactoryTalk Batch Material Manager Client

Typically, Windows Firewall appears under **Control Panel > System and Security > Windows Firewall**. For more information, see the Windows operating system for the current installation.

Windows Firewall exceptions

If the Windows Firewall is enabled when you install FactoryTalk Batch or FactoryTalk eProcedure applications, the installation program adds the following exceptions to the local computer:

Windows Firewall Exceptions	
• batchsvr.exe (Batch server installs)	• OPCEnum.exe
• batchvew.exe (Batch client installs)	• Port 1433 TCP (SQL Server installs)
• DaClient.exe	• Port 137 NetBIOS Name Service
• EventClientMultiplexer.exe	• Port 135 TCP
• EventServer.exe	• Port 80 TCP (FactoryTalk eProcedure Client installs)
• Flexsvr.exe	• RDcyHost.exe
• FTCounterMonitor.exe	• RnaDiagnosticsSrv.exe
• FTSPVStudio.exe	• RnaDiagReceiver.exe
• FTSysDiagSvcHost.exe	• RnaDirServer.exe
• iexplore.exe	• RsvcHost.exe
• Imgrd.exe	• VStudio.exe
• NmspHost.exe	

If the Windows Firewall is enabled, and not externally controlled, the **Windows Firewall Configuration Utility** runs automatically during installation. If this utility does not run automatically, manually run it on each computer in your FactoryTalk Batch system after installing servers or clients.

To manually run the FactoryTalk Windows Firewall Configuration Utility, navigate to **Start > Rockwell Software > Windows Firewall Configuration Utility**.

IMPORTANT If you are using a different firewall with your system, add equivalent exceptions to enable communication through the firewall by the FactoryTalk Batch components.

Configure the Remote Registry service

Remote Registry is enabled to support network synchronization of the FactoryTalk Batch components across computer boundaries. Before installing the FactoryTalk Batch Server or FactoryTalk Batch Material Manager Server on any operating system, configure the Remote Registry service for automatic startup.

To configure the Remote Registry service

1. Navigate to **Control Panel > System and Security > Administrative Tools**. Double-click **Services**.
2. In the **Services (Local)** pane, right-click **Remote Registry** and select **Properties**.
3. For **Startup type**, select **Automatic**.
4. Select **OK**.

Set the system date and time

Set the date and time on each computer on the FactoryTalk Batch network to the same date and time.

IMPORTANT The dates and times for all computers on the network must match each other so that events, journals, and logs in the FactoryTalk Batch system are properly synced.

Prepare the SQL Server installation

These applications can use SQL Server:

- FactoryTalk Batch Server (to store recipes in RDB format)
- FactoryTalk Event Archiver (to archive batch event records and to use Batch reports)
- FactoryTalk Batch Material Manager Server (to store materials for recipes)

Install a supported version of SQL Server as listed in the **System requirements and supported software overview** section and select these features:

- Database Engine Services
- Reporting Services (if using FactoryTalk Event Archiver with Batch reports)

IMPORTANT Configuration of SQL Server Reporting Services differs depending on the version of SQL Server installed. Reporting Services for SQL Server 2017 are installed separately.

Visit the Microsoft website (<https://www.microsoft.com/en-us/sql-server/sql-server-downloads>) to get the latest supported version of SQL Server for the FactoryTalk Batch system.

Consider these items when installing SQL Server for use with the FactoryTalk Batch system:

- Before starting the FactoryTalk Batch installation create a SQL Server database login for the user that will performing the FactoryTalk Batch installation. Make sure that the user account has been granted **dbcreator** permissions in SQL Server. That permission is required to create a database.
- The user installing FactoryTalk Batch Material Manager must have **Read** and **Write** access to the SQL Server database.
- SQL Server can reside on the same computer as the FactoryTalk Batch Server.
- If using a single SQL Server installation, install SQL Server on the same computer where the FactoryTalk Batch Material Manager Server will be installed.
- If using a single SQL Server installation for recipes, Batch reports, and materials, use the default instance name (MSSQLSERVER). The FactoryTalk Batch Material Manager Server supports only default instances.
- Support for named instances:
 - FactoryTalk Batch and the FactoryTalk Batch Material Manager Server do not support named instances.
 - FactoryTalk Event Archiver supports named instances.
- Add TCP Port 1433 as an exception in the Windows Firewall to store recipes from FactoryTalk Batch Recipe Editor on a remote SQL Server.
- Install the FactoryTalk Event Archiver Management Tool on the same computer as SQL Server.

For SQL Server installation instructions, see the [SQL Server Installation Guide](#) on the Microsoft website.


Install Reporting Services for SQL Server 2017 or SQL Server 2019

If using SQL Server 2017 or SQL Server 2019 you must install the corresponding SQL Server reporting Services to create FactoryTalk Batch report using FactoryTalk Event Archiver.

You can download [SQL Server 2017 Reporting Services](#) and SQL Server 2019 Reporting Services from the Microsoft web site.

To install Reporting Services

1. Go to the location where you downloaded Report Services. Right-click **SQLServerReportingServices.exe** and select **Run as administrator** to start the installer.
2. On the **Welcome** page, select **Install Reporting Services**.
3. In **Choose an edition to install** either select the **Developer** free edition or enter your product key and then select **Next**.
4. Read and agree to the license terms and conditions and then select **Next**.

5. Select **Next** to install the report server only.
Reporting Services uses the Database Engine installed with SQL Server to store the report server database.
6. In **Specify an install location** accept the default location for the report server. Select **Install** to continue.
 Tip: The default path is C:\Program Files\Microsoft SQL Server Reporting Services.
7. If prompted to restart your computer, do so.

Configure Reporting Services for SQL Server 2012 or SQL Server 2014

Configure SQL Server Reporting Services so that FactoryTalk Event Archiver can create FactoryTalk Batch reports.



Tips:

- Use this procedure if the "Install only" option was selected when installing Reporting Services, or when modifying an existing SQL Server installation to add the Reporting Services feature and the option to configure reporting services was not selected.
- Use the same user account for installing FactoryTalk Batch and FactoryTalk Event Archiver and configuring Reporting Services. If using a different user account, the application might prompt repeatedly for user credentials.

To configure Reporting Services for FactoryTalk Event Archiver

1. Locate and open the **Reporting Services Configuration Manager**.
2. In **Reporting Services Configuration Connection**, configure these items:
 - In **Server Name**, specify the name of the computer with the report server instance.
 - In **Report Server Instance**, select the default instance (MSSQLSERVER) from the list.
 - Select **Connect**.
3. In **Reporting Services Configuration Manager**, select **Report Manager URL**.



Tip: If a message appears stating that Web Services have not been assigned, select **Web Service URL** from the **Connect** pane, accept the defaults, and click **Apply** before returning to this page.

4. Select the **URLs** link to open **Home - Report Manager** in a web browser.
 - For an inactive link, select **Apply** to activate the link.
 - When accessing the **Report Manager** page for the first time, warning messages might be displayed. To continue, select **Close** for any warning.



Tip: Some configurations might require:

- An additional login to the site
- Starting the browser using the **Run as administrator** option
- Adding the Report Manager URL to the **Local intranet** zone if using Internet Explorer with the **Enhanced Security Configuration** enabled.

5. In **Home - Report Manager**, select **Folder Settings**.
6. In **Security**, select **New Role Assignment**.
7. In **New Role Assignment**, in **Group or user name**, enter a group or a user name to allow these users to run reports. Use the format *domain_name\account_name*.



Tip: Make sure that the group or user specified is granted EXECUTE and INSERT permissions to the BatchHistoryEX and ReportServer databases after installation is complete.

8. Select the **Role** check box to select all of the roles.
9. Select **OK**. The new role displays on the **SQL Server Security** page.

Configure SQL Server 2016 for reporting services

If you are using SQL Server 2016 with FactoryTalk Batch the reporting services configuration is slightly different than in previous versions

To configure Reporting Services for SQL Server 2016

1. In the Windows search bar, type **Reporting Service Configuration Manager** and then select the app to open it.
2. In **Reporting Services Configuration Connection**, select the report server instance to configure.
 - a. In **Server Name**, specify the name of the computer on which the report server instance is installed.
 - b. In **Report Server Instance**, select the SQL Server Reporting Services instance to configure.
Only report server instances for this version of SQL Server appear in the list.
 - c. Click **Connect**. The **Reporting Services Configuration Manager** opens.
3. On the left pane, select **Web Portal URL**.
4. In the **Web Portal URL** pane (on the right), select the **URLs:** link to open **SQL Server Reporting Services** in a web browser.

If the link is not active, select **Apply** to activate the link.

IMPORTANT

If this is the first time accessing the **SQL Server Reporting Services** page, depending on your browser security settings, you might receive several warning messages. To continue, select **Close** or **Add** for each warning.

5. If prompted to log into **Reporting Services** log in as a user with administrative permissions to the BatchHistoryEX and ReportServer databases.

6. In **Home - SQL Server Reporting Services**, select **Manage folder**.
7. In **Security**, select **+ Add group or user**.
8. In **New Role Assignment**, for **Group or user name** enter the domain\user name that was used when SQL Server was installed.



Tip: Make sure that the group or user specified is granted EXECUTE and INSERT permissions to the BatchHistoryEX and ReportServer databases after installation is complete.

9. Select **Role** to select all of the roles.
10. Select **OK**. The new role is added to the list on the **SQL Server Reporting Services Security** page.

Configure Reporting Services for SQL Server 2017

If you are using SQL Server 2017 with FactoryTalk Batch the reporting services configuration is slightly different than in SQL Server 2016.

Before you can install FactoryTalk Batch with FactoryTalk Event Archiver, you must configure the Web Service URL, database and Web Portal URL.

To configure Reporting Services for SQL Server 2017

1. In the Windows search bar, type **Report Server Configuration Manager** and then select the app to open it.
2. In **Report Server Configuration Connection**, select the report server instance to configure.
 - d. In **Server Name**, specify the name of the computer on which the report server instance is installed.
 - e. In **Report Server Instance**, select the SQL Server Reporting Services instance to configure.
Only report server instances for this version of SQL Server appear in the list.
 - f. Click **Connect**. The **Report Server Configuration Manager** opens.

3. On the left pane, select **Web Service URL**.




Tip: FactoryTalk Diagnostics version 6.20 uses the same default port as SQL Server 2017 Reporting Services. If you are planning to run both applications on the same server, configure a different port value for the Web Service URL.

4. Select **Apply** to accept the default values. Observe the **Results** pane. If all tasks completed successfully, continue the configuration.
5. On the left pane, select **Database**.
6. Under **Current Report Server Database**, select **Change Database** to open the **Report Server Database Configuration Wizard**.
7. On the **Action** page, select **Create a new report server database** then select **Next**.
8. On the **Database Server** page complete the settings:
 - In **Server Name** type the name of the SQL Server.
 - In **Authentication Type** select **Current User - Integrated Security**.

- Select **Test Connection** to verify the user account can login to the server.
 - Select **Next**.
9. On the **Database** page, in **Database Name** provide a name for the initial reporting database and then select **Next**.
 10. On the **Credentials** page specify an existing account that the report server will use to connect to the report server database and then select **Next**.
 11. On the **Summary** page confirm the settings are correct and then select **Next**.
 12. Once the report server database is created, select **Finish** to close the wizard.
 13. On the left pane, select **Web Portal URL**.
 14. Select **Apply** to accept the default values. Observe the **Results** pane. If all tasks completed successfully, continue the configuration.
 15. In the **Web Portal URL** pane (on the right), select the **URLs:** link to open **SQL Server Reporting Services** in a web browser.

