

# FactoryTalk Batch View Quick Start Guide

FactoryTalk Batch View 2.0

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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.

If this equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

In no event will Rockwell Automation, Inc. be responsible or liable for indirect or consequential damages resulting from the use or application of this equipment.

The examples and diagrams in this manual are included solely for illustrative purposes. Because of the many variables and requirements associated with any particular installation, Rockwell Automation, Inc. cannot assume responsibility or liability for actual use based on the examples and diagrams.

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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 manual provides information about how to get started with the new FactoryTalk Batch View. It is one of a set of related manuals that describe installing, programming, and operating the FactoryTalk Batch system.



Tip: The modern FactoryTalk Batch View is an innovative and intuitive user interface for your comprehensive batch solution. It leverages state-of-the-art web technologies with scalable graphics for consistent visualization across all devices and form factors. The zero-install browser simplifies administration and maintenance. As the only native client application that supports the new features in FactoryTalk Batch and eProcedure, it is the client of the future for modern batch solutions

For information about FactoryTalk Batch View (legacy) desktop version, view the FactoryTalk Batch View User Guide (FTBVS-UMOO1).

To review FactoryTalk Batch release notes and latest information regarding product compatibility refer to the <u>Product Compatibility and Download</u> <u>Center (PCDC)</u>.

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### **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.

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• 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: <a href="http://www.rockwellautomation.com/global/about-us/contact/contact.page">http://www.rockwellautomation.com/global/about-us/contact.page</a>. 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	Introduces the basics of FactoryTalk Batch Material		
Results Guide	Manager.		
(BWMTR-GR011)			

# **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 <b>.cfg</b> 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

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

# **System requirements**

Following are the required software and browser system requirements to successfully use FactoryTalk Batch View version 2.0.

For detailed information about requirements and compatibility, refer to the Product Compatibility and Download Center:

https://compatibility.rockwellautomation.com/Pages/home.aspx

#### **Hardware requirements**

FactoryTalk Batch View does not have any specific hardware requirements. It runs on any hardware platform that supports the FactoryTalk Batch Server, either locally or on a virtual machine.

#### **Rockwell Software**

- FactoryTalk® Services Platform 6.20 (CPR 9 SR 12) or later
- FactoryTalk Batch 14.00

### **Browser requirements for client**

FactoryTalk Batch View is designed for modern web browsers.

Most browsers can be used with FactoryTalk Batch View. However, the following browsers are recommended:

- Google Chrome<sup>™</sup> browser version 81 or later
- Microsoft Edge<sup>™</sup> (based on Chromium) version 80.0.361.50 or later



The FactoryTalk Batch View Client has a minimum Landscape orientation of  $480 \times 960$  pixels and a minimum Portrait orientation of  $960 \times 480$  pixels.

# Install the FactoryTalk Batch View server

Install FactoryTalk Batch View to access FactoryTalk Batch data from mobile devices, browsers on laptops and desktops, and to use the updated FactoryTalk View SE user controls.

#### To install FactoryTalk Batch View server

- 1. Access the Product Compatibility and Download Center (PCDC) to download the **FactoryTalk Batch View Server.msi**.
- 2. Run the **FactoryTalk Batch View Server.msi** file to install the FactoryTalk Batch View.
- To read the end-user license agreement, select license terms and conditions. Then select the check box to accept the terms and conditions. Select Next.
- 4. In the **HTTPS port:** box, choose the default port or enter a new port. Select **Next**.
- 5. Accept the default installation folder, or select **Change** to browse to a different location. Select **Next**.
- 6. Select Install.
- 7. Select **Finish** to close the installation window when the installation is complete.



Tip: The FactoryTalk Batch View Server does not automatically start after it is installed. Use the FactoryTalk Batch Service Manager to start FactoryTalk Batch View Server after installation.

# Set up a remote FactoryTalk Batch View client

Following are instruction on how to set up a remote FactoryTalk Batch View client.

## To set up a remote FactoryTalk Batch View client

- 1. On the remote client, open a browser.
- 2. Enter the URL for the FactoryTalk Batch View Server.



Tip: The URL must be in the form of https://[node].[port].com. For example: https://MyBatchViewServer.MyDomain.com

- [node]: The computer on which the FactoryTalk Batch Server and FactoryTalk Batch View Server are installed. The node value is either the IP address or the fully qualified node name.
- [port]: The default port number is 443. If the FactoryTalk Batch View Service is installed
  on a different port, launch the client on the FactoryTalk Batch View Server machine to
  identify the port number in the URL. The port number is not shown in the URL if the
  default port number (443) is in use.

