Important User Information

Read this document and the documents listed in the additional resources section about installation, configuration, and operation of this equipment before you install, configure, operate, or maintain this product. Users are required to familiarize themselves with installation and wiring instructions in addition to requirements of all applicable codes, laws, and standards. Activities including installation, adjustments, putting into service, use, assembly, disassembly, and maintenance are required to be carried out by suitably trained personnel in accordance with applicable code of practice.

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

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

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

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

<table>
<thead>
<tr>
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<th>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.</th>
</tr>
</thead>
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<tr>
<td>ATTENTION</td>
<td>Identifies information about practices or circumstances that can lead to personal injury or death, property damage, or economic loss. Attenions help you identify a hazard, avoid a hazard, and recognize the consequence.</td>
</tr>
<tr>
<td>IMPORTANT</td>
<td>Identifies information that is critical for successful application and understanding of the product.</td>
</tr>
<tr>
<td>SHOCK HAZARD</td>
<td>Labels may be on or inside the equipment, for example, a drive or motor, to alert people that dangerous voltage may be present.</td>
</tr>
<tr>
<td>BURN HAZARD</td>
<td>Labels may be on or inside the equipment, for example, a drive or motor, to alert people that surfaces may reach dangerous temperatures.</td>
</tr>
<tr>
<td>ARC FLASH HAZARD</td>
<td>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).</td>
</tr>
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Preface

Purpose of the document

The Getting Results Guide provides you with information on how to install and navigate the RSLinx Classic software. It explains how to effectively use the RSLinx Classic software and how to find and access additional information.

This guide can be considered the entry point into Rockwell Software documentation set for this product. The documentation set contains pertinent, easily accessible product information and ships with the software product. This set is designed to free you from tedious paper shuffling and reduce information overload.

Other components of the documentation set include electronic release notes and help.

Intended audience

We assume that you are familiar with:

- IBM-compliant personal computers
- Microsoft® Windows® operating systems
- OPC (OLE for Process Control®) communication
- DDE (Microsoft dynamic data exchange) messaging
- Allen-Bradley PLC™ (programmable logic controllers)
- Rockwell Software PLC programming tools

Document conventions

The conventions used throughout this document for the user interface comply with those recommended by Microsoft. If you are not familiar with the Microsoft Windows user interface, read the documentation supplied with the operating system you are using before attempting to use this software.

Feedback

Use the feedback form packaged with your software to report errors, or let us know what information you want to see added in future editions of this document. You can also send an email message to info@software.rockwell.com with any comments about Rockwell products and services.

Legal Notices

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

End User License Agreement (EULA)

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

The default location of this file is:

C:\Program Files (x86)\Common Files\Rockwell\license.rtf.
Open Source Software Licenses

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

You can view a full list of all open source software used in this product and their corresponding licenses by opening the index.html file located your product's OPENSOURCE folder on your hard drive.

The default location of this file is:

C:\Program Files (x86)\Common Files\Rockwell\Help\RSLinxrn.chm

You may obtain Corresponding Source code for open source packages included in this product from their respective project web site(s).

Alternatively, you may obtain complete Corresponding Source code by contacting Rockwell Automation via the Contact form on the Rockwell Automation website: http://www.rockwellautomation.com/global/about-us/contact/contact.page. Please include “Open Source” as part of the request text.
Welcome to RSLinx Classic

This chapter includes the following information:

- What is RSLinx Classic?
- Differences between RSLinx Classic types
- Quick start
- Explore RSLinx Classic

What is RSLinx Classic?

RSLinx Classic for Rockwell Automation Networks and Devices is a comprehensive factory communication solution, providing Allen-Bradley programmable controller access to a wide variety of Rockwell Software and Allen-Bradley applications. These range from device programming and configuration applications such as RSLogix and RSNetWorx, to HMI (Human-Machine Interface) applications such as RSView32, FactoryTalk View SE (Site Edition), and FactoryTalk View ME (Machine Edition), to your own data acquisition applications using Microsoft Office, web pages, or Visual Basic®. RSLinx Classic also incorporates advanced data optimization techniques and contains a set of diagnostics. The API (Application Programming Interface) supports custom applications developed with the RSLinx Classic SDK. RSLinx Classic is an OPC Data Access Compliant Server and a DDE server.

Differences between RSLinx Classic types

RSLinx Classic is available in four versions to meet the demand for a variety of cost and functionality requirements. Depending on the version you are running, some functionality may or may not be operational. Refer to the following sections for specific version functionality.

The RSLinx Classic version you are running appears in the title bar at the top of the main window. If a version of RSLinx Classic is started without the proper activation files, it runs as RSLinx Classic Lite.

RSLinx Classic Lite

RSLinx Classic Lite provides the minimum functionality required to support RSLogix and RSNetWorx. This version is not commercially available, but is bundled with products that require only direct access to the RSLinx Classic network drivers. This version does not support OPC, DDE, or the published RSLinx Classic C API (Application Programming Interface).

RSLinx Classic Lite is used for the following:

- Ladder logic programming using RSLogix products.
- Network and device configuration and diagnostics using RSNetWorx.
- Configuring Ethernet modules and devices (for example, 1756-ENET, 1756-DHRIO, and so on).
• Upgrading firmware using ControlFlash.
• Browsing networks and getting device information such as firmware revision.

**RSLinx Classic Single Node**

RSLinx Classic Single Node includes the required functionality to supply communication services for all Rockwell Software products. OPC and DDE interfaces are supported, but to only one device. It does not support applications developed for the RSLinx Classic C API, or direct drivers in HMI applications. RSLinx Classic OEM or higher is required for these application types.

RSLinx Classic Single Node is used for the following:

• Data acquisition using OPC or DDE to only one device. This includes clients such as RSView32, FactoryTalk View SE, FactoryTalk View ME Station, Microsoft Office, Visual Basic, and web pages. Note that this is limited to 32bit client only.
• Ladder logic programming using RSLogix products.
• Network and device configuration and diagnostics using RSNetWorx.
• Configuring Ethernet modules and devices (for example, 1756-ENET, 1756-DHRIO, and so on).
• Upgrading firmware using ControlFlash.
• Browsing networks and getting device information such as firmware revision.
• RSLinx Classic version 4.20.00 adds an RSLinx Classic Local OPC service to permit 64-bit clients to access the OPC DA interface from the same workstation.

**RSLinx Classic OEM**

RSLinx Classic OEM includes the required functionality to supply communication services for all Rockwell Software products. OPC and DDE clients are supported for any number of devices. It also supports applications developed for the RSLinx Classic C API. But note that this is limited to 32bit client only.

RSLinx OEM version 2.2 and previous versions only supported AdvanceDDE. RSLinx Version 2.3 and subsequent versions support all DDE types except FastDDE.

RSLinx Classic OEM is used for the following:

• Data acquisition using OPC or DDE to any number of devices. This includes clients such as RSView32, FactoryTalk View SE, FactoryTalk View ME Station, Microsoft Office, Visual Basic, and web pages.
• Ladder logic programming using RSLogix products.
• Network and device configuration and diagnostics using RSNetWorx.
• Configuring Ethernet modules and devices (for example, 1756-ENET, 1756-DHRIO, and so on).
• Upgrading firmware using ControlFlash.
• Browsing networks and getting device information such as firmware revision.
RSLinx Classic Gateway

RSLinx Classic Gateway extends RSLinx Classic-based communication throughout the enterprise by connecting clients over TCP/IP networks. Programming and configuration products such as RSLogix and RSNetWorx use a local RSLinx Classic Lite or better with a Remote Devices via Linx Gateway driver configured to communicate to the RSLinx Classic Gateway. Remote HMIs and VB/VBA applications including Microsoft Office can use remote OPC to communicate to RSLinx Classic Gateway for data collection. This allows you to have multiple distributed computers performing data collection without having RSLinx Classic installed on each machine!

In addition to the capabilities provided in the RSLinx Classic Professional version, RSLinx Classic Gateway offers remote connectivity to:

- Multiple RSView32, FactoryTalk View SE, and FactoryTalk View ME Station clients accessing data through one RSLinx Classic Gateway (remote OPC).
- Remote computer running RSLogix connecting to a plant network over a modem for online program changes.
- Remote Microsoft Office applications showing plant floor data such as Excel.
- A web page showing plant floor data when the web server and RSLinx Classic are on separate computers.

Quick start

This section outlines the main tasks you need to perform to use the RSLinx Classic software. The quick start information included in this section is intended to be a high-level, conceptual overview. When you are ready to use RSLinx Classic software, follow the detailed procedures found in the Quick Start, which is located in the RSLinx Classic help. To access the Quick Start, click Help > Quick Start from within RSLinx Classic. For information about specific controls on RSLinx Classic windows and dialog boxes, right-click any control.

Step 1 Configure a driver

A driver is the software interface to the hardware device that will be used to communicate between RSLinx Classic and your processor. To configure a driver in RSLinx Classic, click Communications > Configure Drivers. The Configure Drivers dialog box appears, which is used for adding, editing, or deleting drivers. Click a driver to configure from the Available Driver Types list, click Add New, and complete the information required in the driver configuration dialog box that shows. The driver configuration dialog box varies depending on which driver you select.
After you complete the driver configuration, the driver name will appear in the **Configured Drivers** list.

### Step 2 Configure a topic

In RSLinx Classic, a project is a storage container for one or more topics, and a topic represents a specific path to a processor. By grouping topics together in a project, you can make multiple topics available at the same time. To create or edit a project in RSLinx Classic, select **File > Open Project** (opens the Open Project window). To create or edit a topic, select **DDE/OPC > Topic Configuration** (opens the DDE/OPC Topic Configuration window). If you attempt to create a topic without creating a project, RSLinx Classic creates default project for you.

If you selected Configure New DDE/OPC Topic by right-clicking a station in RSWho, the Topic Name field is pre-filled for you. RSLinx Classic starts with the name of the program running in the processor, and if this topic exists, it adds a number to the end until it finds one that does not exist. If there are any spaces, it converts them to underscores (_). You can change the topic name RSLinx Classic selected for you.
From the Data Source tab, click the device, with which you wish to set up communication. To add a new topic to a project that already has at least one topic configured, click New. To edit an existing topic, click the topic from the list. Use the Data Collection tab to include more detailed information about specific topics.

RSLogix Classic provides a mechanism for easily establishing a link from RSLogix Classic to a compatible program. To use the Copy to Clipboard function, choose an RSLogix Classic project that contains topics. Select Edit > Copy DDE/OPC Link, select the topic, and then click OK.