IMPORTANT If this is the first time accessing the **SQL Server Reporting Services** page, depending on your browser security settings, you might receive several warning messages. To continue, select **Close** or **Add** for each warning.

16. In **Execution Account**, select **Specify an execution account**.
 17. In **Account** enter the domain\user name and password that was used when SQL Server was installed.
- 

Tip: Make sure that the group or user specified is granted EXECUTE and INSERT permissions to the BatchHistoryEX and ReportServer databases after installation is complete.
18. Select **Apply**. Observe the **Results** pane and verify the task completed successfully.

Configure Windows Firewall for FactoryTalk Event Archiver

If you are running Windows Firewall on the same computer as the SQL Server, remote connections to the SQL Server will be blocked unless the SQL Server and SQL Browser service can communicate through the firewall. You will have to add an exception in Windows Firewall for these services to make connection from the FactoryTalk Batch Archiver client to the remote FactoryTalk Batch Archiver SQL Server.

By default, SQL Server uses static TCP port number 1433 for the default instance MSSQLSERVER. If you configure SQL Server to use a static port other than the default port add that port to the firewall exception list instead of the default port.

Alternatively, you can configure SQL Server to use a dynamic port. If you use dynamic port allocation, you specify port number zero in the network configuration. Once SQL Service restarts, it requests a free port number from the operating system and assigns that port to SQL Server. When dynamic

ports are used, the SQL Browser service provides the port number to the requesting FactoryTalk Batch component.

To configure Windows Firewall for a SQL Server using static ports

1. On the client computer, open Windows Defender Firewall and choose **Advanced Settings**.
2. Select **Inbound Rules** and click **New Rule**.
3. Follow the **New Inbound Rule Wizard** making these selections:
 - a. For **Rule Type**, select **Port** and then click **Next**.
 - b. For **Protocol and Ports**, select **TCP** and enter the port **1433** (default) or the static port number configured for SQL Server and then click **Next**.
 - c. For **Action**, select **Allow the Connection** and then click **Next**.
 - d. For **Profile**, select the appropriate network profile (**Domain**, **Private**, or **Public**) and then click **Next**.



Tip: Most organizations use a domain network. You can check your network information from **Control Panel > Network and Sharing Center**.

- e. (optional) For **Name**, type a name and description for the inbound rule. Click **Finish**.
4. Click **New Rule** again to create another inbound rule.
5. Follow the **New Inbound Rule Wizard** making these selections:
 - a. For **Rule Type**, select **Port** and then click **Next**.
 - b. For **Protocol and Ports**, select **UDP** and enter the port **1434** and then click **Next**.
 - c. For **Action**, select **Allow the Connection** and then click **Next**.
 - d. For **Profile**, select the appropriate network profile and then click **Next**.
 - e. (optional) For **Name**, type a name and description for the inbound rule. Click **Finish**.

To configure Windows Firewall for a SQL Server using dynamic ports

1. On the client computer, open Windows Defender Firewall and choose **Advanced Settings**.
2. Select **Inbound Rules** and click **New Rule**.
3. Follow the **New Inbound Rule Wizard** making these selections:
 - a. For **Rule Type**, select **Program** and then click **Next**.
 - b. For **Program**, select **This program path** and then click **Browse**.

- c. Enter the path to your SQL Server executable then click **Open**.
Example: *C:\Program Files\Microsoft SQL Server\MSSQL17.MSSQLSERVER\MSSQL\Binn\sqlservr.exe*.
 - d. Confirm the path is correct and then click **Next**.
 - e. For **Action**, select **Allow the Connection** and then click **Next**.
 - f. For **Profile**, select the appropriate network profile and then click **Next**.
 - g. (optional) For **Name**, type a name and description for the inbound rule. Click **Finish**.
4. Click **New Rule** again to create another inbound rule.
 5. Follow the **New Inbound Rule Wizard** making these selections:
 - a. Select **Port** radio button on the first page and then click **Next**.
 - b. Select **UDP** and enter the port **1434** and then click **Next**.
 - c. Select **Allow the Connection** and then click **Next**.
 - d. Select the appropriate network profile and then click **Next**.
 - e. (optional) Add a name and description for the inbound rule. Click **Finish**.

After completing these steps the FactoryTalk Event Archiver client will be able to connect to the FactoryTalk Event Archiver remote SQL Server.

Install FactoryTalk Batch Server, FactoryTalk eProcedure Server, and FactoryTalk Event Archiver

Installing the FactoryTalk Batch Server, eProcedure Server and FactoryTalk Event Archiver software requires that you perform pre-installation tasks to prepare your environment before installing the software. After the installation is complete, you will perform some post-installation configuration to get your system ready for production use.



Tip: If a FactoryTalk Batch Server already exists, see **Install the FactoryTalk Batch client** on [page 52](#) to install FactoryTalk Batch Client components on a different computer.

This section provides instructions for installing the FactoryTalk Batch Server, eProcedure Server, and FactoryTalk Event Archiver software on the same computer.



Tip: We recommend using the default installation directories for all components.

Use this checklist to help you successfully set up the FactoryTalk Batch environment:

Pre-Installation administration tasks

	Tasks	Notes
<input type="checkbox"/>	Obtain administrator privileges on target computer	
<input type="checkbox"/>	Create users and user groups	
<input type="checkbox"/>	Update Windows firewall settings	
<input type="checkbox"/>	Configure the Remote Registry service	
<input type="checkbox"/>	Set the system date and time	
<input type="checkbox"/>	Prepare the SQL Server installation	

Pre-Installation operating system configuration

<input type="checkbox"/>	Configure the Windows Server operating system for the FactoryTalk Batch Server and eProcedure Server	
<input type="checkbox"/>	Configure the Windows desktop operating system for the FactoryTalk Batch Server and eProcedure Server	

Installation		
<input type="checkbox"/>	Install the FactoryTalk Batch components	
<input type="checkbox"/>	Run FactoryTalk Updater to check for updates the components	
Post-Installation configuration		
<input type="checkbox"/>	Configure the FactoryTalk network directory	
<input type="checkbox"/>	Configure <MSSQL> to enable FactoryTalk Event Archiver with Reporting Services <ul style="list-style-type: none"> • Configure SQL Server 2017 to enable FactoryTalk Event Archiver with Reporting Services • Configure SQL Server 2014 or SQL Server 2016 to enable FactoryTalk Event Archiver with Reporting Services • Configure SQL Server 2012 to enable FactoryTalk Event Archiver with Reporting Services 	
<input type="checkbox"/>	Grant access to the FactoryTalk Batch directory on the SQL Server computer	
<input type="checkbox"/>	Add a server to the FactoryTalk Batch system	
<input type="checkbox"/>	Configure event log settings	
<input type="checkbox"/>	Create a shared directory	
<input type="checkbox"/>	Define redundant servers (optional)	
<input type="checkbox"/>	Configure server options	
<input type="checkbox"/>	Set security on logs and journals folders	
<input type="checkbox"/>	Configure browser compatibility view settings	

Install the FactoryTalk Batch components

After preparing the computer operating systems, install the FactoryTalk Batch Server, FactoryTalk eProcedure Server, FactoryTalk Batch View Server, and FactoryTalk Event Archiver components.

- The FactoryTalk Batch Server controls system information, phases, and recipes.
- The FactoryTalk eProcedure Server:
 - Provides services to the FactoryTalk Batch Server to use HTML instruction files.
 - Formats parameters and report parameters from material-based recipes into instruction files.
- The FactoryTalk Event Archiver stores the FactoryTalk Batch ASCII electronic batch records (.evt files) into a SQL Server database. The database can be queried for batch data or can be used by the optional FactoryTalk Batch reporting tools to generate web-based batch reports.



Tip: Prerequisite checks are run automatically to ensure a successful installation. If an issue occurs during installation, an error message with steps to resolve is displayed.

Default installation of FactoryTalk Batch components

The default FactoryTalk Batch installation includes:

- FactoryTalk Services Platform v6.20.00 (always installed with FactoryTalk Batch, FactoryTalk eProcedure, and FactoryTalk Batch Material Manager).
- FactoryTalk Activation v4.03.03 (always installed with FactoryTalk Batch, FactoryTalk eProcedure, and FactoryTalk Batch Material Manager).
- FactoryTalk Linux v6.20.00 (always installed with FactoryTalk Batch, FactoryTalk eProcedure, and FactoryTalk Batch Material Manager).
- FactoryTalk Batch v14.00 (includes Batch Server, Editors and Legacy Client, and FactoryTalk Batch View Server v2.00).
- FactoryTalk Batch View Server (v2.00; installed only if FactoryTalk Batch is selected).
- FactoryTalk Event Archiver Components v14.00 (includes Database and Reporting Services and Management Tool).
- Tools (FactoryTalk Updater Agent v2.00.00).

Optional components available for installation are:

- FactoryTalk eProcedure v14.00 (includes Database and Reporting Services and Management Tool).
- FactoryTalk Batch Material Manager (includes Server Components and Client Components).
- FactoryTalk Batch HMI Controls v2.0.
- Tools (FactoryTalk Updater Server v2.00.00 and FactoryTalk Updater Client v2.00.00)

To install the FactoryTalk Batch Server, FactoryTalk eProcedure, FactoryTalk Batch View Server, and FactoryTalk Event Archiver components

1. Run **Setup.exe**.
2. On the **Setup** page, select **Customize**.
3. On the **Customize** page:
 - Select and then expand **FactoryTalk Batch v14.00**. The **Batch Server** and **Editors and Legacy Client** options are installed by default. Clear either option to remove it from the installation. Removing both options removes FactoryTalk Batch and all other default components from the installation.
 - Select and then expand **FactoryTalk Event Archiver Components v14.00**. The **Server Components** and **Client Components** options are installed by default. Clear either option to remove it from the

- installation. Removing both options removes **FactoryTalk Event Archiver Components v14.00** from the installation.
- Select and then expand **FactoryTalk eProcedure v14.00**. Select the **Server Components** and **Client Components** options to install them with **FactoryTalk eProcedure v14.00**.
 - Select and then expand **Tools**. FactoryTalk Updater Agent v2.00.00 is installed by default. Select all options to include them in the installation.
4. On the **Permission Requested** page:
 - Select **Yes, allow changes to this computer**.
 5. On the **Options** page:
 - Network Directory is required and is selected by default.
 - To store recipes in SQL Server instead of individual files, select **Recipe Storage**.
 - Enter a port to use for the FactoryTalk Batch View Server. Port 443 is the default and is the recommended port.
 - Select **Next**.
 6. On the **System Details** page, complete these fields:
 - In **User Name**, enter the domain\user name for user account created for the **FactoryTalk Batch Server Service** to run under. If the user account is in the current domain, the domain does not need to be specified.
 - In **Password** enter the password for the domain\user name.
 - Select **Next**.
 7. (optional) On the **Event Archiver SQL Connection** page, if installing **FactoryTalk Event Archiver** components, complete these items:
 - In **Server Name**, enter the SQL Server name.
 - In **Instance Name**, enter the instance name if using a named instance.

