Contents

1 • Introduction 1

Intended audience .................................................. 1
Where to find additional information ........................ 1
Help ....................................................................... 1
Release Notes .......................................................... 2
Training programs ....................................................... 2
Knowledgebases ......................................................... 2
Consulting services ..................................................... 2

2 • Welcome to RSLinx Enterprise 3

What is RSLinx Enterprise? ........................................... 3
Features and benefits .................................................. 4
Overview of basic concepts ........................................ 5
FactoryTalk Services Platform ................................. 5
FactoryTalk Directory ................................................. 5
FactoryTalk Live Data ............................................... 5
FactoryTalk Diagnostics .............................................. 5
FactoryTalk Administration Console ....................... 6
Local applications vs. Network applications ............. 6
FactoryTalk Administration Console and FactoryTalk View Studio 7
Design-time vs. runtime ........................................... 7
Installation and configuration checklist ..................... 8

3 • Installing RSLinx Enterprise 9

Minimum system requirements ................................. 9
Hardware requirements ............................................ 9
Software requirements ............................................. 9
Software compatibility ............................................ 10
Installing RSLinx Enterprise .................................... 10
Updating an existing installation ............................. 11
  Updating a system that already has a FactoryTalk-enabled product installed ... 12
4 • Starting RSLinx Enterprise and exploring the user interface 13
   Starting FactoryTalk Administration Console ................................. 13
   FactoryTalk Administration Console user interface components .......... 14
   Adding RSLinx Enterprise to the FactoryTalk application .................. 15
   Exploring the RSLinx Enterprise Communication Setup editor ............ 16
   Right mouse-clicking vs. left mouse-clicking .............................. 18

5 • Defining RSLinx Enterprise server properties 19
   Defining General server properties ........................................... 19
   Setting up RSLinx Enterprise to support a redundant server (optional) .... 20
   Setting up RSLinx Enterprise to support FactoryTalk Alarms and Events (optional). 21

6 • Creating a configuration 23
   Adding a driver ........................................................................... 23
      If you are running on an Ethernet network ................................ 23
      If you are running on any network other than Ethernet ................ 23
   Adding a device .......................................................................... 24
      Automatically adding a device by browsing ................................. 24
      Browsing the virtual backplane .................................................. 24
   Manually adding a device ............................................................... 24
   Creating shortcuts ....................................................................... 25

7 • Troubleshooting 27
   What to check first if you’re having problems ................................. 27
   Troubleshooting tools for RSLinx Enterprise ................................. 27
      FactoryTalk Diagnostics event log ............................................. 28
      Predefined items ..................................................................... 28
   Answers to common questions ...................................................... 28
      Where is the help for RSLinx Enterprise? ................................ 28
      Why don’t I see RSLinx Enterprise on my Start menu? ............... 28
      Why can’t I browse for tags? ...................................................... 28
      Can I run RSLinx Enterprise and RSLinx Classic on the same computer? ........ 29
   How to contact technical support .................................................. 29
8 • Advanced topics
About the virtual backplane ................................................. 31
Supported network routes ................................................... 32
Moving RSLinx Enterprise configurations ............................. 32
  Moving your shortcuts ..................................................... 32
    Moving shortcuts from one computer to another: same application. ... 32
    Moving shortcuts on the same computer: different application ........ 33
    Moving shortcuts from one computer to another: different FactoryTalk Directory ............................................. 34
  Moving your physical layout (drivers and devices) ................. 34
    Moving from one computer to another ................................ 34
Managing CIP connections .................................................. 35
  Logix controllers with a limited number of connections ........... 36
  CIP bridge modules with a limited number of connections ......... 36
Using predefined items to find out how many CIP connections are being used . 36
Using FactoryTalk Diagnostics to track and troubleshoot CIP connections .... 36
  FactoryTalk Diagnostics .................................................... 36
9 • Using RSLinx Enterprise with RSLinx Classic ..................... 39
  Vista, Windows 2008, and Windows 7 operating systems .......... 39
    Dual-channel 1784-PKTX(D) driver .................................. 39
    All supported operating systems ..................................... 39
    1784-PKTX driver .......................................................... 39
    Serial-DF1 driver (RS232 DF1 devices) .............................. 40
    1784-PCIC(S) driver ...................................................... 40
Glossary .......................................................................... 41
Index ............................................................................. 45
Introduction

The *Getting Results Guide* provides you with information on installing, navigating, and using RSLinx Enterprise.

This chapter includes the following information:
- Intended audience
- Where to find additional information

The Getting Results Guide is included in a portable document format (PDF) on your FactoryTalk Services installation CD. These files must be viewed using the Adobe Acrobat Reader software, which is also included on the CD.

**Intended audience**

You should be familiar with:

- Microsoft Windows operating systems
- Allen-Bradley programmable logic controllers (PLCs)
- Rockwell Automation’s PLC programming tools
- FactoryTalk Administration Console

**Where to find additional information**

For additional information about RSLinx Enterprise, consult the following resources:

**Help**

The Help includes all overview, procedural, screen, and reference information for the product. The Help contains these basic components:

- Overview topics
- Quick-start topics
- Step-by-step procedures
- Dialog box descriptions

To view the Help while working in FactoryTalk Administration Console:

- Select **Contents** from the Help menu on FactoryTalk Administration Console main window, then select the book, **Work with RSLinx Enterprise**, or
- Click **Help** on any RSLinx Enterprise dialog box or property page, or
- Press **F1**, or
- From the Start menu, select Programs > Rockwell Software > FactoryTalk Tools > FactoryTalk Help > Work with RSLinx Enterprise.
Release Notes

The electronic Release Notes provide a list of the hardware and software that is necessary to use RSLinx Enterprise effectively and a list of known anomalies, anomalies fixed, and new features that are available in the current release.

The Release Notes are available from the FactoryTalk Services installation CD. The Release Notes for all FactoryTalk components, including RSLinx Enterprise, are available from the FactoryTalk Help. FactoryTalk Help can be launched from FactoryTalk Administration Console or from the Start menu as described in the previous section.

Training programs

Rockwell Automation offers a wide range of training programs, from regularly scheduled classes to custom-tailored classes conducted at your site.

If you would like more information about these training programs, visit the Rockwell Automation site on the Web or contact the Rockwell Automation Training Coordinator. The Web address and telephone numbers appear on page ii of this document.

Knowledgebases

The Rockwell Automation Customer Support Center offers an extensive online database that includes frequently asked questions and the latest patches. Please visit www.rockwellautomation.com/support and select Knowledgebase under Self-Service Support to access this database.

Consulting services

Rockwell Automation provides expert consulting and turnkey implementations for making optimal use of Rockwell Software products. Please contact your local representative for more information.
Welcome to RSLinx Enterprise

This chapter includes the following information:

- What is RSLinx Enterprise?
- Features and benefits
- Overview of basic concepts
- Installation and configuration checklist

What is RSLinx Enterprise?

RSLinx Enterprise is a FactoryTalk Live Data™ server and FactoryTalk Alarms and Events server. RSLinx Enterprise configurations, which you create and modify using the Communication Setup editor, are used by your applications to communicate with devices (such as controllers and I/O scanners) on the plant floor. This enables you to see values, such as sensor readings and other controller data from your plant floor devices, on your desktop computer or dedicated PanelView Plus terminal.