#### For example:

- https://192.168.0.10 (IP address and the default port of 443)
- https://192.168.0.10:4431 (IP address and a port number other than the default port of 443)
- https://Win2019DC-ABC.domain1234.com (a fully qualified machine name and default port number)
- 3. On the FactoryTalk Batch View login page, enter your user name and password, and then select Log On.

#### **HTTPS** certificates

The FactoryTalk Batch View application uses a self-signed certificate created during the product installation on the server. Modern web browsers are designed to warn users when they encounter self-signed certificates because the certificates are not signed by a certificate authority (CA). Self-signed certificates do provide for secure, encrypted data transmission, but are not signed by a CA.

When using FactoryTalk Batch View for the first time in a browser, accept a self-signed certificate for a given session, or permanently store the certificate in the browser.

# Single session self-signed certificates

When using FactoryTalk Batch View for the first time in a browser, accept a self-signed certificate for a given session.

## **Google Chrome**

- 1. In the address bar, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Select Advanced.
- 3. Select **Proceed**.

#### **Microsoft Edge**

- 1. In the address bar, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Select Advanced.
- 3. Select Continue.

#### **Apple Safari**

- 1. In the address bar, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Select Continue.

#### **Mozilla Firefox**

- 1. In the address bar, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Select Advanced.
- 3. Select **Add Exception**.
- 4. Select **Confirm the Exception**.

# Permanent self-signed certificates

If you want to permanently store the self-signed certificate, follow the steps for the browser.



Tip: Instructions may vary slightly based on browser updates.

## **Google Chrome**

This procedure applies to Google Chrome version 56.

- 1. In Google Chrome, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Open **Developer tools** by selecting Ctrl + Shift + I.
- 3. Select the **Security** tab.
- 4. Select View Certificate.
- 5. In the **Certificate** dialog box, select the **Details** tab, and select **Copy to File** to start the **Certificate Export Wizard**.
  - a. In the Certificate Export Wizard, select Next.
  - b. Select **DER encoded binary X.509 (.CER)**, and select **Next**.
  - c. Browse to the location where you want to export the file, and enter a file name. Select **Save**, and then select **Next**.
  - d. Select Finish.

- e. In the Certificate Export Wizard message, select OK.
- f. In the **Certificate** dialog box, select **OK**.
- 6. In the Chrome browser, open Settings, and select Privacy and security.
- 7. Select **Security**.
- 8. Scroll down the page and select Manage certificates.
- 9. In the **Certificates** dialog box, select the **Trusted Root Certification Authorities** tab, and then select **Import**.
- 10. In the **Certificate Import Wizard**, follow these steps:
  - a. Select **Next**.
  - b. Select **Browse** and select the certificate file you saved, and then select **Open**.
  - c. Select Next.
  - d. Select **Place all certificates in the following store** and verify that the **Certificate store** shows Trusted Root Certification Authorities.
  - e. Select Next, and then select Finish.
  - f. Select **OK**, and then select **Close**.
- 11. Restart the Chrome browser.

#### **Microsoft Edge**

- 1. In Microsoft Edge, enter the URL generated during installation of the FactoryTalk Batch View server.
- 2. Open **Developer tools** by selecting *Ctrl* + *Shift* + *I*.
- 3. Select the **Security** tab.
- 4. Select View Certificate.
- 5. In the **Certificate** dialog box, select the **Details** tab, and select **Copy to File** to start the **Certificate Export Wizard**.
  - a. In the Certificate Export Wizard, select Next.
  - b. Select **DER encoded binary X.509 (.CER)** and select **Next**.
  - c. Browse to the location where you want to export the file, and enter a file name. Select **Save**, and then select **Next**.
  - d. Select Finish.
  - e. In the Certificate Export Wizard message, select OK.
  - f. If the **Security Warning** dialog box is displayed, select **Yes** to install the certificate.
  - g. In the **Certificates** dialog box, select **OK**.
- 6. In the Microsoft Edge browser, open **Settings**, and select **Privacy and services**.

- 7. Under Privacy, select Manage certificates.
- 8. In the **Certificates** dialog box, select the **Trusted Root Certification Authorities** tab, and then select **Import**.
- 9. In the **Certificate Import Wizard**, follow these steps:
  - a. Select **Next**.
  - b. Select **Browse** and select the certificate file you saved, and then select **Open**.
  - c. Select Next.
  - d. Select **Place all certificates in the following store** and verify that the **Certificate store** shows Trusted Root Certification Authorities.
  - e. Select **Next**, and then select **Finish**.
  - f. If the **Security Warning** dialog box is displayed, select **Yes** to install the certificate.
  - g. In the Certificates dialog box, select Close.