Tip: If using a single SQL Server installation for recipes, Batch reports, and materials, use the default instance name MSSQLSERVER. The FactoryTalk Batch Material Server supports only default instances.

If using multiple SQL Server installations, FactoryTalk Event Archiver Batch Reports support named instances.

 - In **Data Source Name**, enter the data source name.
 - Select **Include Batch Reports**.
 - Select **Next**.
 8. On the **Connection Validated** page, select **Install**.
 9. On the **End User License Agreements** page, review the agreement and select **Accept all**.
 10. If the **Would you like to install this device software** page appears, select **Install**.



Tip: The installation progress wheel and the specific components and supporting files are displayed.

11. (optional) If prompted on the **Almost There** page, select **Activate your software**, and then select **Next**.
12. If prompted on the **That's it** page, restart the computer.

FactoryTalk Updater

When you start the installation process for your FactoryTalk Batch system one of the optional installation components is FactoryTalk Updater. FactoryTalk Updater assists in management of installed Rockwell Automation software by announcing new versions and patch roll-ups for the software on your computer. Registering for updates is not required to receive announcements from the FactoryTalk Updater. FactoryTalk Updater includes these components:

- **FactoryTalk Updater Agent**
The agent collects information and activation license data from the Rockwell Automation software installed on the computer. Install the FactoryTalk Updater Agent on each computer that requires data collection.
- **FactoryTalk Updater Client**
Displays information collected by the FactoryTalk Updater Server and enables you to review updates and patches.
- **FactoryTalk Updater Server**
Communicates with online FactoryTalk Updater Agents to receive collected data.
Connects to the Product Compatibility and Download Center to retrieve the latest software information.
Responds to requests from the FactoryTalk Updater Client.
Supports ~100 online Agents.
To avoid issues, limit FactoryTalk Updater Server installations to one instance per intranet.

System logs and some application data are stored in this folder:

C:\Users\Public\Documents\Rockwell\Updater\Data

The logs and application data can be helpful when contacting Rockwell Automation Technical Support. System logs are automatically deleted after 90 days.



Tip: To receive notifications of new versions and patch roll-ups, the FactoryTalk Updater application requires access to the **Download Center** web service. Verify that the firewall does not block access to this URL:
<https://api.rockwellautomation.com/es-be-pcdc-vpcprod/>

See the FactoryTalk Updater help for more information about using FactoryTalk Updater.

Modify an installation

Use the **Modify and Repair** installation method to change the optional components selected with the FactoryTalk Batch system installation or to run a repair operation on installed components. If at least one FactoryTalk Batch component is already installed when the installation program is started, an

option to modify the current installation is displayed in the installation wizard. You can also access **Modify and Repair** by opening Windows **Control Panel** and selecting **Change** for a Rockwell Automation software application.

Options for modifying an installation vary, based on the components installed. Options that are supported and not supported when modifying an installed component are:

Component	Supported when modifying an install	Not supported when modifying an install
FactoryTalk Batch FactoryTalk eProcedure FactoryTalk Material Manager	<ul style="list-style-type: none"> Adding a client to an existing server installation 	<ul style="list-style-type: none"> Adding a server to an existing client installation Removing the individual client or server
FactoryTalk Event Archiver	<ul style="list-style-type: none"> Adding the Management tool to an existing Database install if the Include Batch Reports option was selected during the initial installation 	<ul style="list-style-type: none"> Adding the Management tool to an existing Database installation if the Include Batch Reports option was not selected during the initial installation Adding the Database to an existing Management tool installation Removing the individual Database or Management Tool installation

To modify an installation

1. Run **Setup.exe**.
2. On the **Setup** page, select **Modify**.
3. On the **Modify** page, select the components to install.
4. Select **Next**.
5. Complete any remaining pages that open. The pages and options vary based on the components selected.
6. On the **Modification Complete** page, select **Close**.

Post-installation tasks for FactoryTalk Batch components

After installing the FactoryTalk Batch Server, FactoryTalk eProcedure Server, FactoryTalk Batch View Server, and FactoryTalk Event Archiver components there are several settings that should be configured before putting the system into production. Review these tasks to determine which items are applicable to your installation:

- Configure the FactoryTalk network directory
- Configure SQL Server to enable FactoryTalk Event Archiver with Reporting Services
- Grant access to the FactoryTalk Batch directory on the SQL Server computer
- Add a server to the FactoryTalk Batch system
- Configure event log settings
- Create a shared directory
- Configure server options

- Define redundant servers
- Set security on logs and journals folders
- Configure browser compatibility view settings

Configure the FactoryTalk network directory

If you are installing FactoryTalk Batch components on a new system, FactoryTalk Batch installation will install FactoryTalk Services Platform and configure the computer as the FactoryTalk network directory server for the rest of the system. After installing additional components, use the **Specify FactoryTalk Directory Location** utility to point each computer in the network to the FactoryTalk Directory network directory server.

To configure a network directory client computer

1. On each participating network directory client computer, go to **Rockwell Software > Specify FactoryTalk Directory Location**.
2. At the prompt, log on to the network directory with a Windows Administrator account.
3. In **FactoryTalk Directory Server Location Utility**, select **Browse**.
4. In **FactoryTalk Directory Server Configuration**, select **Remote computer**, then specify the name of the computer to use as the network directory server, and select **OK**.
5. When prompted, log on to the network directory.

If single sign-on is enabled on the computer when the location of the network directory server changes, the single sign-on session terminates and you must log on to the new network directory server. The user name and password entered become the new single sign-on credentials for all participating FactoryTalk products on the computer.

6. When prompted, restart the computer.

Configure SQL Server 2017 to enable FactoryTalk Event Archiver with Reporting Services

If including reporting services in the FactoryTalk Batch system installation, you must configure SQL Server to enable FactoryTalk Event Archiver with Reporting Services to connect to and insert records into the FactoryTalk Batch database. This procedure uses SQL Server Management Studio to set up permissions for the **BatchHistory** or **BatchHistoryEx** database.

See the *FactoryTalk Event Archiver User Guide* to configure the reporting option for **End of Batch** or **Incremental**.

IMPORTANT All users of the FactoryTalk Batch Reporting Services must have a user login and read and write access to the source databases, such as BatchHistoryEx or the FactoryTalk® Alarms and Events FTAE_Historian databases. Add any additional users or groups when adding the login account for the FactoryTalk Batch Server.

To configure SQL Server 2017 to enable FactoryTalk Event Archiver with Reporting Services

1. Start SQL Server Management Studio.
2. In **Connect to Server** for **Server type**, select **Database Engine**.
3. Confirm the server name and authentication method are correct, then select **Connect**.
4. In **Object Explorer**, expand **Security > Logins**.
5. Right-click **Logins** and select **New Login** to add a FactoryTalk Batch Server user login.
6. In **Login name**, type the name of the Batch Server user account.
7. Select **Search** to validate the account is correct.
8. In **Default database**, select either **BatchHistory** or **BatchHistoryEx**.
9. Under **Select a page**, select **User Mapping**.
10. Under **Users mapped to this login** select the checkbox for either the **BatchHistory** or **BatchHistoryEX** database.
11. Under **Database role membership for: <database name>** select the checkboxes for **db_datareader** and **db_datawriter** then select **OK**.



Tip: Confirm that *<database name>* has been replaced with either **BatchHistory** or **BatchHistoryEX**. Each database is configured independently. Role membership added for the master database does not transfer to other databases.

12. In **Object Explorer**, expand **Databases**, right-click the **BatchHistory** or **BatchHistoryEx** database, and select **Properties**.
13. Under **Select a page**, select **Permissions**.
14. Under **Users or roles** select the Batch Server user account.
15. Under **Permissions for <SQL_Server_name\user_account>**: select the checkboxes in the **Grant** column for these permissions:

- **Insert**
- **Connect**
- **Execute**



Tip: Confirm that *<user_account>* has been replaced with the Batch Server user account. Each user account permission set is configured independently.

16. Select **OK** to apply the configuration.

Configure SQL Server 2014 or SQL Server 2016 to enable FactoryTalk Event Archiver with Reporting Services

If including reporting services in the FactoryTalk Batch system installation, you must configure SQL Server to enable FactoryTalk Event Archiver with Reporting Services to connect to and insert records into the FactoryTalk Batch database. This procedure uses SQL Server Management Studio to set up permissions for the **BatchHistory** or **BatchHistoryEx** database.

See the *FactoryTalk Event Archiver User Guide* to configure the reporting option for **End of Batch** or **Incremental**.

IMPORTANT All users of the FactoryTalk Batch Reporting Services must have a user login and read and write access to the source databases, such as BatchHistoryEx or the FactoryTalk® Alarms and Events FTAE_Historian databases. Add any additional users or groups when adding the login account for the FactoryTalk Batch Server.

To configure SQL Server 2014 or SQL Server 2016 to enable FactoryTalk Event Archiver with Reporting Services

1. From SQL Server Management Studio, add a FactoryTalk Batch Server user login to the **Security > Logins** folder on the SQL Server instance.
2. Set the default database to **BatchHistory** or **BatchHistoryEx**.
3. Under **User Mapping**, select the **BatchHistory** or **BatchHistoryEX** database.
4. Select **db_datareader**, **db_datawriter**, and select **OK**.
5. In **Databases**, right-click the **BatchHistory** or **BatchHistoryEx** database, and select **Properties**.
6. Select **Permissions**.
7. Select the Batch Server user account from the list.
8. Grant **Execute**, **Insert**, and **Connect** permissions.

Configure SQL Server 2012 to enable FactoryTalk Event Archiver with Reporting Services

If including reporting services in the FactoryTalk Batch system installation, you must configure SQL Server to enable FactoryTalk Event Archiver with Reporting Services to connect to and insert records into the FactoryTalk Batch database. This procedure uses SQL Server Management Studio to set up permissions for the **BatchHistory** or **BatchHistoryEx** database.

To configure SQL Server 2012 to enable FactoryTalk Event Archiver with Reporting Services

1. In SQL Server Management Studio, **Security > Logins** area, add a log in account for the FactoryTalk Batch Server (the account created in the pre-installation).
2. Grant CONNECT to privilege for the FactoryTalk Batch Server user account on either the **BatchHistory** or **BatchHistoryEX** database.
3. Grant INSERT privilege for the FactoryTalk Batch Server user account on either the **BatchHistory** or **BatchHistoryEX** database.

4. Under **BatchHistory\Programmability** or **BatchHistoryEX\Programmability**, add the EXECUTE permission for the FactoryTalk Batch Server user account to **dbo.BHInsert** properties.
5. For **BatchHistoryEX\Programmability**, add the EXECUTE permission for the FactoryTalk Batch Server user account to **dbo.BHRecovery** properties.

Grant access to the FactoryTalk Batch directory on the SQL Server computer

By default, the FactoryTalk Batch directory on the SQL Server computer is not shared to domain users. Therefore, domain users cannot access the appropriate application .log file when an error message refers them to it.

To enable domain users to read application logs, share the FactoryTalk Batch directory on the SQL Server computer in the FactoryTalk Batch system to domain users and give the share Read-Only permissions.