The Copy function takes the information needed to create a link and places it on the Windows clipboard. Some packages support the ability to paste links from the clipboard. The Copy to Clipboard function can be used with these applications only.

Select the topic you just added in the DDE/OPC Topic Configuration dialog box, and browse for the address string for your request.

The Copy to Clipboard function only establishes hot links from RSLogix Classic, the DDE server, to a Windows DDE client application. The Data Table Address, Block Size, Columns per Row, and selected topic are maintained from the last time that you used this function. Changing these values has no effect on the last established link.

Most Windows applications support a Paste Link operation, and this feature is generally located in the Edit menu.

Go to your application program that supports the Paste Link function. For example, in Microsoft Excel, click an open cell in a spreadsheet where you would like to place the data, click Edit > Paste Special, click Paste Link, and click OK. The hot link is pasted into the spreadsheet at the location you selected and begins to update. If you click Paste, instead of Paste Link, the item string will get copied.
Explore RSLinx Classic

When you start RSLinx Classic, the Rockwell Software RSLinx Classic application window appears. The application window contains a title bar, a menu bar, a tool bar, the application workspace where opened child windows (RSWho, diagnostics, and so on), and a status bar.

Title bar

The title bar shows the RSLinx Classic icon, the name of the software product (for example, Rockwell Software RSLinx Classic Gateway), the RSWho instance number (RSWho - 1 opens by default when you open RSLinx Classic), and the Minimize, Maximize, and Close button.

To view the Control Menu, click the RSLinx Classic icon on the title bar. The following items appear on the Control Menu.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restore</td>
<td>Restores the window to its former size after you enlarged it by using the Maximize command or shrunk it by using the Minimize command.</td>
</tr>
<tr>
<td>Move</td>
<td>Allows you to reposition the window on the desktop using the arrow keys on the keyboard.</td>
</tr>
<tr>
<td>Size</td>
<td>Allows you to resize the window by using the arrow keys on the keyboard.</td>
</tr>
<tr>
<td>Minimize</td>
<td>Shrinks the window to an icon, which is located on the task bar. This performs the same function as if you clicked the Minimize button on the title bar.</td>
</tr>
<tr>
<td>Maximize</td>
<td>Enlarges the window to occupy the entire screen. This performs the same function as if you clicked the Maximize button on the title bar.</td>
</tr>
<tr>
<td>Close</td>
<td>Exits the RSLinx Classic application. This performs the same function as if you clicked the Close button on the title bar.</td>
</tr>
</tbody>
</table>

Menu bar

The RSLinx Classic menu bar contains the following menus:

File Edit View Communications Station DDE/OPC Security Window Help

Each menu contains options for performing the following tasks:

<table>
<thead>
<tr>
<th>Menu</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>File</td>
<td>Create and open RSLinx Classic projects.</td>
</tr>
<tr>
<td>Edit</td>
<td>Copy DDE and OPC links to the clipboard.</td>
</tr>
<tr>
<td>View</td>
<td>Set and change RSLinx Classic interface shows, open the Event Viewer, and click the RSWho view.</td>
</tr>
<tr>
<td>Communications</td>
<td>Configure drivers, topics, and other RSLinx Classic options, and view driver, DDE, other client application diagnostics.</td>
</tr>
<tr>
<td>Station</td>
<td>Perform actions on diagnostic counters and view the Data Monitor.</td>
</tr>
<tr>
<td>DDE/OPC</td>
<td>Configure DDE/OPC topics and view event and diagnostic information.</td>
</tr>
<tr>
<td>Security</td>
<td>Set security user and access rights.</td>
</tr>
<tr>
<td>Window</td>
<td>Arrange RSLinx Classic windows.</td>
</tr>
<tr>
<td>Help</td>
<td>View help options for RSLinx Classic and other Rockwell Software products and services.</td>
</tr>
</tbody>
</table>
**Toolbar**

The toolbar contains shortcuts to several commonly used RSLinx Classic functions. Each toolbar button is a graphical representation of a command that is also available from the RSLinx Classic menu bar. The following items appear on the RSLinx Classic toolbar.

<table>
<thead>
<tr>
<th>Icon</th>
<th>Menu Selection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1.png" alt="Image" /></td>
<td>File &gt; Open Project</td>
<td>Shows the currently defined projects and allows you to open a DDE/OPC project.</td>
</tr>
<tr>
<td><img src="image2.png" alt="Image" /></td>
<td>Communications &gt; RSWho</td>
<td>Opens an additional instance of RSWho (one instance is opened by default each time you open RSLinx Classic).</td>
</tr>
<tr>
<td><img src="image3.png" alt="Image" /></td>
<td>Communications &gt; Configure Drivers</td>
<td>Shows the currently configured RSLinx Classic software drivers and allows you to add additional drivers for use with your hardware devices.</td>
</tr>
<tr>
<td><img src="image4.png" alt="Image" /></td>
<td>Communications &gt; Driver Diagnostics</td>
<td>Shows a list of currently configured drivers and provides the option to view diagnostic information for each driver.</td>
</tr>
<tr>
<td><img src="image5.png" alt="Image" /></td>
<td>Edit &gt; Copy DDE/OPC Link</td>
<td>Provides the ability to create a DDE/OPC link between RSLinx Classic and a client application such as Microsoft Excel.</td>
</tr>
<tr>
<td><img src="image6.png" alt="Image" /></td>
<td>DDE/OPC &gt; Topic Configuration</td>
<td>Allows you to create and modify a DDE/OPC topic, which is a specific path to a processor.</td>
</tr>
<tr>
<td><img src="image7.png" alt="Image" /></td>
<td>Help &gt; Whats This?</td>
<td>Changes the cursor to an arrow and a question mark to indicate you are in What's This? help mode. Click any screen item to show help text for that item and to exit What's This? help mode.</td>
</tr>
</tbody>
</table>

**Application workspace**

The application workspace shows open child windows, such as the RSWho and RSLinx Classic dialog boxes.

**RSWho**

RSWho is RSLinx Classic's main window that shows networks and devices in a style similar to Windows Explorer. It allows you to view all network connections from a single screen. For more details about RSWho, refer to RSWho on page 23.

**Status bar**

The status bar at the bottom of the RSLinx Classic screen provides information about the current status of your system.

For Help, press F1

| CAP | NUM | SCRL | 10/10/00 | 11:49 AM |

The left area of the status bar is used to pass messages to the user. For example, when you scroll through the items on the menus, a brief description of the function of that menu item appears in this area of the status bar.

The right area of the status bar shows:

- CAP if the Caps Lock key on your keyboard is toggled for all caps.
- NUM if the Num Lock key on your keyboard is set to enable the numeric keypad on your keyboard.
- SCRL if the Scroll Lock key on your keyboard is set.
- The current date from your computer system clock and calendar.
- The current time from your computer system clock and calendar.
Install and start RSLinx Classic

RSLinx Classic supports two installation methods: Setup wizard installation and automated installation with command line syntax. This chapter uses the Setup wizard installation method to illustrate the steps.

This chapter includes information on the following:

- System requirements
- Installation procedure
- Update an existing installation
- Start procedure
- Troubleshooting installation

The automated installation with command line syntax reduces user interaction and provides command line parameters to install RSLinx Classic. See Install RSLinx Classic with command line syntax on page 59.

Before you begin

Rockwell Software uses a software key to implement copy protection for Windows-based software products. Every software product has a unique key. Although, you can install the software on any number of computers, you are only licensed to run the software on one computer at a time. After you install the RSLinx Classic software, the Setup program will prompt you to activate your software. For more information about moving software keys, copy protection, and software activation, refer to Appendix A in this guide.

System requirements

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

Hardware requirements

RSLinx Classic requires the following hardware:

- Intel® Core i5 Standard Power processor
- 4 GB of memory (RAM)

Software requirements

To run RSLinx Classic v4.20.00 (CPR 9 SR 12), one of the following operating systems is required:

Supported operating systems

RSLinx Classic has been tested on the following operating systems:

- Windows® 10 Enterprise* (64-bit)
- Windows 10 Professional* (64-bit)
See the Windows Lifecycle FAQ and Windows as a Service (WaaS) topics on the Microsoft® Website for details regarding servicing requirements and other important information.

- Windows 10 Semi-Annual Channel v1803, v1809, v1903, v1909, and v2004
  Windows 10 Semi-Annual Channel is governed by the Microsoft Modern Lifecycle Policy. Refer to the Microsoft Website for details.
- Windows 10 IoT Enterprise 2016 Long-Term Servicing Branch (LTSB) Embedded**
- Windows 10 IoT Enterprise 2019 LTSC
- Windows Server® 2012 Datacenter (64-bit)
- Windows Server 2012 Standard (64-bit)
- Windows Server 2012 R2 Datacenter (64-bit)
- Windows Server 2012 R2 Standard (64-bit)
- Windows Server 2016 Datacenter (64-bit)
- Windows Server 2016 Standard (64-bit)
- Windows Server 2019 Datacenter LTSC (64-bit)
- Windows Server 2019 Standard LTSC (64-bit)


**Supported with the Allen-Bradley 61xx family of Industrial Computers or CompactLogix™ 5480 family of controllers.

For the latest information regarding software platform support, refer to http://www.rockwellautomation.com/compatibility/#/scenarios.

You can install one or more Rockwell Software products to a single personal computer.

**Important:**
- This procedure could shut down your process applications. Depending on which applications you are installing or upgrading, it is possible that your factory automation system will become inoperable, shutting down your processes. Be certain you have prepared for this downtime and all of your company’s systems are prepared for these applications to be terminated.
- To install RSLinx Classic, you must log onto your computer as an Administrator.

To install RSLinx Classic software:

1. Start your Windows operating system.
2. Insert the RSLinx Classic DVD into the DVD-ROM drive.
   - Click **Start**, and then click **Run**. The **Run** dialog box appears.
   - In the **Open** control, type `x:\setup`, where x is the letter of the drive containing the RSLinx Classic DVD-ROM, and then click **OK**.
3. If Microsoft .NET Framework 4.0 or later is not installed on your computer, the Microsoft .NET Framework Setup dialog box shows. Click Install.

4. On the RSLinx Classic Setup dialog box, choose one of the following:
   - Click Install Now to start the software installation process with the default installation directory, that is, C:\Program Files\Rockwell Software (for 32-bit operating systems) or C:\Program Files(x86)\Rockwell Software (for 64-bit operating systems).
   - Click Customize to start the software installation process with a different drive where you want to install the RSLinx Classic software, and then click Install.

