

Wizard application

Release 1.1.0



User manual Original Instructions

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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.

No patent liability is assumed by Rockwell Automation, Inc. with respect to use of information, circuits, equipment, or software described in this manual.

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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.

These 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).

The following icon may appear in the text of this document.



Tip: Identifies information that is useful and can help to make a process easier to do or easier to understand.

Rockwell Automation recognizes that some of the terms that are currently used in our industry and in this publication are not in alignment with the movement toward inclusive language in technology. We are proactively collaborating with industry peers to find alternatives to such terms and making changes to our products and content. Please excuse the use of such terms in our content while we implement these changes.

Introduction

The Wizard Application for OptixEdge is a user-friendly tool designed to effortlessly manage and configure controller data transmission via communication protocols like MOTT and OPC UA. The application shares data with these common protocols or saves the data in an internal datalogger.

The Wizard Application empowers users to effortlessly configure data transmission with a logic that mirrors the sophisticated parameters of FactoryTalk Optix. Therefore, users can experience the simplicity of managing nodes and related parameters in an intuitive and user-friendly format.

Access the application

Access the application by entering the following address in your browser bar, replacing <device IP address> with your device IP address: https://<device IP address>:8443.

Wizard Application menu

The Wizard Application is divided into five sections:

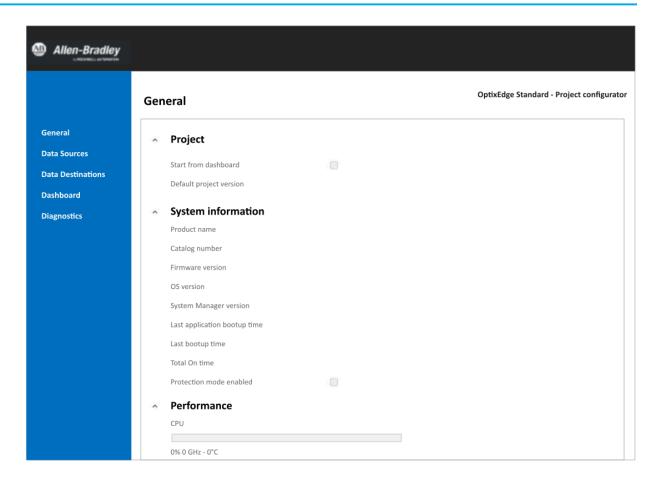
- General on page 7
- Data Sources on page 8
- Data Destinations on page 9
- Dashboard on page 11
- Diagnostics on page 13

NOTE: A warning message at the screen top saying OptixEdge is currently using x feature tokens

Runtime license expired or exceeded number of tokens used may appear to indicate how
many FactoryTalk Optix Runtime tokens are being used and if the number of tokens provided by the
Runtime license is being exceeded.

An orange banner at the screen top saying **Runtime license expired or exceeded number of tokens used – Runtime in demo mode and will be closed in xxx minutes** may appear when the FactoryTalk Optix Runtime tokens used for the project no longer suffice and a Runtime size upgrade is required. The banner also counts down the minutes left while the Runtime operates in Demo mode. The banner turns green when the number of FactoryTalk Optix Runtime tokens is resolved by upgrading the Runtime size in tokens.

See the FactoryTalk Optix Installation Guide for more information on Runtime sizing and Runtime entitlements.



General

View any information about your device and firmware, and set your data Dashboard as the initial page.

Project

- **Start from dashboard**: Flag this checkbox to set your dashboard as the initial page, to directly view the controller values. To create your dashboard, see <u>Dashboard</u> on page 11.
- Default project version: Shows the version of the project configurator, or Wizard application, running on the
 device.

System Information

- **Product name**: Shows the product name.
- Catalog number: Shows the product catalog number.
- Firmware version: Shows the current firmware version.
- OS version: Shows the current OS version of your device.
- System Manager version: Shows the current System Manager version.
- Last application bootup time: Shows the last Wizard application bootup time.
- Last bootup time: Shows the last device bootup time.
- Total On time: Shows the total device operation time.
- Protection mode enabled: Flag this checkbox to enable the System Manager Protection Mode.

NOTE: Refer to the *System Manager* section in your device User manual for further information on this topic. You can download your device User manual from the Lit Library.

Performance

Shows the device performance in terms of:

- **CPU**: Shows the device CPU performance measured in GHz, and temperature, measured in °C.
- Memory: Shows the device memory performance in terms of GB.
- Disk: Shows the device disk capacity measured in GB.

Hardware

- Product code: Shows the the device product code.
- Product type: Shows the the device product type.
- Version: Shows the the device version.
- · Series: Shows the the device series.

Legal Notices

 Third party legal notes: Click the Open button to open a pop-up window that connects to two external libraries: L5Sharp with MIT license and CsvHelper with MS-PL (Microsoft) license.

Data Sources

Configure communication driver stations to ensure seamless data transmission.

This section provides a variety of drivers. Configure one or more stations for the desired driver by selecting next to **Add Station**.