Add a server to the FactoryTalk Batch system

If your FactoryTalk Batch system includes a Material Manager server you will need to configure the system with the newly installed servers and synchronize your FactoryTalk Batch system. The synchronization process copies the network model data from your computer to each of the computers included in your FactoryTalk Batch system. Use the Network Editor utility to perform this procedure.

The Network Editor is a utility that allows you to indicate where other FactoryTalk Batch and/or FactoryTalk Batch Material Manager servers are located on the network. This network configuration information simplifies integration with other FactoryTalk products and the process of reconfiguring a system. The computers running FactoryTalk Batch components that have been installed need to be present in the network model for your system. Each Material Manager server can support ten FactoryTalk Batch servers. After the initial install each computer has a local network model that needs to be synchronized for the components to work together.

The Network Editor is installed automatically with the FactoryTalk Batch and Material Servers.

To select a network model

1. Open the **Network Editor**.
2. In the **Network Editor** toolbar, click the **Select Network Model** button.
3. Type the computer name in the "Enter the object name to select" area, or click the **Advanced** button to search for a computer.
4. Click **OK**.

To add a server

1. Open the **Network Editor**.
2. In the **Hierarchy** pane, select the type of server to add.
3. Click **Add Server**.
4. In the **Alias** box, type an alias name. This is the name that displays in the Network Editor.
5. In the **Computer Name** box, type the computer name, or use the browse button to locate and select the computer from the list of computers on your domain.
6. Click the **Synchronize** button.
7. Click **OK**.

The Network Editor refreshes and the results of the synchronization process display in the **Results** pane.

Event log settings

The Windows Event Log service records application, system, and security information.

Logging events can fill log space very quickly. If logging is enabled, we recommend that you configure the Windows Application and Services logs on Windows Server to use the **Overwrite events as needed** setting.

For more information about event log settings, see **Modify Event Log Settings** in the *FactoryTalk Batch Administrator Guide*.

Create a shared directory

A shared directory allows computers on the network to read from and write to a common recipe, area model, or data file.

The FactoryTalk Batch installation creates a shared directory named **BATCHCTL** where the FactoryTalk Batch software is installed (the default is **C:\Program Files (x86)\Rockwell Software\Batch**).

If you installed your project files in a different directory, configure that directory as a shared directory.

IMPORTANT Administrative privileges are required to create a shared directory.

To create a shared directory

1. Navigate to the project file directory, then right-click the folder, and select the sharing option.
2. Use the **File Sharing** dialog box to add each user or user group name that requires access to the project file directory.
3. Repeat for each user or user group, including the user accounts used by the FactoryTalk Batch Server and FactoryTalk Event Archiver.

4. Select **Share**.

Define redundant servers (optional)

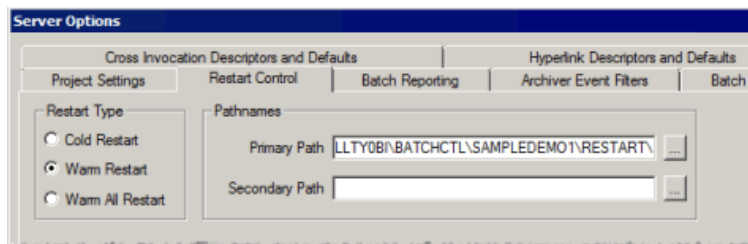
Configure FactoryTalk Batch to store batch journals and batch restart information in two separate locations. If there is a hardware failure on the primary FactoryTalk Batch Server computer, using a secondary server allows for a manual failover.

The second computer must be capable of running the server. Redundant servers are defined by specifying the primary and secondary restart paths. If the system experiences a failure, these paths indicate where system files are written. If a secondary path is not specified, FactoryTalk Batch does not write any secondary files.

FactoryTalk Batch can be configured to store batch journals and batch restart information in two separate locations.

To define redundant servers

1. From the FactoryTalk Batch Equipment Editor **Options** menu, click **Server Options**.
2. Select the **Restart Control** tab.



3. In the **Restart Type** area, click on a selection, or accept the default, **Warm Restart**.
4. Click the **Primary Path** browse button. The **Select Directory** dialog box opens.
5. Select the **MyProject\restart** folder located in the **BATCHCTL** share on the primary server's hard drive (the default is **c:\Program Files (x86)\Rockwell Software\Batch\MyProject\restart**), and then click **OK**.
6. Click the **Secondary Path** browse button. The **Select Directory** dialog box opens.
7. Locate and select the **MyProject\restart** folder located in the **BATCHCTL** share on the secondary server's hard drive, and then click **OK**.
8. Repeat steps 1 through 7 on the redundant server computer, selecting the **Batch\MyProject\restart** folder on the redundant server as the Primary Path. The Secondary Path can remain blank or point to another redundant server. Additionally, you must configure a data server to communicate with the process controller on the redundant

server computer. The redundant server computer needs to communicate with the process controller that is running the phase logic.



Tip: You must also verify that the primary and secondary journal project directories are defined.

Configure server options

Before configuring the FactoryTalk Batch Server, make sure that all project directories are shared. Configure the FactoryTalk Batch Server using the FactoryTalk Batch Equipment Editor **Server Options** dialog box.



Tip: In FactoryTalk Batch Equipment Editor, access **Options > Server Options, Project Settings** tab. Verify that the location listed in **Initialization File Name** is where the **batchsvr.ini** resides on the computer.

Server options has several tabs:

- **Project settings.** Used to set directories for the Primary Journal, Secondary Journal, Error Logging, Instructions (if you are using FactoryTalk eProcedure), and Equipment Database, configure recipe storage locations, and enable recipe versioning.
- **Restart Control.** Used to specify a restart method to initiate in the event of a server computer failure.
- **Batch Reporting.** Used to select the reporting application for generating Batch reports and archiving Batch data.
- **Archiver Event Filters.** Used to determine what electronic Batch record data FactoryTalk Event Archiver writes to the Batch history database.
- **Batch Server.** Used to select and configure FactoryTalk Batch Server options (including the hold propagation type), watchdog communications timeout settings, FactoryTalk Event Archiver log file size, minimum disk space required to add a batch, default batch ID, and whether to enable/disable event journal signatures.
- **Cross Invocation Descriptors and Defaults.** Used to specify cross invocation labels and set default cross invocation strings for different resource types.
- **Hyperlink Descriptors and Defaults.** Specifies the hyperlink labels and default values used with different resource types. This feature is used in conjunction with FactoryTalk eProcedure only.
- **Material Policies.** Used define what action to take when the communication to the Material Server is lost and how to respond to a split feed. These features are used in conjunction with FactoryTalk Batch Material Manager only.

Make sure to configure the FactoryTalk Batch Server to allow each network computer to read from and write to the appropriate project directories and the FactoryTalk Batch Server and Archiver initialization files.

Changing items such as FactoryTalk Batch Server information, area model, and the error logging directory take effect when the server is restarted.

Changing items such as the recipe directory and batch journal directory take effect the next time the server accesses these items. None of the items in FactoryTalk Event Archiver configuration require the server to be restarted. These changes take effect the next time the server needs that configuration item.

IMPORTANT FactoryTalk Batch does not support the use of mapped drives. Do not use mapped drives for project directories.

For more information about configuring server options, see the *FactoryTalk Batch Administrator Guide*.

Set security on logs and journals folders

To prevent losing data in the log files and the event journal (**.evt**) files, set security permissions on the logs and event journal folders. The system administrator determines who needs access to these files and assigns the appropriate permissions. The accounts under which the FactoryTalk Batch Server and FactoryTalk Event Archiver are running must be given full access to these folders.

IMPORTANT FactoryTalk Batch Server continues writing information to log files and event journals (**.evt**) even when they are open. If a file is opened and then saved, data that may have been written to the event journal or log file while the file is open is lost.

Use Notepad to open log files. If a log file is opened with a program other than Notepad, the FactoryTalk Batch Server may not run due to an access error.

To set security on logs and journals folders

1. In **Windows Explorer**, locate the folder.
2. Right-click the folder and then select **Properties**.
3. Select the **Security** tab, select **Edit**, and then select **Add**.
4. From the **Select Users, Computers, Service Accounts, or Groups** dialog box, select **Advanced** and then select **Find Now**.
5. Select a user or group from the **Search results** list, and then select **OK**.
6. Repeat for each user or group that requires access to the folder.

Tip: Be sure to add the FactoryTalk Batch Server user account and then configure the account with **Full Control** permissions.
7. Select **OK** to return to the **Properties** dialog box.
8. From the **Group or user name** list, select a user or group, and then select the permissions in the **Permissions** area. Repeat for each user or group.
9. Select **OK**.

Configure browser compatibility view settings

Configure Internet Explorer **Compatibility View settings** for the FactoryTalk eProcedure Client to ensure that:

- The FactoryTalk eProcedure Client command buttons work and display correctly.
- The current user is displayed and has permissions to view the batch list.
- The buttons on the left side are all the same size.

To configure Compatibility View settings

1. In Internet Explorer, select **Tools > Compatibility View settings**.
2. In **Add this website**, enter the FactoryTalk eProcedure server name and select **Add**.

Install FactoryTalk Batch Client components

When installing FactoryTalk Batch Client components use these guidelines:

- Before installing the FactoryTalk Batch Clients, install and configure the Windows operating system, and install other required software that will be used with the FactoryTalk Batch system.
- Before beginning the installation, complete all the pre-installation administrative tasks.
- Install the FactoryTalk Batch Server before installing FactoryTalk Batch Client.
- Instructions for installing the FactoryTalk Batch Clients are based on installing clients on a computer networked with other FactoryTalk Batch system computers.



Tip: We recommend using the default installation directories for all components.

Use this checklist to help you successfully set up the FactoryTalk Batch Client components:

Pre-Installation administration tasks		
	Tasks	Notes
<input type="checkbox"/>	Obtain administrator privileges on target computer	
<input type="checkbox"/>	Update Windows firewall settings	
<input type="checkbox"/>	Set the system date and time	
Installation		
<input type="checkbox"/>	Install the FactoryTalk Batch Client	

Install the FactoryTalk Batch Client

Installing the FactoryTalk Batch Client also installs these components:

- FactoryTalk Batch Equipment Editor
- FactoryTalk Batch Recipe Editor
- Legacy FactoryTalk Batch View
- Legacy ActiveX® Controls
- FactoryTalk Batch Service Manager



Tip: Prerequisite checks are run automatically to verify that the required software is present on the target computer. If an issue occurs during installation, suggested resolution steps are provided.

To install the FactoryTalk Batch Client

1. Run **Setup.exe**.
2. On the Setup page, select **Customize**.
3. On the **Customize** page:
 - Expand **FactoryTalk Batch v14.00**.
 - Clear the **Batch Server** selection.
 - Select **FactoryTalk Batch Editors and Legacy Client**.
 - Clear all other selections.



Tip: FactoryTalk Services Platform, FactoryTalk Activation, FactoryTalk Linx, FactoryTalk Updater Agent are installed automatically with the FactoryTalk Batch Client.

- Select **Next**.
4. On the **Options** page, select **Next**.
 5. On the **System Details** page, complete these items:
 - Under **Server Node**, in **Name**, enter the name of the FactoryTalk Batch Server.
 - Under **User Account**, in **User Name**, enter the domain name\user name used to install the FactoryTalk Batch Server.
 - Select **Install**.
 6. On the **End User License Agreements** page, review the agreement and select **Accept all**.
 7. If prompted on the **That's it** page, restart the computer.