An RSLinx Enterprise configuration consists of:

- A list of communication devices and their settings (for example, node, baud rate, etc.).
- Device drivers and their associated properties.
- A list of potential target devices with which RSLinx Enterprise can communicate (that is, exchange data).
- Shortcuts. A shortcut is a name that stands for the device you want to connect to and the data that device contains. The communication path associated with the shortcut tells the application where to find that data.

For FactoryTalk View Machine Edition applications, you can pre-configure RSLinx Enterprise-based communications needed for the runtime applications using the design software, FactoryTalk View Studio. You can also edit configurations using Windows CE-based tools on the PanelView Plus.
Features and benefits

RSLinx Enterprise provides the following features and benefits:

- Provides access to controller and device data from any FactoryTalk Live Data client.
- Is optimized for Logix communications.
- Checks for devices that support a relatively small number of CIP connections and limits the number of read connections. (The number of write connections remains fixed at 1.)
- Offers a variety of communication drivers and routing options.
- Supports Local applications (also called stand-alone applications) for smaller systems and Network applications (also called distributed applications) for larger systems.
- For Network applications, provides the option of specifying a secondary, or redundant, server to take over if the primary server fails.
- Provides editing capabilities outside of FactoryTalk View Studio. You do not have to install FactoryTalk View Studio to edit RSLinx Enterprise configurations. Use FactoryTalk Administration Console, which is installed with FactoryTalk Services.
- Installs and supports FactoryTalk Alarms and Events. Refer to the Help for more information about FactoryTalk Alarms and Events.
- Supports FactoryTalk Security to provides a means for system administrators to control access to resources (such as applications or areas) or the ability to perform tasks (such as read and write) in the automation system.
- In conjunction with FactoryTalk Gateway, provides standard OPC connectivity into the FactoryTalk system for third-party products. For more information about FactoryTalk Gateway, refer to the FactoryTalk Gateway Help.
Overview of basic concepts

It is important to understand some basic concepts about FactoryTalk and RSLinx Enterprise before you begin working with RSLinx Enterprise within the FactoryTalk Administration Console. For more detailed information about FactoryTalk, refer to the FactoryTalk Help.

FactoryTalk Services Platform

Formerly known as FactoryTalk Automation Platform, the FactoryTalk Services Platform is an underlying architecture and set of services that Rockwell Automation software products build upon.

The FactoryTalk Services Platform:
- provides common services (such as diagnostic messages, health monitoring services, access to real-time data) and shares plant resources (such as tags and graphic displays) throughout an automation system.
- allows defining plant-floor resources once, and then allows simultaneous access to those resources across product boundaries.
- supports centralized security services.

The FactoryTalk Services Platform includes the following components:

**FACTORYTALK DIRECTORY**

FactoryTalk Directory allows products to share a common address book, which finds and provides access to plant-floor resources, such as data tags and graphic displays.

The FactoryTalk Services Platform includes two separate directories: a Local Directory and a Network Directory. In a **Local Directory**, a Directory Server, all project information, and all participating software products are located on a single computer. Local applications cannot be shared across a network. A **Network Directory** organizes project information from multiple FactoryTalk products across multiple computers on a network.

**FACTORYTALK LIVE DATA**

FactoryTalk Live Data manages connections between FactoryTalk products and data servers. It reads values from, and writes values to, OPC-DA servers (OLE for Process Control - Data Access) and Live Data servers on behalf of client software products, such as FactoryTalk View and FactoryTalk Transaction Manager.

**FACTORYTALK DIAGNOSTICS**

FactoryTalk Diagnostics collects and provides access to activity, status, warning, and error messages generated throughout a FactoryTalk system.
FACTORYTALK ADMINISTRATION CONSOLE

FactoryTalk Administration Console is an optional, standalone tool that enables you to configure and manage FactoryTalk-enabled applications.

FACTORYTALK SECURITY

FactoryTalk Security offers centralized security services that provide the ability to control access to your automation system. For more information on configuring FactoryTalk Security, refer to the topic titled “About FactoryTalk Security” in the Help.

Local applications vs. Network applications

An application organizes project information, including elements such as data servers, HMI servers, and alarm and event servers, and makes it available to all FactoryTalk-enabled products participating in a FactoryTalk system.

- **Network applications** are held in a FactoryTalk Network Directory. Project information and participating software products can be located on multiple computers distributed across a network. All of the computers participating in a particular Network application share a common Network Directory Server located on a network computer.

- **Local applications** are held in a FactoryTalk Local Directory. Project information is located on a stand-alone computer and is available only to software products installed on that same local computer. Local applications cannot be accessed remotely and cannot share project information with a Network application.
FactoryTalk Administration Console and FactoryTalk View Studio

To edit RSLinx Enterprise configurations, use FactoryTalk Administration Console or FactoryTalk View Studio as follows:

- In a Network (distributed) application, you can use either FactoryTalk Administration Console and FactoryTalk View Studio.
- In a Local application, you can edit locally or remotely using FactoryTalk Administration Console, or you can edit locally or remotely within FactoryTalk View Studio.
- To edit a FactoryTalk View Machine Edition (ME) project, use FactoryTalk View Studio because of the specific needs of FactoryTalk View ME.

Design-time vs. runtime

RSLinx Enterprise is comprised of design-time and runtime components. The design-time components provide the user interface that enables you to set up devices, drivers, and shortcuts that are ultimately used by the runtime components. Based on this configuration data, the runtime components execute read/write requests received during runtime operation.
## Installation and configuration checklist

Use the following checklist to guide you through the installation and configuration process.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
<th>Refer to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Read and understand the RSLinx Enterprise Getting Results Guide.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Plan your system.</td>
<td>“Getting started with a FactoryTalk system” in the FactoryTalk Help.</td>
</tr>
<tr>
<td>3.</td>
<td>Verify your personal computer meets the minimum hardware and software</td>
<td>“Minimum system requirements” on page 9.</td>
</tr>
<tr>
<td></td>
<td>requirements.</td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>Add an RSLinx Enterprise server.</td>
<td>“Adding RSLinx Enterprise to the FactoryTalk application” on page 15.</td>
</tr>
<tr>
<td>8.</td>
<td>Optionally, set up a redundant server to take over if the primary server</td>
<td>“Setting up RSLinx Enterprise to support a redundant server (optional)” on page 20.</td>
</tr>
<tr>
<td></td>
<td>fails (network applications only).</td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Optionally, set up options for device-based alarms.</td>
<td>“Setting up RSLinx Enterprise to support FactoryTalk Alarms and Events (optional)” on page 21</td>
</tr>
<tr>
<td>10.</td>
<td>Add drivers and devices.</td>
<td>“Adding a driver” on page 23.</td>
</tr>
<tr>
<td>11.</td>
<td>Create shortcuts that point to your target devices.</td>
<td>“Creating shortcuts” on page 25.</td>
</tr>
</tbody>
</table>
Installing RSLinx Enterprise

This chapter contains the following information:

- System requirements
- Installing RSLinx Enterprise software for the first time
- Updating an existing installation

The user installing RSLinx Enterprise must have administrative rights in Windows on the computers where the software is being installed. The Windows domain Administrator account has these rights, for example.