- RA Ethernet/IP: A communication driver for Rockwell Automation controllers, supporting tags import and real-time data exchange over Ethernet/IP networks.
- S7 TIA Profinet: A driver for Siemens S7-1200 and S7-1500 controllers, enabling tag import and optimized data access via Profinet. This driver allows Symbolic Access data reference.
- **S7 TCP**: A driver for Siemens S7-1200, S7-1500, S7-200, S7-300, and S7-400 controllers, facilitating data exchange over TCP/IP networks. This driver allows Absolute Access data reference.
- Modbus TCP: A driver for devices supporting the Modbus protocol, allowing communication over TCP/IP networks with various industrial equipment.

For configuration, you can select the following icons:

lcon	Description		
	Save the parameter settings, especially before importing the value tags.		
0	Import the value tags to be read from the controller, through the Tag Importer window for the selected station.		
	IMPORTANT: Before importing the value tags, select to save any parameter settings.		

lcon	Description
	You can import the tags manually by clicking for tags source selection through a project dir path, or by clicking for tags source selection through a USB memory stick path. Then, fill in the <filename> placeholder as required. Once the file containing the tag variables is found, the already acquired tags are selected in blue. Select or deselect the variables as needed.</filename>
	NOTE: If you deselect a variable that has already been imported, the Wizard Application removes it.
	You can import the tags source automatically by enabling the Online import toggle in the Tag Importer window. By doing so, the manual import section disappears. Select Browse to activate the import of tags that the application reads from the controller.
	NOTE: The Online import toggle is enabled for S7 TIA Profinet e RA Ethernet/IP drivers only.
	Fill in the fields listed in the pane.
	NOTE: The fields shown may vary based on the station device.
	For example, the following fields appear when configuring an RA Ethernet/IP driver: • Route: Enter the controller IP address.
	Enable extended properties: Enable or disable extended properties. To learn more about this subject, see Extended properties in the FactoryTalk Optix online Help manual.
	Use alarms: Enable or disable alarms. To learn more about this subject, see Alarms in the FactoryTalk Optix online Help manual.
	Timeout: Enable or disable idle timeouts. To learn more about this subject, see Idle timeout configuration in the FactoryTalk Optix online Help manual.
	NOTE: You cannot import all elements or arrays of a structure; you must select each tag you want to import.
&	Shows the variables actually imported from the controller.
Ô	Remove the station.

Data Destinations

Manage settings for data transmission to multiple destinations, such as communication protocols and dataloggers.

OPC UA Server

The OPC UA Server can only be set once. To expose nodes, create a configuration under Server

- **Endpoint URL**: Provide the communications protocol and network address of the endpoint on the server.
- Maximum number of connections: Provide the maximum number of OPC UA clients that can connect to the OPC UA server.

- Use node path in Nodelds: If enabled, the server publishes Nodelds with the node path inside.
- Sampling interval: Select the time interval between successive readings of the field variables by the server.
- Max array length: Provide the maximum accepted number of elements in an array.
- Nodes to publish: Configure the nodes to be published and the users to publish them to. Once the
 configuration exists in the OPC UA server, click to update the new configuration exposed by the OPC UA
 server.
 shows the variables configured for the OPC UA server.

NOTE: If there are no configurations, the entire server is exposed on the OPCUA server. Whereas, any selected variables will appear on the OPCUA server.

MQTT Clients

You can add multiple MQTT Clients. Create the connection to the broker under Client.

- Broker address: Provide the broker address to connect to.
- **Port**: Provide the communication port number.
- Client Id: Provide the client identifier that is unique on the server.

Then set the Publishers:

- Sampling mode: Select a data sampling method. Periodic: records the values of all the selected variables
 at regular intervals; Value change: at regular intervals records only the values of the selected variables that
 have changed with respect to the previous sampling
- Sampling period: Select a data sampling period. Interval in hours, with millisecond precision, between one sampling and the next, in the Periodic mode.
- **Topic**: Select the topic to filter and route messages between clients.
- **QoS**: Select the MOTT QoS level. Clients publishing at a QoS higher than the maximum will be disconnected.
- Retain: Enable or disable retained message support. If a client publishes a message with the retain bit set, it
 will be disconnected if the support is disabled.

Dataloggers

You can add multiple Dataloggers.

NOTE: Dataloggers include variables, so this section configuration features the same icons that are available for the **Data Sources** configuration.

Configure a data logging method for each datalogger:

- Records limit on database: Provide the maximum accepted number of records in an array.
- Sampling mode: Select a data sampling method. Periodic: records the values of all the selected variables
 at regular intervals; Value change: at regular intervals records only the values of the selected variables that
 have changed with respect to the previous sampling
- Sampling period: Select a data sampling period. Interval in hours, with millisecond precision, between one sampling and the next, in the Periodic mode.

Configure the Security:

- SSL/TLS enabled: Enable a secure connection between FT Optix MOTT Client and MOTT Broker.
- Validate broker certificate: Activate/deactivate a validation process of the MOTT Broker certificate.
- CA certificate file: Upload a Certificate Authority certificate through the /persistent/... path.
- Client certificate file: Upload a FT Optix MQTT Client certificate.
- Client private key file: Upload a FT Optix MQTT Client private key.

