



# FactoryTalk View Site Edition

Installation Guide





Allen-Bradley • Rockwell Software

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# What's in this Installation Guide?

This manual describes the FactoryTalk View Product and System, the tasks to be performed on a system before installation, the detailed installation steps, how to use FactoryTalk Activation to license the installed product, tasks for deploying applications, and how to upgrade an existing system.

The contents of this Installation and Deployment guide appear in the order you would use during installation on new or existing systems:

- FactoryTalk View basics describes the software components and layout of the system (Chapter 1).
- Hardware, operating system and domain information identifies requirements for the computers and operating systems (Chapter 2).
- Preparing for installation gives you the information you need to get your computer systems ready for a new installation or an upgrade (Chapter 3).
- Installation procedures walk you through the screens you will see during a complete installation (Chapter 4).
- Activating the software is required to get software license information onto all the computers in your system (Chapter 5).
- Deploying new applications covers several deployment types you may need (Chapter 6, 7, and 8).
- Upgrading existing applications if you already have an installed HMI application and are upgrading to the latest version of FactoryTalk View (Chapter 9).

In addition to *FactoryTalk View Installation Guide*, the FactoryTalk View documentation set includes:

• FactoryTalk View Site Edition User's Guide contains comprehensive information about designing and developing FactoryTalk View SE applications.

The User's Guide is available in PDF format, from the **Help** menu in FactoryTalk View Studio, on the disc containing the Setup Wizard, and from the Rockwell Automation Literature Library.

• **Release Notes**. Read the Release Notes before you begin installing or working with FactoryTalk View and supporting software.

Release Notes for FactoryTalk View SE, RSLinx Enterprise, and RSLinx Classic are available from the FactoryTalk View Installation DVD.

Release Notes for the FactoryTalk Services Platform are available from the Contents page in the FactoryTalk Help. To open the Help, select

# About the FactoryTalk View documentation

Start > All Programs > Rockwell Software > FactoryTalk Tools > FactoryTalk Help.

• **Help**. Procedures and reference information are available from the Help menu in FactoryTalk View Studio, and from editors and dialog boxes used to develop FactoryTalk View SE applications.

# Find information in the FactoryTalk View installation

Most of the dialog boxes during the installation include the selection **View Installation Guide**. Click the link to open the Installation Guide.

You can also open the application release notes that contain the latest information about updates and program features. Click **View Release Notes** for the selected product.

Rockwell So FactoryTalk® View S	ftware Common S tudio Enterprise 8.20.00 (CP	Setup R 9 SR 8)
Configuring Products:	Please select software products to install	
Rockwell Software Common	FactoryTalk Services Platform	FactoryTalk Services Platform Versions:
MSSQL Configuration	✓ FT View Studio Enterprise ✓ FT View Site Edition Server	v2.80.00 (CPR 9 SR 8) English • Installs the FactoryTalk Services Platform to
FT View Studio Enterprise	FT View Site Edition Client	install common Rockwell Automation software components required by FactoryTalk View.
<ul> <li>FT View Site Edition Server</li> </ul>	FactoryTalk Alams and Events	Available for installation
• FT View Site Edition Client	RSLinx Enterprise	
• Computer Environment	Device Status and Diagnostic Faceplates     FactoryTalk Historian Connectivity	
		View Release Notes for Selected Product
	Hard drive space required to install:	202.010
Rockwell Software Common Step 1 of 8 - Product Selection	All selected products	207.001B 3211.4MB

#### What's in this manual

The Installation Guide is available in PDF format from the FactoryTalk View Installation DVD, from the **Help** menu in FactoryTalk View Studio, and from the Rockwell Automation Literature Library.

**Tip:** In the Literature Library, to find the current version of the Installation Guide and the User's Guide, search for publication numbers containing the string **VIEWSE**.

Chapters in this manual describe how to:

• Set up the computers that will run FactoryTalk View SE.

- Install FactoryTalk View SE and supporting software.
- Activate the FactoryTalk View SE software.
- Deploy FactoryTalk View SE network and local applications.
- Upgrade FactoryTalk View SE components.

Each chapter includes a task check list, which you can use to create customized procedures suited to the needs of your application.

#### **Other Documents**

Document	Description
FactoryTalk Alarms and Events System Configuration Guide, publication <b>FTAE-RM-001</b>	Describes the tasks to install, configure, and use FactoryTalk Alarms and Events services as part of a FactoryTalk-enabled automation system.
FT Security System Configuration Guide, publication FTSEC-QS001	Walk through of configuring FactoryTalk Security, creating accounts and setting permissions.

#### **Open FactoryTalk View manuals**

The FactoryTalk View Site Edition User's Guide, Installation Guide, and the Release Notes are available online, while you are working in FactoryTalk View Studio.

To open the manuals:

- 1. Open FactoryTalk View Studio.
- 2. From the **Help** menu, select **Online Books**, and then select the manual you want to open.
  - **Tip:** During installation, Adobe Reader may be installed on the computer so that you can view online manuals. For information about using Adobe Reader, see the product documentation.

## Contact Rockwell Automation Technical Support

If you cannot find the answer to your question in the documentation or on the Internet, contact Rockwell Automation Technical Support, using any of these methods:

- Telephone: 1-440-646-3434
- Online: http://support.rockwellautomation.com

Support staff are available Monday to Friday from 8:00 a.m. to 5:00 p.m. local time (North America only), except on statutory holidays.

# When you call Rockwell Automation Technical Support

When you call, it is recommended that you be at your computer and ready to provide the following information:

- The product's Serial Number and Product Key, which are printed on the Activation Certificate enclosed with the product software DVD.
- The FactoryTalk View product version number.
- FactoryTalk Services Platform version number.
- The connectivity (RSLinx Enterprise or RSLinx Classic) version number.
- The type of hardware you are using.
- The names of other Rockwell Automation products installed on the computer.
- The exact wording of any messages shown on the computer.
- A description of what happened and what you were doing when the problem occurred.
- A description of how you tried to solve the problem.

If you are running a FactoryTalk View SE network distributed application, also note:

- How many computers are participating in the network application.
- Whether computers on the network are connected using a Windows domain controller or a workgroup.
- Which FactoryTalk View SE components are installed on participating computers.
- Which computers are running servers (the Network Directory server, HMI servers, data servers, or tag alarm and event servers), and whether the servers are set up with redundancy.
- Which computers are running clients (FactoryTalk View SE Client or FactoryTalk View Studio).

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This document is current as of the time of release of the product; however, the accompanying software may have changed since the release. Rockwell Automation, Inc. reserves the right to change any information contained in this document or the software at any time without prior notice. It is your responsibility to obtain the most current information available from Rockwell when installing or using this product.

#### **Environmental compliance**

Rockwell Automation maintains current product environmental information on its website at

http://www.rockwellautomation.com/rockwellautomation/about-us/sustainabi lity-ethics/product-environmental-compliance.page

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#### **Contact Rockwell Automation**

Customer Support Telephone — 1.440.646.3434

Online Support — <u>http://www.rockwellautomation.com/support/</u> http://www.rockwellautomation.com/support/

# FactoryTalk View basics

	FactoryTalk View, including FactoryTalk View SE (Site Edition) and FactoryTalk View ME (Machine Edition), are HMI (human-machine interface) software products designed with a common look, feel, and navigation to help speed HMI application development and training time.
	Supporting the Rockwell Automation Integrated Architecture, FactoryTalk View is part of the scalable and unified suite of monitoring and control solutions designed to span stand-alone machine-level applications up through supervisory-level HMI applications across a network. This suite offers you a common development environment, application reuse, and architecture so you can increase productivity, reduce operation costs, and improve quality.
	FactoryTalk View includes the PC-based development tool FactoryTalk View Studio as well as FactoryTalk View ME and FactoryTalk View SE.
What is FactoryTalk View SE?	FactoryTalk View SE is an integrated software package for developing and running HMI applications that can involve multiple users, clients, and servers, distributed over a network.
	FactoryTalk View SE provides all the tools you need to create powerful, dependable process monitoring and supervisory control applications.
	A FactoryTalk View SE System is more than the HMI Server and Clients. It

A FactoryTalk View SE System is more than the HMI Server and Clients. It also includes FactoryTalk Services Platform and Data Communication products such as RSLinx Enterprise and RSLinx Classic.

# About the architecture of your FactoryTalk View system

A network distributed FactoryTalk View SE system consists of several components as shown below.



This example of a distributed system includes a FactoryTalk Directory Server, FactoryTalk View SE Server and Client, RSLinx Enterprise Data Server, and FactoryTalk View Studio for application development and configuration.

#### FactoryTalk View Studio Enterprise

FactoryTalk View Studio Enterprise is the configuration software for developing and testing FactoryTalk View SE network distributed, network station, local station, and FactoryTalk View ME applications.

FactoryTalk View Studio contains editors for creating complete applications, and includes client and server software for testing the applications you create. Use the editors to create applications that are as simple or as complex as you need.



#### FactoryTalk View SE Server

FactoryTalk View SE Server, also called the HMI server, stores HMI project components (for example, graphic displays) and supplies them to clients. The server also contains a database of tags, and performs alarm detection and historical data logging.

The FactoryTalk View SE Server has no user interface. Once installed, it runs as a set of *headless* Windows services that supply information to clients as they request it.

#### FactoryTalk View SE Client

FactoryTalk View SE Client is software for viewing and interacting with FactoryTalk View SE local station, network station, and network distributed applications at run time.

Use the FactoryTalk View SE Client Wizard to create client configuration files that can be deployed to client host computers. For details, see the FactoryTalk View SE Client Help.

#### FactoryTalk View SE Station

FactoryTalk View SE Station is a supervisory HMI software package for enterprise solutions. SE Station is a single-computer HMI that can be operated in either a Local or a Network FactoryTalk Directory. There are key differences between View SE Distributed and View SE Station:

- View SE Distributed can share HMI screens and data with multiple clients.
- View SE Station does not allow sharing of HMI screens or data to other View SE Stations.

A Network Station deployment (below) can include several HMI stations using a single Directory server and a single RSLinx communication server. While each HMI station can access the same controller data, through the shared RSLinx Enterprise server, and the same Directory resources through the shared Directory server, they can only access their own HMI data such as graphics, macros, and datalogs.



A Local Station FactoryTalk View SE system (below) can include several HMI computers, each with its own FactoryTalk Directory server and data server connection to the controllers.



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#### Stand-alone RSLinx Enterprise Server

RSLinx Enterprise is a FactoryTalk Live Data server and can be enabled as a FactoryTalk Alarms and Events server. Your applications use RSLinx Enterprise to communicate with devices such as controllers and I/O scanners. This enables you to see values, such as sensor readings and other controller data from your plant floor devices, on your desktop computer or dedicated PanelView Plus terminal.

#### Stand-alone FactoryTalk Directory Server

FactoryTalk Directory provides a central lookup service for a FactoryTalk system so all definitions do not have to exist in a single physical project file. References saved by FactoryTalk Directory are used by FactoryTalk-enabled products and FactoryTalk services to locate definitions when they are needed. It allows clients to locate key configuration information such as system organization, server locations, and policy information. FactoryTalk Directory provides a common address or phone book of factory resources that are shared among FactoryTalk-enabled applications in a distributed system.

FactoryTalk Services Platform provides a set of common services (such as diagnostic messages, health monitoring services, and access to real-time data) for all the FactoryTalk products and applications used in a control system.

FactoryTalk Services Platform is installed automatically with any FactoryTalk-enabled product.

#### FactoryTalk Administration Console

FactoryTalk Administration Console is a stand-alone tool for developing, managing, and securing multiple FactoryTalk View applications.

To open the Administration Console, select **Start > All Programs > Rockwell Software > FactoryTalk Administration Console**.

#### FactoryTalk Directory

The FactoryTalk Directory centralizes access to system resources and names for all FactoryTalk products and components participating in an automated control system.

The FactoryTalk Network Directory manages resources for FactoryTalk View SE network applications, and the FactoryTalk Local Directory manages resources for FactoryTalk View SE local applications.

# FactoryTalk Services Platform

#### FactoryTalk Alarms and Events

FactoryTalk Alarms and Events, which installs behind the scenes during FactoryTalk View SE installation, provides system-wide alarm monitoring and control centralized at the FactoryTalk Directory.

To distribute device- and tag-based alarms in a FactoryTalk View SE application, you can set up FactoryTalk Alarms and Events servers in the application.

#### FactoryTalk Security

FactoryTalk Security centralizes user authentication and authorization at the FactoryTalk Directory.

#### FactoryTalk Live Data

FactoryTalk Live Data manages connections between FactoryTalk products and data servers.

#### FactoryTalk Diagnostics

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

# **Connectivity** How you plan to obtain data for an application will determine which communications software you install.

You can use the RSLinx Enterprise or RSLinx Classic software shipped with FactoryTalk View SE, or use other software and devices that support OPC (OLE for Process Control) communications.

**Tip:** RSLinx Enterprise is automatically installed for FactoryTalk View applications. You may also choose to include RSLinx Classic during the installation procedure.

#### **RSLinx Enterprise**

RSLinx Enterprise is a communication server built around FactoryTalk technology to assist in developing and running your FactoryTalk View SE applications.

For communications with Allen-Bradley local and remote devices, particularly with Logix5000 controllers, RSLinx Enterprise is the recommended data communications software for FactoryTalk View applications.

However, RSLinx Enterprise does not allow you to create alias topic shortcuts, or to perform online tasks such as uploading and downloading RSLogix 5000 files. If you need these capabilities, you may use RSLinx Classic as your data communications server instead.

#### **RSLinx Classic**

RSLinx Classic is software that provides communications to a wide range of devices, such as Logix5000 processors. RSLinx Classic is an OPC Data Access v2.05a-compliant data server that can serve FactoryTalk Live Data tags from an HMI Tag database or RSLinx Enterprise. RSLinx Classic is available for personal computers only.

For example, install and use RSLinx Classic to serve data through DH+ (Data Highway +) networks, to support complex bridging and routing, and to support unsolicited messaging from a controller to RSLinx.

RSLinx Classic also allows you to create alias topic shortcuts, and to perform online tasks such as uploading and downloading RSLogix 5000 files.

## Installation DVD

The FactoryTalk View DVD provides all the software you need to develop and run local applications confined to a single computer, or distributed control systems that involve several computers, connected over a network.

Depending on needs, the architecture of a FactoryTalk View distributed application can involve multiple clients and servers that represent different parts of your plant or process. To accommodate those requirements, these FactoryTalk View programs are included in this Setup Wizard :

- Studio Enterprise
- Server
- Client
- Station
- Stand-alone RSLinx Enterprise Server

• Stand-alone FactoryTalk Directory Server

FactoryTalk® View Setup 8.20.	00 (CPR 9 SR 8)	
	Welcome to the FactoryTa	alk® View Setup Wizard.
	Select your FactoryTalk® View Pro	duct:
	Select Product to Install	▼
	☑ Install Adobe Reader	
		Next > Cancel

- Tip:Three other applications can also be installed from this<br/>Setup Wizard for FactoryTalk View ME applications:
  - Studio for Machine Edition
  - Machine Edition Station for Windows
  - Stand-alone ME Transfer Utility

# Hardware, operating system, and domain information

This chapter introduces computer and Microsoft Windows support information for a FactoryTalk View SE system, including:

- <u>Review computer hardware requirements</u> on page 23
- <u>Review operating system requirements</u> on page 24
- Set up Windows domain or workgroup on page 26
- Set up computers with names to be used in production on page 28

In a network application, it is possible for a single server computer that meets the listed hardware requirements to host all of the following components:

- One FactoryTalk View SE Server
- One RSLinx Enterprise data server (which can also be set up as FactoryTalk Alarms and Events device-based alarm server)
- One RSLinx Classic OPC-DA server (or some other OPC data server)
- One FactoryTalk Alarm and Event Tag based alarm Server
- The FactoryTalk Network Directory

However, running more than one HMI server on a single computer is not recommended. If you plan to deploy a network distributed application that uses more than two servers (or two pairs of redundant servers) and 20 clients, it is recommended that you contact your local Rockwell Automation Sales office for architectural assistance. For information about setting up redundant FactoryTalk View SE Servers, see Chapter 14, Setting up FactoryTalk system availability in the FactoryTalk View User's Guide VIEWSE-UM006.

The computer hardware you choose to install and operate your FactoryTalk View SE System should be adequately sized for the demands of each component. These specifications are based on the hardware that the FactoryTalk View product and its supported operating systems require.