Minimum system requirements

To use RSLinx Enterprise, your personal computer must meet the following minimum hardware and software requirements:

**Hardware requirements**

To install RSLinx Enterprise, you will need the following hardware:

- Minimum: Intel Pentium III, 600MHz, 512MB RAM
- Recommended: Intel Pentium 4, 2GHz or faster, 1GB or more RAM

**Software requirements**

To run RSLinx Enterprise, you will require Microsoft Internet Explorer 6.0 (or later), and one of the following operating systems:

- Microsoft Windows XP Professional, Service Pack 2, Service Pack 3
- Microsoft Windows 2003 Server R2 Standard Service Pack 2 (64-bit)
- Microsoft Windows Server 2008 Service Pack 1, Service Pack 2, R2 Service Pack 2
- Microsoft Windows Server 2008 64-bit Standard Service Pack 2, R2 Standard (64-bit only)
- Microsoft Windows Vista Business 32-bit Service Pack 1, Service Pack 2
- Microsoft Windows 7 32-bit and Professional
- Microsoft Windows 7 64-bit Professional
Software compatibility

All Rockwell Software components must be of the same Coordinated Product Release (CPR) version. Be sure that you install RSLinx Enterprise v5.30.00 (CPR 9 Service Release 3) with Rockwell Automation's CPR 9 Service Release 3 products.

To check the CPR version of each Rockwell Software product, select Start > Settings > Control Panel > Add or Remove Programs. The CPR version number is shown next to the product name (for example, RSLinx Enterprise (CPR 9 Service Release 3)).

Installing RSLinx Enterprise

The user installing RSLinx Enterprise must have administrative rights in Windows on the computers where the software is being installed. The Windows domain Administrator account has these rights, for example.

To install RSLinx Enterprise, use the follow procedure:

1. Insert the FactoryTalk Services CD into the CD-ROM drive.

   If autorun is: Then:

   | enabled   | The Setup program starts automatically, and the FactoryTalk Services opening screen displays. Proceed to step 2. |
   | disabled  | a. Click Start, and then click Run. The Run dialog box displays. |
   |           | b. In the Open control, type x:setup, where x is the letter of the drive containing the FactoryTalk Services CD, and click OK. The FactoryTalk Services opening screen displays. |

2. Install FactoryTalk Services Platform: Click this step to start the installation wizard for FactoryTalk Services Platform. FactoryTalk Services Platform CPR 9 Service Release 3 must be installed on the computer before you install RSLinx Enterprise.

   Included with this installation is FactoryTalk Administration Console, which is a stand-alone tool that allows you to configure and manage FactoryTalk-enabled applications, such as RSLinx Enterprise. For more information about FactoryTalk and FactoryTalk Administration Console, refer to the FactoryTalk Help.

   If you have already installed another CPR 9 Service Release 3 FactoryTalk Services-enabled product, you already have Factory Talk Services Platform installed on your computer.

3. Select Install RSLinx Enterprise.

4. Follow the instructions in the order they are presented on the screen.
View RSLinx Enterprise Release Notes: The Release Notes may contain more up-to-date information than was available when this document was published. Read the Release Notes for the product you are installing before continuing with the installation.

View RSLinx Enterprise Getting Results Guide: This selection provides the RSLinx Enterprise Getting Results Guide in a searchable PDF file. Read and understand this guide before working with RSLinx Enterprise. You must install Adobe Acrobat Reader if it is not installed before you can view the Getting Results Guide.

Install RSLinx Enterprise: Click this step to start the installation wizard for RSLinx Enterprise. You will be prompted to do the following for each installation:
- Accept the license agreement
- Enter your user name and organization
- Select a setup type:
  - Standard Feature Set Installation to Default Location. This is the default selection, which installs both the runtime and the design-time components to C:\Program Files\Rockwell Software.
  - Custom Location Selection and/or Custom Feature Selection. Select this option if you want to install RSLinx Enterprise to a directory other than the default.
- Check for Product Updates: Click this step to launch the Product Updates page, which provides links to any late-breaking product updates and to the Rockwell Automation Support Knowledgebase.

5. When you are finished installing the software, click Exit, remove the FactoryTalk Services CD from the CD-ROM drive, and store it in a safe place.

You must restart your computer after installing Rockwell Software products. If you are installing multiple products, you must restart your computer after all of the products are installed.

Updating an existing installation

Note the following before upgrading RSLinx Enterprise:
- The user installing RSLinx Enterprise must have administrative rights in Windows on the computers where RSLinx Enterprise is being installed. The Windows domain Administrator account has these rights, for example.
RSLinx Enterprise v5.30.00 (CPR 9 Service Release 3) is a component of Rockwell Automation's latest Coordinated Product Release (CPR 9). Be sure that you install RSLinx Enterprise v5.30.00 (CPR 9 Service Release 3) with Rockwell Automation's CPR 9 Service Release 3 products.

Perform the following steps to upgrade from a previous version of the software:

1. Stop your current version of RSLinx Enterprise.
2. Insert the RSLinx Enterprise v5.30.00 (CPR 9 Service Release 3) product CD. Perform the installation steps in the order presented on the screen.
3. Restart your computer.

You must restart your computer after installing Rockwell Software products. If you are installing multiple products, you must restart your computer after all of the products are installed.

Updating a system that already has a FactoryTalk-enabled product installed

If you are installing RSLinx Enterprise on a system on which other FactoryTalk-enabled products are currently installed, you must first verify that all products are of the same CPR number. You can do this using Add or Remove Programs:

Start > Settings > Control Panel > Add or Remove Programs

The CPR number is shown with the product. If any products are of a previous release, you must uninstall the products (uninstalling FactoryTalk Services Platform last), restart your computer, and then use the installation CD to install the correct release version.

If the CPR versions are compatible, verify that FactoryTalk Administration Console is installed using the following procedure:

1. Select Start > Settings > Control Panel > Add or Remove Programs.
2. Select FactoryTalk Services Platform from the Add or Remove Programs screen.
3. Select Change to start the installation wizard.
4. Select Modify from the Program Maintenance screen.
5. Verify the installation status of FactoryTalk Administration Console. Check the box to install it, if it is not already checked.
6. Click Install.
7. Click Finish when the installation is complete.
Starting RSLinx Enterprise and exploring the user interface

This chapter includes the following information:
- Starting FactoryTalk Administration Console
- Basic FactoryTalk Administration Console user interface components
- Exploring the Communication Setup editor

Starting FactoryTalk Administration Console

RSLinx Enterprise is launched from within FactoryTalk Administration Console. To start FactoryTalk Administration Console, use the following procedure:

1. From the Start menu, select Programs > Rockwell Software > FactoryTalk Administration Console.
2. Select the FactoryTalk Directory you want to use. Refer to chapter 2 for more information about Network and Local applications.