5. (Optional) If you select Customize in Step 3, and RSSecurity Emulator was previously installed on the computer, the RSLinx Classic Security Configuration Selection dialog box shows. Select Enable Security if you want to use security, and click Install.

6. On the End-User License Agreements dialog box, read the agreements and click Accept all to continue the installation, or click Decline to return to the previous page.

7. The We'll take it from here dialog box shows with the installation progress bar. Wait while the wizard installs the required components.

8. (Optional) When prompted to restart your computer, click Restart now to restart your computer and continue the installation, or Restart later to suspend and exit the installation.

9. On the Almost there dialog box, select one of the following, and click Next.
   - Select Activate your software to activate the software now. For more information, refer to Appendix A Activation on page 43.
   - Select Skip activation to activate the software later. Some features may not be available until you complete the software activation.

10. After the RSLinx Classic software finishes installing, the That's it! dialog box shows.
    - Click Installation Summary to see the installation details.
    - Click Register for updates to learn how to receive email updates about product patches.
    - Click Download it free to install Adobe Acrobat Reader. Adobe Acrobat Reader is required to open the RSLinx Classic Getting Results Guide and other documents.
    - Click Restart now to restart your computer and continue the installation, or Restart later to exit the installation. You must restart your computer before using RSLinx Classic.

11. When you finish installing the software, remove the RSLinx Classic DVD from the DVD-ROM drive, and store it in a safe place.

   After installing the software, you are recommended to read the release notes located in the help. The release notes may contain more up-to-date
information than was available when this document was published. To view the release notes, start RSLinx Classic, and then choose Help > Release Notes from the main menu.

Perform the following steps to update an existing RSLinx Classic installation to RSLinx Classic version 4.20.00 (CPR 9 SR 12):

1. Close your current version of RSLinx Classic.
2. Insert the RSLinx Classic DVD into the DVD-ROM drive. Refer to Install RSLinx Classic software on page 18 and perform the installation steps. The old version of RSLinx Classic that exists on your computer is automatically uninstalled when you install a newer version of RSLinx Classic.
   **Tip:** The Installation Setup Wizard automatically backs up the driver configuration that exists in the old version of RSLinx Classic, and restore the configuration automatically into RSLinx Classic v4.20.00 (CPR 9 SR 12). You can find the backup file BackupFromSystemInstall.rsx in C:\Users\<username>\AppData\Local\Temp.
3. When the upgrade completes, restart your computer.

For RSLinx Classic version 2.57.00 and later, a compatible version of FactoryTalk Services Platform must be installed along with RSLinx Classic. In the Installation Setup Wizard of RSLinx Classic version 3.70.00 and later, a compatible version of FactoryTalk Services Platform is automatically installed (or upgraded) along with the RSLinx Classic installation (or upgrade).

For more details about upgrading FactoryTalk Services Platform, refer to Upgrading the FactoryTalk Services Platform software in FactoryTalk Services Platform Online Help.

To start RSLinx Classic software, select Start > Programs > Rockwell Software > RSLinx > RSLinx Classic.

**Note:** We assume that you used the default names for the directory and program group. If you did not use the default names, substitute the actual names that you specified for the default names shown.

RSLinx Classic can run as a service or as an application. When you start RSLinx Classic, it automatically runs as a service by default.

**Tip:** Starting with RSLinx Classic v3.74.00, when RSLinx Classic is running as a service, if you select Start > Programs > Rockwell Software > RSLinx > RSLinx Classic, the following warning message shows, and you can choose to Stop Service or Cancel.

"RSLinx Classic is currently running as a service. To view or change the RSLinx configuration, the service must be stopped and RSLinx started as an application. Stopping the service will stop all communications and may impact other client software."

To switch RSLinx Classic to run as an application, follow the steps below:

1. Click Start > Programs > Rockwell Software > RSLinx > RSLinx Classic Launch Control Panel.
2. In the **RSLinx Classic Launch Control Panel** dialog box, click **Stop**.
3. Once RSLinx Classic service stops running, clear the **Always Run As Service** check box.
4. Click **Start** to start RSLinx Classic as an application.

RSLinx Classic now runs as an application, and the RSLinx Classic main window shows on the screen. When RSLinx Classic is running as an application, the RSLinx Classic icon appears in the lower right corner of the Windows task bar. You can also click this icon to show RSLinx Classic main window.

**Note:** To modify RSLinx Classic configuration, you must run it as an application.

**Troubleshooting installation**

If RSLinx Classic does not start or run properly, consider the following:

- Does your computer have enough memory? Running RSLinx Classic requires a minimum of 512MB of RAM.
- Does your computer have enough disk space? Running RSLinx Classic requires a minimum of 2.2GB of available hard disk space.
- Do you have the correct activation for RSLinx Classic installed? If your RSLinx Classic installation shows as RSLinx Classic Lite, RSLinx Classic Single Node, or RSLinx Classic OEM, the proper activation files were not installed. See [Activate RSLinx Classic with FactoryTalk Activation Manager](#) on page 43 for information about activation files.
- Have you reinstalled an earlier Service Pack or removed a component, such as DCOM, that RSLinx Classic requires?
This chapter describes the features of the RSWho network browser interface. RSWho allows you to view all the active network connections from a single screen.

RSWho is RSLinx Classic main window that shows networks and devices in a style similar to Windows Explorer. A variety of integrated configuration and monitoring tools are accessible from the right mouse button in the RSWho. Some of the available tools are the ControlLogix Gateway Configuration Tool for Controlnet, DeviceNet, Ethernet, 1756-DHRIO, and 1756-DH485 modules, and a Data Monitor for monitoring live data out of any ControlLogix, PLC-5, SLC, or MicroLogix family controllers. With RSLinx Classic version 4.12 or later, it is required to have a purchased version of FactoryTalk Linx and have FactoryTalk Security authorization.

The following figure shows the main areas of the RSLinx Classic RSWho.

<table>
<thead>
<tr>
<th>Item</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Control bar</td>
</tr>
<tr>
<td>2</td>
<td>Tree control (left pane)</td>
</tr>
<tr>
<td>3</td>
<td>List control (right pane)</td>
</tr>
</tbody>
</table>
## Control bar

The control bar of the **RSWho** contains the following items:

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Autobrowse</td>
<td>The <strong>Autobrowse</strong> check box is selected by default. If you select the check box, <strong>RSWho</strong> continually queries the selected device or network to discover items to display in the browser (regardless if the selected item is expanded or collapsed). Additionally, the <strong>Refresh</strong> button is disabled. If you clear the check box, the <strong>Refresh</strong> button is enabled, and <strong>RSWho</strong> stops the discovery process. To refresh the browser you must then click the <strong>Refresh</strong> button.</td>
</tr>
<tr>
<td>Refresh</td>
<td>The <strong>Refresh</strong> button is available if you clear the <strong>Autobrowse</strong> check box. Clicking the <strong>Refresh</strong> button instructs <strong>RSWho</strong> to perform one discovery cycle of the selected device or network. Since clicking the button only performs one discovery cycle, you may need to click multiple times to discover everything on the network.</td>
</tr>
<tr>
<td>EDS file auto-upload</td>
<td>The <strong>EDS file auto-upload</strong> button indicates whether the EDS files automatic upload and registration function is enabled. If you turn on the <strong>EDS file auto-upload</strong> button, <strong>RSLinx Classic</strong> automatically uploads and registers EDS files of unrecognized online devices when detected during a browse discovery operation. By default, the button is turned off, and the automatic upload and registration function is disabled.</td>
</tr>
<tr>
<td>Show large icons</td>
<td>The <strong>Show large icons</strong> button indicates how devices and networks show in the list control (right pane) in the <strong>RSWho</strong>. If you click the <strong>Show large icons</strong> button, devices and networks show as large icons. By default, the button is turned on, and devices and networks show as large icons.</td>
</tr>
<tr>
<td>Show details</td>
<td>If you click the <strong>Show details</strong> button, devices and networks in the list control (right pane) show in a list. You can view device details such as Address, Device Type, Online Name, and Status.</td>
</tr>
</tbody>
</table>

### Status

The status of device and network browsing. **Tip:** Be patient when browsing some networks, such as through a 1785-KA, as it may appear that no devices exist, but the update is only being delayed as **RSWho** checks all possible station addresses.

## Tree control

The left pane of the **RSWho** is the tree control, which shows networks and devices.

The **RSWho** icon  indicates a network. If the icon is animated, the network is being browsed. Click a network or device to start browsing. The **RSWho** only browses one network at a time.

A network is browsed when you click the “+” sign to expand it, or select it or a device under the network node. When the network or device is collapsed (indicated by the “+” sign), click “+” or double-click the network or device icon next to the “+” sign to expand the view and begin browsing. When the network or device is expanded (indicated by the “-” sign), click “-” or double-click the network or device icon next to the “-” sign to collapse the view.

Right-click a supported device to select Station Diagnostics, Configure DDE Topic, or other supported services for that device.
Note: A device that appears with a red X indicates that RSWho previously recognized this device, but now it cannot. The red X indicates a communication status error, such as unplugging a recognized device. These devices can be removed from the RSWho display by right-clicking the device and selecting Remove.

List control

The right pane of the RSWho is the list control, which shows all members of a collection. A collection is a network, or a device that is a bridge. Right click in the list control and choose a view option of large icons or details. You can also right click a supported device to select Station Diagnostics, Configure DDE Topic, or other supported services for that device.
Chapter 4

OPC and DDE Connectivity

This chapter describes the features of:

- OPC (OLE for Process Control)
- DDE (Dynamic Data Exchange)

**OPC**

OPC (OLE for Process Control) is a communication standard based on OLE technology provided by Microsoft, and developed and maintained by the OPC Foundation, a coalition of industrial manufacturing companies, of which Rockwell Automation is a member. The charter of this group is to provide an industrial standard exchange mechanism between plant floor devices and client applications. RSLinx Classic is an OPC-compliant server exposing the required interfaces for an OPC client application to access data consistent with other OPC-compliant servers. The added benefit provided from RSLinx Classic is its ability to provide several DDE formats in addition to OPC.

OPC is designed to allow client applications access to plant floor data in a consistent manner. OPC provides many benefits:

- Hardware manufacturers only have to make one set of software components for customers to use in their applications.
- Software developers do not have to rewrite drivers because of feature changes or additions in a new hardware release.
- Customers have more choices with which to develop world class integrated manufacturing systems.