Typically, application servers such as FactoryTalk View SE Server, FactoryTalk Alarms and Events, and RSLinx Enterprise will need to be sized with faster CPUs and more RAM than operator or engineering workstations. The greater the demand, the more powerful a system you need.

# What can I install and run on one server?

# Review hardware requirements

You should also specify a hard drive that has enough disk space to provide virtual memory that is at least twice the size of the physical RAM.

For FactoryTalk View software upgrades in this release, we recommend upgrading your hardware to these levels.

Туре	Description	CPU	RAM
Operator Workstation	FactoryTalk View SE Client or FactoryTalk View SE Station	Intel Core 2 Duo and greater	2 GB or more
Engineering Workstation	FactoryTalk View Studio Enterprise RSLinx Classic RSLinx Enterprise Studio 5000	Intel Core 2 Duo and greater	4 GB or more
Application Server	FactoryTalk View SE Server FactoryTalk View Studio Enterprise FactoryTalk Alarms & Events Tag	Smaller System: Intel Core 2 Duo and greater	2 GB or more
	Based Server RSLinx Enterprise Data Server with FactoryTalk Alarms and Events enabled	Medium to larger systems: Quad core Intel Xeon family or greater	4 GB or more

**Note:** Do not run FactoryTalk Alarms and Events servers (Rockwell Automation Device Server or Tag Alarm and Event Server) on the computers that meet only minimum server requirements.

# Review operating system requirements

FactoryTalk View SE software is designed to run on Microsoft Windows operating systems, including:

Operating System	32-bit	64-bit	
Windows 8.1 Professional	Yes	Yes	
Windows 8.1 Enterprise	Yes	Yes	
Windows 8 Professional	Yes	Yes	
Windows 8 Enterprise	Yes	Yes	
Windows 7 Professional	Yes	Yes	
Windows 7 Professional with Service Pack 1	Yes	Yes	
Windows 7 Enterprise with Service Pack 1	Yes	Yes	
Windows 7 Ultimate with Service Pack 1		Yes	
Windows Server 2012 R2 Standard		Yes	
Windows Server 2012 R2 Datacenter		Yes	
Windows Server 2012 Standard		Yes	
Windows Server 2012 Datacenter		Yes	
Windows Server 2008 R2 Standard		Yes	
Windows Server 2008 R2 Standard with Service Pack 1		Yes	
Windows Server 2008 R2 Enterprise with Service Pack 1		Yes	

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Windows Server 2008 Standard with Service Pack 2	Yes	Yes
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The choices you make will depend in part on whether the computer is to host an application client or server. You might choose to run operator or engineering workstations in a Windows Server operating system, but that is not required.

Recommended specifications for application servers are not as flexible, because server computers are more likely to host critical components and to handle more of the processing load in a FactoryTalk View SE application.

**Note:** FactoryTalk View SE software is tested and supported on Windows operating systems installed from original Microsoft media only. Using unsupported operating systems is not recommended.

#### Operating system recommendations for application servers

For computers hosting application servers (HMI servers, data servers, or Tag Alarm and Event Servers), operating system requirements depend on whether the server will support more or fewer than 10 client connections.

A *client* can be any of FactoryTalk View SE Client, FactoryTalk View Studio, the FactoryTalk View SE Administration Console, a FactoryTalk Transaction Manager connector, or another FactoryTalk View SE Server.

For application servers that support:

- More than 10 client connections, the recommended operating systems (with the appropriate number of CAL (client access licenses) installed)
  - Windows Server 2012 Standard Edition (64-bit)
  - Windows Server 2012 R2 Standard Edition (64-bit)
  - Windows Server 2008 Service Pack 2 (32-bit or 64-bit)
  - Windows Server 2008 R2 Standard Edition with Service Pack 1 (64-bit).
- 10 or fewer client connections, the minimum requirement is

- Windows 8.1 Professional (32-bit or 64-bit)
- Windows 8 Professional (32-bit or 64-bit)
- Windows 7 Professional (32-bit or 64-bit)
  - **Note:** Do not run the primary and secondary servers in a redundant server pair on the computers that have different operating systems. For example, do not run the primary server on a Windows Server 2008 computer and the secondary server on a Windows Server 2012 computer.

## Set up the Windows domain or workgroup

The number of computers participating in a FactoryTalk View SE network application determines whether the computers can belong to a Windows domain or a workgroup.

Workgroups can be used only in applications that include 10 or fewer computers. Do not use Windows Workgroups with more than 10 computers, a Windows domain is recommended in that case.

For more information about setting up domains and workgroups, see the document, *FactoryTalk View SE Distributed System Design Considerations*, attached to Rockwell Automation Knowledgebase Answer ID 32549.

- A domain controller makes it possible to administer the network and user accounts from a central location. FactoryTalk Security, which manages centralized security services, supports Windows-linked accounts that are managed and authenticated by the Windows operating system, but have separate permissions for accessing the automation system.
- Name resolution is required for the computers to communicate with each other on the network.
- All computers participating in a single FactoryTalk system must be members of the same Windows domain.
- Do not locate the domain controller on the same computer as any FactoryTalk software. Microsoft recommends against third party software being installed on a domain controller.

#### Domain controller requirements

For network applications consisting of more than 10 computers, the use of a domain controller is recommended.

The following domain controllers are supported:

- Windows Server 2012 (Standard Edition)
- Windows Server 2012 R2 (Standard Edition)

- Windows Server 2008 with Service Pack 2 (Standard Edition)
- Windows Server 2008 R2 with Service Pack 1 (Standard Edition)

For more information about Windows operating systems and Service Pack compatibility, see Rockwell Automation Knowledgebase Answer ID 20450.

**Note:** Do not install FactoryTalk Directory, FactoryTalk View SE Server, or any other application software on the same computer as the Windows domain controller. This configuration is not supported.

# About synchronizing time on application computers

In a networked system, to ensure that time stamps on alarms, historical data, and diagnostics are accurate, it is highly recommended that time synchronization be configured on all application computers.

For more information about synchronizing application computer clocks to an authoritative time server, see *FactoryTalk View SE Design Considerations*, attached to Rockwell Automation Answer ID 32549.

#### Windows workgroup requirements

For network applications consisting of 10 or fewer computers, you can run FactoryTalk View SE in a Windows workgroup network environment.

- Name resolution is required for the computers to communicate with each other on the network.
- Workgroups do not use a domain controller, so central network administration is not available. This means that security and network communications (for example, name resolution) must be handled at each individual computer in the workgroup.
- Each workstation in a workgroup must have the same user accounts, with the same user names and passwords on each machine, for all machines participating in a client-server environment.
- All users in a workgroup should have Administrative rights assigned to them.
- FactoryTalk Directory provides centralized security services without requiring a Windows Server and domain controller. When setting up centralized security in a FactoryTalk Network Directory for Windows Workgroups, do not use Windows-linked accounts. Instead, create user accounts that are managed and authenticated by FactoryTalk Security.

# Set up computers with names to be used in production

When you install the FactoryTalk Services Platform with FactoryTalk View SE, the program creates a FactoryTalk account for the current computer, under the Local and Network FactoryTalk Directories.

As a result, if you rename the computer *after* installing FactoryTalk View SE or when you deploy an application, the FactoryTalk Directory will not recognize the new name.

To avoid this problem, it is recommended that you give the application client and server host computers the names they will use in a production setting, before you install the FactoryTalk View SE software.

**Tip:** If you must rename a computer and you encounter problems, for assistance, see Rockwell Automation Answer ID 35169 (for FactoryTalk View SE network applications), or Answer ID 38775 (for FactoryTalk View SE local and ME applications).

# **Pre-installation configuration**

This chapter guides you through the steps for preparing your computer for installation of the FactoryTalk View SE product and supporting software.

Use the following checklist for preparing the computer for installation:

- Disable automatic Windows updates on page 29
- <u>Disable operating system themes</u> on page 30
- Manually configure NICs and switch ports on page 30
- Disable or uninstall third-party firewalls on page 32
- <u>Remove Internet Explorer Enhanced Security Configuration</u> on page 33
- <u>Set up Data Execution Prevention</u> on page 35 if needed
- Remove unnecessary DCOM networking protocols on page 35

## Disable automatic Windows updates

When you install Microsoft Service Pack releases and other Windows operating system updates, you introduce new software that could affect the operation of FactoryTalk View SE components on the computer.

**Note:** Windows updates should be disabled in all production computers. Updates can cause unexpected behaviors, including shutting down running applications and automatic computer reboots.

#### To disable automatic Windows updates:

- 1. Open the Windows Update window:
  - (Windows 7 or Windows Server 2008)

Select Start > All Programs > Windows Update.

• (Windows 8.1, Windows 8, or Windows Server 2012)

Press the Windows button+**X**, select **Control Panel** > **Windows Update**.

- 2. In the left column, select Change settings.
- 3. In the **Important Updates** drop down, select **Never check for updates**.

- 4. Select the check box Give me recommended updates the same way I receive important updates.
- 5. Clear the check box Allow all users to install updates on this computer.

For more information about Windows operating systems and Service Pack compatibility, see Rockwell Automation Knowledgebase Answer ID 20450.

Operating system themes, which allow for effects such as sounds, icons, and other elements that personalize the computer, can cause heavy loads on the computer's processor when running some FactoryTalk View SE graphic components, such as alarm summaries.

For best performance, disable all themes. Follow the steps below.

- 1. Open Control Panel:
  - (Windows 7 or Windows Server 2008)
     Select Start > Control Panel.
  - (Windows 8.1, Windows 8, or Windows Server 2012)
     Press the Windows button+X, select Control Panel.
- 2. In Control Panel, click Appearance and Personalization.
- 3. Under Personalization, click Change the theme.

On the Themes tab, in the Theme list, click **Windows Classic**, and then click **OK**.

The NIC (Network Interface Card) is the hardware in a computer that lets it connect to other devices on the network. A switch manages traffic on the Ethernet network. Some switches allow ports (physical connections) to be configured individually.

The link speed and duplex settings for network connections can be auto-negotiated (the device determines the best way to communicate), or manually configured (settings are hard coded).

Many NICs also offer a power-saving feature that turns off the network card if it is not being used. This setting sometimes interferes with the ability of the computer to receive data, causing errors such as wireframes, stale data, and other failures. To prevent these errors, disable power saving for your computer's network interface cards. For details, see <u>Disable power saving for the NIC</u> on page 31.

For FactoryTalk View SE applications, it is recommended that you use managed switches across the control system network and that you manually

## Manually configure NICs and switch ports

**Disable operating** 

system themes

configure the same link speed and duplex setting for all network connections into the managed switches.

It is also recommended that you manually configure the managed switch ports, using the same settings. To learn how to configure switch ports, see the product documentation provided with the switches you are using.

For an overview of best practices for connecting devices over a network, see the *Ethernet Design Considerations Reference Manual* document in the Rockwell Automation Literature Library. (Search for publication ENET-RM002.)

#### Set up the NIC link speed and duplex

Follow the steps below. The steps may vary slightly for some of the Windows operating systems.

- 1. Open Windows Control Panel, and then click Network and Internet.
- 2. From the list of categories, select Network and Sharing Center.
- 3. From the list of **Tasks** on the left, select **Change adapter settings** (or **Manage network connections**).
- 4. From the list of network connections, right-click Local Area Connection (or Ethernet), and then select Properties.
- 5. In the **Networking** tab, click **Configure**.
- 6. In the **Properties** dialog box for the device, click the **Advanced** tab.
- 7. From the list of properties for the device, select Link Speed & Duplex (or Speed & Duplex).
- 8. From the **Value** list, select the highest possible value for the connection, and then click **OK**.

#### Disable power saving for the NIC

Follow the steps below. The steps may vary slightly for some of the Windows operating systems.

**Note:** If you are using unmanaged switches, the NIC settings must remain auto-negotiated. Connecting an auto-negotiated device to a manually configured device can result in network communication errors and is not recommended.

	1. Open Windows Control Panel, and then click <b>Network and Internet</b> .
	2. From the list of categories, select <b>Network and Sharing Center</b> .
	3. From the list of <b>Tasks</b> on the left, select <b>Change adapter settings</b> (or <b>Manage network connections</b> ).
	4. From the list of network connections, right-click <b>Local Area Connection</b> (or <b>Ethernet</b> ), and then select <b>Properties</b> .
	5. In the <b>Networking</b> tab, click <b>Configure</b> .
	6. In the <b>Properties</b> dialog box for the device, click the <b>Power Management</b> tab.
	7. Clear the <b>Allow the computer to turn off this device to save power</b> check box, and then click <b>OK</b> .
Disable or uninstall third-party firewalls	FactoryTalk View SE is compatible only with the built-in Windows firewall and should not be used with third-party firewalls because this can cause unexpected results.
	Before installing FactoryTalk View SE, disable or uninstall all third-party firewalls on the computer. For details, see the documentation supplied with your firewall product.
Install IIS	Microsoft Internet Information Services (IIS) is a critical service for a Distributed FactoryTalk View SE System. Because of this, the Setup Wizard detects whether Microsoft IIS is available on the computer and shows the status of that installation to the user.
	The following table shows whether IIS is required on your computers:

IIS required	IIS not needed
FactoryTalk View SE Server	FactoryTalk View SE Client
<ul> <li>FactoryTalk View Studio that needs to remotely connect to a</li> </ul>	FactoryTalk View Studio
Network FactoryTalk View SE system.	Stand Alone RSLinx Enterprise Server
	Stand Alone FactoryTalk Directory Server

## Guidelines for different operating systems

Because of different versions and configurations for IIS, you may need to perform manual steps for older operating systems before installing FactoryTalk View SE. Microsoft has also changed its policy of including a key IIS component, WebDAV, in various operating systems. This also will require manual steps to download and install WebDAV for older operating systems. By default, IIS is installed by FactoryTalk View Setup Wizard automatically. If you have problems with the IIS setting, refer to <u>Install Microsoft Internet</u> <u>Information Services</u> on page 133.

If you are using Windows Server 2008 with Service Pack 2, you need to manually download WebDAV from Microsoft and install it.

#### About uninstalling IIS

If for some reason, you need to uninstall and then reinstall IIS, after reinstalling, you need to recreate the virtual directories in IIS.

To recreate the virtual directories, in Windows Explorer, open C:\Program files\Rockwell Software\RSView Enterprise and double-click RSViewWebManager.exe.

# **Remove ESC**

Internet Explorer Enhanced Security Configuration (ESC) is a group of default security settings for Windows Server 2008 and Windows Server 2012 that protects servers by limiting the ways users can browse Internet and Intranet Web sites on the computer.

If installed on a computer with FactoryTalk View SE software components, the Internet Explorer ESC can interfere with the ability of FactoryTalk View SE Clients to connect to application servers.

To avoid unexpected behavior, it is recommended that you remove the ESC from computers running FactoryTalk View SE.

#### To remove ESC in Windows Server 2008:

1. Select **Start > Administrative Tools > Server Manager**.

2. In the Server Manager window, under Security Information, click Configure IE ESC.

Server Manager (APCNDAEASHENG	9) Server Manager (APCNDAEASHE	NG9)	
Features     Joing Diagnostics     Configuration	Get an overview of the features.	status of this server, perform top management tas	is, and add or remove server roles and
	Server Summary		Server Summary Help
	Computer Information		🔛 Change System Properties
	Security Information     Windows Firewall:     Windows Updates:     Last checked for updates:     Last instaled updates:     TE Enhanced Security     Configuration (ESC):	On Install updates automatically using Microsoft Update 3/19/2009 7-149 AM 3/17/2009 4-00 PM Off For Administrators Off For Users	Go to Windows Firewall     Configure Updates     Configure Updates     Configure Voltation Ward     Configure IE ESC
	🕑 Roles Summary		Roles Summary Help
	🕑 Features Summary		Features Summary Help
			Resources and Support Help

3. In the **Internet Explorer Enhanced Security Configuration** dialog, select **Off** to turn off IE Enhanced Security for Administrators and for users, and then click **OK**.

nternet lefault f	Explorer Enhanced Security Configuration is enabled by or Administrators and Users groups.
	an right man area and area a dradbal
Administ	rators:
۲	C On (Recommended)
8	• Off
<u>J</u> sers:	
۲	C On (Recommended)
8	€ Off
1ore ab	out Internet Explorer Enhanced Security Configuration

To remove ESC in Windows Server 2012:

1. On the Windows taskbar, select the Server Manager icon.

	2. In the <b>Server Manager Dashboard</b> window, on the left side, click <b>Local Server</b> .
	3. On the right side of the Local Server window, under Properties, locate IE Enhanced Security Configuration and click On.
	4. In the <b>Internet Explorer Enhanced Security Configuration</b> dialog, select <b>Off</b> to turn off IE Enhanced Security for Administrators and for users, and then click <b>OK</b> .
Set up DEP	Data Execution Prevention (DEP) is a Microsoft Windows security feature that is built into the operating system starting with Windows XP and Windows Server 2003. DEP is intended to protect programs and services from viruses and other security threats.
	The DEP settings determine which programs and services are covered by DEP protection. On computers running FactoryTalk View SE components, it is recommended that DEP be turned on for essential Windows programs and services only.
	To turn on DEP:
	<ol> <li>Open Windows Control Panel, select Control Panel Home &gt; System and Maintenance.</li> </ol>
	2. Click <b>System</b> .
	3. From the list of tasks on the left, select <b>Advanced system settings</b> .
	4. In the <b>System Properties</b> dialog box, click the <b>Advanced</b> tab.
	5. In the Advanced tab, under Performance, click Settings.
	6. In the <b>Performance Options</b> dialog box, click the <b>Data Execution Prevention</b> tab.
	7. Select the option, <b>Turn on DEP for essential Windows programs</b> <b>and services only</b> , and then click <b>OK</b> .
Remove unnecessary DCOM networking protocols	If multiple DCOM protocols are installed and configured on the computer, performance of communications in a FactoryTalk View SE system can be adversely impacted. To ensure that DCOM communications function correctly, and do not affect the performance of the system, remove all protocols other than TCP/IP.
	To remove unnecessary DCOM protocols:
	1. Select <b>Start &gt; Run</b> .