NOTE: Depending on the security settings, you may be required to enter a User name and Password to open an application. Refer to the FactoryTalk Help for more information.
**FactoryTalk Administration Console user interface components**

FactoryTalk Administration Console is made up of the following basic user interface components:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The <strong>Explorer pane</strong> contains the Application tab and the Communications tab.</td>
</tr>
<tr>
<td>2</td>
<td>The <strong>Application tab</strong> displays your applications in tree format as you create them. The application tree allows you to view and manage your applications. You use FactoryTalk Administration Console to add references to data servers, such as RSLinx Enterprise, within FactoryTalk applications. For more information about creating applications in the FactoryTalk Administration Console, refer to the FactoryTalk Administration Console Help.</td>
</tr>
<tr>
<td>3</td>
<td>The <strong>Communications tab</strong> provides a view from the computer you are currently using. It allows you to browse for devices your computer can access on the network (similar to RSWho in RSLinx Classic) and displays them in tree format. The tree is composed of networks, chassis, devices, and services. The status bar on this tab indicates if the computer is online or offline, and whether it is browsing or not browsing.</td>
</tr>
<tr>
<td>4</td>
<td>The <strong>workspace</strong> is an empty pane when you start FactoryTalk Administration Console. When you launch RSLinx Enterprise from the Explorer pane, the Communication Setup editor displays in the workspace.</td>
</tr>
</tbody>
</table>
Adding RSLinx Enterprise to the FactoryTalk application

To begin using RSLinx Enterprise after you install it, you must first add it to a FactoryTalk application, which is created in the FactoryTalk Directory. Use the following procedure to add RSLinx Enterprise to an application.

1. In the Explorer window, position the mouse cursor on the area or application to which you want to add the RSLinx Enterprise server.

2. Right-click the area or application, point to Add New Server in the context menu, and then select Rockwell Automation Device Server (RSLinx Enterprise).

3. In the RSLinx Enterprise Server Properties tabs, set the server properties. These tabs are described in Chapter 5.

4. Click OK to add the RSLinx Enterprise server to the application.
Exploring the RSLinx Enterprise Communication Setup editor

Use the Communication Setup editor to add drivers, add devices, set up driver and device properties, and set up device shortcuts in your RSLinx Enterprise configurations.

To open the Communication Setup editor:

1. In the Explorer pane, expand the appropriate application in the application tree.
2. Expand RSLinx Enterprise.

Modifying this data at run time could cause unexpected results. See “Making run-time changes in FactoryTalk applications” in the Help.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>Device Shortcuts area</strong> enables you to add, remove, and modify shortcuts and apply the shortcut properties to the selected shortcut name. A shortcut is a name that stands for the device you want to connect to and the data that device contains. The shortcut is associated with a communication path to tell the application where to find that data.</td>
</tr>
</tbody>
</table>
### Tab(s) contain a communications tree control representing the communication topology.

Depending on your product, you will see the following tabs:

- **FactoryTalk View Site Edition (SE) Local**: Primary tab
- **FactoryTalk View Site Edition (SE) Network**: Primary tab and, if server redundancy is selected, Secondary tab.

Use the tabs to add, remove, and modify devices and drivers.

Menu options are displayed by right-clicking on the various nodes within the communications tree.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
</table>
| 2    | Tab(s) contain a communications tree control representing the communication topology. Depending on your product, you will see the following tabs:  
- **FactoryTalk View Site Edition (SE) Local**: Primary tab  
- **FactoryTalk View Site Edition (SE) Network**: Primary tab and, if server redundancy is selected, Secondary tab.  
Use the tabs to add, remove, and modify devices and drivers.  
Menu options are displayed by right-clicking on the various nodes within the communications tree. |
| 3    | Mode: Indicates if you are Online or Offline. |
| 4    | Browse status: Indicates whether or not RSLinx Enterprise is interrogating the network to determine if there are additional devices present. |
| 5    | Shortcut Properties Table indicates the properties associated with the selected shortcut. |
| 6    | Status messages assist you as you configure your shortcuts. |
| OK   | Saves any changes and closes the Communication Setup editor. |
| Cancel | Closes the Communication Setup editor without saving the current changes. |
| Verify | Displays a summary of the shortcuts you created and their associated status messages. |
| Help | Displays Help. |
Right mouse-clicking vs. left mouse-clicking

<table>
<thead>
<tr>
<th>To do this:</th>
<th>Do this:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Select a device on the communications tree to apply a shortcut to it.</td>
<td>Left-click the device. The Apply button will become active if it is a valid device selection, or a status message (6) will alert you it is an invalid device selection.</td>
</tr>
<tr>
<td>Start browsing the network.</td>
<td>Left-click a network on the communications tree. The Browse status (4) will indicate Browsing. or Right-click a network. Select Start Browsing from the context menu.</td>
</tr>
<tr>
<td>Stop browsing the network.</td>
<td>Right-click a network. Select Stop Browsing from the context menu.</td>
</tr>
<tr>
<td>View or edit a property page.</td>
<td>Right-click the device or network. Select Properties from the context menu.</td>
</tr>
<tr>
<td>View a context menu.</td>
<td>Right-click.</td>
</tr>
</tbody>
</table>

To display the property page for a device, do not left-click the device to select it before right-clicking to display the property page. The left-click action selects a shortcut target, which may or may not be the intended target for the highlighted shortcut.

Warnings have been added to FactoryTalk to alert you if making an edit in the development environment will adversely affect the run-time system. If the change is made through a dialog box, this warning icon:

![Warning Icon]

appears next to the component where the edit can be made. Hovering the mouse cursor over the icon displays the following message:

*Modifying this data at run time could cause unexpected results. See Making run-time changes in FactoryTalk applications in the Help.*

If the edit is made through a menu item, the message is displayed when you click the menu item.
Defining RSLinx Enterprise server properties

This chapter includes the following information:

- Defining General server properties
- Setting up RSLinx Enterprise to support redundant servers (optional)
- Setting up RSLinx Enterprise to support FactoryTalk Alarms and Events (optional)

To launch the Communication Setup editor, double-click Communication Setup from the Explorer under the RSLinx Enterprise server icon. The RSLinx Enterprise Server Properties dialog displays.

Defining General server properties

Both Local and Network applications require you to specify server properties on the General tab of the RSLinx Enterprise Server Properties dialog.

- The server name is RSLinx Enterprise and cannot be changed after the server has been created.
- Use the Description field to describe a component’s location, to identify a contact person or number in the event of failure, or to keep track of changes or version information.
For Local applications, the computer hosting the RSLinx Enterprise server defaults to localhost and cannot be changed. For Network applications, identify the computer where the RSLinx Enterprise server resides by either clicking **Browse** or typing the computer name.

If you are going to set up a redundant server, click the Redundancy tab. Otherwise, click **Apply** to save the server information, and then click **OK** to close the dialog.

### Setting up RSLinx Enterprise to support a redundant server (optional)

The Redundancy tab of the RSLinx Enterprise Server Properties dialog box enables you to set up a secondary (redundant) server that will take over in the event that there is loss of service of the primary RSLinx Enterprise server.

The secondary server cannot be hosted on the same computer as the primary server. You can set up a redundant data server for a network (distributed) application only. Refer to the RSLinx Enterprise Help for more information about redundant servers.

To set up a redundant server, on the Redundancy tab:

1. Select **Provide redundancy using a secondary server**.
2. Type the name of the computer that the secondary server will run on, or click **Browse** to locate and select a computer.
3. Select a switchover option.
If you are going to set up FactoryTalk Alarms and Events support, click the Alarms and Events tab. Otherwise, click **Apply** to save the server information, and then click **OK** to close the dialog.