With OPC, system integration in a heterogeneous computing environment is simple. Leveraging the OLE/COM environment is possible.

RSLinx Classic is an OPC-compliant server. For more information about OPC, visit the OPC Foundation web site at http://www.opcfoundation.org. For more information on using OPC with Rockwell Software products, visit our web site at http://support.rockwellautomation.com.

**DDE**

DDE (Dynamic Data Exchange) is a standard inter-application communication protocol, which is built into Microsoft Windows operating systems and supported by many applications that run under Windows. DDE takes data from one application and gives it to another application. It allows Windows programs that support DDE to exchange data between themselves.

- A DDE server is a program that has access to data and can provide that data to other Windows programs.
- A DDE client is a program that can obtain data from a server.
By specifying an application, topic, and item, a client application can exchange data with a server application. DDE works like a conversation between two people. The people represent the different applications running under Windows, and the data they share is what they are talking about. RSLinx Classic does not know the type of data it is receiving, it only knows that a DDE link is providing the data.

For example, if you have a DDE link from RSLinx Classic to an Excel spreadsheet, Excel does not know that you are sending a counter value into a spreadsheet. All Excel sees is data.

For example, RSLinx Classic is the application name, PLC5TOPIC1 is an example topic name, and C5:0.ACC is an example item, in this case a counter accumulator in an Allen-Bradley PLC-5.

**Note:** Not all applications that run under Microsoft Windows support DDE. Check with the applications manufacturer before purchasing an application for use with RSLinx Classic.

For more information about DDE, refer to the DDE topic in the RSLinx Classic help.

**DDE/OPC client connectivity**

RSLinx Classic provides connectivity for client applications using OPC or multiple DDE data formats. The OPC and AdvanceDDE interfaces provide optimized read operations by packing multiple requests from multiple clients in a single transaction. In configuring a DDE Topic, you can specify whether or not you want DDE poke operations optimized. Optimized pokes only work with PLC-5 and SLC processors.

The benefit of optimizing DDE poke operations is packing multiple updates in a single write operation, thus reducing the overall number of packets required. Operations such as downloading a recipe can take advantage of this feature.

Other DDE formats supported include FastDDE (for Wonderware clients), XL_Table and CF_Text to support Microsoft Office products, and other generic DDE client applications.
Chapter 5

Register EDS files of devices

Electronic Data Sheet (EDS) files (*.eds) are text files that contain configuration data for specific device types. The EDS file of a device is provided by the device vendor and is required for compliance with Open DeviceNet Vendor Association, Inc. (ODVA) standards.

This chapter introduces the possible ways to register EDS files of devices in RSLinx Classic, the folder path of all the existing EDS files, and how to remove EDS files from your computer.

- Manually upload and register EDS files in the RSWHo
- Automatically upload and register EDS files in the RSWHo
- Manually register EDS files in the EDS Hardware Installation Tool
- View existing EDS files of devices on the computer
- Unregister EDS files in EDS Hardware Installation Tool
- Uninstall EDS Hardware Installation Tool and all EDS files

For an online device whose EDS file is not registered, RSLinx Classic detects whether the device contains an EDS file within its firmware. If there is an EDS file found, you can manually upload and register the device's EDS file in the RSWHo.

To manually upload and register EDS file from device in the RSWHo, perform the following steps:

1. Connect the device to the computer.
2. Open RSLinx Classic, and browse for the device in the RSWHo.
3. Once you find the device, right-click it, and select Upload EDS file from device from the context menu.

Tip: If you right click an unregistered online device, and the context menu does not contain the Upload EDS file from device option, it means the device does not support this function.

You can manually upload and register one EDS file of a device at a time. If you want to upload and register multiple EDS files at a time, refer to Automatically upload and register EDS files in the RSWHo and Manually register EDS files in the EDS Hardware Installation Tool.
Automatically upload and register EDS files in the RSWho

For an online device which supports manually upload and registration in the RSWho, RSLinx Classic can automatically upload and register it, if you enable the EDS files automatic upload and registration function. With this function enabled, you can upload and register the EDS file(s) of one or more devices at a time.

To upload and register EDS files automatically, perform the following steps:

1. Turn on the EDS file auto-upload button on the control bar of the RSWho window.
   Tip: This enables the automatic upload and registration function. By default, the function is disabled.

2. In the communication tree in the Explorer of the RSWho, double click (or click the “+” sign beside) a node or a bus under a certain network to expand and view devices under the selected node or bus.
   Tip: To trigger the automatic upload and registration, you must double click (or click the “+” sign beside) a sub-node under a certain network. Double clicking (or clicking the “+” sign beside) a root node of a network (for example, Ethernet) does not trigger the automatic upload and registration.

The software performs a browse discovery query for a selected node or bus. If an unregistered online device is found with its EDS file upon browsing, the EDS file is uploaded and registered automatically. A progress bar shows beside the unregistered device in the communication tree.

Note:
- If you turn off the EDS file auto-upload button when an EDS file is in the process of being uploaded, the EDS file upload process is aborted. While an EDS file is being registered, the EDS file auto-upload button cannot be turned off.
- If an EDS file is invalid, or an error occurs during the upload and registration, the EDS file cannot be registered, and a diagnostics message is logged into FactoryTalk Diagnostics Viewer. To view the diagnostics messages:
  - From the Windows Start menu: Start > All Programs > Rockwell Software > FactoryTalk Tools > Diagnostics Viewer, or
  - From the FactoryTalk Administration Console: From the Tools menu, click FactoryTalk Diagnostics > Viewer.
- If there are multiple RSWho instances:
  - To allow automatic upload and registration, you need to turn on the EDS file auto-upload button in each RSWho instance respectively. If a RSWho instance does not enable this function, double clicking (or clicking the “+” sign beside) a node or a bus in this RSWho instance triggers the network browsing, but not the automatic upload and registration process.
  - If a device is automatically uploaded and registered in one RSWho instance, the device information of this specific device is synchronized in the rest of RSWho instances (including the RSWho instances which disable the automatic upload and registration function). Note that no progress bar shows for the synchronization in the other RSWho instances.
  - RSWho may respond slowly if there are many EDS files being registered.
Manually register EDS files in the EDS Hardware Installation Tool

You can manually register EDS files of devices by launching the EDS Hardware Installation Tool. The EDS Hardware Installation Tool is installed on your computer when you install RSLinx Classic.

Important:
- You must have a valid and complete EDS file of the device which you want to register. To search and download the EDS file of a specific device, visit Rockwell Automation Network Resources at http://www.rockwellautomation.com/support/networks/overview.page.
- If an icon file (*.ico) exists for the device, save it with the same name as the EDS file in the same directory. You can save one or more EDS files (and the related icon files) in one directory.

To manually register EDS files of devices in the EDS Hardware Installation Tool, perform the following steps:

1. Launch the EDS Hardware Installation Tool from Start > All Programs > Rockwell Software > RSLinx > Tools > EDS Hardware Installation Tool.
3. On the Registration screen, do one of the following, and then click Next:
   - Select Register a single file to register one EDS file at a time, and click Browse to select the EDS file
   - Select Register a directory of EDS files to register two or more EDS files at a time, and click Browse to select the directory of the EDS files
4. On the EDS File Installation Test Results screen, review the hardware device list, and click Next.
5. On the Change Graphic Image screen, review the icon(s) of the hardware device(s), and click Next.
   Note: The Rockwell Automation’s EDS Wizard assigns a default icon to each hardware device. You can specify another icon for the hardware device(s) by selecting the hardware device and clicking the Change icon button.
6. On the Final Task Summary screen, review the hardware device list and click Next.
7. When the registration is complete, click Finish to return to the Rockwell Automation - Hardware Installation Tool dialog box.
8. Click Exit.

View existing EDS files of devices on the computer

All the existing EDS files (and related icons) are stored in a default folder on your computer. These existing EDS files include:
- EDS files that are installed from the RSLinx Classic installation media
- EDS files that are uploaded and registered in the RSWHo, either manually or automatically
- EDS files that are manually registered via the EDS Hardware Installation Tool
To view existing EDS files on your computer, refer to the default folder path below.

- For RSLinx Classic v3.80.00 or earlier
  - C:\Program Files\Rockwell Software\RSCommon\EDS (for 32-bit operating systems)
  - C:\Program Files (x86)\Rockwell Software\RSCommon\EDS (for 64-bit operating systems)
- For RSLinx Classic v3.81.00 or later
  - C:\Users\Public\Documents\Rockwell\EDS *

*RSLinx Classic v3.81.00 relocates the default EDS file folder. For RSLinx Classic v3.81.00 or later, you can register or remove EDS files in the EDS Hardware Installation Tool without having to login as Windows administrator on the computer.

Important:  If you want to remove one or more EDS files from your computer, do not delete EDS files (or related icons) in this folder. Follow the steps in Unregister EDS files in EDS Hardware Installation Tool and Uninstall EDS Hardware Installation Tool and all EDS files.

**Unregister EDS files in EDS Hardware Installation Tool**

To unregister one or more EDS files from your computer, perform the following steps:

1. Select **Start > All Programs > Rockwell Software > RSLinx > Tools > EDS Hardware Installation Tool** to launch the tool.
2. On the **Rockwell Automation - Hardware Installation Tool** dialog box, click **Remove**. Wait while the tool prepares and generates a full list of the existing EDS files on your computer. A progress bar shows and indicates the status. This may take a few seconds.
   **Tip:** The full list of the existing EDS files on your computer includes:
   - EDS files that are installed from the RSLinx Classic installation media
   - EDS files that are uploaded and registered in the RSWho, either manually or automatically
   - EDS files that are manually registered via the EDS Hardware Installation Tool
3. On the **Rockwell Automation’s EDS Wizard** dialog box, select the check boxes before the EDS files which you want to unregister from the computer. For devices with multiple firmware revisions, select the check boxes before the specific revisions to be unregistered. Click **Next**.
   **Tip:**
   - Click **Select All** to select all the EDS files in the list, or click **Clear All** to clear your selections.
   - Click **Find Device** and enter a keyword of a device’s name to quickly locate the device’s EDS file in the list.
   - The full list of the existing EDS files shows in alphabetical order by default. You can select the **Display by Catalog Name** check box to view the devices by catalog name.
4. Review the **Final Task Summary**, and click **Next**.
5. Click **Finish**.
6. On the **Rockwell Automation - Hardware Installation Tool** dialog box, click **Exit**.