2. In the **Run** dialog box, type **dcomcnfg**, and then click **OK**.

- 3. In the **Component Services** tool, expand **Component Services**, open the **Computers** folder, right-click **My Computer**, and then select **Properties**.
- 4. Click the **Default Protocols** tab. If the DCOM Protocols list shows protocols in addition to TCP/IP, remove those unnecessary protocols. For example, remove the protocol Connection-oriented SPX.
## Installing FactoryTalk View

The FactoryTalk View installation DVD provides all the software you need to develop and run distributed systems involving multiple computers on a network, or local applications confined to a single computer using FactoryTalk View Site Edition (SE).

This chapter uses FactoryTalk View Studio Enterprise to illustrate the installation steps, because it includes all mandatory and optional installation choices included with the other selections on the welcome screen.

To learn about upgrading an existing version of FactoryTalk View SE, see <u>Upgrading an operating FactoryTalk View SE application</u> on page 99.

FactoryTalk View supports two installation methods: Setup wizard installation and unattended installation.

The unattended installation reduces user interaction and provides command line parameters to install FactoryTalk View products. See <u>Use unattended</u> installation on page 137.

This chapter uses the Setup wizard installation method to illustrate the steps. The overall installation process includes:

- 1. Decide which FactoryTalk View SE components to install on page 38
- 2. Prepare for installation on page 39
- 3. Launch Setup Wizard and select what to install on page 39
- 4. <u>Setup common product and install IIS</u> on page 40
- 5. Provide information for the installation on page 43
- 6. <u>Check selections and start the installation</u> on page 50
- 7. <u>Complete installation</u> on page 51
- 8. Install SE clients in a distributed system on page 52
- 9. Post-installation procedures on page 54

## Steps to install FactoryTalk View SE

## Decide which FactoryTalk View SE components to install

The FactoryTalk View Setup Wizard offers several options for installing the FactoryTalk View Site Edition software. You can select:

- Studio Enterprise
- Site Edition Server
- Site Edition Client
- Site Edition Station
- Stand-alone RSLinx Enterprise Server
- Stand-alone FactoryTalk Directory Server

The option you choose depends on the type of FactoryTalk View Site Edition application or software component you plan to run on the computer and on the design of your control system.

For each selection on the Welcome Screen, the following table shows the mandatory, recommended and optional software components to install.

Selected Application	Mandatory Applications	Recommended and Optional
Studio Enterprise	FactoryTalk View Studio Enterprise FactoryTalk Services Platform FactoryTalk Activation Manager FactoryTalk Alarms and Events RSLinx Enterprise	FactoryTalk View SE Server FactoryTalk View SE Client Device Status and Diagnostics Faceplates RSLinx Classic FactoryTalk Historian Connectivity
Site Edition Server	FactoryTalk View SE Server FactoryTalk Services Platform FactoryTalk Activation Manager FactoryTalk Alarms and Events RSLinx Enterprise	FactoryTalk View SE Client RSLinx Classic
Site Edition Client	FactoryTalk View SE Client FactoryTalk Services Platform FactoryTalk Activation Manager FactoryTalk Alarms and Events	FactoryTalk Historian Connectivity
Site Edition Station	FactoryTalk View SE Server FactoryTalk View SE Client FactoryTalk Services Platform FactoryTalk Activation Manager FactoryTalk Alarms and Events RSLinx Enterprise	FactoryTalk View Studio Device Status and Diagnostics Faceplates RSLinx Classic FactoryTalk Historian Connectivity
Stand-alone RSLinx Enterprise Server	RSLinx Enterprise FactoryTalk Services Platform FactoryTalk Activation Manager	FactoryTalk Alarms and Events RSLinx Classic
Stand-alone FactoryTalk Directory Server	FactoryTalk Services Platform FactoryTalk Activation Manager	

# Prepare for installation

Launch Setup Wizard and selecting what to install To prepare for the installation:

- Ensure that the user installing the software has administrative rights in Windows.
- If installing FactoryTalk View Studio Enterprise, locate the serial number because you will be prompted for it during the installation. Serial numbers are generally on the original packaging of the installation media.
- Schedule downtime for the system if you are upgrading operating applications or replacing computers during the installation.

To launch the Setup Wizard and select the product to install:

- 1. Close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double click **Setup.exe** within the installation package.
  - Tip: If the installation does not start automatically, double-click **D:\Setup.exe**, where **D:\** is the drive containing the DVD.
- 3. The **Welcome** screen offers a pull down menu to select the products you would like to install.

FactoryTalk® View Setup 8.20.0	00 (CPR 9 SR 8)	
	Welcome to the FactoryTa	lk® View Setup Wizard.
	Select your FactoryTalk® View Proc	Juct:
	Select Product to Install	
E.A.		
	🔽 Install Adobe Reader	
		Next > Cancel

- 4. Select the appropriate product for the computer you are upgrading or installing.
  - Tip: Information about Studio for Machine Edition and Machine Edition Station for Windows appears in FactoryTalk View Machine Edition Installation Guide VIEWME-IN007.
- 5. Adobe Reader will be installed unless you clear the check box. Adobe Reader is required to open the Installation Guide, User Guide, and other manuals.

## Setup common products and install IIS

- 6. After you make the selection from the list, the Setup Wizard will automatically offer different choices for the software products to install. Make your choices and click **Next**. The applications you have selected will determine the sequence of installation.
- 7. Follow the prompts for the product you have selected.

On the **Rockwell Software Common Setup** page, there may be three different options displayed:

- **Mandatory** (greyed-out and checked) software that will be automatically installed as part of the selected application.
  - **Tip:** If a product is already installed, it will be greyed out with an unchecked check box.
- **Recommended** (check box with a green check) indicates software that Rockwell recommends for the application. You may decide to uncheck the box so the software does not install.
- **Optional** (clear check box) indicates software that you may wish to include depending on your system. Check the box to include the software during installation.

When a new product from the middle selection box is selected, version and upgrade information is shown in the right text box. If applicable, information about the previous version is also displayed in the right text box.

Make any changes desired and click Next to proceed.

	Please select software products to install	USTEN, THINK, SOL
Configuring Products:	Eacton/Talk Services Platform	FactoryTalk Services Platform Versions:
MSSQL Configuration FT View Studio Enterprise FT View Site Edition Server FT View Site Edition Client Computer Environment	FT Vew Stude Enterprise     FT Vew Stee Edition Client     FT Vew Ste Edition Client     Factory Talk Advantant Manager     Factory Talk Advantant Versta     RSUrx Enterprise     RSUrx Classic     Poevice Status and Diagnostic Faceplates     FactoryTalk Historian Connectivity	<ul> <li>V2.80.00 (CPR 9 SR 0) Engleth         <ul> <li>Installe the FactoryTalk Services Platform to install common Relevant Automation software components required by FactoryTalk Vew</li> <li>Available for installation</li> </ul> </li> </ul>
	Hard drive enace maying to install	View Release Notes for Selected Product
Rockwell Software Common Step 1 of 8 - Product Selection	FactoryTalk Services Platform All selected products	287.0MB 3211.4MB

#### FactoryTalk activation warning

Some products require activation using FactoryTalk Activation Manager. Even if you previously used a different method of activation, all FactoryTalk View software must be activated using FactoryTalk Activation Manager. Click **Next** to proceed.



#### **IIS check and installation**

The Setup Wizard automatically installs Microsoft Internet Information Services (IIS) if needed. Click **Install IIS** to proceed.



After selecting Install IIS, you will see the text appear in this screen at the top:

Installing IIS - This may take several minutes, please wait...

Once the IIS installation is complete, the text will appear in this screen at the top:

IIS is installed correctly, please click Next to continue.

**Tip:** For Windows Server 2008 SP1 and SP2 running network applications, the WebDAV module must be installed in IIS. Click on **Download WebDAV** to download and install the extension from the Microsoft website.

After IIS and WebDAV are installed as needed, click Next to proceed.

#### Dependent software process termination warning

During the installation, the Setup Wizard identifies Rockwell Automation software that will be replaced. The program automatically terminates the programs listed on the following dialog box.

Note: 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.

Click Next to proceed.

actoryraik@ view 5	Users antiquities and a below before continuing
onfiguring Products:	Prease review the notes below before continuing
Rockwell Software Common	The FactoryTalk View Installation will automatically terminate all Rockwell Automation software processes before installing the following product(s). All Rockwell Automation
MSSQL Configuration	software products should be shutdown before installation.
FT View Studio Enterprise	FactoryTalk Alams and Events v2.80.00 (CPR 9.SR 8) English
FT View Site Edition Server	FactoryTalk Services Platform v2.80.00 (CFR 9 SR 8) English
FT View Site Edition Client	FT View Site Edition Client v8.20.00 (CPR 9 SR 8) English FT View Site Edition Server v8.20.00 (CPR 9 SR 8) English
Computer Environment	FT View Studio Enterprise v8.20.00 (CPR 9 SR 8) English
	Click Next to continue, Cancel to exit.

# Provide information for the install

The Setup Wizard will only show this Serial Number entry page when FactoryTalk View Studio Enterprise is selected for installation. All other product serial numbers will be entered through the FactoryTalk Activation Manager after the installation is complete.

User name and organization are optional and not required for all installations. A serial number reveals which edition of FactoryTalk View you purchased. Valid serial numbers are important to get activation keys and call Technical Support. If you do not enter a valid serial number, you will be allowed to proceed with the installation. Serial number information is available from the product packaging.

Enter the serial registration information and click Next.

onfiguring Products	Please enter the following information	USTEN, THINK, SOLV
Pockwell Software Common	User Name:	
MSSOL Configuration	Rockwell Automation	
FT View Studio Enterprise	Organization:	
FT View Site Edition Server	Rockwell Automation	
FT View Site Edition Client	Serial Number:	
Computer Environment	1234567890	
ockwell Software Common		

#### **End User License agreement**

End-user license agreements (EULA) spell out your rights and responsibilities. Depending on the applications being installed, it is possible that there may be more than one license agreement on this page. The individual license agreements are listed above the text box.



Some software products may be delivered or made available only after you agree to the terms and conditions of each of the license agreements.

#### To accept the license agreements:

- 1. Select an agreement at the top of the dialog box to read the license agreement.
- 2. Repeat for each license agreement.
- 3. When all license agreements have been read, click **Accept All** to agree with the terms of all the listed license agreements and continue.

If you do not accept the terms of the license agreements click **Decline**. The Setup Wizard will end.

To return to the previous screen, click **Back**.

#### File location for product installation

Select the location for Rockwell Automation software. If needed, select the pull down menu to browse to another drive location.

Once the drive is selected, click Next.

FactoryTalk® View Studio Enter	prise Setup 8.20.00 (CPR 9 5R 8)		
Rockwell So FactoryTalk® View S	ftware Commo tudio Enterprise 8.20.00 (	n Setup (CPR 9 SR 8)	
Configuring Products:	Select drive where all products will be	e installed	USTEN, THINK, SOLV
Rockwell Software Common	C:\Program Files\Rockwell Software	C:\	
MSSQL Configuration			
<ul> <li>FT View Studio Enterprise</li> </ul>			
<ul> <li>FT View Site Edition Server</li> </ul>			
FT View Site Edition Client			
Computer Environment			
Rockwell Software Common Step 7 of 8 - Install Location			
Explore CD Contents View Installati	ion Guide	< Back	Next > Cancel

#### Select Setup Type

This dialog box allows you to select the most appropriate type of installation for your applications.

- **Complete** installs all the components available in the Setup Wizard.
- **Custom** allows you to select optional components such as Help and demo applications.

Select a setup type and click Next.



#### SQL Server sign-in or installation

During the installation, the Setup Wizard determines whether a compatible SQL server is available on the computer.

🖥 FactoryTalk® View Studio Ente	rprise Setup 8.20.00 (CPR 9 SR 8)
MSSQL Conf FactoryTalk® View S	<b>iguration Setup</b> Studio Enterprise 8.20.00 (CPR 9 SR 8)
Configuring Products:	Input password of System Administrator (SA):
Rockwell Software Common	Microsoft SQL Server 2008 R2 is required for FactoryTalk® View 8.20.00. By default, Microsoft SQL Server 2008 R2 Express x86 will be installed. Please enter a password for the System Administrator
MSSQL Configuration	(SA) account and click Next to continue.
FT View Studio Enterprise	If you want to use other compatible SQL Server editions, please click the Compatible Editions link for more details
<ul> <li>FT View Site Edition Server</li> </ul>	Compatible Editions
• FT View Site Edition Client	Liear Name:
Computer Environment	sa s
	Password: (Guidelines)
	Verify Password:
MSSQL Configuration Step 1 of 1 - MSSQL Configuration	
Explore CD Contents View Installa	tion Guide Cancel

FactoryTalk View Site Edition tag database supports the following editions:

- SQL Server 2008 R2 Express (32-bit or 64-bit)
- SQL Server 2008 R2 Standard (32-bit or 64-bit)
- SQL Server 2008 R2 Enterprise (32-bit or 64-bit)

If a supported edition of **FTVIEWx64TagDB** instance exists, the installer skips the SQL configuration step.

If it is not already installed, the Setup Wizard will prompt for a new password and will ask to verify the password as shown above.

**Tip:** To use other compatible SQL Server editions, you need to manually install it. Click **Compatible Editions** for instructions or see <u>Install compatible SQL Server editions</u> on <u>page 47</u>

New passwords must be *strong passwords*. Click **Guidelines** to review the requirements for strong passwords.

Enter and verify the password, then click Next.

**Note:** The chosen password should be recorded and saved along with other administrator passwords for system maintenance personnel.

#### Strong password guidelines

Strong passwords are not readily guessed by a person, and are not easily hacked using a computer program. Strong passwords cannot use prohibited conditions or terms, including:

- A blank or NULL condition
- Password
- Admin
- Administrator
- sa
- sysadmin

A strong password cannot be the following terms associated with the installation computer:

- The name of the user currently logged onto the machine
- The computer name

A strong password must be more than 8 characters in length and satisfy at least three of the following four criteria:

- It must contain uppercase letters
- It must contain lowercase letters
- It must contain numbers
- It must contain non-alphanumeric characters; for example, #, %, or ^

#### Install compatible SQL Server editions

FactoryTalk View Site Edition provides a batch file that you can use to install the SQL Server edition with minimal user intervention. Follow the steps below:

- 1. Close all open Windows programs, including FactoryTalk View setup program.
- 2. Open the **Command Prompt** window:

- (Windows Server 2012, Windows 8.1, and Windows 8) Press the Windows button+R. In the Open text box, input cmd and click OK.
- (The other supported operating systems) From the Windows Start menu, select **All Programs** > **Accessories** > **Command Prompt**.
- 3. In the **Command Prompt** window, navigate to the following directory where **D**:\ is the drive containing the disk:

#### D:\Redist\SQLServerEXPR\_2008R2SP2

In this example, type the following command and press Enter:

cd /D "D:\Redist\SQLServerEXPR 2008R2SP2

4. Type a command line with the following syntax:

```
"Install Compatible SQL.bat" [SQL setup.exe path]
[Product key] [SA password]
```

#### where

- [SQL setup.exe path] Specifies the full path of SQL Server setup.exe, for example, E:\setup.exe.
- [Product key] Specifies the SQL Server product key.
- [SA password] Specifies the SQL Server System Administrator (SA) password.