Install FactoryTalk Batch Material Manager

Server components

Use FactoryTalk Batch Material Manager to track material consumption in FactoryTalk Batch recipes.



Tip: We recommend using the default installation directories for all components.

Use this checklist to help you successfully set up the FactoryTalk Batch Material Manager environment:

Pre-Installation administration tasks		
	Tasks	Notes
<input type="checkbox"/>	Obtain administrator privileges on target computer	
<input type="checkbox"/>	Create users and user groups	
<input type="checkbox"/>	Update Windows firewall settings	
<input type="checkbox"/>	Configure the remote registry service	
<input type="checkbox"/>	Set the system date and time	
<input type="checkbox"/>	Prepare the SQL Server installation	
<input type="checkbox"/>	Configure Microsoft Message Queuing Service <ul style="list-style-type: none"> • Configure the Windows Server operating system • Configure the Windows desktop operating system 	
Installation		
<input type="checkbox"/>	Install the FactoryTalk Batch Material Manager Server	
Post-installation tasks		
<input type="checkbox"/>	Identify the material database	
<input type="checkbox"/>	Add a server to the FactoryTalk Batch system	

Install the FactoryTalk Batch Material Manager Server


Use this procedure to install the FactoryTalk Batch Material Manager Server.



Tip: Prerequisite checks are run automatically to verify that the required software is present on the target computer. If an issue occurs during installation, suggested resolution steps are provided.

To install the FactoryTalk Batch Material Manager Server:

1. Run **Setup.exe**.
2. On the **Setup** page, select **Customize**.
3. On the **Customize** page:
 - Select and expand **FactoryTalk Batch Material Manager v14.00**.
 - Select **Server Components**.
 - Clear all other selections.



Tip: FactoryTalk Services Platform v6.20.00 is always installed with FactoryTalk Batch Material Manager v14.00.

 - Select **Next**.
4. On the **Permission Requested** page, select **Yes, allow changes to this computer**, and then select **Next**.
 Installing this component will make these changes to users and groups:
 - **MTUsers** will be assigned permissions to the MaterialBasedRecipe database
 - **MTBatchServer** will be added to the MTBatchServer role.
 - **MTLotAuthor** will be added to the MTLotAuthor role.
 - **MTMaterialAuthor** will be added to the MTMaterialAuthor role.
 - **MTMaterialViewer** will be added to MTMaterialViewer role.
5. On the **Options** page:
 - Under **Material Activity Journal** select **Record activity to the MaterialBasedRecipe_MAJ database** if you will be using FactoryTalk Event Archiver reporting with FactoryTalk Batch Material Manager.
 - Select **Next**.
6. On the **System Details** page, complete these fields:
 - Under **User Account** in **User Name**, enter the domain\user name for user account created for the FactoryTalk Batch Material Manager Server to run under. If the user account is in the current domain, the domain does not need to be specified.
 - In **Password** enter the password for the domain\user name.
 - Select **Install**.
7. On the **End User License Agreements** page, review the agreement and select **Accept all**.
8. (optional) If prompted on the **Almost There** page, select **Activate your software**, and then select **Next**.
9. If prompted on the **That's it** page, restart the computer.

Post-installation for FactoryTalk Batch Material Manager Server

After installing the FactoryTalk Batch Material Manager Server, complete these configuration items before transitioning the system into production:

- [Identify the material database](#)
- [Add a server to the FactoryTalk Batch system](#)
(If the Material Manager Server is on a different server than the FactoryTalk Batch server)

Identify the material database

Configure the FactoryTalk Batch Material Manager Server with the location of the SQL database that contains the materials for the recipes.

To identify the material database

1. Navigate to **Rockwell Software > Network Editor**.
The **Network Editor** window opens with the **Material Server** selected by default.
2. Select **Configure**. The **Configure MaterialTrack** dialog box opens. The default database is *materialbasedrecipe*.
3. In the **MaterialTrack Database** box, enter the name of the database, and select **OK**.

IMPORTANT The **Network Editor** does not verify database names. Changes made to the database name are immediate for the clients and servers. If the database name is invalid, the **Material Editor** will not open.

Before changing the database name, check the spelling of the database name and synchronize the **Network Editor**. After changing the database name, confirm that the **Material Editor** opens and reads the databases.

4. Select **Synchronize**.
5. Select **File > Exit**, and then select **Yes** to exit the **Network Editor**.

Install FactoryTalk Batch Material Manager Client components

This section provides instructions on how to install the FactoryTalk Batch Material Manager Client components.



Tip: We recommend using the default installation directories for all components.

Install the FactoryTalk Batch Material Manager Client components

Use this procedure to install the FactoryTalk Batch Material Manager Client.



Tip: Prerequisite checks are run automatically to verify that the required software is present on the target computer. If an issue occurs during installation, suggested resolution steps are provided.

To install the FactoryTalk Batch Material Manager Client

1. Run **Setup.exe**.
2. On the **Customize** page:
 - Select and expand **FactoryTalk Batch Material Manager v14.00**.
 - Select **Client Components**.
 - Clear all other selections.

Tip: FactoryTalk Services Platform v6.20.00 is always installed with FactoryTalk Batch Material Manager v14.00.

 - Select **Next**.
3. If prompted, on the **System Details** page, specify the name of a computer that has the FactoryTalk Batch Server installed, and select **Install**.
4. On the **End User License Agreements** page, review the agreement, and select **Accept all**.
5. On the **That's it** page, if prompted to do so, restart your computer.

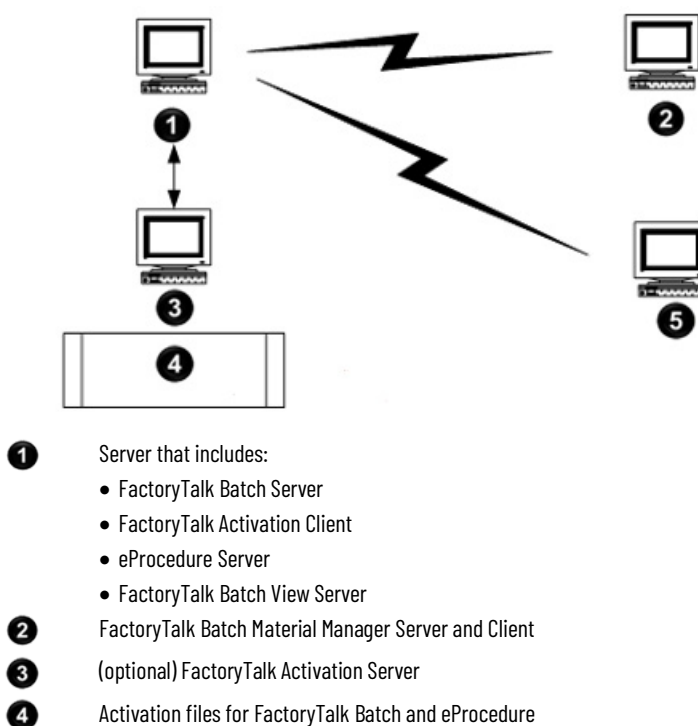
FactoryTalk Activation

FactoryTalk® Activation Manager is the license application for FactoryTalk Batch and eProcedure. FactoryTalk Activation Manager is not necessary on client installations or any FactoryTalk Batch Material Manager installations. At the end of the installation wizard you can activate the software or continue without activation.

IMPORTANT Some features may not be available until the software is activated.

The FactoryTalk Batch Server computer requires the FactoryTalk Activation Manager to enable communication with the FactoryTalk Activation Server. FactoryTalk Activation Manager and FactoryTalk Batch View Server are installed automatically on computers where the FactoryTalk Batch Server resides. FactoryTalk Activation Manager is also installed automatically on computers where the eProcedure Server resides. FactoryTalk Activation Manager can be installed on all FactoryTalk Batch Server computers.

FactoryTalk Activation Manager for FactoryTalk Batch and eProcedure



- 5 Client computer that includes:
- FactoryTalk Batch Client
 - eProcedure Client
 - FactoryTalk Batch View

IMPORTANT The FactoryTalk Batch Server checks for valid licenses and the correct number of unit licenses for FactoryTalk Batch and eProcedure at start up.

FactoryTalk Activation Licensing for the FactoryTalk Batch Server

Follow these licensing guidelines:

- The FactoryTalk Batch Server installs the FactoryTalk Activation Server on the FactoryTalk Batch Server machine.
- To obtain activation files for FactoryTalk Batch components, identify the Host ID of the FactoryTalk Activation Server computer.

IMPORTANT In this scenario, the FactoryTalk Batch Server starts only if it finds valid activation files for FactoryTalk Batch.

If a license does not exist on the designated FactoryTalk Activation Server, a prompt asks for a serial number and product key. The installer attempts to download the license from the licensing service. If an Internet connection is not available, skip the on-line activation and obtain activation files using one of these alternative methods:

- Go to: <https://activate.rockwellautomation.com/>
- Use the FactoryTalk Activation Manager on a computer that has Internet access.
- If Internet access is not available, call Rockwell Automation Technical Support and request an activation file be sent by email.

Cumulative unit licensing

Software licenses are split into a product license and multiple unit licenses. For example, a 30-unit FactoryTalk Batch product contains a 30-unit FactoryTalk Batch Server license, which includes a bundled license for FactoryTalk Batch Server, eProcedure Server, and FactoryTalk Batch Material Manager Server, and 30 new unit licenses.

When the FactoryTalk Batch Server starts, it performs a license check to determine which applications have a license. It then attempts to check out individual unit licenses up to the number of units specified in the area model. The FactoryTalk Batch Server then sets the maximum number of allowable units to the total number of successful individual unit license checkouts.

Upgrade FactoryTalk Batch

If you have an existing FactoryTalk Batch system, you can upgrade the environment instead of doing a new installation.

Use this checklist to help you to successfully upgrade the FactoryTalk Batch environment:

Pre-upgrade tasks		
	Tasks	Notes
<input type="checkbox"/>	Allow the Message Queue to clear for Material Manager	
<input type="checkbox"/>	Export XML or RDB recipes to binary	
<input type="checkbox"/>	Back up files	
<input type="checkbox"/>	Uninstall a previous version of FactoryTalk Batch	
FactoryTalk Batch component upgrade tasks		
<input type="checkbox"/>	Upgrade the FactoryTalk Batch components	
Post-upgrade tasks		
<input type="checkbox"/>	Restore back up files	
<input type="checkbox"/>	Migrate area models from FactoryTalk Batch version 13.00 or 13.00.02	
<input type="checkbox"/>	Migrate recipes from FactoryTalk Batch version 13.00 or 13.00.02	
<input type="checkbox"/>	(optional) Convert binary recipes to XML or RDB	
<input type="checkbox"/>	Convert migrated recipes back to XML format (optional)	
<input type="checkbox"/>	Convert migrated recipes back to RDB format (optional)	
<input type="checkbox"/>	Configure recipe storage	

Pre-upgrade tasks for FactoryTalk Batch

This section describes steps to perform before upgrading the software, including:

- Allowing the Message Queue to clear (Material Manager)
- If using XML or RDB recipes, exporting them to binary
- Backing up existing data files
- Uninstalling previous versions of FactoryTalk Batch components

Allow the Message Queue to clear for FactoryTalk Batch Material Manager

Allow the message queues for communication to clear between the FactoryTalk Batch Material Manager Server and the Material Activity Journal.