---

### Important:
The following products share the EDS files on your computer. If any of the products listed below are installed on your computer, you are not recommended to unregister the EDS files:
- RSNetworx
- RSLinx Classic
- FactoryTalk Linx
- RSLinx 5000 or Studio 5000 Logix Designer
- Logix Designer (RSLinx 5000) Module Profiles
- FactoryTalk Services Platform

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### Uninstall EDS Hardware Installation Tool and all EDS files

To uninstall EDS Hardware Installation Tool and all EDS files, perform the following steps:

1. Select **Start > All Programs > Rockwell Software > RSLinx > Tools > Uninstall EDS Hardware Installation Tool and all EDS files** to launch the uninstall EDS subsystem process.
2. Read the **Uninstall EDS Subsystem** warning message, and click **Yes**. Wait while the system uninstalls the tool and unregisters devices from your computer. This may take a few minutes. A confirmation message shows when this is complete.
3. Click **OK** on the confirmation message.

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### Important:
The following products share the EDS subsystem on your computer. If any of the products listed below are installed on your computer, you are not recommended to uninstall the EDS subsystem:
- RSNetworx
- RSLinx Classic
- FactoryTalk Linx
- RSLinx 5000 or Studio 5000 Logix Designer
- Logix Designer (RSLinx 5000) Module Profiles
- FactoryTalk Services Platform
Compact harmony files

RSLinx Classic v3.90.00 (CPR 9 SR 9) and later allows you to compact existing harmony topologies through the RSLinx Classic user interface, instead of manually locating and deleting the harmony files from your computer's hard drive. This reduces the waiting time to open RSLinx Classic, or to expand the driver nodes in the RSWho.

Important:
• This operation deletes the browsed topologies and configured DDE/OPC topics in RSLinx Classic. If you are using RSLinx Classic for OPC communications, RSLinx Classic will not be able to serve data for the defined topics after the operation is completed.
• To re-establish communications after you have compact harmony files, you must re-open the application which uses RSLinx Classic, edit the topic in RSLinx Classic, re-browse and select a target device for each topic within RSLinx Classic's Topic Configuration.

Compact harmony files in RSLinx Classic

To compact harmony files:

1. In RSLinx Classic menu bar, click File > Compact Harmony, or
   In RSLinx Classic Launch Control Panel, click Tools > Compact Harmony.
2. The following warning message shows. Read the message and click Yes to continue, or click No to cancel the compact harmony operation.
   "This operation will delete all of the RSLinx Classic stored topology information. If you are using RSLinx Classic for OPC communications, after the Compact Harmony Database operation is completed, RSLinx Classic will not be able to serve data for defined topics. To re-establish communications, you must manually browse and select a target device for each topic within RSLinx Classic's Topic Configuration. Do you want to continue?"
3. If RSLinx Classic or the Harmony service is running, the following warning message shows. Read the message and click Yes to continue, or click No to cancel the compact harmony operation.
   "RSLinx Classic and Harmony service need to be shut down in order to perform this operation. Shut down RSLinx Classic and Harmony services?"
Tip: (Optional) Clear the Restart RSLinx Classic when finished check box if you do not want to restart RSLinx Classic after the compact harmony process. This option is selected by default.

4. If the system detects RSLinx Classic is in use by any other applications, the following warning message shows. Read the message and click Yes to continue, or click No to cancel the compact harmony operation.

"RSLinx Classic is currently in use by one or more applications. If RSLinx Classic is shut down now, these applications will experience timeouts and/or loss of data. Shut down RSLinx Classic anyway?"

5. Depending on your Windows User Account Control (UAC) level, an UAC warning message may show to confirm whether to make changes to your computer or not. Click Yes to start the compact harmony process.

6. The progress begins and the Compact Harmony Progress dialog box shows with progress bar. Click Detail to show or hide progress details.

Tip: During the compact harmony process, the OK button is disabled. The button is enabled once the compact harmony progress is completed or failed.

7. When the compact harmony process is completed, click OK.
Find the information you need

Use this chapter to review the sources of additional information about RSLinx Classic software. This chapter helps you find what you need efficiently by describing how to:

- Use the help
- Access guides
- Participate in Rockwell Software training courses
- Contact Technical Support

Use the help

RSLinx Classic help provides general overview information, comprehensive step-by-step procedures, and context-sensitive, dialog box control definitions for working with all of the features in the software. To view online help while running RSLinx Classic:

- Choose **RSLinx Classic Help** from the **Help** menu on the RSLinx Classic main window,
- Click **Help** on any RSLinx Classic dialog box or property page,
- Position the cursor over a control, with which you want help and right-click, or
- Press **F1**.

Help contents

The help contents include overview, procedural, screen, and reference information for the product. The help contains these basic components:

- overview topics
- quick start topics
- step-by-step procedures
- screen element descriptions (for example, text boxes, drop-down lists, and option buttons)

All of the help is context-sensitive with the application, and provides you with immediate access to application tasks and screen element descriptions. For a more detailed description of the help, see Find the information you need on page 37.

Note: This getting results guide, as well as any reference guides, are included in a PDF (portable document format) on your RSLinx Classic DVD. These files must be viewed using the Adobe Acrobat Reader software, which you can download for free from the Adobe website: http://www.adobe.com.
Access help for a control or field

To show a definition for a control or a field, click the Whats This? icon in the upper right corner of the dialog box, drag the cursor to the selected area, and then click to show the definition. In this example, the Property control was selected.

Find step-by-step procedures

To view a list of tasks related to the current topic, move to the See also section at the bottom of the help window and select one of the listed tasks. The current topic is replaced with a step-by-step procedure for completing the task.

For example, from the What is a driver? help topic, if you select Add a driver under the See also section, the procedure that describes how to add RSLinx Classic drivers shows.
What is a driver?

A driver is the software interface to the hardware device that allows RSLinx Classic to communicate with your PLC. Configuring a software driver is the first step in establishing a DDE hot link.

Select **Communications > Configure Drivers** to display the Configure Drivers dialog box that is used for adding, editing or deleting drivers. The available hardware drivers are shown in the **Available Drivers** list. The presently configured drivers are displayed in the Configured Drivers list.

**Tip:** For specific information on each dialog box control, right-click on the control and select the What’s This? help option.

What do you want to do?
- Add a driver
- Edit a driver
- Delete a driver
- View information on driver diagnostics

Add a driver

**How do I access the dialog?**

1. From the Configure Drivers dialog box, select the desired driver from the Available Drivers list.
2. Click **Add New**. The configuration dialog box for that driver appears.
3. Enter the appropriate parameters for the desired driver in the configuration dialog box.
4. Click **OK** to close the configuration dialog box. The new driver now appears in the Configured Drivers list.

Find definitions

Within the RSLinx Classic help, blue text highlighted with an underline indicates a link to a pop-up definition or a link to a related topic. For example,
in the Dynamic Data Exchange help topic, application, topic, and item are pop-up definitions, and DDE link is a link to a related topic.

**DDE**

DDE (Dynamic Data Exchange) is a standard inter-application communication protocol built into Microsoft Windows operating systems and supported by many applications that run under Windows. DDE takes data from one application and gives it to another application. It allows Windows programs that support DDE to exchange data between themselves.

- A DDE server is a program that has access to data and can provide that data to other Windows programs.
- A DDE client is a program that can obtain data from a server.

By specifying an application, topic, and item, a client application can exchange data with a server application.

DDE works like a conversation between two people. The people represent the different applications running under Windows, and the data they share is what they are talking about.

Applications using DDE to talk to RSLinx Classic do not care what kind of data they are getting. All they know is there is a DDE link and that link is providing data. What that data is and how it will be used is immaterial to the receiving application.

For example, if you have a DDE link from RSLinx Classic to an Excel spreadsheet, Excel does not know that you are sending a counter value into a spreadsheet. All Excel sees is data.

For example, _RSLinx_ is the application name, _PLCSTOPI1_ is an example topic name, and _CS10:ACC_ is an example item, in this case a counter accumulator in an Allen-Bradley PLC-5.

**Tip:** Not all applications that run under Microsoft Windows support DDE. Check with an application’s manufacturer before purchasing an application for use with RSLinx Classic.

---

### Access guides

You can gain immediate access to product documentation through the guides included with RSLinx Classic. The guides include this Getting Results Guide, as well as any reference guides, in an electronic book format. The guides are included in a PDF (portable document format) on your RSLinx Classic DVD. These files must be viewed using the Adobe Acrobat Reader software, which you can download for free from the Adobe website at [http://www.adobe.com](http://www.adobe.com).

### Training

One of the best ways to increase your proficiency at using Rockwell Software products is to attend a Rockwell Software training program. Our training programs can help you master the basics and show you how to unleash the full potential of our software.

Rockwell offers a wide range of training programs, from regularly scheduled classes conducted at Rockwell Software facilities, to custom-tailored classes conducted at your enterprise. The size of each class is kept small intentionally to maximize student engagement.

If you would like more information about Rockwell training programs, visit the Rockwell Software site or contact the Rockwell Software Training Coordinator. Our World Wide Web address and telephone numbers appear on the inside front cover of this document.

### Technical support

If you cannot find answers to your questions in the *Getting Results with RSLinx Classic* guide, the help, or the guides, you can call Rockwell Software Technical Support at the numbers listed on the inside front cover of this guide. The technical support staff is available Monday through Friday from 8:00 A.M. to 5:00 P.M. Eastern Time, except holidays. You can also access the Rockwell
When you call

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

- Product serial numbers
- Product version number
- The product serial numbers and version number can be found in the software by clicking **Help > About RSLinx Classic**.
- Version of Windows and any service packs that you are using
- Hardware you are using
- Exact wording of any errors or messages that appeared on your screen
- Description of what happened and what you were doing when the problem occurred
- Description of how you attempted to solve the problem
Activation

RSLinx Classic v2.58.00 (CPR 9 Service Release 4) and later only supports activation using FactoryTalk Activation.

Note: EvRSI activation is replaced by FactoryTalk Activation. If you are a current user using EvRSI activation and want to upgrade to RSLinx Classic v2.58.00 or later, contact your local Rockwell Automation Sales office or Rockwell Automation Technical Support for information on migrating your activations to FactoryTalk Activation Manager. For Rockwell Automation Technical Support in the U.S. call 1 (440) 646-3434. Outside the U.S. see http://www.rockwellautomation.com/locations/.