All parameters are required.

```
Example: If your SQL Server setup.exe is under the drive E:, the
product key is 01234-56789-ABCDE-FGHIJ-KLMNO, and
the SA password is mySaPwd@123, type the following
command:
    "Install Compatible SQL.bat"
    E:\setup.exe
01234-56789-ABCDE-FGHIJ-KLMNO
mySaPwd@123
```

5. Press **Enter**. The installation starts. Follow the on-screen instruction to complete the installation.

#### **Configure products**

If you selected the **Custom** setup, you can decide whether to install the demo applications and help files when performing a FactoryTalk View Studio Enterprise installation.

Fractory talk® view Studio Elite	rprise Setup 8.20.00 (CPR 9 SR 8)	· · · · · · · · · · · · · · · · · · ·
FT View Stud FactoryTalk® View S	dio Enterprise Set Studio Enterprise 8.20.00 (CF	Cup PR 9 SR 8) USTEN THINK SOME
Configuring Products:	Select one or more features to install	
✓ Rockwell Software Common	FactoryTalk View Studio Enterprise	Description:
✓ MSSQL Configuration	Demo Applications	Installs the FactoryTalk View Studio Enterprise
FT View Studio Enterprise	E Trop	manage projects for FactoryTalk View Site Edition and Machine Edition
FT View Site Edition Server		
• FT View Site Edition Client		
Computer Environment		
		View Release Notes for Selected Product
	Hard drive space required to install:	F0.010
FT View Studio Enterprise Step 1 of 1 - Feature Selection	All selected products	30.5MB 3211.4MB

Under the FactoryTalk View Site Edition Server application, you can also decide whether to install the client install portal feature. The feature allows you to install Site Edition Client through a web browser in a distributed system. For more information about the feature, see <u>Installing SE clients in a distributed system</u> on page 52.

FactoryTalk® View S	tudio Enterprise 8.20.00 (CP	R 9 SR 8)
onfiguring Products:	Select one or more features to install	USTEN, THINK, SOU
Rockwell Software Common	FactoryTalk View Site Edition Server	Description:
MSSQL Configuration	Client Install Portal	Installs FactoryTalk View Site Edition HMI Server that
FT View Studio Enterprise		screens and data.
FT View Site Edition Server		
FT View Site Edition Client		
Computer Environment		
		View Release Notes for Selected Product
T View Site Edition Server	FactoryTalk View Site Edition Server	53.4MB
tep 1 of 1 - Feature Selection	All selected products	3211.4MB

Tip: Make sure to select the Client Install Portal check box at the first time if you plan to use this feature. Otherwise, you will not be able to add and install it in the **Program** Maintenance mode.

Some other applications may not provide any choices.

Click **Next** to continue.

Once all the selections are made, the Setup Wizard displays the prerequisites and Rockwell software that will be installed.

- **Configuration Summary** indicates the software that will be included in the installation process.
- **Prerequisite Software** is required on the computer to support the Rockwell Software applications.
- **Rockwell Software** applications are the Rockwell applications queued for installation.

This step shows you the list of software that will be installed based on the selections made in the Setup Wizard.

Select the software names to show descriptions in the bottom text window.

To make a different product selection, click **Back**.

If everything in the list looks okay, click **Install** to start the installation process.



## Check selections and start the installation

#### Start the installation process

After installing prerequisites, the installer automatically installs all the Rockwell Software applications selected previously. Installation is automatic and does not require any input from the user.

Installation status updates are provided at the bottom, just above the progress bar.



# Complete the installation

When the installation completes, the Setup Complete page opens.

To receive the patch notification when you install Rockwell software, click **Register for updates** and subscribe.

To proceed directly to activation of the installed components, click **Finish**. You can also clear the check box for **Activate products using FactoryTalk Activation** to finish without activation. See <u>Activate FactoryTalk View</u> <u>software on page 57</u>. After you click **Finish**, you will be prompted to restart the computer. Click **Yes** to restart now. Click **No** to restart later.

PercoryTalk® View Studio Enterprise Setup 8.20.00 (CP Rockwell Software Se FactoryTalk® View Studio Enterpris	19588) E <b>tup</b> e 8.20.00 (CPR 9 S	R 8)	×
Installation Summary: ✓ FactoryTalk Services Platform Platd ✓ Studio 5000 Launcher V 36. 3939 Er ✓ FT View Studio Enterprise v3.20.00 ✓ FT View Site Edition Client v3.20.00 ✓ FT View Site Edition Client v3.20.00 ✓ FT View Site Edition Client v3.20.00 ✓ FactoryTalk Alarms and Events v2.4 ✓ Rodswell Automation USBCIP Driver ✓ RSLink Enterprise v5.80.00 (CPR 9	studio Enterprise Setup is com Juere's an update? Jusing FactoryTalk Activation	USTEN. TH	NK SOIVE
Explore CD Contents View Installation Guide		< Back Einish	Cancel

# Install SE clients in a distributed system

In a distributed system, after installing the server computer with the client install portal feature, you can install SE clients through the web browser.

#### To install the SE client application:

- 1. On the client computer, open Internet Explorer.
- 2. In the Address field of Internet Explorer, type the following address:

#### http://servername/ftviewclient

where *servername* is the name of your FactoryTalk View SE server computer.

For example, if your FactoryTalk View SE server is called MYSERVER, type:

#### http://MYSERVER/ftviewclient

If you are using SSL, then begin with **https://** instead.

3. Press Enter.

Chapter 4

Internet Explorer displays a page from the server that allows you to install the FactoryTalk View Site Edition Client application.

Welcon Version: 8.2	ne to FactoryTalk View Site Edition Client Installation Page 0.00 (CFR 9 SR 8)	Factory <b>Talk</b> ® View SE
Install Fa	actoryTalk View Site Edition Client Software	
Microsoft .NE	ET Framework 4.0 is required before you can install FactoryTalk View Site Edition Client. Please click the lin	nk below to install .NET Framework 4.0 firstly.
🛃 Install	.NET Framework 4.0 on this computer.	
Click the link	below to start FactoryTalk View Site Edition Client software installation. This will start the FactoryTalk Vie	w Site Edition Client Setup to install the Client Software.
	FactoryTalk View Site Edition Client on this computer.	
If you are di	splaying data from FactoryTalk Historian on your trends, then install this on your client too.	
Install	FactoryTaik Historian Connectivity tools.	
Tip:	If Internet Explorer displays an error message	ge that it
	cannot connect to the install web page, try a	adding the
	FactoryTalk View Site Edition website (URL	above) to
	your local intranet site list.	
	To do this, in Internet Explorer, click Tools	> Internet
	Options > Security tab > Local intranet >	Sites >
	Advanced, and add the website to the list.	For more
	information about the local intranet, refer to	Windows

- Microsoft .NET Framework 4.0 is required before you can install FactoryTalk View Client. If it is not installed, click Install .NET Framework 4.0 on this computer. The option is not shown if it is already installed.
- 5. Follow the on-screen instructions. If prompted to restart your computer, click **Restart Now**.
- 6. Once the computer has restarted, repeat steps 1 to 4.

Help and Support.

- To install SE Client, click Install FactoryTalk View Site Edition Client on this computer. Follow the on-screen instructions. If you are displaying data from FactoryTalk Historian on trends, click Install FactoryTalk Historian Connectivity tools. Follow the on-screen instructions to complete the installation.
  - **Tip:** FactoryTalk Historian Connectivity allows the TrendX object to retrieve data from a Historian SE Server or Historian ME Module. It makes updates to FactoryTalk Administration Console and FactoryTalk View SE Studio to display an Historian icon for both Historian SE and Historian ME when they are registered. You can use it to create new Historian SE points from TrendX and select existing Historian points from Historian SE or Historian ME.

# Post-installation procedures

Now that FactoryTalk View product has been installed, there may be several final setup steps that must be completed:

- Install product updates on page 126
- Specify the Network Directory server location on page 54

#### Specify the Network Directory server location

Use the FactoryTalk Directory Server Location Utility on all application server and client computers to specify the computer that will host the FactoryTalk Network Directory server.

To set up the local computer as the Network Directory server:

1. On the Network Directory computer, click **Start** > **All Programs** > **Rockwell Software** > **FactoryTalk Tools**, and then click **Specify FactoryTalk Directory Location**.

You will have to log on as an administrator on the local computer.

2. If *localhost* is displayed in the field under Computer hosting directory server, the computer is already specified as the Network Directory host. You can close the utility.

If *localhost* is not displayed, click the **Browse** button.

- 3. In the **FactoryTalk Directory Server Configuration** dialog box, click **This computer**, and then click **OK**.
- 4. Click **OK** again, to close the FactoryTalk Directory Server Location Utility.

To specify the Network Directory on client and server computers:

- 1. On the Network Directory computer, click Start > All Programs > Rockwell Software > FactoryTalk Tools, and then click Specify FactoryTalk Directory Location.
- 2. If a remote computer is hosting the Network Directory server, click the **Browse** button beside the field, **Computer hosting directory server**.
- 3. In the FactoryTalk Directory Server Configuration dialog box, click **Remote computer**.
- 4. Type the name of the Network Directory server computer, or click the **Browse** button to find and select the computer, and then click **OK**.

You will have to log on as an administrator on the remote computer.

5. Click **OK** again, to close the FactoryTalk Directory Server Location Utility.

Repeat steps 1 to 5 on all client and server computers that will participate in the deployed network distributed application.

# Activating FactoryTalk View software

For continuous use of FactoryTalk View SE and other Rockwell Software products, computers running the software must have access to activation files.

To manage and provide activations for FactoryTalk View SE software components, use the FactoryTalk Activation Manager installed with FactoryTalk View.

FactoryTalk Activation Manager provides a secure, software-based system for activating Rockwell Software products and managing software activation files.

With FactoryTalk Activation Manager, there is no need for a physical master disk or any physical media; instead, activation files are generated and distributed electronically.

FactoryTalk View SE products use two types of activations:

- **Floating** concurrent activations are checked out of an activation server located on the network, and require a continuous network connection.
- **Borrowed** concurrent activations are time-expiring activations checked out of an activation server on the network, and do not require a continuous network connection.

For standard installations of the product software, FactoryTalk View SE supports only the use of both types of **shared concurrent** activations. Node-locked activations are not supported.

**Tip:** To learn about the types of activation that other Rockwell Automation products can use, see the product documentation or contact your local Rockwell Automation Sales office.

### What happens if FactoryTalk View is not activated?

If the FactoryTalk View components you have installed cannot be activated, for example, because the activation server is unavailable or because borrowed activations have expired, the software will continue to run for up to seven days.

## About FactoryTalk Activation Manager

The seven-day grace period allows time to correct the problem with acquiring activations without disrupting critical applications. If activation is restored within seven days, normal operations will resume.

If activation is not restored, the grace period will expire. After the grace period expires, if you restart FactoryTalk View SE and activation remains unavailable, the software will run for two hours in demo mode.

With a FactoryTalk View SE network distributed application, running in demo mode, you can:

- Create or load up to five HMI servers locally in FactoryTalk View Studio.
- Create or load up to five graphic displays per HMI server.
- Run a local station FactoryTalk View application for up to two hours. In demo mode, remote clients cannot connect to a FactoryTalk View server.
- In Symbol Factory, import only the first graphic in each category.

### Set up client computers to obtain floating activations

Floating concurrent activations are assigned automatically to clients that need them, and returned automatically to the activation server pool when FactoryTalk View SE stops running on the client, or when the client computer shuts down.

Client computers must be set up to obtain floating activations from the activation server.

If you prefer to use borrowed activations for clients, skip to <u>Borrow</u> activations for development computers on page 59.

After you set up the activation server (or servers), you can specify which server each client computer will obtain activations from.

Once a client is connected to a server, all you have to do is to run the FactoryTalk View software (for example, the FactoryTalk View SE Client), and the server will issue available activations automatically.

A continuous network connection is required for an activation client to use floating activations. After a client obtains a floating activation, when the activation server detects that the client has been disconnected, the activation is returned to the server pool.

To ensure that critical software components (redundant HMI servers, for example) can always obtain the necessary activations, set up an activation server on the computer where the software is running.

Ensure that network application components stay activated	To ensure that critical software components in a network application using floating activations can always obtain the necessary activations, even if the network is disrupted, set up a FactoryTalk Activation server on every computer where the FactoryTalk View SE software is running. This includes all clients and all servers, whether redundant or not. For example, to ensure that a redundant FactoryTalk View SE Server
	remains activated, install the activation server on both computers hosting the redundant server pair, and then add the necessary activations to those computers.
Borrow activations for development computers	If it is not convenient for a development computer to remain connected to the network where the activation server resides, you can connect to the activation server temporarily, borrow a concurrent activation for a limited amount of time, and then disconnect. When the time-limited activation expires, its associated software is no longer activated, and the activation automatically becomes available again from the server's activation pool.
	Only the FactoryTalk View Studio activation keys can be borrowed. While developing Network applications disconnected from the network, the FactoryTalk View Studio activation key is shared by any test clients and HMI servers in your application, allowing all necessary components to run for development purposes.
	<b>Note:</b> To use borrowed activations, you <b>must</b> upgrade to FactoryTalk Activation Manager version 3.30 or later (included on any FactoryTalk CPR 9 SR 4 product's DVD) on all server and client computers where the borrowed activations will be used.
Activation keys for FactoryTalk View software components	The activation files you download from the Rockwell Software Activation Website contain the activation keys you purchased, in encrypted form. The activation key is the software that activates FactoryTalk View SE components. Following is a list of activation keys used by the FactoryTalk View SE and ME products.

**Tip:** For information about the keys required to activate other Rockwell Automation products in your application, see the product documentation.

To activate this software product or component	Use this key
FactoryTalk View Studio* *Includes software for developing and testing FactoryTalk View Site Edition and Machine Edition applications	RSV.STUDIO
FactoryTalk View SE Server (network distributed applications), unlimited displays	RSVSESRV.MAX
FactoryTalk View SE Server (network distributed applications), 250 displays	RSVSESRV.250

FactoryTalk View SE Server (network distributed applications), 100 displays	RSVSESRV.100
FactoryTalk View SE Server (network distributed applications), 25 displays	RSVSESRV.25
FactoryTalk View SE Client (network distributed applications), read and write	RSVSECLI.RW
FactoryTalk View SE Client (network distributed applications), view only	RSVSECLI.RO
FactoryTalk View SE Station (network station and local station applications), unlimited displays	RSVSE.MAX
FactoryTalk View SE Station (network station and local station applications), 250 displays	RSVSE.250
FactoryTalk View SE Station (network station and local station applications), 100 displays	RSVSE.100
FactoryTalk View SE Station (network station and local station applications), 25 displays	RSVSE.25
FactoryTalk View SE Station (network station and local station applications), 15 displays	RSVSE.15

# Sharing keys among multiple software components

Multiple FactoryTalk View SE software components can function using one activation key in the following cases:

- Multiple instances of FactoryTalk View Studio or the FactoryTalk View SE Client running on the same computer can use a single key (RSV.STUDIO or RSVSECLI), as long as the components are not running in a Terminal Services session.
- In the network application of FactoryTalk View SE versions earlier than 6.10, for development and testing purposes, one FactoryTalk View Studio key activates a FactoryTalk View SE Client and SE Server on the same computer. Remote clients and servers require component-specific activations.
  - **Note:** In version 6.10 or higher, one FactoryTalk Studio key can no longer activate the local server or client to run in test run mode.
- Local applications use a single key (RSVSE.\*) to activate both the FactoryTalk View SE Client and the FactoryTalk View SE Server at run time. These components running together are also known as FactoryTalk View SE Station.
  - **Tip:** FactoryTalk View SE Server activations—known as capacity activations because they are based on the number of displays in an application—cannot be shared.

#### Read-write versus view-only activations

In a network application, FactoryTalk View SE Clients can use two types of activation:

- Read-write keys (RSVSECLI.RW) allow full read-write privileges.
- View-only keys (RSVSECLI.RO) allow view-only privileges.