IMPORTANT This procedure applies to **FactoryTalk Batch Material Manager only**.

To allow the Message Queue to clear

1. Navigate to **Computer Management**.
2. In the **Computer Management** window, expand **Services and Applications** > **Message Queuing**, and then select the **Private Queues** folder.

The list of queues is displayed in the right pane.

3. Wait until the number of messages in the **Material**, **Material_o**, and **material_tracko-4** queues reaches **0**.
4. Close **Computer Management**.

See also

[Upgrade FactoryTalk Batch components](#) on [page 61](#)

Export XML or RDB recipes to binary

Before upgrading FactoryTalk Batch components to a later version, export recipes to binary format and delete any RDB recipe database.

To export XML or RDB recipes to binary

1. Back up all existing XML or RDB recipes to a new location.
2. Open FactoryTalk Batch Recipe Editor.
3. Select **File** > **Export from Working Set**.
4. Select **Binary Files** and set the path to a location to store the binary files.
5. Select **Export**.

IMPORTANT

- When installing FactoryTalk Batch 14.00 with RDB support, FactoryTalk Batch recreates the default MasterRecipes database.
- FactoryTalk Batch does not recreate any custom database that stores recipes during installation.
- When storing recipes from FactoryTalk Batch Recipe Editor on a remote SQL Server, run the Windows Firewall Configuration Utility to add TCP Port 1433 as an exception in the Windows Firewall.

Back up files

Before uninstalling the previous versions of FactoryTalk Batch components, close all applications, and stop all FactoryTalk Batch services, including the eProcedure Server, then back up the configuration and data files.



Tip: Back up the **.ini** files so that you can revert to the previous installation if needed.

FactoryTalk Batch Server files

- **Batcharc.ini** file (Batch\bin folder) (if customized)
- **Batchmbs.ini** (Batch\bin folder)
- **Batchsim.ini** file (Batch\bin folder)
- **Batchsvr.ini** file (Batch\bin folder)
- **BatchIDCreation.dll** (Batch\bin folder) (if customized)
- BatchID Custom folder (if customized)
- Simulator configuration files (**.sim** files in any folder)
- DSDF files (Batch\Data Servers folder) (if customized)

FactoryTalk Batch Client files

- Area models (Batch\<project name>\recipes folder)
- Recipes folders and contents (Batch\<project name>\recipes folder)

IMPORTANT If using Security Authority to secure area models and recipes, back up the FactoryTalk Network Directory Security Authority Identifier (SAI). This provides a means of recovery to any binary area models or recipes linked to an SAI that would otherwise not be opened if the SAI was lost.

- Customized *.bmp files (Batch\bmp folder)
- **Batcheqp.ini** file (Batch\bin folder)
- **Batchrcp.ini** file (Batch\bin folder)
- **Batchvew.ini** (Batch\bin folder)

FactoryTalk eProcedure files

Close all applications and stop all Batch services before backing up files.

- Customized Instruction files
- Customized **User.asp** files
- Any other customized files that support the customized **User.asp**

FactoryTalk Material Manager databases and files

Close all applications and stop all FactoryTalk Batch services before backing up files.

- Customized Instruction files
- **MaterialBasedRecipe** database
- **MaterialBasedRecipe_MAJ** database
- Any other material-based recipe databases unique to the facility

FactoryTalk Event Archiver database and files

- **BatchHistory** or **BatchHistoryEx** database
- Customized reports

Uninstall a previous version of FactoryTalk Batch

Uninstall FactoryTalk Batch components from version 13.00 or 13.00.02.



Tip: Users must have administrative privileges on the target computer to uninstall the software.

Prerequisites

- Back up all the files and databases associated with the applications being uninstalled.
- Close all applications.
- Stop all FactoryTalk Batch services.

To uninstall a previous version of FactoryTalk Batch

1. Navigate to **Control Panel > Programs and Features**, and then select **Uninstall a Program**.
2. Select the application to uninstall:
 - For FactoryTalk Batch 13.00, select each **FactoryTalk Batch** component and select **Uninstall**, until all components are uninstalled.
 - For FactoryTalk Batch 13.00.02, select **FactoryTalk Batch system** and select **Uninstall**.
3. If the **User Account Control** dialog box is displayed, select **Yes**.
4. When all components are uninstalled, restart the computer.

Upgrade the FactoryTalk Batch components

After backing up files and uninstalling the previous version of FactoryTalk Batch, install the latest versions of FactoryTalk Batch components to upgrade to the latest version:

- [Install the FactoryTalk Batch components](#) on [page 36](#)
- [Install the FactoryTalk Batch Client](#) on [page 52](#)
- [Install the eProcedure Client](#) on [page 78](#)
- [Install the Material Manager Server](#) on [page 54](#)
- [Install the Material Manager Client](#) on [page 57](#)

Post-upgrade tasks

After upgrading the FactoryTalk Batch software, perform these tasks before putting the system into production:

- Restoring back-up files
- Migrating area models and binary recipes, including XML or RDB recipes that were exported to binary before the upgrade
- (Optional) Converting binary recipes back to XML or RDB

Restore backup files

Before opening the FactoryTalk Batch Recipe Editor or the FactoryTalk Batch Equipment Editor, restore backed up files to their original locations. This preserves the Batch Server and Client files and the databases for use with the upgraded version of FactoryTalk Batch.

IMPORTANT Do not delete installed FactoryTalk Batch, eProcedure, or Material Manager product files from their installed locations.

Removing product files from their original locations may cause unexpected failures and error messages in the Microsoft Install Resiliency feature. Instead, replace or overwrite the product files with other files of the same name.

For example, overwrite **BatchIDCreation.dll**, **RAMSCustom.dll** and other hot fix files, but never delete and then replace these files.

FactoryTalk Batch Server files

Restore these FactoryTalk Batch Server files by placing them in the appropriate directories.

- **Batcharc.ini** (Batch\bin folder) (if customized). Prior to restoring a customized **Batcharc.ini** file:
 - Open the newly installed **Batcharc.ini** file.
 - Copy the **ArchiverTableName** and **ArchiverConnectionString** lines.
 - Paste these lines into the back up **Batcharc.ini** file, and then use that file as the restore file.

Restoring the **Batcharc.ini** file without copying these lines may revert the newly created connection string. If this occurs, restore the new connection string with the **Archiver Setup** application.

- **BatchIDCreation.dll** (Batch\bin folder) (if customized)
- BatchID Custom folder (if customized)
- Simulator configuration files (.sim files in any folder)
- DSDF files (Batch\Data Servers folder) (if customized)

FactoryTalk Batch Client files

Restore these FactoryTalk Batch Client files by placing them in the appropriate directories.

- Customized *.bmp files (Batch\bmp folder)

- Binary recipes (if using XML or RDB, first update the exported binary versions after upgrading the FactoryTalk Batch software, and then export them back to XML or RDB format)
- Area models (Batch\<project name>\recipes folder)

IMPORTANT Do not restore the FactoryTalk Batch version 13 module **.ini** files. The **.ini** files are only restored when you are reverting to the previous installation.

FactoryTalk eProcedure files

Restore these FactoryTalk eProcedure files to their original locations:

- Customized Instruction files
- Customized **User.asp** files
- Any other customized files that support the customized **User.asp**

FactoryTalk Material Manager databases and files

Restore these FactoryTalk Material Manager files and databases to their original locations:

- Customized Instruction files
- **Materialserver.log** file (Batch\bin folder)
- **MaterialBasedRecipe** database
- **MaterialBasedRecipe_MAJ** database
- Any other material-based recipe databases unique to the facility



Tip: After restoring the material database, use SQL Server Management Studio to run the **MaterialTrack_db_schema.Procedures.sql** script, which deletes the old stored procedures and adds the new stored procedures. The script is located at: C:\Program Files (x86)\Rockwell Software\Batch\Scripts.

FactoryTalk Event Archiver databases and files

During installation of FactoryTalk Event Archiver during installation an option to overwrite the existing database or migrate data from the **BatchHistory** (or **BatchHistoryEx**) database to the new FactoryTalk Batch 14.00 database is provided. Because of this, you do not need to restore the backup files created before the upgrade. Those files were created to support reverting your system to the previous version if necessary.

IMPORTANT Updates to the **BatchHistoryEx** database overwrite any customizations made to FactoryTalk Event Archiver reports. You will need to recreate all customized reports after the upgrade.

Do not attempt to perform a full database backup and restore instead of allowing the installation program to overwrite or migrate the databases. A full database backup and restore will overwrite changes made to the schema as part of the upgrade.

Migrate area models from FactoryTalk Batch version 13.00 or 13.00.02

After upgrading FactoryTalk Batch you must migrate any area models and recipes to the 14.0 schema so they can be used by the system.

Prerequisites

- Use the FactoryTalk Administration Console to confirm that any linked FactoryTalk and Windows users and groups that are required by signature templates are configured in the FactoryTalk Network Directory.

To migrate area models from FactoryTalk Batch version 13.00 or 13.00.02

1. Open FactoryTalk Batch Equipment Editor.
2. Select **File > Open**.
3. Navigate to and select the version 13 area model.
4. When prompted to update the equipment database, select **Yes**.

If the area model uses signature templates, and no FactoryTalk users and groups match, the **Security Permissions** in the signature template are empty and require configuration. FactoryTalk Batch Equipment Editor displays a list of signature templates on which translation of security descriptors failed in the **Invalid Signoffs** dialog box.

5. Make a note of the affected templates and select **OK**. The migration completes.

IMPORTANT If the Phase Failure enumeration set of an area model has ordinal values greater than 32767, reconfigure the values after migration. See **System enumeration sets** in the *FactoryTalk Batch Equipment Editor User Guide*.

6. Save the area model.
7. Open each signature template and configure the **Signoff Permissions**. See **Create a Signature Template** in the *FactoryTalk Batch Equipment Editor User Guide* for detailed instructions.

Migrate recipes from FactoryTalk Batch version 13.00 or 13.00.02

The FactoryTalk Batch Recipe Editor schema has changed from version 13 to version 14. When opening the Recipe Editor, some recipes might require translation before using the Recipe Editor.

These instructions are for recipes stored in the default binary files and for migrating the binary recipes export of XML or RDB recipes.

To migrate recipes from FactoryTalk Batch version 13.00 or 13.00.02

1. Open FactoryTalk Batch Equipment Editor.
2. Select **Options > Server Options**.
3. In the **Server Options** dialog box, **Store Recipes Using** section, select **Binary Files** and set the path to the binary files.
4. Open the binary area model that was backed up before upgrading. FactoryTalk Batch Equipment Editor prompts to migrate the area model. Accept the migration and then save the file.
5. If errors occur during migration, stop and address the errors in the area model.
6. Open FactoryTalk Batch Recipe Editor.
7. If prompted to translate recipes, select **Yes**.
8. (optional) If auditing is enabled, enter appropriate comments in the **Audit Comments** dialog box
9. Select **OK**. The **Recipes Requiring Verification** dialog box displays all recipes that require verification.
10. (optional) Select **Verify All** to verify the listed recipes. The **Verification Process Results** dialog box opens. If any errors occur during translation, they are displayed in the top portion of the dialog box.
11. Double-click an error message to open the recipe to the error.