RSLinx Classic shows a message indicates the activation status when you place the cursor over the tray icon in the notification area. If the activation status changes during runtime, the message shows the new status after you restart RSLinx Classic.

Grace period

RSLinx Classic v2.52.00 (CPR 9) and later supports a seven-day activation grace period when a valid activation is not found. During the grace period:

- When the software is started, a message is logged to the FactoryTalk Diagnostic log every four hours until a valid activation is found.
- RSLinx Classic can be started an unlimited number of times. If the grace period ends, and a valid activation has not been found, RSLinx Classic Lite is started.

Note: If RSLinx Classic is unable to successfully obtain valid activations (for example, a network failure occurs), the software will attempt to run in grace period for up to seven days.

Activate RSLinx Classic with FactoryTalk Activation Manager

Activate RSLinx Classic

RSLinx Classic v3.70.00 and later support software activation during the software installation. The Installation Setup Wizard contains an Activate products using FactoryTalk Activation check box. This no longer requires you to open FactoryTalk Activation Manager to activate the software.

To activate RSLinx Classic in the RSLinx Classic Installation Setup wizard, perform the following steps:

1. Perform the steps in Install RSLinx Classic software on page 17 on page 18 to install RSLinx Classic software.
2. On the Almost there dialog box in the Installation Setup wizard, select the Activate your software check box and click Next.
3. On the Software Activation dialog box, enter the serial number and product key from your Activation Certificate.
4. Select a version from the Earliest version drop down list.
5. Select **Activate locally** to activate RSLinx Classic on a single computer, or select **Activate using a dongle** to activate RSLinx Classic on any computer by using a dongle.

   **Note:** The **Activate using a dongle** option requires that you have a dongle to lock the activation.

6. Click **Continue**.

You can still activate RSLinx Classic via FactoryTalk Activation Manager by clicking the **Explore other options** link in the **Software Activation** dialog box. The link provides direct access to the FactoryTalk Activation Manager software. To activate your copy of RSLinx Classic in the FactoryTalk Activation Manager, click **Get New Activations** and follow the instructions in the FactoryTalk Activation Manager.

For more information on using the FactoryTalk Activation Tool, click **More** or **Help** in the FactoryTalk Activation Manager window.

For help with FactoryTalk Activation Manager at any point, you can click:

- **Help** on the FactoryTalk Activation Manager window
- **Help** on the Rockwell Software Activation website: https://licensing.software.rockwell.com

If you cannot connect to the Internet, call Technical Support for help creating an activation file from an e-mail or a fax.

Phone: 440-646-3434 in North America. Outside of North America, call your local support organization.
Appendix B

Secure RSLinx Classic with FactoryTalk Security

FactoryTalk Security™ is intended to improve the security of your automation system by limiting access to those with a legitimate need. FactoryTalk Security authenticates user identities and authorizes user requests to access a FactoryTalk-enabled system. These security services are fully integrated into the FactoryTalk Directory and are included as part of the FactoryTalk Services Platform that installs with many products.

For more information on how to use security services, refer to FactoryTalk Security help.

RSLinx Classic, along with supporting RSSecurity, also supports FactoryTalk Security. FactoryTalk Security is intended to improve the security of your automation system by limiting access to those with a legitimate need. FactoryTalk Security authenticates the identities of users and authorizes user requests to access a FactoryTalk-enabled system against a set of defined user accounts and access privileges held in the FactoryTalk Directory. For more information on FactoryTalk Security, read the About FactoryTalk Security topic located in RSLinx Classic Help. The following sections explain the steps you would need to perform to implement one of the two security mechanisms (FactoryTalk Security and RSSecurity) supported by RSLinx Classic.

Follow the steps in the sections below to set up security in RSLinx Classic v4.20.00 (CPR 9 SR 12) and later versions. The steps below are similar to RSLinx Classic v3.70.00 but with a different user interface.

Note: When you install or upgrade the RSLinx Classic software, make sure to install or upgrade a compatible version of FactoryTalk Services Platform. For the compatibility information, refer to http://www.rockwellautomation.com/compatibility/#/scenarios.

How do I set up security in RSLinx Classic?

If you have not used FactoryTalk Security or RSSecurity before

If you have not used FactoryTalk Security before, and have never configured security using RSSecurity, follow the steps below to set up security in RSLinx Classic.

1. Install FactoryTalk Services Platform v6.20.00 and RSLinx Classic v4.20.00 using RSLinx Classic Setup Wizard.

Note: The RSSecurity Emulator Installation files, required for RSLinx Classic to support security, are copied onto the workstation during the installation of FactoryTalk Service Platform but not installed.
2. Install RSSecurity Emulator from Start > All Programs > Rockwell Software > FactoryTalk Tools > RSSecurity Emulator Install. And follow the instructions to proceed the installation process.
Note: During the RSSecurity Emulator installation, the FactoryTalk Directory screen appears (see the following figure) where you will be prompted to select the FactoryTalk Directory (Network or Local) that RSSecurity Emulator should use. At this step, be sure to make a note of the directory you choose — you will require this information when adding security policies to FactoryTalk Directory in Step 4.
3. Run the RSLinx Classic Setup Wizard, select **Modify** in the Program Maintenance page.

**Note:** In the RSLinx Classic Setup Wizard page, select Enable Security. Click Modify and follow the instructions until you finish the modification.
Appendix B  Secure RSLinx Classic with FactoryTalk Security

Note: The Enable Security feature is only available when the RSSecurity Emulator is installed.

4. Open FactoryTalk Administration Console from Start > All Programs > Rockwell Software > FactoryTalk Administration Console to add user accounts and set security settings to secure RSLinx Classic.
   Note: • For more information on how to add user accounts, read the Add a FactoryTalk user account topic in FactoryTalk Services Platform help, located at Build a FactoryTalk system > Manage users > Add a FactoryTalk user account.
   • For more information on how to secure RSLinx Classic features, read the Feature Security for Product Policies topic in FactoryTalk Services Platform help, located at Secure a FactoryTalk system > Set product-specific policies > Feature Security for Product Policies.
   • For more information on what you can secure in RSLinx Classic, read the What can I secure in RSLinx Classic topic in RSLinx Classic Online help, located at How to > Secure RSLinx Classic with FactoryTalk Security > What can I secure in RSLinx Classic.

5. Open RSLinx Classic from Start > All Programs > Rockwell Software > RSLinx > RSLinx Classic, and click Security > Set Security User from the main menu. In the New User dialog box, enter the username and password of the user you created in FactoryTalk Administration Console in step 4, and click OK.
   Note: Because the access to features in RSLinx Classic is governed by the permissions you set for a user in FactoryTalk Administration Console, some features out of the 13 securable features in RSLinx Classic may be inaccessible (for example, if the user you entered in Step 5 does not have the appropriate permission).

This completes the security setup for RSLinx Classic.
If you have not used FactoryTalk Security before, and want to import an existing RSSecurity Configuration into the FactoryTalk Directory, follow the steps below to configure security in RSLinx Classic. The steps below take RSLinx Classic v4.20.00 (CPR 9 SR 12) as an example.

1. Install FactoryTalk Services Platform v6.20.00 and RSLinx Classic v4.20.00 using RSLinx Classic Setup Wizard.
2. Launch the **FactoryTalk Security Import** dialog box by selecting **Start > All Programs > Rockwell Software > FactoryTalk Tools** > **Import RSSecurity Configuration**.
3. In **FactoryTalk Security Import**, select **Browse**, choose a backup database to import, and then select **Open**.
4. In **FactoryTalk Security Import**, select import options, and then select **OK**.
5. Uninstall RSSecurity Server/Client (whichever is installed on this machine) from Windows Control Panel.
6. Install RSSecurity Emulator from **Start > All Programs > Rockwell Software > FactoryTalk Tools > RSSecurity Emulator Install**. And follow the instructions to proceed the installation process.
During the RSSecurity Emulator installation, the FactoryTalk Directory page appears. Select the FactoryTalk Directory (Network or Local) which RSSecurity Emulator uses. At this step, be sure to make a note of the directory you choose—this directory information is needed when adding security policies to FactoryTalk Directory in Step 8 below.
7. Run the RSLinx Classic Setup Wizard, select **Modify** in the Program Maintenance page.

**Note:** In the RSLinx Classic Security Configuration Selection page, select **Enable Security**. Click **Next** and follow the instructions until you finish the modification.
Note: The Enable Security feature is only available when the RSSecurity Emulator is installed.

8. Import RSSecurity Server database by selecting Start > All Programs > Rockwell Software > FactoryTalk Tools > Import RSSecurity Configuration.

Note: While running the Import RSSecurity Configuration utility, the FactoryTalk Security Import dialog box appears. In the Destination directory of the FactoryTalk Security Import dialog box, be sure to import the .bak file to the directory where you installed the Emulator (Local or Network).
9. Open RSLinx Classic, and select **Security > Set Security User** from the main menu. In the New User dialog box, enter the username (domain name\username) and password of the RSSecurity user.  

**Note:**
- If you do not remember the usernames of the users that existed in your old RSSecurity setup, perform the following steps:
  a. Run FactoryTalk Administration Console by selecting **Start > Programs > Rockwell Software > FactoryTalk Administration Console**.
  b. In the Explorer pane, expand the FactoryTalk Local or Network Directory tree, and then expand the Systems folder until the Users folder is visible.
  c. In the Users folder, the users who have domain associated with their usernames (for example, na\Bob) are your RSSecurity users.
- Because access to features in RSLinx Classic is governed by the permissions you set in the security server, some features out of the 13 securable features in RSLinx Classic may be inaccessible (for example, if the user you entered in Step 9 does not have the appropriate permission).

This completes the security setup for RSLinx Classic.

If you used FactoryTalk Security before, and want to continue to use FactoryTalk Security when upgrading RSLinx Classic to v3.81.00 or later, follow the steps below to set up security in RSLinx Classic. The steps below take RSLinx Classic v4.20.00 (CPR 9 SR 12) as an example.

1. Install FactoryTalk Services Platform v6.20.00 and RSLinx Classic v4.20.00 using RSLinx Classic Setup Wizard.  

**Note:** While running the RSLinx Classic Setup Wizard, expand RSLinx Classic v4.20.00. Select **Enable Security**, Click **Next** and follow the instructions until you finish the installation.
2. Open FactoryTalk Administration Console from **Start > All Programs > Rockwell Software > FactoryTalk Administration Console** to add user accounts and set security settings to secure RSLinx Classic.