Whether a FactoryTalk View SE Client runs in read-write or in view-only mode depends on the type of activation key available for the client to use, *and* whether the client itself is set up as read-write or view-only:

- If the activation server can only provide view-only licenses, and a read-write client obtains one of these licenses, then the activation overrides the client's configuration, and the client runs in view-only mode.
- If the activation server can only provide read-write licenses, and a view-only client obtains one of these licenses, then the client's configuration overrides the activation, and the client runs in view-only mode.
- Do not rely on available activation keys to determine whether the FactoryTalk View SE Client runs in read-write or view-only mode. Instead, to ensure that a client always runs in view-only mode, choose the view-only option when setting up the client's configuration file. For details, click **Help** in the FactoryTalk View SE Client wizard.

# Deploying network distributed applications

After developing and testing a FactoryTalk View Site Edition network distributed application, you can deploy it to run in a live setting, such as the plant floor. Deploying a network distributed application often involves installing FactoryTalk View SE software components on multiple client and server computers.

For details about installing the software, see <u>Installing FactoryTalk View</u> on page 37. For information about upgrading a network distributed application that is already deployed, see <u>Upgrading an operating FactoryTalk View SE</u> application on page 99.

For details about the structure and content of network distributed applications, see Chapter 6, *Working with network distributed applications* in the *FactoryTalk View Site Edition User's Guide*.

## Overview of tasks Th

The checklist in this section summarizes the basic tasks involved in deploying a FactoryTalk View SE network distributed application. Each task is described in detail in the rest of this chapter. Add or remove steps as necessary to create a customized procedure that reflects the design and content of your FactoryTalk View application. For example, your application might include additional communications or database servers.

For details about deploying FactoryTalk Alarms and Events servers, see the *FactoryTalk Alarms and Events Configuration Guide* by selecting **Start** > **All Programs** > **Rockwell Software** > **FactoryTalk Tools** > **FactoryTalk Alarms and Events Configuration Guide**.

#### Task checklist

- Back up the network distributed application on page 64.
- <u>Restore the network distributed application</u> on page 65.
- Renew data server shortcuts, topics, and device paths on page 68.
- <u>Set up additional HMI server properties</u> on page 69.
- <u>Set up the FactoryTalk View SE Clients</u> on page 73.
- <u>Run the FactoryTalk View SE Clients</u> on page 75 to test the application.

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# Back up the network distributed application

Use the **Distributed Application Manager** tool to back up a FactoryTalk View SE network distributed application. The archive includes all FactoryTalk Directory like accounts, passwords, policies and security settings. It also includes all application contents like application configurations, HMI servers, data servers, and tag Alarm and Event servers.

- RSLinx Classic configuration files are not included when you back up an application. You need to back up the configuration files before upgrading. For instructions, see <u>Back up and restore RSLinx Classic</u> <u>configurations</u> on <u>page 67</u>.
  - For information about backing up and restoring files that belong to FactoryTalk Tag Alarm and Event Servers, see the FactoryTalk Alarms and Events Help.

Before backing up an application, record the user names and passwords of administrative users set up for the application, in case you need this information after restoring the application.

#### To back up the application:

- 1. On the HMI server, select Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Distributed Application Manager.
  - Tip: The logged on user must have the **Backup and restore** directory contents permission. For more information, see FactoryTalk Security Help.
- 2. In the **Create a Backup** tab, select your application and follow the wizard. The following example shows an overview of the tool when creating a backup. For more instructions, see Distributed Application Manager Help.

	Dis	stributed Application Manager			
Home Create a Backup Re	store an Archive			APCNDAE-CDI	ORKY1\SE
Choose Application	<sup>(2)</sup> Review a	and Customize > Insta	antFizz		
🖙 🚺 Network	Area	Server Type	Server Name	Host Machine	Datalog
InstantFizz	HMI_Area	HMI Server	InstantFizz_HMI	APCNDAE-CDDRKY1(PRIMARY)	•
MySecondApplication	Data_Area	TRSLinx Enterprise Server	RSLinx Enterprise	APCNDAE-CDDRKY1(PRIMARY)	
	FTAETag_Area	Tag Alarm and Event Server	FTAETag_Server	APCNDAE-2J4RY2X(SECONDARY)	
	<				
	<ul> <li>Encrypt the ba</li> <li>Finalize</li> </ul>	and Begin Backup			
	Archive Name:				
	InstantFizz				
	Target Folder:				-
	C:\Users\Public\	Documents\RSView Enterprise\SE	Archives		Backup

# About backing up System information with an application

The following illustration shows what a FactoryTalk View SE network distributed application looks like when opened in FactoryTalk View Studio.



The FactoryTalk Network Directory (also called the Network Directory) is represented at the top of application hierarchy. One level down, the System folder stores settings that are used by all the applications that belong to the same Network Directory.

For example, FactoryTalk user and computer accounts set up for each application are stored in the System folder.

**Note:** RSLinx Enterprise device paths are also saved with System information, and might not be correct for the computer where the application will be restored. For information about checking device paths after restoring an application. see <u>Verify RSLinx</u> Enterprise shortcuts on page 116.

# Restore the network distributed application

Before restoring the network distributed application, all client and server computers in the application must point to the same FactoryTalk Directory server.

You can restore the application to an existing or a new FactoryTalk Directory. You can choose to restore the HMI project files only, the application only, the application with FactoryTalk Directory, or the application with FactoryTalk Directory and security identifier. Note: Restoring archived application with FactoryTalk Directory System information replaces existing FactoryTalk Directory System settings on the computer. When deploying a FactoryTalk View SE network distributed application, it is recommended that you do not restore FactoryTalk Directory System information with the application, as this will remove existing computer accounts and prevent users from logging on to the Network Directory. Include FactoryTalk Directory System information in the restore operation only if there are no applications using the current Network Directory, or if the effect on existing applications will be minimal.

During the restore operation, you can also:

- Specify HMI server host computer names.
- Specify data server host computer names.
- Specify tag alarm and event server host computer names.
- Restore both the primary and secondary servers at the same time when restoring an archive with redundant servers.

#### To restore an application:

- On the HMI server, select Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Distributed Application Manager.
  - Tip: The logged on user must have the Backup and restore directory contents permission. For more information, see FactoryTalk Security Help.
- 2. In the **Restore an Archive** tab, specify the restore options.

3. Follow the wizard to restore the application. The following example shows an overview of the tool when restoring an archive. For more instructions, see Distributed Application Manager Help.



#### **Restore RSLinx Enterprise configurations**

When you back up a FactoryTalk View SE network distributed application, the archive includes RSLinx Enterprise shortcut names, but does not include device path information.

After restoring the application, you must open the Communications Setup editor in FactoryTalk View Studio, and re-apply the device path for each configured shortcut.

For details, see <u>Renew data server shortcuts</u>, topics, and device paths on page <u>68</u>.

#### **Back up and restore RSLinx Classic configurations**

RSLinx Classic configuration files are not included when you back up an application. You have to back up, move, and restore the files manually.

If RSLinx Classic is installed on the development and production computers, you can use the RSLinx Classic Backup/Restore tool to back up and restore configuration files.

Tip: You can also restore RSLinx Classic configuration files from the Wizard Completed window of the RSLinx Classic software setup program.

#### To move RSLinx Classic configuration files:

- On the development computer, click Start > All Programs > Rockwell Software > RSLinx, and then click RSLinx Classic Backup Restore Utility.
- 2. In the RSLinx Classic Backup/Restore tool, click Backup.

Baskus	
Баскир	
Restore	
Close	

- 3. Select a folder for the backup file, type a file name, and then click **Save**.
- 4. In Windows Explorer, copy the backup file (with .rsx extension), and then paste it into a location on the data server production computer.
- On the production computer, click Start > All Programs > Rockwell Software > RSLinx, and then click RSLinx Classic Backup Restore Utility.
- 6. In the RSLinx Backup/Restore tool, click **Restore**.
- 7. Find and select the backup file you just pasted, and then click **Open**.

After restoring RSLinx data servers in the application, renew or verify the topics, shortcuts, and device paths associated with each data server, as needed.

If you are restoring redundant data servers, then the device paths must be confirmed and reapplied for both the primary and the secondary server.

#### To renew RSLinx Enterprise device paths:

- 1. Open the restored application in the FactoryTalk Administration Console.
- 2. In the Explorer window, expand the data server (RSLinx Enterprise), and then double-click **Communications Setup**.

### Renew data server shortcuts, topics, and device paths

- 3. In the Communications Setup editor, select each configured RSLinx Enterprise shortcut, point the shortcut at the correct device, and then click **Apply**.
- 4. Save the configuration, and then close the **Communications Setup** editor.

#### To verify RSLinx Classic topics:

- 1. On the data server computer, select **Start > All Programs > Rockwell Software > RSLinx > RSLinx Classic**.
- 2. On the DDE/OPC menu, click **Topic Configuration**.
- 3. In the Topic List, select each configured topic and confirm that the corresponding data source updates correctly.
- 4. Click the **Advanced Communication** tab, confirm that there is a device path specified for Remote Addressing, and then click **Done**.

After restoring the application, you can open the HMI server properties dialog box in FactoryTalk View Studio to verify the HMI server settings and set up the following HMI server properties, as needed.

• In the **General** tab, to determine when the HMI server will load, select a Startup Type.

### Set up additional HMI server properties

You can specify that the HMI server will load when the first client attempts to connect to it (On demand) or when the host computer starts up (Load and run startup components when operating system initializes). The second option is recommended for production HMI servers, and required for an HMI server that is part of a redundant pair.

eneral Redundancy				
Name:	Components			
InstantFizz_HMI				
Description:				
l Computer hosting the	server:			
LOCALHOST				<u></u>
Startup Type				
	aundancy will be artup componer	e disabled) nts when operati	ng system initializ	zes
C Load and run st	artup componer o server comput	e disabled) nts when operati ær):	ng system initializ	zes
C Load and run st Project file (relative to C: \Users\Public\Doct	aundancy will be artup componer o server comput uments\RSView I	e disabled) nts when operati er): Enterprise\SE\H!	ng system initializ 4I Projects\Insta	zes antFizz_HMI
C Load and run st Project file (relative to C:\Users\Public\Docu Number of displays:	aunoancy will be artup componer o server comput uments\RSView 1 69	e disabled) nts when operati er): Enterprise\SE\HI License	ng system initializ 4I Projects\Insta d maximum: Unl	intFizz_HMI
C Load and run st Project file (relative tr C:\Users\Public\Doct	aunoancy will be artup componer o server comput iments\RSView i 69	e disabled) nts when operati er): Enterprise\SE\H License	ng system initializ 4I Projects\Insta d maximum: Unl	intFizz_HMI

• In the **Redundancy** tab, to set up redundancy for the HMI server, first select the check box, **Provide redundancy using a secondary server**; then, specify the name the computer that will host the secondary server, and select a switchover option.

ieneral	Redundancy Components
🗖 Pro	wide redundancy using a secondary server
-9 (	econdary server Somputer hosting the server
9 1	startup type: Load and run startup components when operating system initializes
1	Number of displays: Unknown Licensed maximum: Unknown
	<ul> <li>becomes available again</li> <li>Switch over to the primary server when it becomes available</li> <li>Replication</li> </ul>
	Replicate Primary to Secondary
-	

- **Tip:** Before you can specify the secondary server in a redundant pair, you must manually copy the HMI project files to the secondary server computer.
- In the **Components** tab, select the application components that will start automatically when the HMI server starts, and select the macro that will run when the server shuts down. You can also start or stop components manually.

If the HMI server is redundant, you can also start and stop components for the primary and the secondary server, and select On active and On standby macros.

neral Redundancy Comp	onents	
On startup components Alarming		
🔽 Data logging:	InstantFizz	
Derived tags:	InstantFizz	
🗖 Events:		
🔽 Macro:	Clients	ihutdown 🗾
On shutdown macro:	Clients	ihutdown
🗖 On active macro:		×
On standby macro;		<b>•</b>
Primary server		
Run Startup Compon	ents	Stop All Running Components
Sacondaru saruar		
accounted a sciwer	and a literature	CITE ALL DURING CONTRACTOR
On standby macro: Primary server Run Startup Compon	ents	Stop All Running Components

You must set up the HMI server properties separately, for each server in the FactoryTalk View SE network distributed application you are deploying. You can do this on the computer running the HMI server, or from a remote computer.

For details about setting up HMI server properties, see Chapter 6, *Working with network distributed applications* in the *FactoryTalk View Site Edition User's Guide*. For details about setting up redundant HMI servers, see Chapter 14, *Setting up FactoryTalk system availability* in the *FactoryTalk View Site Edition User's Guide*.

#### Synchronize redundant HMI servers and projects

After setting up redundancy for an HMI server, to ensure that identical copies of the HMI server and project files are running on the primary and the secondary computers, replicate changes from the primary to the secondary server.
The replicate operation copies the primary server's configuration files, including settings in the Components tab, to the secondary server.

For example, if an On Active and a Shutdown macro are selected for the primary server, the settings will be replicated to the secondary. This means that the same macros specified for the primary server will run when the secondary server becomes active or shuts down.

Information that is not included in the replicate operation includes datalog files generated at run time, the current value of HMI memory tags, retentive tags, and the HMI tag alarm suppressed list.

#### To replicate changes from the primary to the secondary server:

- 1. Open the restored application in the FactoryTalk View Studio Enterprise.
- 2. In the Explorer window, right-click the HMI server's name, and then click **Properties**.

# 3. Click the **Redundancy** tab, and then click **Replicate Primary to Secondary**.

**Tip:** If a secondary server is not specified, the Replicate Primary to Secondary button will not be available in the Redundancy tab.

To finish replicating, follow the on-screen instructions. After the replicate operation is complete, the secondary server is restarted.

# Set up FactoryTalk View SE Clients

The FactoryTalk View SE Client provides a complete and secure run-time environment for a local application. For example, operators can use the client to:

- Load, view, and interact with graphic displays from any HMI server in the application.
- Monitor and control alarms (HMI tag alarms and FactoryTalk Alarms and Events).
- View and interact with trends.
- Adjust set points.
- Start and stop server components.

**Note:** For the replicate operation to succeed, a copy of the HMI project files must already exist on the secondary server computer. In addition, the state of the primary server must be Active, and the state of the secondary server must be Standby, for the duration of the operation.

In a network distributed application, FactoryTalk View SE Clients, HMI servers, and data servers can run on multiple computers, connected over a network.

If you have already set up FactoryTalk View SE Client files for a network distributed application, you can copy the files to the production computers. Otherwise, you can create new client files.

#### Create a new FactoryTalk View SE Client file

FactoryTalk View SE Client configuration files specify the name of the application the client will connect to, the components that start when the connection is made, and how the client will behave at run time.

To create a new client file, use the FactoryTalk View SE Client Wizard. You can also use the wizard to modify or run an existing client file, or to remove a client from the list of available files.

**Tip:** It is not necessary to start the HMI server if you want to use the FactoryTalk View SE Client Wizard.

#### To create a new FactoryTalk View SE Client file:

- 1. On the desktop, select Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Site Edition Client.
- 2. In the FactoryTalk View SE Client Wizard, click **New**, and then follow the on-screen instructions. For details about options in the wizard, click **Help**.

The client file is created with a .cli extension, in the location you specified.

#### Copy existing FactoryTalk View SE Client files

When setting up the FactoryTalk View SE Clients for a network distributed application, you can copy existing client files from the development computer to the client production computers.

You can run the client configuration from the desktop, or from any other location on the client computer.

By default, client configuration files are saved under C:\Users\Public\Public Documents\RSView Enterprise\SE\Client.

#### Lock operators into the run-time environment

To lock operators into the FactoryTalk View SE Client at run time, for example, to prevent access to other programs on the computer, try one or more of the following methods:

• Limit the ability to manipulate graphic displays, by removing the title bar or minimize and maximize buttons from selected displays.

To do this, in the Display Settings dialog box, clear the check boxes **Title Bar, Minimize Button**, and **Maximize Button**. For details, see Chapter 16, Creating graphic displays in the *FactoryTalk View Site Edition User's Guide*.

• Limit the ability to manipulate the client window, by removing the title bar or minimize and maximize buttons from the client.

To do this, in the FactoryTalk View SE Client wizard, clear the check boxes, **Show title bar**, and **Show system menu and close button**. For details, click **Help** in the FactoryTalk View SE Client wizard.

- **Prevent switching to other applications**. To do this, in the FactoryTalk View SE Client wizard, select the check box, **Disable switch to other applications**. For details, click **Help** in the FactoryTalk View SE Client wizard.
- **Restrict access to the desktop**, using the DeskLock tool.