**Setting up RSLinx Enterprise to support FactoryTalk Alarms and Events (optional)**

The Alarms and Events tab on the RSLinx Enterprise Server Properties dialog allows you to configure the selected server for FactoryTalk Alarm and Event device-based alarm monitoring. Refer to the RSLinx Enterprise Help or click Help on the property page before attempting to set up FactoryTalk Alarms and Events support.
Creating a configuration

This chapter includes the following information:

- Adding a driver
- Adding a device
- Creating shortcuts

To begin working with RSLinx Enterprise, you must add an RSLinx Enterprise data server to the FactoryTalk Directory. This procedure is described in chapter 4. Once you have added RSLinx Enterprise and configured its properties, use the Communication Setup editor to add drivers, set up driver and device properties, and set up device shortcuts.

To launch the Communication Setup editor, double-click Communication Setup from the Explorer under the RSLinx Enterprise data provider.

Adding a driver

A driver is software that interacts with a network interface (such as the interface that connects your computer to the Ethernet network) and manages the exchange of communication packets over the network to which the interface is attached. Refer to the RSLinx Enterprise Help for information about the drivers that are supported.

If you are running on an Ethernet network

To add a driver if you are running on an Ethernet network, right-click on the network shown (Ethernet), and select Start Browsing to populate the driver with devices.

Some Ethernet devices may not support the browse protocol used by RSLinx Enterprise on Ethernet. If the devices you expect to appear during the browse do not display, manually add the devices to the workstation’s Ethernet network by right-clicking on the network and selecting Add Device.

If you are running on any network other than Ethernet

To add a driver if you are running on any network other than Ethernet, right-click the device shown at this workstation, and select Add Driver.
Adding a device

You can add devices by browsing the network, or you can manually add devices.

Automatically adding a device by browsing

The list of potential device targets for RSLinx Enterprise can be gathered during online browsing. During a browse cycle, RSLinx Enterprise scans the network addresses, determines the present devices, and displays them in tree format. The display shows the set of devices discovered during the most recent browse cycle.

If a device is not found during a browse, it does not appear on the display, regardless of whether or not that device was previously discovered.

If you are running on an Ethernet network, right-click the network shown (Ethernet) to start browsing. The network is automatically populated with devices.

BROWSING THE VIRTUAL BACKPLANE

When you select the virtual backplane on the user interface, RSLinx Enterprise may not automatically discover devices that reside in it. This is most likely to happen if you have added the device with a separate software package such as the SoftLogix Chassis Monitor or RSLinx Classic.

If you think you have devices resident in your virtual backplane that are not showing up on the RSLinx Enterprise user interface, you can right-click the virtual backplane and select Start Browsing or Show All Devices to see those devices. Note that saved configuration data is not lost if the devices do not appear.

Manually adding a device

You can manually add the devices to the workstation's network using the following procedure:

1. Right-click the network or driver and select Add Device.

A list of Available Devices that applies only to the network you selected displays.
2. Select the device you wish to add and click **OK**. The device is added below the driver or network on the communications tree. Unless your application requires a specific device version, you should select the most recent revision of that device.

For information on device revisions in the device list, see the drivers, device, and shortcuts section of Frequently Asked Questions in the Help. The Help also provides information about how to add and configure drives and devices.

### Creating shortcuts

Your application uses a configuration file to communicate with devices on the network. This file contains at least one shortcut, which is a name that stands for the device you want to connect to and the data that device contains. The communication path associated with the shortcut tells the application where to find that data.

Here are some important aspects about device shortcuts:

- A shortcut needs to be configured for each device that the application needs to access. The connected device must be capable of providing data to the application.
- Shortcuts are stored on a per-FactoryTalk application basis instead of being associated with the RSLinx Enterprise server itself.
- Shortcuts are added, deleted, or modified using the Shortcut Editor in the Device Shortcuts area of the Communication Setup editor.

To create a shortcut, use the following procedure:

1. In the Device Shortcuts area of the Communication Setup editor, click **Add**. A default shortcut named "New_Shortcut" is created.
2. If you wish to change the name of the shortcut, you can enter the new name at this point.
When creating a shortcut name:

- Use the name of the controller in which the data (tags) resides.
- Ensure that the name is unique within this FactoryTalk View application.
- Do not use any of the following characters: . (period), ], [, %, or /. 
- Keep shortcut names as short as possible. (The name must be less than 255 characters.)
- Do not give the same name to RSLinx Enterprise shortcuts and RSLinx Classic topics. If a shortcut has the same name as a topic, tags will not be displayed for one of them during a tag browse.

3. Select the device on the communications tree (by left-clicking on the device) that contains the data you want to access for this shortcut, and click **Apply**. A dialog displays to confirm your changes.

4. **Optional** -- You may also choose to use an Offline Tag File by entering the path and name of the file in the Properties Table or by clicking **Browse**... and browsing for the file. Click **Apply** in the Device Shortcuts area. An offline tag file is a ControlLogix project file (.acd) that contains tag data. You can use this file to browse for tags when designing your application when the controller is not online.

   *Note: The ControlLogix program file (.acd) must be located on the local computer, not on a networked location. The offline file must be located in the specified directory on all RSLinx Enterprise server machines associated with the shortcut.*

5. **Optional** -- Enable Alarms and Events support for this shortcut by selecting **Yes** from the menu in the Shortcut Properties Table. Refer to the Help before enabling Alarms and Events support for a shortcut.

6. To see the status messages associated with each shortcut you have configured, click **Verify** on the Communication Setup editor.

7. When you are finished adding shortcuts, click **OK** to close the Communication Setup editor. The shortcuts are not saved until you click **OK** to close this dialog. A dialog displays to confirm your changes.
This chapter includes the following information:

- What to check first if you’re having problems
- Troubleshooting tools for RSLinx Enterprise
- Answers to common questions
- How to contact technical support

What to check first if you’re having problems

Does your PC meet the minimum hardware and software requirements? Refer to chapter 3 for these requirements.

Is the FactoryTalk Administration Console installed on your PC? Verify that FactoryTalk Administration Console is installed using the following procedure:

1. Select Start > Settings > Control Panel > Add or Remove Programs.
2. Select FactoryTalk Automation Platform from the Add or Remove Programs screen.
3. Select Change to start the installation wizard.
4. Select Modify from the Program Maintenance screen.
5. Verify the installation status of FactoryTalk Administration Console. Select to install it, if it is not already selected.
6. Click Install.
7. Click Finish when the installation is complete.

Troubleshooting tools for RSLinx Enterprise

RSLinx Enterprise provides of diagnostic tools that enable you to troubleshoot problems if they occur:

- FactoryTalk Diagnostics event log
- Predefined items
FactoryTalk Diagnostics event log

In a FactoryTalk-enabled automation system, Rockwell Software products monitor system activity and generate detailed diagnostic messages. Meanwhile, FactoryTalk Diagnostics collects these activity, warning, error, and audit messages from all participating products throughout a distributed system and routes them to Local Logs (also called event logs) on each computer.

If you encounter a problem, you can review the events in the log that led up to the problem to assist in determining the cause. Or you can monitor the log to identify potential problems and take corrective action before a problem occurs.

Refer to the FactoryTalk Help for more information about FactoryTalk Diagnostics and the event log.