Tip: Select all of the error or warning text and copy it to a text editor to use the list while addressing the errors.
12. Close the dialog box. The verified recipes are copied back into the working set of recipes.
13. (optional) If auditing is enabled, the **Audit Comments** dialog box opens prior to saving the recipes. Enter appropriate comments, and then select **OK**.

Convert binary recipes to XML or RDB

After installing the latest version of FactoryTalk Batch components and migrating the area model, convert binary format recipes to an XML or RDB format if needed.

Convert migrated recipes back to XML format

Use this procedure to convert updated binary recipes back to XML format.

To convert migrated recipes back to XML format

1. Open FactoryTalk Batch Equipment Editor.
2. Select **Options > Server Options**.
3. In the **Server Options** dialog box, **Store Recipes Using** section, select **XML Files** and set the path to the XML recipe location.
4. Open FactoryTalk Batch Recipe Editor.
5. Select **File > Import Recipe Into Working Set**.

6. In the **Import Recipe into XML directory** dialog box, select **Binary Files** and set the path to the location of the translated binary files.
7. In the **Recipe Name** list, select all the recipes, and then select **Import**. Recipes are imported into the working set of recipes in XML format.

Convert migrated recipes back to RDB format

Use this procedure to convert migrated binary recipes back to RDB format.

To convert migrated recipes back to RDB format

1. In FactoryTalk Batch Equipment Editor, select **Options > Server Options**.
2. In the **Server Options** dialog box, under **Store Recipes Using**, select **SQL Server Database**.
3. Select the node and database to store recipes.

Tip: The default database is **masterrecipes**. Substitute a different database name, if needed.
4. Open FactoryTalk Batch Recipe Editor.
5. Select **File > Import Recipe Into Working Set**.
6. In the **Import Recipe into Database** dialog box, select **Binary Files** and set the path to the location of the migrated binary files.
7. In the **Recipe Name** list, select all the recipes, and then select **Import** to convert the recipes to RDB format and store in the database.

Configure recipe storage

Recipes can be stored either as binary files, in a SQL Server Database, or as XML files

To configure recipe storage

1. Open FactoryTalk Batch Equipment Editor.
2. On the menu bar, select **Options** to open the **Server Options** dialog box.
3. Under **Store Recipes Using**, select one of these options for storing recipes:
 - **Binary Files (default format):** Stores recipes in separate files according to the recipe level and specified directory:
 - Stores procedures as .bpc files
 - Stores unit procedures as .upc files
 - Stores operations as .uop files
 - **Microsoft SQL Server Database:** Stores recipes in a SQL Server database.



Tip: If SQL Server is not installed on the same computer as the Batch Client, perform a custom installation of SQL Server and install the **Client Tools Connectivity** option. This displays a list of available SQL Server databases in the **Server Options** dialog box.

- **XML Files:** Stores recipes in separate .xml files:
 - Stores procedures as .pxml files
 - Stores unit procedures as .uxml files
 - Stores operations as .oxml files
4. Select **OK** to apply the configuration settings.

Troubleshoot FactoryTalk Batch installation or upgrade

At release time, this application presents certain circumstances and errors that require troubleshooting. This section supplies troubleshooting topics that indicate possible causes and solutions.

- Manually configuring the Windows Firewall
- Defining or resetting a disabled Administrator account
- Communication with the FactoryTalk Batch Server timing out
- Configuring Internet Explorer security settings for Trusted Sites
- Internet Explorer's intranet zone
- Running as Administrator for eProcedure Client on Windows Server operating system
- Recreating the masterrecipes database

Manually configure the Windows Firewall

If the Windows Firewall is enabled, and not externally controlled, the **Windows Firewall Configuration Utility** runs automatically. If this utility does not run automatically, manually run it on each computer in the FactoryTalk Batch system after installing servers or clients.

To manually configure the Windows Firewall

1. Navigate to **All Programs > Rockwell Software > FactoryTalk Tools > Windows Firewall Configuration Utility**. The configuration utility starts.
2. If the firewall is not enabled, a dialog box may open. Select **Yes** to enable the firewall and continue.
3. On the **Rockwell Software Windows Firewall Configuration Utility** dialog box, review the list of suggested changes and select **Accept**.
4. On the **Confirm Windows Firewall Changes** dialog box, verify that the **New Firewall State** is set to **On with Exceptions**.
5. Select **OK**.

For a complete list of the exceptions made by the **Windows Firewall Configuration Utility**, refer to **FactoryTalk Batch Windows Firewall exceptions** in the *FactoryTalk Batch Administrator Guide*.

Define or reset a disabled FactoryTalk Administrator account

The **FactoryTalk Directory Configuration Wizard** runs silently during the FactoryTalk Service Platform installation or upgrade. Run the wizard manually to define or reset a disabled Administrator account. FactoryTalk Batch and FactoryTalk Batch ActiveX Controls store client configuration settings in the Local and Network Directory.

To define or reset a disabled FactoryTalk Administrator account

1. Open the **FactoryTalk Directory Configuration Wizard** located within the installed FactoryTalk Batch applications. The **FactoryTalk Directory Configuration Wizard** opens.
2. Select one or more options, and then select **Next**.
 - **Configure the FactoryTalk Network Directory**
 - **Configure the FactoryTalk Local Directory**
3. Complete one or more pages:
 - In **Reconfigure FactoryTalk Network Directory**, enter the User name and Password for an existing Network administrator account. Re-enter the password in the **Confirm password** box, and then select **Next**.
 - In **Reconfigure FactoryTalk Local Directory**, enter the User name and Password for an existing Local administrator account. Re-enter the password in the **Confirm password** box, and then select **Next**.
4. On the **Summary** window, select **Close**.



Tip: For more detailed information on FactoryTalk Directory installation and configuration, select the **Help** button on the wizard, or view the FactoryTalk Administration Console help file.

Communication with FactoryTalk Batch Server times out

If the FactoryTalk Batch and eProcedure Servers run on a workgroup, add an Incoming Firewall Rule to allow the FactoryTalk Batch Service Manager to connect to the Server in a timely manner. For more information about adding an Incoming Firewall Rule, see **Add an incoming firewall rule**.

Disable Administrative Approval Mode for all administrators on the FactoryTalk Batch Server when running on a workgroup. This ensures that administrators do not have to install or run programs using elevated privileges.

For more information about disabling Administrative Approval, see **Disable Administrative Approval Mode**.

Configure Internet Explorer security settings for Trusted Sites

Use these instructions to configure Internet Explorer security settings for Trusted Sites.

To configure Internet Explorer security settings for Trusted Sites

1. Using **Internet Explorer**, open **Settings > Internet Options**.
2. Select the **Security** tab.
3. Select **Trusted sites**.
4. Under **Security level for this zone**, drag the slider to lower the security level for the **Trusted sites** zone to **Low** or **Medium-low**.
5. If the eProcedure Trusted sites differ from the default installation, select **Sites** to open the **Trusted sites** dialog box.
 - Under **Websites**, scroll through the list and verify that the eProcedure Server computer and **about:blank** sites are listed.
 - If the eProcedure Server computer and **about:blank** sites are not listed, select **Add** and add them.
 - Select **Close** when finished.
6. Select **OK** to apply the changes.

Internet Explorer intranet zone

The installation of the eProcedure Server installs a **Security_HKLM_Only** key and sets the key to 1 (enabled). The key exists in the location:

HKEY_LOCAL_MACHINE\Software\Policies\Microsoft\Windows\CurrentVersion\Internet Settings

Internet Explorer uses intranet security settings when:

- The Security_HKLM_Only key is 0 (disabled) or removed
- The eProcedure Server name does not appear on the list of trusted sites
- The site qualifies as an intranet site

Configure the ActiveX settings for the intranet zone.

Run as Administrator on eProcedure Client on Windows Server operating systems

To launch the eProcedure Client on a computer running Windows Server you must be logged in with an account that has administrator privileges.

To run as Administrator on Windows Server operating systems:

- Right-click the eProcedure Client icon and select **Run as administrator**.

Manually recreate the masterrecipes database

If the database name is not **masterrecipes**, follow these steps to edit the .bat file and the **createmasterrecipedb.sql** script to specify the name of the database and recreate it.

If the database needs to be recreated at any time, the .bat file can also be used to recreate it.



Tip: If **Store recipes in RDB format** was selected when installing FactoryTalk Batch, running the **createmasterrecipedb.bat** file is not required.

Prerequisites

- Use the **Rockwell Software\Batch\Scripts\createmasterrecipedb.bat** file to recreate the recipe database.



Tip: This batch file uses the default database name **masterrecipes**. It executes these SQL scripts in the **Batch\Scripts** folder to create the database and tables:

- **createmasterrecipedb.sql**
- **createrecipetables.sql**

To manually recreate the masterrecipes database

1. Edit **Batch\Scripts\createmasterrecipedb.bat** using a text editor. Replace **masterrecipes** with the database filename.
2. Edit the **createmasterrecipedb.sql** script using either SQL Server Management Studio or another editor to specify the database file name.
3. Run the **Batch\Scripts\createmasterrecipedb.bat** file to create the database and tables.

Use FactoryTalk Batch with a Windows Workgroup

This appendix includes instructions for using FactoryTalk Batch components on a Windows workgroup.

Windows Workgroup

This section describes steps to configure FactoryTalk Batch to run under a Windows Workgroup.

If the FactoryTalk Batch system runs under a Windows Workgroup, you will need to perform these additional tasks:

- Create Windows accounts
- Add an incoming firewall rule
- Disable Administrative Approval Mode

Create Windows accounts

If the FactoryTalk Batch application servers use a local account, create Windows accounts with the same name and password on all computers in the workgroup.

Add an incoming firewall rule

Add incoming firewall rules for these applications:

- FactoryTalk Batch Server
- eProcedure Server
- FactoryTalk Batch Material Manager Server

To add an incoming firewall rule

On the computer where the component is being installed:

1. Navigate to **Windows Firewall with Advanced Security**.
2. Select **Inbound Rules**, right-click **Inbound Rules**, and then select **New Rule**.
3. In the **New Inbound Rule Wizard**, select the following values:
 - In **Rule Type**, select **Port**.
 - In **Protocol and Ports**, select **TCP** and in **Specific local ports**, type **49157**.
 - In **Action**, select **Allow the connection**.
 - In **Profile**, select all profiles (Domain, Private, Public).

- In **Name**, in the **Name** box, enter **Port 49157 TCP**, and then select **Finish**.
- Verify that **Port 49157 TCP** rule exists in the **Inbound Rules** list.
- Close **Windows Firewall with Advanced Security**.

Disable Administrative Approval Mode

Disable the **User Account Control: Run all administrators in Admin Approval Mode** security policy setting on the FactoryTalk Batch Server computer when running on a Windows Workgroup. This ensures that users do not have to install or run programs using elevated privileges.

IMPORTANT If this security setting is configured to **Disabled**, the Windows Security Center notifies you that the overall security of the operating system has been reduced. As a result of this change Windows User Account Control (UAC) is not used, and any security benefits and risk mitigations that are dependent on UAC are not present on the computer. Additionally, when this setting is changed, the computer must be restarted.