To open Desklock, on the desktop click **Start > All Programs > Rockwell Software > FactoryTalk View > Tools**, and then click **DeskLock**.

For details about using DeskLock, click **Help** within the tool.

**Note:** Do not enable DeskLock until you read the help for the tool and understand how it works. Otherwise, you could end up locking yourself out of the desktop.

## Run the FactoryTalk View SE Clients

Once the network distributed application is fully deployed, test it by running the FactoryTalk View SE Clients.

**Note:** To connect a FactoryTalk View SE Client to a network distributed application, all client and server computers in the application must point at the same FactoryTalk Network Directory server. For details, see <u>Specify the Network</u> <u>Directory location on application computers</u> on page 79.

For tips to help you get communications working between clients and servers, see the FactoryTalk View Site Edition Help.

#### To run an SE Client using the .cli file:

Double-click the client setup file (.cli), in the default folder C:\Users\Public\Public Documents\RSView Enterprise\SE\Client.

#### To run an SE Client from FactoryTalk View Studio:

- 1. In FactoryTalk View Studio, on the Tools menu, click Launch SE Client.
- 2. In the **FactoryTalk View SE Client Wizard** dialog box, select the client configuration file from the list of most recently used files and click **Run**. To search for and select another file, click the browse button.

#### To run an SE Client when Windows starts:

- 1. Create a shortcut to the.cli file (on the desktop, for example).
- 2. Move the shortcut to the Windows Startup folder.

For information about adding shortcuts to the Startup folder, see the Windows Help

#### Log on to the FactoryTalk View SE Client

To start the FactoryTalk View SE Client, or to change users while the client is running, the user logging on must have the necessary security permissions.

If the user does not have the necessary permissions, the FactoryTalk View SE Client login dialog box opens, to let another user log on.

FactoryTalk View SE Client	
Type your user name and password:	
User name:	ОК
Password:	Cancel

# Deploying network station applications

After you finish developing and testing a FactoryTalk View Site Edition network station application, you can deploy it to run in a live setting, such as the plant floor. Deploying a network station application involves installing all FactoryTalk View SE software components on the application's host computer.

For details about installing the software, see <u>Installing FactoryTalk View</u> on page 37.

For details about the structure and content of network station applications, see Chapter 7, *Working with network station applications* in the *FactoryTalk View Site Edition User's Guide*.

## **Overview of tasks**

The checklist in this section summarizes the basic tasks involved in deploying a FactoryTalk View SE network station application. Use the checklist to guide you through the tasks you need to perform. Each task is described in detail in the rest of this chapter.

If appropriate, add or remove details to create a customized procedure that reflects the design and content of your FactoryTalk View application. For example, your application might include additional communications or database servers so you may need to repeat these steps accordingly.

Tip: If your application includes Tag Alarm and Event Servers, see the FactoryTalk Alarms and Events Help for information about deploying these servers.

## Task checklist

- Move the network station application on page 78
- <u>Specify the Network Directory location on application computers</u> on <u>page 79</u> if necessary
- Move the application's data server files on page 79
- Specify data server host computer names on page 81
- <u>Renew data server shortcuts, topics, and device paths</u> on page 68

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- <u>Specify when HMI server components start or stop</u> on page 83
- <u>Set up the FactoryTalk View SE Client on page 84</u>
- <u>Run the FactoryTalk View SE Client</u> on page 86 to test the application

# Move the network station application

There are two steps involved in moving a network station application: on the development computer, back up the application; then, on the production computer, restore the application archive.

You can perform both of these steps in the Application Manager tool. For details about options in the Application Manager, click **Help** in the tool.

**Note:** Before backing up an application, record the user names and passwords of administrative users set up for the application, in case you need this information after restoring the application.

#### To back up a network station application:

- On the desktop, select Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Application Manager.
- 2. In the Application Manager, select **Site Edition** (**Network Station**), and then click **Next**.
  - Tip: To back up a network station application, the logged on user must have FactoryTalk administrative rights. If you receive a prompt to log on, check with your System Administrator.
- 3. Select the back up operation, and then follow the instructions in the Application Manager to complete the operation.
- 4. Copy the .apa file to the new (production) computer.

If you are restoring a network station application on a computer that contains a copy of the original application, ensure the application is not running, then use the Application Manager to delete (or rename) the original application, before you begin the restore operation.

#### To restore a network station application:

- 1. On the production computer, on the desktop, select **Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Application Manager**.
- 2. Select Site Edition (Network Station), and then click Next.

- **Tip:** To restore a network station application, the logged on user must have FactoryTalk administrative rights. If you receive a prompt to log on, check with your System Administrator.
- 3. Select the restore operation, and then follow the instructions in the Application Manager to complete the operation.
- 4. Copy the backed up application to the new (production) computer.

If you have not done so already, use the FactoryTalk Directory Server Location Utility to specify the location of the FactoryTalk Network Directory server.

Performing this task might require more than one set of FactoryTalk security credentials:

- To use the FactoryTalk Directory Server Location Utility, you must have administrative rights on the local computer.
- To specify a remote location for the Network Directory, you must have administrative rights on the remote computer.

To specify the Network Directory on application computers:

- 1. On the client or server computer, select **Start > All Programs > Rockwell Software > FactoryTalk Tools > Specify FactoryTalk Directory Location**.
- 2. Click the **Browse** button beside the field, Computer hosting directory server.
- 3. In the FactoryTalk Directory Server Configuration dialog box, click **Remote computer**.
- 4. Type the name of the Network Directory server computer, or click the **Browse** button to find and select the computer, and then click **OK**.

You will have to log on as an administrator on the remote computer.

5. Click **OK** again, to close the FactoryTalk Directory Server Location Utility.

After specifying the FactoryTalk Network Directory location on application computers, ensure that the required communications software (RSLinx Enterprise, RSLinx Classic, or other OPC software) is installed on computers that will run data servers.

Then, if necessary for the data servers you are deploying, move configuration files to the production computers, and then specify the new host computer names.

# Move the application's data server files

# Directory location on application computers • To use the

**Specify the Network** 

**Tip:** For information about moving setup files for OPC data servers other than RSLinx Classic, see the product documentation for the OPC server

#### Back up and restore RSLinx Classic configurations

RSLinx Classic configuration files are not included when you back up an application. You have to back up, move, and restore the files manually.

If RSLinx Classic is installed on the development and production computers, you can use the RSLinx Classic Backup/Restore tool to back up and restore configuration files.

Tip: You can also restore RSLinx Classic configuration files from the Wizard Completed window of the RSLinx Classic software setup program.

#### To move RSLinx Classic configuration files:

- On the development computer, click Start > All Programs > Rockwell Software > RSLinx, and then click RSLinx Classic Backup Restore Utility.
- 2. In the RSLinx Classic Backup/Restore tool, click Backup.

Backup	
Restore	
Close	

- 3. Select a folder for the backup file, type a file name, and then click **Save**.
- 4. In Windows Explorer, copy the backup file (with .rsx extension), and then paste it into a location on the data server production computer.
- On the production computer, click Start > All Programs > Rockwell Software > RSLinx, and then click RSLinx Classic Backup Restore Utility.
- 6. In the RSLinx Backup/Restore tool, click **Restore**.
- 7. Find and select the backup file you just pasted, and then click **Open**.

# Specify data server host computer names

After moving data server configuration files to production computers, open the restored network station application, and in the Properties dialog box for each data server, specify the name of the server's host computer.

Then, renew RSLinx shortcuts, topics, and device paths, as needed. For details, see <u>Renew data server shortcuts</u>, topics, and device paths on page 68.

For information about setting up other data server properties, click **Help** in the server's Properties dialog box, or see the product documentation.

**Tip:** The first time you open an application after relocating a data server, if the server does not load, you should still be able to open the Properties dialog box and change the host computer name. After the computer name is updated, the server should load as expected.

To change the RSLinx Enterprise server computer name:

- 1. Click Start > All Programs > Rockwell Software, and then click FactoryTalk Administration Console.
- 2. In the **Select FactoryTalk Directory** dialog box, select **Network**, and then click **OK**.

3. In the Explorer window, expand the name of the restored application, right-click the RSLinx Enterprise server's name, and then click **Properties**.

	terprise Server Properties		×
General	Redundancy Alarms and Eve	ents	
Na	me		
RS	SLinx Enterprise		<u> </u>
De	scription		
Con	nputer hosting the RSLinx Enterp	orise server:	Browse
Con	nputer hosting the RSLinx Enterp oduction_1	orise server:	Browse
Con	nputer hosting the RSLinx Enterp oduction_1	orise server:	Browse
Con	nputer hosting the RSLinx Enter oduction_1	orise server:	Browse
Cor Pro	nputer hosting the RSLinx Enter oduction_1	orise server:	Browse
Cor	nputer hosting the RSLinx Enterp oduction_1	orise server:	Browse

 In the General tab, in the field, Computer hosting the RSLinx Enterprise server, type the name of the production computer, or click Browse to find and select the computer, and then click OK. Acknowledge the warning if needed by clicking OK.

#### To change the RSLinx Classic server computer name:

- 1. Open the restored application in the FactoryTalk Administration Console. To learn how to do this, see the previous task.
- 2. In the Explorer window, expand the name of the restored application, right-click the RSLinx Classic server's name, and then click **Properties**.
- 3. In the General tab, in the field, **Computer that will run the OPC** server, type the name of the production computer, or click **Browse** to find and select the computer, and then click **OK**.

# Renew data server shortcuts, topics, and device paths

After restoring RSLinx data servers in the application, renew or verify the topics, shortcuts, and device paths associated with each data server, as needed.

If you are restoring redundant data servers, then the device paths must be confirmed and reapplied for both the primary and the secondary server.

#### To renew RSLinx Enterprise device paths:

- 1. Open the restored application in the FactoryTalk Administration Console.
- 2. In the Explorer window, expand the data server (RSLinx Enterprise), and then double-click **Communications Setup**.
- 3. In the Communications Setup editor, select each configured RSLinx Enterprise shortcut, point the shortcut at the correct device, and then click **Apply**.
- 4. Save the configuration, and then close the **Communications Setup** editor.

#### To verify RSLinx Classic topics:

- 1. On the data server computer, select **Start > All Programs > Rockwell Software > RSLinx > RSLinx Classic**.
- 2. On the DDE/OPC menu, click **Topic Configuration**.
- 3. In the Topic List, select each configured topic and confirm that the corresponding data source updates correctly.
- 4. Click the **Advanced Communication** tab, confirm that there is a device path specified for Remote Addressing, and then click **Done**.

In FactoryTalk View Studio, open the Properties dialog box for the HMI server in the application, to view the location of the HMI project files, the current number of displays in the application, and the maximum number of displays allowed.

You can add a description for the HMI server and, in the Components tab, select components that will start when the HMI server starts running.

**Tip:** In a local station application, the HMI server and the application have the same name. The name cannot be modified in the HMI server's Properties dialog box.

#### To open the HMI Server Properties dialog box:

1. Click Start > All Programs > Rockwell Software, and then click FactoryTalk View Studio.

# Specify when HMI server components start or stop

- 2. Select View Site Edition (Network Station), and then click Continue.
- 3. Click the **Existing** tab, select the network station application's name, and then click **Open**.
- 4. In the Explorer window, right-click the HMI server's name, and then click **Properties**.

#### How HMI server components start and stop

Use the HMI Server Properties dialog box to specify which components in a local station application will start automatically, when the HMI server starts running.

In a network station or local station application, the HMI server loads and the specified components start running when the FactoryTalk View SE Client connects to the application. When the client stops running, the HMI server is unloaded, and the specified shutdown macro is run.

You can also start or stop the HMI server components manually. To do this, in the Components tab, click **Run Startup Components** and **Stop All Running Components**, respectively.

#### To select HMI server startup and shutdown components:

- 1. In the HMI Server Properties dialog box, click the **Components** tab.
- 2. To specify startup components, select the component check boxes, and then select the components you want to start automatically, when the HMI server starts running.
- 3. To specify a shutdown macro, select the check box **On shutdown macro**, and then select the macro you want to run when the HMI server stops running.

The FactoryTalk View SE Client provides a complete and secure run-time environment for a network station or local station application. For example, operators can use the client to:

- Load, view, and interact with multiple graphic displays from the HMI server.
- Manage alarm information.
- View trends.
- Adjust set points.
- Start and stop server components.

# Set up the FactoryTalk View SE Client

To run a network station or local station application, the FactoryTalk View SE Client must run on the same computer as the HMI server.

If you have already set up a FactoryTalk View SE Client file for the application, you can copy the file to the production computer. Otherwise, you can create a new client file.

#### Create a new FactoryTalk View SE Client file

FactoryTalk View SE Client configuration files specify the name of the application the client will connect to, the components that start when the connection is made, and how the client will behave at run time.

To create a new client file, use the FactoryTalk View SE Client Wizard. You can also use the wizard to modify or run an existing client file, or to remove a client from the list of available files.

**Tip:** It is not necessary to start the HMI server if you want to use the FactoryTalk View SE Client Wizard.

#### To create a new FactoryTalk View SE Client file:

- 1. On the desktop, select Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Site Edition Client.
- 2. In the FactoryTalk View SE Client Wizard, click **New**, and then follow the on-screen instructions. For details about options in the wizard, click **Help**.

The client file is created with a .cli extension, in the location you specified.

#### Lock operators into the run-time environment

To lock operators into the FactoryTalk View SE Client at run time, for example, to prevent access to other programs on the computer, try one or more of the following methods:

• Limit the ability to manipulate graphic displays, by removing the title bar or minimize and maximize buttons from selected displays.

To do this, in the Display Settings dialog box, clear the check boxes **Title Bar, Minimize Button**, and **Maximize Button**. For details, see Chapter 16, Creating graphic displays in the *FactoryTalk View Site Edition User's Guide*.

• Limit the ability to manipulate the client window, by removing the title bar or minimize and maximize buttons from the client.

	To do this, in the FactoryTalk View SE Client wizard, clear the check boxes, <b>Show title bar,</b> and <b>Show system menu and close button</b> . For details, click <b>Help</b> in the FactoryTalk View SE Client wizard.
	• <b>Prevent switching to other applications</b> . To do this, in the FactoryTalk View SE Client wizard, select the check box, <b>Disable switch to other applications</b> . For details, click <b>Help</b> in the FactoryTalk View SE Client wizard.
	• <b>Restrict access to the desktop</b> , using the DeskLock tool.
	To open Desklock, on the desktop click <b>Start &gt; All Programs &gt;</b> <b>Rockwell Software &gt; FactoryTalk View &gt; Tools</b> , and then click <b>DeskLock</b> .
	For details about using DeskLock, click <b>Help</b> within the tool.
	<b>Note:</b> Do not enable DeskLock until you read the help for the tool and understand how it works. Otherwise, you could end up locking yourself out of the desktop.
Run the FactoryTalk View SE Client	Once the application is deployed, test it by running the FactoryTalk View SE Client. <b>To run an SE Client using the .cli file:</b>
	Double-click the client setup file (.cli), in the default folder C:\Users\Public\Public Documents\RSView Enterprise\SE\Client.
	To run an SE Client from FactoryTalk View Studio:
	1. In FactoryTalk View Studio, on the Tools menu, click Launch SE Client.
	2. In the <b>FactoryTalk View SE Client Wizard</b> dialog box, select the client configuration file from the list of most recently used files and click <b>Run</b> . To search for and select another file, click the browse button.
	To run an SE Client when Windows starts:
	1. Create a shortcut to the.cli file (on the desktop, for example).
	2. Move the shortcut to the Windows Startup folder.
	For information about adding shortcuts to the Startup folder, see the Windows Help

## Log on to the FactoryTalk View SE Client

To start the FactoryTalk View SE Client, or to change users while the client is running, the user logging on must have the necessary security permissions.

If the user does not have the necessary permissions, the FactoryTalk View SE Client login dialog box opens, to let another user log on.

FactoryTalk View SE Client	
Type your user name and password:	
User name:	ОК
Password:	Cancel

# Administer deployed applications

To make minor changes to an application after it is deployed, use either FactoryTalk View Studio or the FactoryTalk View SE Administration Console. The SE Administration Console contains the following subset of editors.

To do this in the SE Administration Console	Use this editor
Change the properties of an HMI server.	HMI Server Properties
Change the properties of a data server.	Data Server Properties
Add FactoryTalk users to an application.	Runtime Security
Set up security for commands and macros.	Secured Commands
Run FactoryTalk View commands.	Command Line
Change how HMI tag alarms are logged.	Alarm Setup
Change the paths of data log models.	Data Log Paths
Manage HMI tag alarm log files.	Alarm Log Setup
Import and export HMI tags.	Tag Import and Export Wizard

For details about options in these editors, click Help.