Predefined items

Predefined items are counters or strings that are made available by RSLinx Enterprise as data items for diagnostic purposes. These predefined items access information contained in RSLinx Enterprise. Refer to the RSLinx Enterprise Help for more information about predefined items.

Answers to common questions

Where is the help for RSLinx Enterprise?

From the FactoryTalk Administration Console, select Help > Contents > FactoryTalk Help > Work with RSLinx Enterprise. If this book is not present, RSLinx Enterprise is not installed on your PC. Refer to chapter 3 for the installation procedure.

Why don’t I see RSLinx Enterprise on my Start menu?

RSLinx Enterprise uses the FactoryTalk Administration Console to edit all of the configuration data and does not require a standalone interface. FactoryTalk View Studio can also make changes to RSLinx Enterprise configurations, therefore users of FactoryTalk View Site Edition and FactoryTalk View Machine Edition do not have to leave their main user interface.

Why can’t I browse for tags?

Tag browsing (that is, browsing online for data items) is not supported in the FactoryTalk Administration Console. To browse for tags and connect them to components in your system, you must use the FactoryTalk View Studio or the FactoryTalk Transaction Manager tag browsers.
Why can't I edit my Machine Edition configuration?

Editing HMI servers within applications, namely FactoryTalk View Site Edition Distributed, Site Edition (SE) Local, and Machine Edition (ME), is not supported in the FactoryTalk Administration Console. The FactoryTalk Administration Console is intended to configure and manage your application. To edit SE or ME configurations, you must use FactoryTalk Studio.

Can I run RSLinx Enterprise and RSLinx Classic on the same computer?

RSLinx Enterprise and RSLinx Classic can run simultaneously on the same computer, although there are some considerations that you must be aware of to avoid resource conflicts between these two applications. Refer to Appendix C for more information.

How to contact technical support

Questions concerning installation and use of RSLinx Enterprise software are handled by the Rockwell Automation Customer Support Center. The center is staffed Monday through Friday, except on U.S. holidays, from 8 AM to 5 PM Eastern time zone for calls originating within the U.S. and Canada.

To reach the Customer Support Center, call 440-646-3434 and follow the prompts. For calls originating outside the U.S./Canada, locate the number in your country by visiting support.rockwellautomation.com/contact information.

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

- The product serial number and version number, which can be found by selecting Start > Settings > Control Panel > Add or Remove Programs. Click the product name, and then click Click here for support information.
- The type of hardware you are using.
- The exact wording of any errors or messages that appeared on your screen.
- A description of what happened and what you were doing when the problem occurred.
- A description of how you attempted to solve the problem.
Advanced topics

The following topics are presented in this section:
- About the virtual backplane
- Supported network routes
- Moving RSLinx Enterprise configurations
- Managing CIP connections

About the virtual backplane

The virtual backplane is a driver service that provides connectivity between RSLinx Enterprise and various device drivers and other applications within the RSLinx Enterprise server. It allows the software modules and communications resources contained in the server to be configured and visualized in a manner similar to the devices in a ControlLogix system.

For example, both the PCICS and PKTCS device drivers plug into the virtual backplane. Packets received by one of these communications interface cards can be routed across the virtual backplane to (or through) any other interface card whose driver plugs into the virtual backplane, or to any application that plugs into the virtual backplane, such as the SoftLogix5xxx controller.

This is very similar to having a 1756-CNB and a 1756-ENBT module plugged into a ControlLogix chassis: packets received across the ENBT can be routed across the backplane and out the CNB module, or to a controller sitting in the backplane.

Note that RSLinx Enterprise occupies a slot in the virtual backplane (as can RSLinx Classic), which means that it is able to be both a source and a destination for packets sent over the backplane.

This chassis-like model is carried over to the PanelView Plus platforms in a minimalistic fashion. For ControlNet support, those platforms implement two-slot virtual backplanes, where RSLinx Enterprise sits in one slot (slot #0) and the 2711P-RN15S ControlNet Scanner card sits in the other (slot #1).
Supported network routes

The preferred route for PCCC networks is for the RSLinx Enterprise engine to be connected to the end device (for example, a PanelView Plus device connected directly to a PLC-5, or an RSLinx Enterprise data server on a Windows computer connected directly to a DH+/RIO module in a ControlLogix rack).

RSLinx Enterprise allows you to change the network type used when going across a route that includes multiple CIP (Control and Information Protocol; for example, Ethernet or ControlNet) hops.

RSLinx Enterprise does not support “offlink” routes. Offlink routes are network paths in which the underlying network protocol changes. This means if you originally start on a PCCC route (for example, DH+/DH485, DH-RIO), you cannot switch to a CIP route such as ControlNet or Ethernet. The reverse is also true: you cannot start on a CIP route (for example, Ethernet to ControlLogix to DH+ to PLC-5) and then switch to a PCCC route.

Moving RSLinx Enterprise configurations

The following sections provide guidelines for moving your shortcuts from application to application and for moving your list of selected hardware from computer to computer. Before moving your files, shut down the RSLinx Enterprise service using the Windows Service Control Panel.

Moving your shortcuts

You can reuse shortcuts developed in one application for RSLinx Enterprise for another RSLinx application without having to re-enter the shortcuts using the following procedures. Note that these procedures move only the shortcuts and not the drivers themselves.

MOVING SHORTCUTS FROM ONE COMPUTER TO ANOTHER: SAME APPLICATION

1. Right-click the RSLinx Enterprise server in the application tree and select Properties.
2. Change the computer name in the Computer hosting the RSLinx Enterprise server box to the new location of the RSLinx Enterprise server.
3. A warning displays to alert you that this procedure changes the RSLinx Enterprise server reference. You must reapply your shortcuts because the paths may not be set correctly; only the shortcut name is preserved. Follow the instructions provided on the dialog.
MOVING SHORTCUTS ON THE SAME COMPUTER: DIFFERENT APPLICATION

1. Identify the computer on which your FactoryTalk Directory Server is located.

2. On that FactoryTalk Directory Server computer, locate the shortcuts.xml file in:

   C:\Documents and Settings\All Users\Application Data\Rockwell\RNAServer\Global\RnaStore\your_application_name\any_area_or_sub_areas_you_have\your_RSLinx_Enterprise_server_name

   (This assumes you have not changed your documents and settings location and that you installed Windows to the C:\ drive.)

   Your_application_name is the name of your application, and within the application are folders and sub folders for areas and sub areas, if used.

   Any_area_or_sub_areas_you_have will match a file directory of the same name.

   Your_RSLinx_Enterprise_server_name will match the name of your RSLinx Enterprise data server in the application (the default is RSLinx Enterprise).

3. Move the shortcuts.xml file to the path where your new application is; all your shortcuts NAMES will be moved there.

   For example:

   C:\Documents and Settings\All Users\Application Data\Rockwell\RNAServer\Global\RnaStore\your_NEW_application_name\any_area_or_sub_areas_you_have\your_RSLinx_Enterprise_server_name

4. For each shortcut, you must reapply the path to the end device.

   This method works for moving shortcuts between Local applications (remembering that Local applications always use the computer on which it runs as the "Local" FactoryTalk Directory server) and for moving shortcuts between Local and Networked applications.

   The path for local shortcuts is:

   C:\Documents and Settings\All Users\Application Data\Rockwell\RNAServer\Local\RnaStore\your_application_name_here\your_RSLinx_Enterprise_server_name.