   **Note:**
   - For more information on how to add user accounts, read the Add a FactoryTalk user account topic in FactoryTalk Services Platform help, located at [Build a FactoryTalk system > Manage users > Add a FactoryTalk user account](#).
   - For more information on how to secure RSLinx Classic features, read the Feature Security for Product Policies topic in FactoryTalk Services Platform help, located at [Secure a FactoryTalk system > Set product-specific policies > Feature Security for Product Policies](#).
   - For more information on what you can secure in RSLinx Classic, read the What can I secure in RSLinx Classic topic in RSLinx Classic Online help, located at [How to > Secure RSLinx Classic with FactoryTalk Security > What can I secure in RSLinx Classic](#).

3. Open RSLinx Classic from **Start > All Programs > Rockwell Software > RSLinx > RSLinx Classic**, and click **Security > Set Security User** from the main menu. In the **New User** dialog box, enter the username and password of the user you created in FactoryTalk Administration Console in Step 2, and click **OK**.
Note:  
- Because the access to features in RSLinx Classic is governed by the permissions you set for a user in FactoryTalk Administration Console, some features out of the 13 securable features in RSLinx Classic may be inaccessible (for example, if the user you entered in Step 3 does not have the appropriate permission).
- When RSLinx Classic is reinstalled, all security settings that were previously configured for networks and devices are lost. You must redefine these security settings in the Networks and Devices tree, or in RSWho. For more information, see Considerations when using RSLinx Classic with FactoryTalk Security.

This completes the security setup for RSLinx Classic.

The following table explains the features you can restrict access to in RSLinx Classic. For example, you might restrict the ability to shut down the RSLinx Classic service to a small group of users, to prevent parts of your automation system from going down at runtime.

<table>
<thead>
<tr>
<th>Securable feature</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clear DDE/OPC Event Log</td>
<td>Shows information on any DDE/OPC error messages logged while running RSLinx Classic with DDE/OPC compliant programs.</td>
</tr>
<tr>
<td>Configure CIP Options</td>
<td>Administers how PCCC requests that use the CIP protocol are sent over networks.</td>
</tr>
<tr>
<td>Configure Client Applications</td>
<td>Maps configured and running RSLinx Classic drivers to legacy INTERCHANGE C API, as well as shows the link identifier of the virtual network maintained by RSLinx Classic for the use of Client Applications in the virtual link unsolicited messaging model.</td>
</tr>
<tr>
<td>Configure ControlLogix Gateway</td>
<td>Provides you with information about the modules in your ControlLogix Gateway.</td>
</tr>
<tr>
<td>Configure DDE/OPC Topic</td>
<td>Configures DDE/OPC topic.</td>
</tr>
<tr>
<td>Configure Drivers and Shortcuts</td>
<td>Configures (add, edit, or delete) drivers and shortcuts that allow RSLinx Classic to communicate with your PLC, and provide quick access to specific networks.</td>
</tr>
<tr>
<td>Configure Gateway</td>
<td>Allows you to enable the RSLinx Classic Gateway.</td>
</tr>
<tr>
<td>Configure Network Properties</td>
<td>Allows you to configure network properties.</td>
</tr>
<tr>
<td>Edit DDE/OPC Project</td>
<td>Allows you to edit your DDE/OPC project.</td>
</tr>
<tr>
<td>Edit Options</td>
<td>Shows the options dialog box, which contains the General and DDE tabs.</td>
</tr>
<tr>
<td>Reset Station Diagnostic Counters</td>
<td>Clears the counters in the station diagnostic screens.</td>
</tr>
<tr>
<td>Shutdown</td>
<td>Shuts down RSLinx Classic.</td>
</tr>
<tr>
<td>View NT Event Log</td>
<td>Records important system occurrences such as RSLinx Classic drivers successfully starting and stopping.</td>
</tr>
</tbody>
</table>

**What can I secure in RSLinx Classic?**

**Important:** If you selected Network Directory during the RSLinx Classic security setup procedure, you must use FactoryTalk Security to secure the following list of features. For more information, contact your local Rockwell Automation distributor.

**Using FactoryTalk Security**

Keep the following in mind when using RSLinx Classic with FactoryTalk Security:
The FactoryTalk Services Platform can install two completely separate and independent FactoryTalk Directories: Local Directory and Network Directory. User accounts, passwords, and security permissions to securable features are completely separate and cannot be shared between the Network Directory and the Local Directory. Configuring any of these items on one directory does not configure them on the other. Similarly, changing the password to a user account in one directory does not change the password in the other directory, even if the account has the same name in both directories.

When configuring RSLinx Classic to work in one of the two directories, keep the following in mind:

- RSLinx Classic security policies and RSSecurity Emulator must be installed in the same directory (either Local or Network).
- If you configured RSLinx Classic to work in the Network Directory, you must use FactoryTalk Security to administer centralized security across the network.
- If you configured RSLinx Classic to work in Local Directory and want to use FactoryTalk Security, you can administer security only on a single computer.

Keep the following additional FactoryTalk Security considerations in mind:

- If you did not select the **Enable Security** check box during the RSLinx Classic installation, but want to enable security now, you need to uninstall and then reinstall RSLinx Classic.
- Every time you are in RSLinx Classic, be sure to verify that the Username shown in the Current Security User text box of the Set **Security** dialog box (**Security > Set Security User**) is correct. If it is incorrect, enter the new Username and Password, and click **OK**.
Install RSLinx Classic with command line syntax

Besides the Setup Wizard installation, RSLinx Classic supports automated installation using command line syntaxes. You can typically use this automated installation method during large-scale rollouts, when it might be too slow and costly to have administrators or technicians interactively install the software on individual computers.

This automated installation method requires you enter a command line at the beginning of the installation. During the installation process, instead of prompting you for installation and configuration information interactively, the process follows the specific command line, without user intervention.

RSLinx Classic supports the following automated installation:

- Unattended installation (recommended)
- Silent installation for RSLinx Classic .msi file

RSLinx Classic supports setup wizard installation, and installation with command line syntax (that is, unattended installation and silent installation). The following table illustrates the differences among each installation method.

<table>
<thead>
<tr>
<th>Installation method</th>
<th>Description</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setup wizard installation</td>
<td>The standard method to install RSLinx Classic. It installs all the necessary prerequisites software and required components. The installation processes are visible, easy to use, and provides full installation details such as installation summary and how to register for products updates.</td>
<td>Install RSLinx Classic software on page 18</td>
</tr>
<tr>
<td>Unattended installation</td>
<td>An automated installation method in CPR 9 SR 9 and later. It installs all the necessary prerequisites software and required components with little (or no) user intervention, and provides multiple parameters that allow customized installations. It is recommended for large-scale rollouts. Tip: Depending on the customized parameters, you can silently install RSLinx Classic, prerequisite software, and required components using this method. See Example 1 on page 62.</td>
<td>Use unattended installation on page 60</td>
</tr>
<tr>
<td>Silent installation for RSLinx Classic .msi file</td>
<td>An automated installation method in CPR 9 SR 6 and later. It installs the RSLinx Classic .msi file with little (or no) user intervention. You need to manually install the prerequisite software and required components before silent installation.</td>
<td>Use silent installation for RSLinx Classic .msi file on page 62.</td>
</tr>
</tbody>
</table>

Comparing different installation methods
Appendix C  Install RSLinx Classic with command line syntax

Use unattended installation

Starting with CPR 9 SR 9, RSLinx Classic support unattended installation. In the unattended installation, you enter a specified command line syntax with multiple parameters. You can customize the parameters to meet your needs.

Perform unattended installation

To perform RSLinx Classic unattended installation, follow the steps below. The steps may vary slightly. Follow the on-screen instructions that apply to your operating system.

1. Close all open Windows programs.
2. Open the Command Prompt window as administrator.
3. In the Command Prompt window, navigate to D:, where D: is the drive containing the RSLinx Classic installation DVD or installation package, and press Enter.
   Tip: The User Account Control dialog box may show after you press Enter, click Yes to continue.
4. Type a command line with the following syntax:
   

5. Press Enter. The installation process starts with the parameters you specified.
6. For detailed description about each parameter, see Parameters. You can also type Setup /? in the Command Prompt window, and press Enter to view the help information of all parameters and examples.

Parameters

The parameters and values are not case sensitive. If the value includes spaces, you need to enclose it in quotation marks (" ").

/Q

Required if /QS is not specified.
Installs the product in the silent mode without any user interface.

/QS

Required if /Q is not specified.
Installs the product in the unattended mode without user interaction during installation, and shows the progress, errors, or complete messages on the user interface.

/IAcceptAllLicenseTerms

Required. Specifies that you read and acknowledge all license agreements, and agree to continue the installation.
Appendix C  Install RSLinx Classic with command line syntax

/AutoRestart
Optional. If specified, the computer will be restarted automatically after the installation, if a restart is required to complete the installation.

The parameter is ignored if a restart is not required.

/SetupLanguage=value
Optional. Specifies which language will be displayed during the installation process. The value must be one of ENU, CHS, DEU, ESP, FRA, ITA, JPN, KOR, or PTB.

If omitted, the default language is the user or system user interface language.

/Record
Optional. Records the installation options chosen to a recording file.

/Playback
Optional. Plays back a recording file to specify the installation options.

/IgnoreWarning
Optional. If specified, the setup will ignore warnings and continue.

/Uninstall
Optional. Use to uninstall the software.

/InstallDrive=value
Optional. Specifies the installation drive.

If omitted, the default drive and location are:

- C:\Program Files (x86)\Rockwell Software (64-bit) or
- C:\Program Files\Rockwell Software (32-bit).

/SerialNumber="value"
Optional. Specifies the serial number that is required if you want to get an activation key during installation.

/ProductKey="value"
Optional. Specifies the product key which is required if you want to get an activation key during installation.

/Version="value"
Optional. Specifies the version corresponds to the product version that the SerialNumber and ProductKey are able to activate if you want to get an activation key during installation. If omitted, the installer uses a
default version which is the most recent product version available when retrieving the activation.

The following examples show how to use the commands during the unattended installation.

**Example 1**

```bash
Setup.exe /Q /IAcceptAllLicenseTerms
```

means:

The RSLinx Classic unattended installation uses the default settings during the installation process, with no user interface.