#### **Apple Safari**

- 1. In the address bar, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Select Show Certificate.
- 3. Select Always trust < URL> when connecting to < URL>.
- 4. Select Continue.

#### **Mozilla Firefox**

- 1. In the address bar, go to the URL generated during installation of the FactoryTalk Batch View server.
- 2. Select **Advanced**.
- 3. Select **Add Exception**.
- 4. Select **Permanently store this exception**, then select **Confirm the Exception**.

# Welcome to FactoryTalk Batch View

Use FactoryTalk® Batch View to initiate and control the batch process. A batch is a running control recipe. The material produced by a single execution of a recipe is also considered a batch.

- Use Batches to create, view, and command a control recipe, observe the execution of a single recipe, and bind units for class-based recipes.
- Use Prompts to alert operators to value requests for parameters, unit binding, material binding, and signatures or manual instructions.
- Use Equipment for an equipment-centric view of the defined area model. There are three levels of equipment: process cell, unit, and phase.
- Use Diagnostics to view server and service status, server performance, server statistics, arbitration, and journals.
- Use Profile to change the default language, view assigned groups, enable or disable the minimal view, and view authorization settings

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

## **Batches**

Use Batches to create, view, and command a control recipe, observe the execution of a single recipe, and bind units for class-based recipes. Once a control recipe is created, it remains in the **Batches** list until it is removed or until the FactoryTalk Batch Server is restarted with a cold boot. A graphical representation of a running batch and its associated data is displayed.

## **Prompts**

Use Prompts to alert operators to value requests for parameters, unit binding, material binding, and signatures or manual instructions. A control recipe cannot complete execution until the operator provides the requested information. In most cases, pending requests for information (value prompts, signatures, or manual instructions) are not acknowledged until a user either provides the information or stops or aborts the control recipe.

• Value prompts alert operators to requests for parameter values, unit binding, and material phase/container binding.

- Signatures are requests for signoffs that require user permissions and optional comments. When a signature is generated against a control recipe, acknowledge the signature by completing the associated signoffs. The requested user information in a signature is determined by the signature template defined in the area model.
- Instructions are individual steps of a manually executed phase. As a batch executes, the instruction for each active step appears.

  Instructions execute in the order specified within the master recipe.

# **Equipment**

Use **Equipment** for an equipment-centric view of the defined area model. The FactoryTalk Batch Equipment Editor defines the equipment that appears.

There are three levels in **Equipment** displayed: process cell, unit, and phase or operation sequence. Each level includes run-time data and other information for each resource. From the phase level, you can view phase-specific information and run phases or operation sequences manually, independent of recipes.

In **Equipment**, view the area model hierarchy using different views:

- **List view** (default): Each item lists different values depending on the window size: either mobile or desktop size. More fields are available in desktop size.
- **Diagram view**: Process cells, units, and phases or operation sequences appear as graphical elements in the area model.
  - Zoom in, zoom out, and zoom to fit buttons on the top left of the diagram view.
  - The top right of the diagram view describes which equipment level is being viewed: process cells, units, or phases/operation sequences.
- **Phase Summary view**: View all phases or operation sequences for all units in all process cells at once in a list type view.

# **Diagnostics**

Use **Diagnostics** to view server and service status, server performance, server statistics, batch event journals, and arbitration information.

- **Status** view version and connection information for the FactoryTalk Batch View, FactoryTalk Batch Server, FactoryTalk Services, eProcedure Server, and FactoryTalk Activation. Displays the status of configured data servers and services.
- **Server** view server performance, hardware, and software information.
- **Statistics** view information on connections, equipment model file name and save time, and perform tag verification.

- **Journals** view a list of all available event journals.
- **Arbitration** view, acquire, release, and reorder system elements.

### **Profile**

#### Access **Profile** to:

- View a logged-in user and its assigned groups
- Change the default language
- Enable or disable the minimal view
- View authorization settings

# **Rockwell Automation support**

Use these resources to access support information.

Technical Support Center	Find help with how-to videos, FAOs, 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	Get help determining how products interact, check features and capabilities, and	rok.auto/pcdc
(PCDC)	find associated firmware.	

#### **Documentation feedback**

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# Waste Electrical and Electronic Equipment (WEEE)



At the end of life, this equipment should be collected separately from any unsorted municipal waste.

Rockwell Automation maintains current product environmental information on its website at rok.auto/pec.

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