MOVING SHORTCUTS FROM ONE COMPUTER TO ANOTHER: DIFFERENT APPLICATION

To move shortcuts between computers and between applications, follow the same path on the FactoryTalk Directory server as described in the previous section. Keep in mind that the FactoryTalk Directory server will have a directory for each application and for each RSLinx Enterprise server.
MOVING SHORTCUTS FROM ONE COMPUTER TO ANOTHER: DIFFERENT FACTORYTALK DIRECTORY

To move shortcuts between computers, even with different FactoryTalk Directories, follow the same path on the FactoryTalk Directory server as described in the previous section. Keep in mind that the FactoryTalk Directory server will have a directory for each application and for each RSLinx Enterprise server, and you will be able to move from application to application.

Note that your shortcut names are copied, but not the associated paths; so you must reapply each shortcut.

Moving your physical layout (drivers and devices)

Applications using RSLinx Enterprise data services from the same RSLinx Enterprise host computer always share the same physical hardware configuration (for example, drivers, devices, etc.) In this case, there is no need to move hardware configurations from one application to another.

MOVING FROM ONE COMPUTER TO ANOTHER

CAUTION: Only qualified personnel familiar with RSLinx Enterprise and the consequences associated with moving the RSLinxNg.xml file should perform the procedure described in this section. These consequences include:

- Driver mismatch (different driver configurations, including addresses)
- Communications interfaces mismatch (some cards may get inappropriately reconfigured)
- Topology mismatch (including subnets)

Contact Rockwell Automation Technical Support for assistance.

This procedure is typically used for the following reasons:

- You have nearly identical control systems on similar process lines, and you want to copy the same hardware configurations to duplicate RSLinx Enterprise host computers on each line.

or

- You have nearly identical workstations (RSLinx Enterprise hosts) in the same control system, each having the same perspective of the network, and the same hardware configuration is needed in each workstation.
Using the following procedure for these scenarios may enable you to:

- copy I/O configurations
- avoid losing user-assigned device names
- avoid having to reapply shortcuts for applications copied from the source computer

1. Shut down the RSLinx Enterprise service using the Windows Service Control Panel on both the source and the target computers.

RSLinx Enterprise will restart if a Rockwell Automation application attempts to use this service. Rockwell Automation applications that use RSLinx Enterprise must be stopped or shut down before you proceed. This will prevent the service from automatically starting while you are moving the configuration file.

2. Use Windows Explorer to locate the file an RSLinxNG.xml file in the directory C:\Documents and Settings\All Users\Application Data\Rockwell\RSLinx Enterprise. (This assumes you have not changed your documents and settings location and that you installed Windows to the C:\ drive).

3. Copy RSLinxNG.xml from the source computer to the target computer and restart the computer hosting RSLinx Enterprise. This results in an exact copy of the source computer’s hardware configuration.

Any time you change the RSLinx Enterprise physical configuration (RSLinxNG.xml), you may break existing application shortcut assignments. Check all shortcut assignments in all applications that use the RSLinx Enterprise service on the same host workstation to ensure that the correct devices are assigned.

Managing CIP connections

Prior to CPR 9 Service Release 2, RSLinx Enterprise would, by default, open up to five CIP connections to a Logix controller: Four for read operations and one for write operations. In some system configurations, the maximum connection resources in a controller or bridge module could be reached fairly quickly. In this situation, if the client load changed, problems could result (for example, if an HMI terminal was introduced into the system, it could cause performance variation among all terminals in the system, or you might not be able to go online with programming software).

With CPR 9 Service Release 2, RSLinx Enterprise checks for devices that support a relatively small number of CIP connections and limits the number of read connections. (The number of write connections remains fixed at 1.) These devices are described in the following sections. By default, all other devices and bridge modules still open as many as four read connections and one write connection.
LOGIX CONTROLLERS WITH A LIMITED NUMBER OF CONNECTIONS

The following Logix controllers are assigned from 1 to 4 read connections, as configured, with the default being 1 read connection and 1 write connection. This is determined at runtime and is based on the actual controller, not the type specified in the RSLinx Enterprise topology, if it is different.

- 1769-L23E-QB1
- 1769-L23-QBFC1
- 17-69-L23E-QBFC1

CIP BRIDGE MODULES WITH A LIMITED NUMBER OF CONNECTIONS

The following communication bridge modules are assigned from 1 to 4 read connections, as configured, with the default being 1 read connection and 1 write connection. This determination is based on the RSLinx Enterprise topology; only the bridge module closest to the target controller is checked.

- 1756-DHRIO
- 1756-DHRIO
- 1761-NET-ENI

Using predefined items to find out how many CIP connections are being used

To determine how many CIP connections RSLinx Enterprise is using for a particular path, create a shortcut using that path and then check the value in the @ConnectionsActive predefined item. Refer to the RSLinx Enterprise Help for more information on predefined items.

Using FactoryTalk Diagnostics to track and troubleshoot CIP connections

FACTORYTALK DIAGNOSTICS

The following FactoryTalk Diagnostics messages are used to support this feature:

- 1_CLXDP_STARTED_ON_ROUTE is logged when a CLX data provider is started.
- 1_CLXDP_MAX_READ_CONNECTIONS is logged to indicate the maximum number of read connections that the data provider will attempt to open.

Refer to the FactoryTalk Help for more information about FactoryTalk Diagnostics.
Changing the allocation of CIP connections

Configuration parameters in the registry file or the RSLinxNG.xml file can be used to override the default values. Refer to Knowledgebase Answer ID 39366 for information on manually changing the connection allocation.
Using RSLinx Enterprise with RSLinx Classic

RSLinx Enterprise and RSLinx Classic can run simultaneously on the same computer. This is a common setup if you need to create or edit a program using RSLogix 5, RSLogix 500, and RSLogix 5000 software (which require RSLinx Classic) for use in an application and you must accomplish this using only one computer.

Vista, Windows 2008, and Windows 7 operating systems

If your RSLinx Enterprise configuration consists of a:

Dual-channel 1784-PKTX(D) driver

As of CPR 9 SR 2, RSLinx Enterprise and RSLinx Classic both install and use the same 1784-PKTX(D) driver. RSLinx Enterprise uses the first channel (assigned by default and cannot be changed). RSLinx Classic uses the second channel.

If you are running on Vista, Windows 2008, or Windows 7, and your RSLinx Enterprise or RSLinx Classic configuration consists of a dual-channel 1784-PKTX(D) driver, you configure the driver for both RSLinx Enterprise and RSLinx Classic.

See “Configure the 1784-PKTX(D) driver for RSLinx Enterprise and RSLinx Classic” in the Help for this procedure.

NOTE: This applies only to the dual-channel 1784-PKTX(D) driver; the single-channel 1784-PKTX driver can be configured in only one RSLinx product at a time.

All supported operating systems

If your RSLinx Enterprise configuration consists of a:

1784-PKTX driver

If your RSLinx Enterprise configuration consists of a 1784-PKTX driver, and you need RSLinx Classic to communicate using that same driver, then you must share the driver within RSLinx Enterprise with RSLinx Classic.

See “Sharing an RSLinx Enterprise driver with RSLinx Classic in the Help for this procedure.