**Example 2**

```bash
Setup.exe /QS /IAcceptAllLicenseTerms /AutoRestart
/SetupLanguage=CHS /InstallDrive=D:
/SerialNumber=0123456789 /ProductKey=ABCDE-FGHIJ
/Version=3.90.01
```

means:

- During the installation, the progress, error, or complete messages show on user interfaces. The displayed language is Chinese.
- RSLinx Classic version v3.90.01 will be installed to `D:\Program Files (x86)\Rockwell Software` if you are using a 64-bit operating system, or `D:\Program Files\Rockwell Software` if you are using a 32-bit operating system.
- The setup will get activation keys during installation if the serial number `0123456789` and product key `ABCDE-FGHIJ` are valid.
- After the installation, if a restart is required, the computer will be restarted automatically.

**Use silent installation for RSLinx Classic .msi file**

Starting with RSLinx Classic v3.60.00 (CPR 9 SR 6), RSLinx Classic supports silent installation for RSLinx Classic .msi file. In the silent installation, RSLinx Classic is installed with default settings, with no (or little) dialog boxes, messages, or user intervention.

**Before you begin**

Before installing the .msi file of RSLinx Classic using the silent installation, you must manually install the following prerequisite software and required components, in the following sequences:

- Microsoft .NET Framework 4.6
  To manually install it, run it from RSLinx Classic installation directory `\Redist\DotNETFX_4.6`.
- Microsoft SQL Server Compact 4.0
To manually install it, run it from RSLinx Classic installation directory `\Redist\SQLServerCE_4.0`.

- **OPC .NET API 4.5**
  To manually install it, run it from RSLinx Classic installation directory `\Redist\OPCNETAPI\Redist_2.01.10600\x86`.

- **FactoryTalk Diagnostics v2.90.00**
  To manually install it, run it from RSLinx Classic installation directory `\Redist\FTDiagnostics_2.90.00`.

- **Windows Firewall Configuration Utility 1.00.08**
  To manually install it, run it from RSLinx Classic installation directory `\Redist\WFCU_1.00.08`.

- **Certificates installation**
  For detailed instructions about how to install it, refer to [Install certificates](#) on page 64.

- **USB CIP driver package (for 32-bit operating systems)**
  This driver is used for Rockwell Automation USB devices and is represented by the **Virtual Backplane (SoftLogix58xx, USB driver)** type on the **Configure Drivers** dialog box.
  To manually install it, run it from RSLinx Classic installation directory `\Redist\USBCIP_3.18.06`.

- **x64 driver package (for 64-bit operating systems)**
  To manually install it, run it from RSLinx Classic installation directory `\Redist\KN64Bit_2.01.01`.

- **FactoryTalk Services Platform**
  To manually install it, run it from RSLinx Classic installation directory `\Common\2.90.00-FTSP`.

### RSLinx Classic x64 driver package

RSLinx Classic version 4.20.00 (CPR 9 SR 12) x64 driver package includes the following:

- **1747-UIC (DH485)**
- **1752-SmartGuard USB**
- **1784-PCIC(S) (ControlNet)**
- **1784-PKTX (DH485/DH+/RIO)**
- **1784-U2DHP (DH+)**
- **Micro800 Remote LCD (208-REMLCD / 820 Remote LCD)**
- **Micro810**
- **Virtual Backplane**
- **USB CIP**

In addition, this release of x64 driver package includes a number of enhancements, including USB CIP driver improvements and new driver installation folder `C:\Program Files\Rockwell Automation`.
Appendix C Install RSLinx Classic with command line syntax

Install certificates

The following certificates are available in the installation directory \Redist\Cert:

- 2016-Rockwell-Driver-SHA1.cer
- 2016-Rockwell-SHA256.cer
- DriverCodeSigning2012-1.cer
- Drivers-12-06-2016.cer
- Logix-11-04-2016.cer
- Rockwell_2013.cer
- Rockwell_2014.cer
- Rockwell_2015.cer
- rockwellcert2010.cer
- rockwellcert2013.cer
- VeriSign Class 3 Public Primary Certification Authority - G5 2036.cer

To manually install a certificate, perform the following steps. The steps below take the VeriSign Class 3 Public Primary Certification Authority - G5 2036.cer certificate as an example.

1. Locate the certificate file at RSLinx Classic installation directory \Redist\Cert\VeriSign Class 3 Public Primary Certification Authority -G5 2036.cer, and double click it.
3. In the Certificate Import Wizard dialog box, click Next.
4. Select Place all certificates in the following store, and click Browse.
5. In the Select Certificate Store dialog box, select the Trusted Root Certificate Authorities folder, and click OK.
6. In the Certificate Import Wizard dialog box, click Next.
7. Click Finish.


Perform silent installation

To install RSLinx Classic in silent mode with default parameter:

1. Close all open Windows programs.
2. Open the Command Prompt window as administrator.
3. In the Command Prompt window, navigate to D:\4.20.00-RSLinxClassic\ENU, where D: is the drive containing the RSLinx Classic installation DVD or installation package, and press Enter.
   
   **Tip:**
   - For RSLinx Classic Lite, the directory is D:\4.20.00-RSLinxClassic-Lite\ENU.
   - For RSLinx Classic SDK, the directory is D:\4.20.00-RSLinxClassic-SDK\ENU.
   - The User Account Control dialog box may show after you press Enter, click Yes to continue.
4. Type the following command line syntax, and press Enter.

```
Msiexec /I "RSLinx.msi" /qn /L*v+ "%Temp%\Rockwell - RSLinx Classic Install.log"
```
**Tip:** The command line install has two options:

- `/qb`: basic UI (user interface) - simple progress and error handling
- `/qn`: no UI - completely silent installation

The installation process starts silently. For the installation log file, type the following command line syntax in the **Command Prompt** window:

```
%Temp%\Rockwell - RSLinx Classic Install.Log
```

During the installation, you may see one or two **Windows Security** messages:

- If the message shows "Windows can’t verify the publisher of this driver software", click **Install this driver software anyway** to continue the installation.
- If the message shows "Would you like to install this device software", select the **Always trust software from Rockwell Automation** check box and click **Install**. Selecting the check box prevents this dialog box from appearing again.
Using RSLinx Classic with ControlFlash

Select an RSLinx Edition in ControlFlash

When working with ControlFlash, you can use either RSLinx Classic or FactoryTalk Linx (or RSLinx Enterprise v5.90.00) as your communications software. The default choice is RSLinx Classic.

To select or change an RSLinx edition in ControlFlash:

1. Launch ControlFlash on your computer.
2. On the Welcome page, click Change RSLinx Edition. The button is enabled only if RSLinx Classic and FactoryTalk Linx (or RSLinx Enterprise v5.90.00) are installed.
   - The default choice is RSLinx Classic to communicate over Data Highway Plus, DF1, DH485, ControlNet, DeviceNet, Ethernet, and USB networks.
   - The other choice is FactoryTalk Linx (or RSLinx Enterprise v5.90.00) to communicate over USB and Ethernet networks.

The following table shows the RSLinx edition that ControlFlash uses.

<table>
<thead>
<tr>
<th>ControlFlash uses...</th>
<th>If...</th>
</tr>
</thead>
<tbody>
<tr>
<td>RSLinx Classic</td>
<td>RSLinx Classic is installed, and FactoryTalk Linx (or RSLinx Enterprise v5.90.00) is not installed.</td>
</tr>
<tr>
<td>FactoryTalk Linx (or RSLinx Enterprise v5.90.00)</td>
<td>FactoryTalk Linx (or RSLinx Enterprise v5.90.00) is installed, and RSLinx Classic is not installed.</td>
</tr>
<tr>
<td>Your preferred RSLinx edition</td>
<td>RSLinx Classic and FactoryTalk Linx (or RSLinx Enterprise v5.90.00) are installed.</td>
</tr>
</tbody>
</table>

RSWho

RSWho is RSLinx Classic’s main window that shows networks and devices in a style similar to Windows Explorer. It allows you to view all network connections from a single screen. For more details about RSWho, refer to RSWho on page 23.

Configure drivers in RSLinx Classic

To add a driver in RSLinx Classic:

1. From the RSLinx Classic main menu, select Communications > Configure Drivers.
2. From the Configure Drivers dialog box, select the desired driver from the Available Driver Types list.
3. Click Add New. The Add New RSLinx Classic Driver dialog box opens.
4. Enter a name for the selected driver (15 characters at maximum), and click OK. The Configuration dialog box for that driver shows.
5. In the Configuration dialog box, enter the appropriate parameters for the desired driver.

6. Click OK to close the Configuration dialog box. The new driver now appears in the Configured Drivers list.

To edit a driver in RSLinx Classic:

1. From the RSLinx Classic main menu, select Communications > Configure Drivers.
2. From the Configure Drivers dialog box, select the desired driver from the Configured Drivers list.
3. Click Configure. The Configuration dialog box for that driver shows.
4. Make the necessary modifications to the driver, and click OK to return to the Configure Drivers dialog box.

Uninstall RSLinx Classic

To uninstall RSLinx Classic software, do any of the following:

- Open Programs and Features in Windows Control Panel, right-click RSLinx Classic version 4.20.00 and then click Uninstall.
- Open Setup.exe, and then click modify or uninstall.
- Open the Command Prompt window and type a command with the following syntax:

  Setup.exe [/Q | /QS] /Uninstall

  Note: Components, such as FactoryTalk Activation Manager, that are shared with other products will not be uninstalled.

For more information about command-line parameter, see Parameters on page 60.
**Activation file** - A hidden, read-only, system file that activates a Rockwell Software product. The software will run only if your system can find the correct activation file.

**Activation key** - Activation files contain a database of activation keys. Each key is particular to a certain product and must be accessible on a local or remote drive for that product to run.

**Driver** - The software interface to the hardware device that will be used to communicate between RSLinx Classic and your processor.

**DDE (Dynamic Data Exchange)** - A form of inter-process communication. When two or more programs that support DDE are running simultaneously, they can exchange information and commands.

**License** - Authorization to use a specified number of instances of software. A products activation key contains a license for each copy of the software you have purchased.

**Links** - The data path established for one or more channels between two or more stations. DDE links can be hot, warm, or cold.

**OPC** - Provides an industry-standard mechanism to communicate and exchange data between clients and servers using OLE technology.

**Packet** - The transmission unit exchanged at the network layer.

**Poke** - DDE version of a write.

**Read** - To acquire data from somewhere (memory, an output, another station).

**Topic** - Represents a specific path to a processor.

**Write** - To load data into somewhere (memory, an output, another station).
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Rockwell Automation support

Use these resources to access support information.

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

Documentation feedback

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Waste Electrical and Electronic Equipment (WEEE)

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

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