#### To open a network station application in FactoryTalk View Studio:

- 1. Select Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Studio.
- 2. Select View Site Edition (Network Station), and then click Continue.
- 3. In the **Existing** tab, select the restored application's name, and then click **Open**.

# **Deploying local station applications**

After you finish developing and testing a FactoryTalk View Site Edition local station application, you can deploy it to run in a live setting, such as the plant floor. Deploying a local station application involves installing all FactoryTalk View SE software components on the application's host computer.

For details about installing the software, see <u>Installing FactoryTalk View</u> on page 37.

For details about the structure and content of local station applications, see Chapter 8, *Working with local station applications* in the *FactoryTalk View Site Edition User's Guide*.

**Overview of tasks** The checklist in this section summarizes the basic tasks involved in deploying a FactoryTalk View SE local station application. Use the checklist to guide you through the tasks you need to perform. Each task is described in detail in the rest of this chapter.

If appropriate, add or remove details to create a customized procedure that reflects the design and content of your FactoryTalk View application. For example, your application might include additional communications or database servers.

**Tip:** If your application includes Tag Alarm and Event Servers, see the FactoryTalk Alarms and Events Help for information about deploying these servers.

#### Task checklist

- Move the local station application on page 90
- Move data servers and change their properties on page 91
- <u>Specify OPC data server host computer names</u> on page 93
- Specify when HMI server components start or stop on page 83
- <u>Set up the FactoryTalk View SE Client</u> on page 84
- <u>Run the FactoryTalk View SE Client</u> on <u>page 86</u> to test the application

# Move the local station application

There are two steps involved in moving a local station application: on the development computer, back up the application; then, on the production computer, restore the application archive.

You can perform both of these steps in the Application Manager tool. For details about options in the Application Manager, click **Help** in the tool.

**Note:** Before backing up an application, record the user names and passwords of administrative users set up for the application, in case you need this information after restoring the application.

#### To back up a local station application:

- 1. On the desktop, click **Start > All Programs > Rockwell Software > FactoryTalk View > Tools,** and then click **Application Manager**.
- 2. In the Application Manager, select **Site Edition** (Local Station), and then click **Next**.
  - **Tip:** The logged on user must have FactoryTalk administrative rights. If you receive a prompt to log on, check with your System Administrator.
- 3. Select the back up operation, and then follow the instructions in the Application Manager to complete the operation.
- 4. Copy the .apa file to the new (production) computer.

If you are restoring a local station application on a computer that contains a copy of the original application, restart the computer, then use the Application Manager to delete (or rename) the original application, before you begin the restore operation.

#### To restore a local station application:

- On the production computer, on the desktop, click Start > All Programs > Rockwell Software > FactoryTalk View > Tools, and then click Application Manager.
- 2. Select Site Edition (Local Station), and then click Next.
  - **Tip:** To restore a local station application, the logged on user must have FactoryTalk administrative rights. If you receive a prompt to log on, check with your System Administrator.
- 3. Select the restore operation, and then follow the instructions in the Application Manager to complete the operation.

# About restoring System information with the application

In FactoryTalk View Studio, in a local station application, the top-level System folder contains FactoryTalk Security information, including user accounts set up for all applications using the same FactoryTalk Local Directory (also called the Local Directory).

When you back up a local station application, this FactoryTalk system information is saved to the archive automatically. When you restore a local station application, you can choose whether to restore the system information with the application.

To restore FactoryTalk system information with the application:

In the **Application Manager** tool, after specifying the archive to restore, select the option, **Restore the FactoryTalk View SE (local station) application and FactoryTalk Local Directory**.

To complete the operation, the user logged on to the Application Manager must have FactoryTalk administrative rights at the Local Directory being restored.

A FactoryTalk View SE local station application can contain one RSLinx Enterprise data server, which must be located on the same computer as the application.

In addition, the local station application can contain one or more OPC data servers (RSLinx Classic, or some other OPC server), which can be located on remote computers.

After ensuring that the required communications software is installed on production computers, for each remote OPC data server you are deploying, move the configuration files to the production computer and specify the new host computer name.

After installing RSLinx Enterprise, RSLinx Classic, or some other OPC server software on the production computer, if necessary, you can move the data server's setup files to the computer.

### Back up and restore RSLinx Enterprise files

When you back up a FactoryTalk View SE local station application, the archive includes RSLinx Enterprise shortcut names, but does not include device path information.

# Move data servers and change their properties

**Tip:** For information about moving setup files for OPC data servers other than RSLinx Classic, see the product documentation for the OPC server.

After restoring the application, you must open the Communications Setup editor in FactoryTalk View Studio, and re-apply the device path for each configured shortcut.

For details, see <u>Renew data server shortcuts, topics, and device paths</u> on <u>page</u> <u>68</u>.

#### Back up and restore RSLinx Classic configurations

RSLinx Classic configuration files are not included when you back up an application. You have to back up, move, and restore the files manually.

If RSLinx Classic is installed on the development and production computers, you can use the RSLinx Classic Backup/Restore tool to back up and restore configuration files.

Tip: You can also restore RSLinx Classic configuration files from the Wizard Completed window of the RSLinx Classic software setup program.

#### To move RSLinx Classic configuration files:

- On the development computer, click Start > All Programs > Rockwell Software > RSLinx, and then click RSLinx Classic Backup Restore Utility.
- 2. In the RSLinx Classic Backup/Restore tool, click **Backup**.

Backup	
Restore	
Close	

- 3. Select a folder for the backup file, type a file name, and then click **Save**.
- 4. In Windows Explorer, copy the backup file (with .rsx extension), and then paste it into a location on the data server production computer.
- On the production computer, click Start > All Programs > Rockwell Software > RSLinx, and then click RSLinx Classic Backup Restore Utility.
- 6. In the RSLinx Backup/Restore tool, click **Restore**.

7. Find and select the backup file you just pasted, and then click **Open**.

# Specify OPC data server host computer names

After moving RSLinx Classic configuration files to production computers, open the restored local station application, and in the Properties dialog box for each data server, specify the name of the server's host computer.

**Tip:** Unlike RSLinx Classic data servers, you do not have to change the computer names of RSLinx Enterprise data servers. The RSLinx Enterprise data server in a local station application must be located on the same computer as the application, and is always named localhost.

For information about setting up other data server properties, click **Help** in the server's Properties dialog box, or see the product documentation.

**Tip:** The first time you open an application after relocating a data server, if the server does not load, you should still be able to open the Properties dialog box and change the host computer name. After the computer name is updated, the server should load as expected.

#### To change the RSLinx Classic server computer name:

- 1. Open the restored application in the FactoryTalk Administration Console. To learn how to do this, see the previous task.
- 2. In the Explorer window, expand the name of the restored application, right-click the RSLinx Classic server's name, and then click **Properties**.
- 3. In the General tab, in the field, **Computer that will run the OPC server**, type the name of the production computer, or click **Browse** to find and select the computer, and then click **OK**.

**Nen HMI nponents number nu** 

You can add a description for the HMI server and, in the Components tab, select components that will start when the HMI server starts running.

**Tip:** In a local station application, the HMI server and the application have the same name. The name cannot be modified in the HMI server's Properties dialog box.

#### To open the HMI Server Properties dialog box:

1. Click Start > All Programs > Rockwell Software, and then click FactoryTalk View Studio.

# Specify when HMI server components start or stop

- 2. Select View Site Edition (Network Station), and then click Continue.
- 3. Click the **Existing** tab, select the network station application's name, and then click **Open**.
- 4. In the Explorer window, right-click the HMI server's name, and then click **Properties**.

#### How HMI server components start and stop

Use the HMI Server Properties dialog box to specify which components in a local station application will start automatically, when the HMI server starts running.

In a network station or local station application, the HMI server loads and the specified components start running when the FactoryTalk View SE Client connects to the application. When the client stops running, the HMI server is unloaded, and the specified shutdown macro is run.

You can also start or stop the HMI server components manually. To do this, in the Components tab, click **Run Startup Components** and **Stop All Running Components**, respectively.

#### To select HMI server startup and shutdown components:

- 1. In the HMI Server Properties dialog box, click the **Components** tab.
- 2. To specify startup components, select the component check boxes, and then select the components you want to start automatically, when the HMI server starts running.
- 3. To specify a shutdown macro, select the check box **On shutdown macro**, and then select the macro you want to run when the HMI server stops running.

The FactoryTalk View SE Client provides a complete and secure run-time environment for a network station or local station application. For example, operators can use the client to:

- Load, view, and interact with multiple graphic displays from the HMI server.
- Manage alarm information.
- View trends.
- Adjust set points.
- Start and stop server components.

# Set up the FactoryTalk View SE Client

To run a network station or local station application, the FactoryTalk View SE Client must run on the same computer as the HMI server.

If you have already set up a FactoryTalk View SE Client file for the application, you can copy the file to the production computer. Otherwise, you can create a new client file.

#### Create a new FactoryTalk View SE Client file

FactoryTalk View SE Client configuration files specify the name of the application the client will connect to, the components that start when the connection is made, and how the client will behave at run time.

To create a new client file, use the FactoryTalk View SE Client Wizard. You can also use the wizard to modify or run an existing client file, or to remove a client from the list of available files.

Tip: It is not necessary to start the HMI server if you want to use the FactoryTalk View SE Client Wizard.

#### To create a new FactoryTalk View SE Client file:

- 1. On the desktop, select Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Site Edition Client.
- 2. In the FactoryTalk View SE Client Wizard, click **New**, and then follow the on-screen instructions. For details about options in the wizard, click **Help**.

The client file is created with a .cli extension, in the location you specified.

#### Lock operators into the run-time environment

To lock operators into the FactoryTalk View SE Client at run time, for example, to prevent access to other programs on the computer, try one or more of the following methods:

• Limit the ability to manipulate graphic displays, by removing the title bar or minimize and maximize buttons from selected displays.

To do this, in the Display Settings dialog box, clear the check boxes **Title Bar, Minimize Button**, and **Maximize Button**. For details, see Chapter 16, Creating graphic displays in the *FactoryTalk View Site Edition User's Guide*.

• Limit the ability to manipulate the client window, by removing the title bar or minimize and maximize buttons from the client.

	To do this, in the FactoryTalk View SE Client wizard, clear the check boxes, <b>Show title bar,</b> and <b>Show system menu and close button</b> . For details, click <b>Help</b> in the FactoryTalk View SE Client wizard.		
	• <b>Prevent switching to other applications</b> . To do this, in the FactoryTalk View SE Client wizard, select the check box, <b>Disable switch to other applications</b> . For details, click <b>Help</b> in the FactoryTalk View SE Client wizard.		
	• <b>Restrict access to the desktop</b> , using the DeskLock tool.		
	To open Desklock, on the desktop click <b>Start &gt; All Programs &gt;</b> <b>Rockwell Software &gt; FactoryTalk View &gt; Tools</b> , and then click <b>DeskLock</b> .		
	For details about using DeskLock, click Help within the tool.		
	<b>Note:</b> Do not enable DeskLock until you read the help for the tool and understand how it works. Otherwise, you could end up locking yourself out of the desktop.		
Run the FactoryTalk View SE Client	Once the application is deployed, test it by running the FactoryTalk View SE Client. <b>To run an SE Client using the .cli file:</b> Double-click the client setup file (.cli), in the default folder		
	C:\Users\Public\Public Documents\RSView Enterprise\SE\Client.		
	To run an SE Client from FactoryTalk View Studio:		
	1. In FactoryTalk View Studio, on the Tools menu, click Launch SE Client.		
	2. In the <b>FactoryTalk View SE Client Wizard</b> dialog box, select the client configuration file from the list of most recently used files and click <b>Run</b> . To search for and select another file, click the browse button.		
	To run an SE Client when Windows starts:		
	1. Create a shortcut to the.cli file (on the desktop, for example).		
	2. Move the shortcut to the Windows Startup folder.		
	For information about adding shortcuts to the Startup folder, see the Windows Help		

## Log on to the FactoryTalk View SE Client

To start the FactoryTalk View SE Client, or to change users while the client is running, the user logging on must have the necessary security permissions.

If the user does not have the necessary permissions, the FactoryTalk View SE Client login dialog box opens, to let another user log on.

FactoryTalk View SE Client	
Type your user name and password:	
User name:	ОК
Password:	Cancel

# Administer deployed applications

To make minor changes to an application after it is deployed, use either FactoryTalk View Studio or the FactoryTalk View SE Administration Console. The SE Administration Console contains the following subset of editors.

To do this in the SE Administration Console	Use this editor
Change the properties of an HMI server.	HMI Server Properties
Change the properties of a data server.	Data Server Properties
Add FactoryTalk users to an application.	Runtime Security
Set up security for commands and macros.	Secured Commands
Run FactoryTalk View commands.	Command Line
Change how HMI tag alarms are logged.	Alarm Setup
Change the paths of data log models.	Data Log Paths
Manage HMI tag alarm log files.	Alarm Log Setup
Import and export HMI tags.	Tag Import and Export Wizard

For details about options in these editors, click Help.

#### To open a local station application in FactoryTalk View Studio:

- 1. Click Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Studio.
- 2. Select View Site Edition (Local Station), and then click Continue.
- 3. In the **Existing** tab, select the restored application's name, and then click **Open**.

# Upgrade an operating FactoryTalk View SE network distributed application

Upgrading the FactoryTalk View Site Edition software in an automation and control application involves two core tasks: uninstalling the existing software and then installing the new version.

After installing the new software version, you should be able to open a FactoryTalk View SE application in FactoryTalk View Studio, and then run the application in a FactoryTalk View SE Client without any further intervention.

Tip: Applications developed on versions 6.0 and earlier may need to be converted using the Legacy Tag Database Conversion Utility. Start the utility by clicking Start > Rockwell Software > FactoryTalk View > Tools > Legacy Tag Database Conversion Utility. For details about using the utility, click Help.

However, depending on the design, content, and complexity of your control system, you might have to perform additional tasks to support the upgrade, especially if you are upgrading FactoryTalk View SE in a production environment. The information in this chapter will help you safeguard the live application, while ensuring that the upgrade process is efficient and successful.

The upgrading steps vary depending on your application:

- <u>Upgrade a non-redundant network distributed application</u> on page 100
- <u>Upgrade a redundant network distributed application</u> on page 108

As there are many possible variations for this type of application, parts of the documented process might not apply directly to the application you are upgrading. If you have questions about architectural elements not covered in this chapter, for example, your application is more or less complex than the example provided, contact your local Rockwell Automation Sales office for assistance.

**Note:** Before installing FactoryTalk View applications or any supporting software, review <u>Hardware</u>, <u>operating system</u>, <u>and</u> <u>domain information</u> on <u>page 23</u>, and ensure that you have performed the tasks that are appropriate to the role and configuration of each application host computer.

#### Information to help you upgrade

You can also look for answers in other Rockwell Automation product documentation, and on the Rockwell Automation Web site. See <u>Open the FactoryTalk View online manuals</u> on page 11.

**Tip:** RSView Enterprise is the former name of the FactoryTalk View family of software products. If you are upgrading from a version of RSView, the information in this chapter still applies, even though it refers to FactoryTalk View as the previous product version.

# Find out about features in the new product version

After upgrading all the software components in your deployed application, to find out about features in the new product version, see the product Release Notes.

- The FactoryTalk View installation DVD or installation package contains the Release Notes of products such as FactoryTalk View SE, ME, and RSLinx Classic.
- During installation, the **Common Setup** page shows links to the Release Notes of each product.
- The Contents tab of the FactoryTalk Help also contains the Release Notes of each product. To open it, after installation, select Start > All Programs > Rockwell Software > FactoryTalk Tools > FactoryTalk Help.

Use the following checklist as a guideline for upgrading your application. Details about each step are provided in this chapter.

#### Part 1: Prepare for the upgrade

- <u>Step 1: Prepare for the upgrade on page 101</u>
- <u>Step 2: Back up the deployed application on page 102</u>

#### Part 2: Perform upgrade of software components

- <u>Step 3: Shut down all client computers on page 103</u>
- Step 4: Upgrade the FactoryTalk Directory server on page 103
- <u>Step 5: Upgrade the HMI server</u> on page 104
- <u>Step 6: Upgrade the data server on page 104</u>

# Upgrade a non-redundant network distributed application

- <u>Step 7: Upgrade the engineering workstation</u> on page 105
- <u>Step 8: Migrate the application on page 105</u>
- <u>Step 9: Upgrade all run-time clients</u> on page 107
- <u>Step 10: Test the migrated application</u> on page 107

#### **Example**

The following illustration shows an example of a FactoryTalk View SE network distributed application without redundant servers.