TIP: You can use this procedure for Vista, Windows 7, and Windows XP operating systems; however, the previous procedure is the preferred method.
Serial-DF1 driver (RS232 DF1 devices)

If your RSLinx Enterprise configuration consists of a Serial-DF1 driver (RS232 DF1 devices), and you need RSLinx Classic to communicate using that same driver, then you must share the driver within RSLinx Enterprise with RSLinx Classic.

See “Sharing an RSLinx Enterprise driver with RSLinx Classic” in the Help for this procedure.

1784-PCIC(S) driver

If your RSLinx Enterprise configuration consists of a 1784-PCIC(S) driver, you configure the driver in RSLinx Enterprise, then add a virtual backplane to RSLinx Classic.

The virtual backplane is a sharable component between RSLinx Classic and RSLinx Enterprise. Because the 1784-PCIC(S) plugs into the virtual backplane, it is sharable as well.

See “Sharing the RSLinx Enterprise virtual backplane with RSLinx Classic” in the Help for this procedure.
Glossary

application. A set of data elements used to implement a control system. See Network application, Local application.

area. Areas organize and subdivide a distributed Network application into logical or physical divisions. For example, separate areas may correspond with separate manufacturing lines in a facility, separate plants in different geographical locations, or different manufacturing processes. Areas are not available with Local applications.

bus. In RSLinx Enterprise, a bus is defined as a network, a driver, or chassis.

channel. In RSLinx Enterprise, a channel is a driver.

CIP. Control and Information Protocol.

client. A component or subsystem that uses data or functionality provided by some other component or subsystem (the server). The term can also refer to the computer that executes this software, connecting to a server computer across a communications network.

configuration. A file that contains information about the physical structure you defined for your system. This file includes all network paths, defined drivers and devices, data providers, and object protocols.

CPR. Coordinated Product Release.

data access server. A server that provides tags.

data element. An individually addressable item of data. For example, a tag (e.g., OPC or HMI) or an HMI Project Component (e.g., a graphic display, event file, node, channel, etc.).

Data Provider. Logic that knows how to speak to a particular class of products. One of the building blocks of RSLinx Enterprise, a Data Provider acts as a multiplexor for multiple clients and optimizes what data can be read together for more efficient handling.

deploy. To copy and distribute project files to designated directories on other computers.

distributed application. See Network application.

driver. Software that interacts with a network interface (such as the interface that connects your computer to the Ethernet network) and manages the exchange of communication packets over the network to which the interface is attached.

FactoryTalk. FactoryTalk is a set of services and technologies that enable Rockwell Automation products to work together to share information across all layers of an enterprise.
**FactoryTalk Administrative Console.** A stand-alone tool used to configure and administer FactoryTalk applications. This tool may be used to perform such tasks as creating areas and data server elements, creating user accounts and user groups, configuring security permissions, and viewing system-wide diagnostic messages. FactoryTalk Administration Console installs along with most FactoryTalk-enabled software products.

**FactoryTalk Alarms and Events.** FactoryTalk Alarms and Events is a set of distributed services that allows participating FactoryTalk products, such as FactoryTalk View, to use alarm information detected from devices distributed across an application.

**FactoryTalk Directory.** The FactoryTalk Directory contains the information that allows a distributed automation system to organize, browse, and locate all the data and services available to it. A FactoryTalk Directory can contain multiple applications, which allows multiple automation systems on the same network.

**FactoryTalk Live Data.** FactoryTalk Live Data is a service that reads and writes tag values (OPC items) to or from any OPC-DA (OLE for process Control - Data Access) or Live Data server on behalf of client software products such as FactoryTalk View Site Edition and FactoryTalk Transaction Manager.

**GUI.** Graphical user interface.

**HMI.** Human-machine interface.

**local.** Having to do with using a single computer to carry out a task.

**Local application.** A Local application is accessible only from the local computer where it resides. Even if the computer is connected to a network or a Network application resides on the same computer, the Local application remains self-contained and does not share its data or any of its project elements. Local applications do not support areas. Also called stand-alone applications.

**Network application.** A software system that uses several interconnected computers that share information and processing duties to accomplish its tasks. A Network application organizes project elements from multiple FactoryTalk-enabled products. All of the computers participating in a particular application share a common FactoryTalk Directory located on a network computer. Also called a distributed application.

**offline data item.** A data item (tag) whose server is not currently available but whose name is still available for browsing, selection, and use. Offline data items are read directly from a controller’s project file.

**online data item.** A data item (tag) whose server is currently available to supply data. Online data items are read directly from a controller, just as they are defined in that controller.
OPC. A set of industry-standard specifications that define interfaces for communicating with automation devices and services. Applying OPC standards makes interoperability possible among automation and control applications, field systems and devices, and business and office applications that are supplied by different vendors.

packet. The transmission unit exchanged at the network layer.

PCCC (PC³). Programmable Controller Communication Commands.

redundancy. Having to do with the availability of a standby hardware or software module that can assume the responsibilities of a primary hardware or software module if that primary module fails.

reference. A link from one data element to another. The referring element is called the “source element” and the referenced element is called the “target element.” A graphic display, for example, typically reference tags, which supply it with runtime data.

runtime. Having to do with the operation of a control system.

server. A subsystem that provides services for clients using a set of interfaces.

shortcut. Represents a device that you want to connect to on the network and the data that device contains. The communication path associated with the shortcut tells the application where to find that data. This symbolic reference to a physical device is similar to a topic in RSLinx Classic.

stand-alone application. All application components in a stand-alone application are located on a single computer and are only accessible from the computer where they reside. Stand-alone applications do not support areas. Also called Local applications.

tag. A logical name for a variable in a device or in local memory. For example, a tag can represent a process variable in a Logix 5000 controller.
Index

A
adding a data server • 15
adding a device
  automatically • 24
  manually • 24
adding drivers • 23
Alarms and Events tab • 21
applications, about • 6
autorun • 10

B
browsing
  for devices • 24
tag • 28
  virtual backplane • 24

C
checklist, installation and configuration • 8
CIP (Control and Information Protocol) • 32
Communication Setup editor, exploring • 16
configurations
  creating • 23
  moving • 32
consulting services • 2
contacting
  Customer Support Center • 29
creating shortcuts • 25
Customer Support Center, contacting • 29

D
data server, adding • 15
design-time component • 7
device shortcuts, creating • 25
devices
  adding • 24
  moving • 34
drivers
  adding • 23
  moving • 34

E
Ethernet network, adding drivers to • 23
event log, FactoryTalk Diagnostics • 28

F
FactoryTalk Administration Console • 6
  starting • 13
  user interface components • 13, 14
FactoryTalk Diagnostics • 5, 28
FactoryTalk Directory • 5
FactoryTalk Live Data • 5
FactoryTalk Security • 6
FactoryTalk Services Platform
  about • 5
  installing • 10
FactoryTalk View Machine Edition • 29
FactoryTalk View Site Edition • 29
FactoryTalk View Studio • 7, 28
FactoryTalk, basic concepts • 5

G
General tab • 19

H
hardware requirements, RSLinx Enterprise • 9
Help, accessing • 1

I
installation and configuration checklist • 8
installing RSLinx Enterprise • 9

K
Knowledgebase • 2

L
Local applications • 6