To disable Administrative Approval Mode

1. On the FactoryTalk Batch Server, navigate to **Control Panel > Administrative Tools > Local Security Policy**.
2. Expand **Local Policies** and select **Security Options**.
3. Locate **User Account Control: Run all Administrators in Admin Approval Mode** and double-click it.
4. In the **Local Security Setting** tab, select **Disabled**, and then select **OK**.
5. Verify that **User Account Control: Run All Administrators in Admin Approval Mode** displays as **Disabled**.
6. Close the **Local Security Policy** window.

Install FactoryTalk eProcedure Client components

The FactoryTalk eProcedure Client uses Internet Explorer to enable operators to run batch recipes that contain manual instruction phases and automated phases.

Before beginning the installation, complete all the pre-installation administrative tasks.

Install the FactoryTalk Batch Server and FactoryTalk eProcedure Server components before installing FactoryTalk eProcedure Client components.



Tip: We recommend using the default installation directories for all components.

Be aware of these limitations regarding FactoryTalk eProcedure components:

- The FactoryTalk eProcedure Client requires installation of MSXML 4.0 on the FactoryTalk eProcedure Server machine to properly render the Instruction page. Due to security risks, the FactoryTalk Batch installation no longer installs MSXML 4.0.

Use FactoryTalk Batch View v1.02 to view FactoryTalk eProcedure clients or manually install the msxml.msi located in the [root folder]\Redist\MSXML_4.0SP3\ folder.

- Any Visual Basic® scripting in instructions should be converted to JavaScript.

Browsers such as Microsoft Edge, Google Chrome browser, Mozilla Firefox, and Apple Safari, do not support Visual Basic scripting. In these browsers, Visual Basic scripting actions are ignored and no error message is displayed.

- The user must be a member of the Administrators group to run the FactoryTalk eProcedure Client on a Windows Server computer and to obtain the required privileges to execute the FactoryTalk eProcedure Client.
- The FactoryTalk eProcedure Client is not supported on a computer running the Windows Server 2012 Data Center and Windows Server 2016 Data Center operating systems. Use FactoryTalk Batch View v1.02 to view FactoryTalk eProcedure clients.

Important:	<p>To run the FactoryTalk eProcedure Client on a Windows Server machine, first do the following:</p> <ul style="list-style-type: none"> • Disable Internet Explorer Enhanced Security Configuration. • Obtain the required privileges to execute the FactoryTalk eProcedure Client, right-click the FactoryTalk eProcedure Client icon and select Run as administrator.
-------------------	--

Install the FactoryTalk eProcedure Client

The FactoryTalk eProcedure Client is a web-based application that creates and commands batches. A batch is composed of a combination of process-connected phase logic and instruction files that step the operator through the manual process of producing a batch of products.



Tip: Prerequisite checks are run automatically to verify that the required software is present on the target computer. If an issue occurs during installation, suggested resolution steps are provided.

To install the FactoryTalk eProcedure Client Components

1. Run **Setup.exe**.
2. On the **Setup** page, select **Customize**.
3. On the **Customize** page:
 - Select **FactoryTalk eProcedure v14.00**.
 - Select **Client Components**.
 - Select **Next**.
4. On the **Options** page, **Network Directory** is required and is selected by default. Select **Next**.
5. On the **System Details** page, complete these items:
 - In **User Name**, enter the domain\user name for the FactoryTalk Batch Server or Material Server to run under. If the user account is in the current domain, the domain does not need to be specified.
 - In **User Account**, enter the user account for use by the FactoryTalk Batch Server.
 - Select **Next**.
6. On the **End User License Agreements** page, review the agreement and select **Accept all**.
7. If prompted on the **That's it** page, restart the computer.

Post-FactoryTalk eProcedure Client component installation

Post-installation configuration of the FactoryTalk eProcedure Client computer includes these tasks:

- Set the Internet Explorer home page for FactoryTalk eProcedure Clients
- Configure Internet Explorer to view FactoryTalk eProcedure pages
- Configure Internet Explorer compatibility view settings
- Select the Windows Classic theme in Windows 7

Set the Internet Explorer home page for FactoryTalk eProcedure Clients

The FactoryTalk eProcedure Client install sets the home page only for the user who installed the product. Any other users who will be using the FactoryTalk eProcedure Client on that computer must set the FactoryTalk eProcedure Client as the home page.

To set the Internet Explorer home page for FactoryTalk eProcedure Clients

1. In Internet Explorer, select **Tools > Internet Options**.
2. In the **Home page** box, enter **http://<computer name>/FactoryTalk eProcedure/** (where <computer name> is the name of the Server where the FactoryTalk eProcedure Server is installed).
3. Select **OK**.

Configure Internet Explorer to view FactoryTalk eProcedure pages

Use these instructions to configure Internet Explorer to view FactoryTalk eProcedure pages.

To configure Internet Explorer to view FactoryTalk eProcedure pages

1. In Internet Explorer, select **Tools > Internet Options**.



Tip: If using the global policy editor, use **gpedit.msc**.

2. Select the **Security** tab.
3. Select **Trusted sites** and then select **Sites**.



Tip: When adding sites to Internet Explorer Security Zones, be aware that:

- The FactoryTalk eProcedure installation modifies the Trusted sites security setting for the local computer. This provides all users with consistent FactoryTalk eProcedure Client operation. The instructions provided in this guide enable the current user to customize the FactoryTalk eProcedure Client operation and addition of sites into the current user's Internet Explorer security zones. Incorrectly following the instructions may result in undesired FactoryTalk eProcedure Client behavior or damage to the configuration of the computer, or both.
- Third-party computer and network security products, like Symantec, interact with Internet Explorer to secure computing environments. Modifying the default FactoryTalk eProcedure installation may lock down some settings and prevent the FactoryTalk eProcedure Client from successfully operating.

4. In the **Trusted sites** dialog box, verify that **Require server verification** (https:) for all sites in this zone is disabled.
5. In the **Add this Web site to the zone** box, type **http://<name of computer hosting FactoryTalk eProcedure server>**. Select **Add** to add the Web site to the **Web sites** box.
6. In the **Add this Web site to the zone** box, type **about:blank**. Select **Add** to add **about:blank** to the list of websites.
7. In the **Add this Web site to the zone** box, type **about:internet**. Select **Add** to add **about:internet** to the list of websites.
8. Close the **Trusted sites** dialog box.
9. In the **Internet Explorer Options** dialog box, select **Custom Level**.
10. In the **Security Settings** dialog box, select **Enable** for these options:
 - Download signed ActiveX controls
 - Download unsigned ActiveX controls
 - Initialize and script ActiveX controls not marked safe
 - Run ActiveX controls and plug-ins
 - Script ActiveX controls marked safe for scripting
11. Select **OK**. A confirmation message is displayed.
12. Select **Yes** to change the security settings and close the **Security Settings** dialog box.
13. Select **OK**. If prompted, restart the computer.

Configure Internet Explorer compatibility view settings

Use these instructions to configure the Internet Explorer compatibility view settings.

To configure Internet Explorer compatibility view settings

1. From Internet Explorer, select **Tools > Compatibility View Settings**.
2. In **Add this website**, enter the eProcedure server name as **http://<computer name>**, and select **Add**.
3. Refresh the Internet Explorer browser.



Tip: To enable the current user to maintain a separate set of eProcedure Client security settings than those for the local computer, see **Configure Internet Explorer security settings for Trusted Sites**.

Select Windows theme in Windows 7

Windows 7 requires the Windows Classic theme to use the eProcedure Client. Using other themes (such as Windows Basic) may cause unpredictable issues with color and display.

To select the Windows Classic theme in Windows 7

1. Select **Start > Control Panel > Appearance and Personalization > Personalization**.
2. Select the Windows Classic theme.
3. Select **Close**.

Uninstall FactoryTalk Batch version 14.00

This section describes how to uninstall FactoryTalk Batch version 14.00.



Tip: Users must have administrative privileges on the target computer to uninstall the software.

Uninstall the FactoryTalk Batch system

Use this procedure to uninstall all FactoryTalk Batch components on the computer at once.

Prerequisites

- Close all FactoryTalk Batch applications.
- Stop all Batch services.

To uninstall the FactoryTalk Batch System

1. Navigate to **Control Panel > Programs and Features**, and then select **Uninstall a Program**.
2. On the **Uninstall or change a program** page, select **FactoryTalk Batch system** and select **Uninstall**. The **Uninstall** page opens with all **FactoryTalk Batch** installed components on the computer selected.
3. Select **Uninstall**. The uninstall program removes all FactoryTalk Batch components.
4. Select **Close**.

Uninstall the FactoryTalk Batch components

As an alternative to uninstalling the entire FactoryTalk Batch System, use the **Uninstall** page to uninstall unnecessary components and keep useful components. Multiple components can be selected.

Prerequisites

- Close all FactoryTalk Batch applications.
- Stop all Batch services.

To uninstall the FactoryTalk Batch components

1. Navigate to **Control Panel > Programs and Features**, and then select **Uninstall a Program**.
2. On the **Uninstall or change a program** page, select a FactoryTalk Batch component and select **Uninstall**.
3. On the **Uninstall** page, select the check box next to each component to remove.
4. Select **Uninstall**. The uninstall program removes the selected FactoryTalk Batch components.
5. Select **Close**.

Uninstall FactoryTalk Batch Material Manager

Uninstall FactoryTalk Batch Material Manager to move it to another server or to permanently uninstall FactoryTalk Batch Material Manager if it is not being used.

Prerequisites

- Close all FactoryTalk Batch applications.
- Stop all Batch services.
- Allow the Message Queue to clear

To uninstall FactoryTalk Batch Material Manager

1. Navigate to **Control Panel > Programs and Features**, and then select **Uninstall a Program**.
2. On the **Uninstall or change a program** page, select **FactoryTalk Batch Material Manager** and select **Uninstall**.
3. On the **Uninstall** page, verify the **FactoryTalk Batch Material Manager** option is selected, and then select **Uninstall**. The uninstall program removes **FactoryTalk Batch Material Manager**.
4. Select **Close**.

Delete the default directories

Delete the default directories or the directories of the FactoryTalk Batch components after uninstalling the applications to free up space on the file system.

To delete the default directories

1. In **Windows Explorer**, expand the **Program Files (x86)** folder, and select the **Rockwell Software** folder. The **Batch** folder displays in the right pane.

2. Right-click the **Batch** folder and select **Delete**. A message box confirms the deletion.
3. Select **Yes**.
4. Close **Windows Explorer**.

Delete databases

After uninstalling FactoryTalk Batch, delete any remaining databases in SQL Server to free up space in the database.

Databases that might be present are:

- BatchHistory or BatchHistoryEx
- MaterialBasedRecipe
- MaterialBasedRecipe_MAJ
- Sample2_Materials

To delete databases

1. Open SQL Server Management Studio and expand **Databases**.
2. Right-click the database and select **Delete**.
3. Click **OK**.

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Rockwell Automation support

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAQs, chat, user forums, and product notification updates.	rok.auto/support
Knowledgebase	Access Knowledgebase articles.	rok.auto/knowledgebase
Local Technical Support Phone Numbers	Locate the telephone number for your country.	rok.auto/phonesupport
Literature Library	Find installation instructions, manuals, brochures, and technical data publications.	rok.auto/literature
Product Compatibility and Download Center (PCDC)	Get help determining how products interact, check features and capabilities, and find associated firmware.	rok.auto/pcdc

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