Configure the **User Identity**:

- **User identity type**: Specify user when accessing the MOTT Broker.
 - Anonymous (default): No login is performed, access the server as Anonymous user.
 - Username/Password: Specify a username and password combination for logon.

Dashboard

Create dynamic dashboard widgets to visualize your transmitted data.

At the top right corner, click to create and configure a dashboard widget through a configuration window. Once created, you can edit the dashboard parameters by accessing the configuration window again by clicking. The configurable parameters set varies, based on the selected widget **Type**.

Data grid and Trend

Type

Select Widget Selection > Data grid or Widget Selection > Trend, then select a datalogger to which
you want the widget to point. The Query* field populates automatically. Once you click OK, a responsive
table widget is generated based on the retrieved data.

Properties

- Widget title: Enter the widget title.
- Data grid properties: Enter data grid properties. To learn more about this subject, see Data grid in the FactoryTalk Optix online Help manual.
- Source model: Select the datalogger source model.
- Query*: This parameter is automatically imported but you can amend it as needed.
- Auto refresh time: Enter the auto-refresh time of the widget.

Layout

To learn more about this subject, see Configure a grid layout in the FactoryTalk Optix online Help manual.

- **Column position**: Select the table column position in the grid layout.
- Column span: Select the number of columns in the grid layout taken up by an item.
- Row position: Select the table row position in the grid layout.
- **Row span**: Select the number of rows in the grid layout taken up by an item.

Display

Type

- Select **Widget Selection > Display**, then select a variable to which you want the widget to point. Once you click **OK**, a responsive display widget is generated based on the retrieved data.
- Data source: Select Source driver or Source station and set the variables that you want to track within each datalogger.
 - Source driver: Select the source driver.
 - Source station: Select the source station.
 - Source variable: Select the source variable.

Properties

- Widget title: Enter the widget title.
- Engineering unit: Enter the widget engineering unit.

· Trend properties

- Source model: Select the source datalogger.
- Query: It shows a pre-set customizable guery setting.
- Refresh time: Set the data refresh time.
- Time window: Set the the time frame displayed on the trend along the x-axis.
- Y axis automatic scaling: Enable or disable the Y axis automatic scaling by selecting respectively
 True or False.
- Y axis maximum: Set the highest value displayed on the y-axis of the trend graph. It defines the upper limit of the data range shown.
- Y axis minimum: Set the lowest value displayed on the y-axis of the trend graph. It defines the lower limit of the data range shown.

Pens

The station name together with the variable configured in the datalogger appear here.

- **Enabled**: Show or hide the label displayed on the widget by selecting respectively **True** or **False**.
- Title: Enter the trend line title.
- Thickness (-1 Auto): Enter the trend line thickness.
- Color: Edit the trend line color.

Layout

To learn more about this subject, see Configure a grid layout in the FactoryTalk Optix online Help manual.

- Column position: Select the table column position in the grid layout.
- **Column span**: Select the number of columns in the grid layout taken up by an item.
- Row position: Select the table row position in the grid layout.
- Row span: Select the number of rows in the grid layout taken up by an item.

Sparkline

Type

- Widget Selection > Sparkline: Points directly to a variable. A display with a sparkline is generated.
 Once you click OK, a responsive widget showing a sparkline is generated based on the retrieved data as per settings.
- Data source: Select Source driver or Source station and set the variables that you want to track within each
 datalogger.
 - Source driver: Select the source driver.
 - **Source station**: Select the source station.
 - Source variable: Select the source variable.

Properties

- Widget title: Enter the widget title.
- Engineering unit: Enter the engineering unit.
- Sparkline properties: Select the sparkline properties.
- **Time window**: Provide the sparkline time range.
- Refresh time: Provide the sparkline refresh time.
- Y axis maximum: Provide the maximum value of the Y-axis.
- Y axis minimum: Provide the minimum value of the Y-axis.
- Range high: Provide the high value of the range.

Layout

To learn more about this subject, see Configure a grid layout in the FactoryTalk Optix online Help manual.

- **Column position**: Select the table column position in the grid layout.
- **Column span**: Select the number of columns in the grid layout taken up by an item.
- Row position: Select the table row position in the grid layout.
- Row span: Select the number of rows in the grid layout taken up by an item.

Diagnostics

Access detailed data logs and system diagnostics.

Four buttons display at the top of the screen:

Regenerate CSV tags template: Export the data logs listed in this section. By clicking the Regenerate CSV tags template button, a tags_to_import.csv file is generated and saved in the ProjectFiles\Docs directory. Use this file to import tags into your project.

NOTE: You can download the generated .csv file using the **File Explorer** section within the **Interactive Access** Tool of FTRA.

• Open User Manual: Open the Wizard Application user manual.

NOTE: The Wizard Application user manual is located also in the ProjectFiles\Docs directory.

- Communication status: View the communication status between drivers and stations.
- Restart OptixEdge: Restart your device.

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	Get help determining how products interact, check features and capabilities, and find	rok.auto/pcdc
(PCDC)	associated firmware.	

Documentation feedback

Your comments help us serve your documentation needs better. If you have any suggestions on how to improve our content, complete the form at rok.auto/docfeedback.

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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