In this example, **Workstation #1** is the name of the engineering workstation. Assume that:

- The FactoryTalk Directory server, HMI server, and data server are hosted on different computers.
- The Tag Alarm and Event server and HMI server are hosted on the same computer.



# Part 1: Prepare for the upgrade

#### Step 1: Prepare for the upgrade

Use the following multi-step checklist as a guideline when you prepare for the upgrade. For details, see procedures that follow.

- Have the FactoryTalk View installation DVD or installation package on hand
- Log on with administrative rights on page 102
- <u>Record the names and passwords of administrative users</u> on page 102

<u>Perform set-up tasks on application computers</u> on page 102

#### Log on with administrative rights

To perform certain tasks, the user performing the upgrade must have administrative rights in Windows and at the FactoryTalk Network Directory.

Windows administrative rights are required to install FactoryTalk View and supporting software because the Setup Wizard creates program folders and modifies registry entries.

FactoryTalk administrative rights are required to log on to the FactoryTalk Network Directory, for example, when you use the FactoryTalk Directory Server Location Utility.

To open the utility, you must log on as a FactoryTalk administrator on the local computer. To specify a remote Network Directory location, you must also have administrative rights on the remote computer.

FactoryTalk administrative rights are also required to back up and restore FactoryTalk View SE applications.

#### Record the names and passwords of administrative users

Before backing up the deployed application, ensure that you have recorded the user names and passwords of users that belong to the FactoryTalk administrators group.

Only members of the FactoryTalk administrators group can add, remove, or modify FactoryTalk user accounts, if this is necessary after restoring a backed-up application.

#### Perform set-up tasks on application computers

Before upgrading FactoryTalk View SE, review the chapter <u>Hardware</u>, <u>operating system</u>, and <u>domain information</u> on <u>page 23</u>. It contains information about tasks you can perform on application computers, to ensure that FactoryTalk View SE runs smoothly after it is installed. It also contains information about hardware and software requirements, and application limits.

#### Step 2: Back up the deployed application

Before backing up the deployed application, ensure that the most recent application data is available for the upgrade at the FactoryTalk Network Directory. Use the **Distributed Application Manager** tool to back up the application. The backup archive has an **.APB** extension, and includes all FactoryTalk Directory data, such as accounts, passwords, policies and security settings. It also includes all application contents like application configurations, HMI servers, data servers, and tag Alarm and Event servers.

**Tip:** RSLinx Classic configuration files are not included when you back up a FactoryTalk View SE application. You need to back up the RSLinx Classic configuration files before upgrading. For instructions, see <u>Back up and restore RSLinx Classic configurations</u> on page 67.

#### To back up the application:

- 1. On the HMI server, select Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Distributed Application Manager.
  - Tip: The logged on user must have the **Backup and restore** directory contents permission. For more information, see FactoryTalk Security Help or check with your System Administrator.
- 2. In the **Create a Backup** tab, select your application and follow the wizard to back up the application. For more instructions, see Distributed Application Manager Help.

#### Step 3: Shut down all client computers

To disconnect the clients from the servers, shut down all run-time client computers, server computers, and **Workstation #1**.

#### Step 4: Upgrade the FactoryTalk Directory server

- 1. On the FactoryTalk Directory computer, close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - Tip: If the DVD does not start automatically, run D:\Setup.exe, where *D*: is the drive containing the DVD.
- 3. On the Welcome page, select Stand-alone FactoryTalk Directory Server and click Next.

# Part 2: Perform upgrade of software components

- Tip: If you host the FactoryTalk Network Directory, HMI server, and data server on the same computer, select Studio Enterprise.
- 4. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 5. After installation, install any necessary product updates. For instructions, see Install product updates on page 126.
  - Tip: If you host the FactoryTalk Network Directory, HMI server, and data server on the same computer, skip to Step 7: Upgrade the engineering workstation on page 105.

#### Step 5: Upgrade the HMI server

- 1. On the HMI server computer, close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - Tip:If the DVD does not start automatically, runD:\Setup.exe, where D: is the drive containing the DVD.
- 3. On the Welcome page, select Site Edition Server and click Next.
- If you have FactoryTalk Historian Management Tools installed, you need to manually uninstall the Management Tools Suite and the System Management Tools before installing FactoryTalk Historian Connectivity. For more information, see Rockwell Automation <u>Answer ID 618193</u> https://rockwellautomation.custhelp.com/app/answers/detail/a\_id/6181 93 and the product documentation.
- 5. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 6. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

#### Step 6: Upgrade the data server

1. On the RSLinx Enterprise data server computer, close all open Windows programs.

- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - Tip:If the DVD does not start automatically, runD:\Setup.exe, where D: is the drive containing the DVD.
- 3. On the Welcome page, select Stand-alone RSLinx Enterprise Server and click Next.
- 4. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 5. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

#### Step 7: Upgrade the engineering workstation

- 1. On the engineering workstation computer, close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - Tip:If the DVD does not start automatically, runD:\Setup.exe, where D: is the drive containing the DVD.
- 3. On the Welcome page, select Studio Enterprise and click Next.
- If you have FactoryTalk Historian Management Tools installed, you need to manually uninstall the Management Tools Suite and the System Management Tools before installing FactoryTalk Historian Connectivity. For more information, see Rockwell Automation <u>Answer ID 618193</u> https://rockwellautomation.custhelp.com/app/answers/detail/a\_id/6181 93 and the product documentation.
- 5. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 6. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

#### Step 8: Migrate the application

Use the following checklist as a guideline when you migrate the FactoryTalk View SE application:

• Open the application in FactoryTalk View Studio on page 106

- <u>Verify RSLinx Enterprise shortcuts</u> on page 106
- <u>Test the migrated application</u> on page 106

#### Open the application in FactoryTalk View Studio

To migrate the application, open it in the new version of FactoryTalk View Studio installed on upgraded **Workstation #1**.

#### To open the application:

- 1. On Workstation #1, select Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Studio.
- 2. Select View Site Edition (Network Distributed) and then click Continue.
- 3. In the **Existing** tab, click the application name, select an application language, and then click **Open**.
- 4. If prompted to convert the application the new version, click **OK**.
- 5. Wait until the HMI server and all project components in the application are loaded, and then leave the application open in FactoryTalk View Studio.

#### Verify RSLinx Enterprise shortcuts

To confirm that data communications are set up correctly in the migrated application, verify that RSLinx Enterprise shortcuts point at the correct devices.

#### To verify RSLinx Enterprise shortcuts:

- 1. In FactoryTalk View Studio, expand the data server **RSLinx Enterprise**, and then double-click **Communications Setup**.
- 2. In the **Communications Setup** editor, select each configured RSLinx Enterprise shortcut, and ensure that it points at the correct device.
- 3. Save the configuration and close the **Communications Setup** editor.

#### Test the migrated application

To test the migrated application, run the application on **Workstation #1**.

- 1. On Workstation #1, start a FactoryTalk View SE Client configuration.
- 2. Ensure that data communications are functioning as expected.

### Step 9: Upgrade all run-time clients

If you already have the **Client Install Portal** feature installed on the HMI server, you can upgrade the clients through a web browser. For detailed instructions, see <u>Install SE clients in a distributed system</u> on page 52. Otherwise, you can use the installation DVD or installation package. Follow the instructions below.

- 1. On the client computers, close all software programs that are currently running.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - **Tip:** If the DVD does not start automatically, run **D:\Setup.exe**, where *D*: is the drive containing the DVD.
- 3. On the Welcome page, select Site Edition Client and click Next.
- Follow the instructions to finish the installation. For more information, see the chapter <u>Install FactoryTalk View</u> on page 37.

After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

#### Step 10: Test the migrated application

To test the migrated FactoryTalk View SE application, perform these tasks:

- Run the migrated application on upgraded clients on page 107
- Verify that the system is functioning as expected on page 107

#### Run the migrated application on upgraded clients

On each of the upgraded run-time client computers, run the existing FactoryTalk View SE Client configuration file (.cli).

#### Verify that the system is functioning as expected

After the application starts running on the upgraded client computers, verify that display navigation, object animation, communications, alarming (if configured), and other applications features are functioning as expected.

# Upgrade a redundant network distributed application

Upgrading a redundant system can be done in parts, allowing you to keep your system running without redundancy temporarily while you upgrade. During an upgrade, a temporary system can help you with verification and validation.

Use the following multi-step checklist as a guideline for upgrading your redundant system. Details about each step are provided in this chapter.

#### Part 1: Prepare for the upgrade

- Step 1: Prepare for the upgrade on page 109
- <u>Step 2: Back up the application on Server #1 on page 110</u>

#### Part 2: Set up a separate system and perform a partial upgrade

- <u>Step 3: Set up a temporary upgrade system on page 112</u>
- <u>Step 4: Upgrade Server #2 on page 115</u>
- <u>Step 5: Upgrade Workstation #1</u> on page 115
- <u>Step 6: Migrate the application on page 115</u>
- Step 7: Upgrade selected run-time clients on page 117
- <u>Step 8: Test the migrated application on page 118</u>

#### Part 3: Upgrade remaining computers and restore redundancy

- <u>Step 9: Upgrade remaining client computers</u> on page 119
- <u>Step 10: Upgrade Server #1</u> on page 120
- Step 11: Restore redundancy and finish upgrading on page 121

#### Example

The following illustration shows an example of a FactoryTalk View SE network distributed application with redundant servers.

In this example, **Server #1** is the name of the primary server computer, **Server #2** is the name of the secondary server computer, and **Workstation #1** is the name of the engineering workstation. Assume that:

• The FactoryTalk Directory server, primary data server, primary HMI server, and primary Tag Alarm and Event server are located on **Server** #1.
• The secondary data server, secondary HMI server, and secondary Tag Alarm and Event server are located on **Server #2**.



# Part 1: Prepare for the upgrade

## Step 1: Prepare for the upgrade

Use the following multi-step checklist as a guideline when you prepare for the upgrade. For details, see the procedures that follow.

- Have the FactoryTalk View installation DVD or installation package on hand
- Log on with administrative rights on page 109
- Record the names and passwords of administrative users on page 110
- Perform set-up tasks on application computers on page 110
- Ensure that the latest application files are on the primary server on page 110

#### Log on with administrative rights

To perform certain tasks, the user performing the upgrade must have administrative rights in Windows and at the FactoryTalk Network Directory.

Windows administrative rights are required to install FactoryTalk View and supporting software because the Setup Wizard creates program folders and modifies registry entries.

FactoryTalk administrative rights are required to log on to the FactoryTalk Network Directory, for example, when you use the FactoryTalk Directory Server Location Utility.

To open the utility, you must log on as a FactoryTalk administrator on the local computer. To specify a remote Network Directory location, you must also have administrative rights on the remote computer.

FactoryTalk administrative rights are also required to back up and restore FactoryTalk View SE applications.

#### Record the names and passwords of administrative users

Before backing up the deployed application, ensure that you have recorded the user names and passwords of users that belong to the FactoryTalk administrators group.

Only members of the FactoryTalk administrators group can add, remove, or modify FactoryTalk user accounts, if this is necessary after restoring a backed-up application.

#### Perform set-up tasks on application computers

Before upgrading FactoryTalk View SE, review the chapter <u>Hardware</u>, <u>operating system</u>, and <u>domain information</u> on <u>page 23</u>. It contains information about tasks you can perform on application computers, to ensure that FactoryTalk View SE runs smoothly after it is installed. It also contains information about hardware and software requirements, and application limits.

## Ensure that the latest application files are on the primary server

During the upgrade described in this chapter, the application and HMI project files backed up on the primary server are restored on the secondary server, and then migrated in FactoryTalk View Studio on the upgraded engineering workstation.

To ensure that you migrate and re-deploy the most recent application, ensure that the application and HMI project files you back up initially, on the primary server, are the most recent application files.

### Step 2: Back up the application on Server #1

Before backing up the deployed application, ensure that the most recent application data is available for the upgrade on Server #1.

Use the **Distributed Application Manager** tool to back up the application. The backup archive has an **.APB** extension, and includes all FactoryTalk Directory data, such as accounts, passwords, policies and security settings. It also includes all application contents like application configurations, HMI servers, data servers, and tag Alarm and Event servers. **Tip:** RSLinx Classic configuration files are not included when you back up a FactoryTalk View SE application. You need to back up the RSLinx Classic configuration files before upgrading. For instructions, see <u>Back up and</u> restore RSLinx Classic configurations on page 67.

#### To back up the application:

- 1. On Server #1, select Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Distributed Application Manager.
  - **Tip:** The logged on user must have the **Backup and restore directory contents** permission. For more information, see FactoryTalk Security Help or check with your System Administrator.
- 2. In the **Create a Backup** tab, select your application and specify the **Host Machine** as **Server #1**.
- 3. Follow the wizard to back up the application on **Server #1**. For more instructions, see Distributed Application Manager Help.

During this part, a temporary system is set up to test a partial upgrade that involves **Server # 2**, **Workstation #1**, and selected run-time clients. For the test, **Server #2** is set up to function as the primary server.

**Tip:** It is recommended that you upgrade the software on some application clients, confirm that the upgraded application is running as expected, and then upgrade the software on the remaining clients. The number of clients to upgrade initially is left to your discretion.



## Part 2: Set up a temporary system and perform a partial upgrade

#### Step 3: Set up a temporary upgrade system

As part of the process, the original HMI project and application files that were backed up on **Server #1** are restored on **Server #2**. The restored application will be migrated later, after **Workstation #1** is upgraded.

**Note:** To avoid introducing incompatible software component versions into a deployed production system, be sure to restore the HMI project and application files before upgrading any software.

To set up a temporary system so that you can test a partial upgrade, perform the tasks below. For details, see the procedures that follow.

- <u>Disable HMI and data server redundancy in the original application</u> on page 112
- <u>Copy the archive file to Server #2</u> on page 113
- Specify Server #2 as the Network Directory location on page 113
- <u>Restore the application on Server #2 as the primary server on page 113</u>
- Specify Server #2 as the Network Directory location for Workstation #1 on page 113
- <u>Disable redundancy on Server #2</u> on page 114
- <u>Disable alarm and event history logging</u> on page 114

## Disable HMI and data server redundancy in the original application

To ensure that **Server #2** can be detached from the application for upgrading, open the application in FactoryTalk View Studio, and disable redundancy for the HMI server and data server.

#### To disable HMI and data server redundancy:

- 1. On Workstation #1, open the application in FactoryTalk View Studio.
- 2. In the Explorer window, right-click the HMI server and select **Properties**.
- 3. In the **Redundancy** tab, clear the check box **Provide redundancy using a secondary server**, and click **OK**.
- 4. In the Explorer window, right-click the data server **RSLinx Enterprise** and select **Properties**.
- 5. In the **Redundancy** tab, clear the check box **Provide redundancy using a secondary server**, and click **OK**.

#### Copy the archive file to Server #2

Move the archive file (\*.apb) created on Server #1 to Server #2.

#### Specify Server #2 as the Network Directory location

- 1. On Server #2, select Start > All Programs > Rockwell Software > FactoryTalk Tools > Specify FactoryTalk Directory Location.
  - **Tip:** To use the utility, you have to log on as an administrator on the local computer.
- 2. Click the **Browse** button besides the field **Computer hosting directory server**.
- 3. In the **FactoryTalk Directory Server Configuration** dialog box, select **This computer** and click **OK**.
  - **Tip:** To change the Network Directory location, you have to log on as an administrator on the new Network Directory computer (local or remote).
- 4. Click **OK** and then restart **Server #2**.

#### Restore the application on Server #2 as the primary server

- 1. On Server #2, select Start > All Programs > Rockwell Software > FactoryTalk View > Tools > Distributed Application Manager.
  - Tip: The logged on user must have the **Backup and restore** directory contents permission. For more information, see FactoryTalk Security Help or check with your System Administrator.
- 2. In the **Restore an Archive** tab, specify the restore scope as **Restore application, with FactoryTalk Directory** and the **Primary Host** as **Server #2**.
- 3. Follow the wizard to restore the application. For more instructions, see Distributed Application Manager Help.

## Specify Server #2 as the Network Directory location for Workstation #1

1. On Workstation #1, select Start > All Programs > Rockwell Software > FactoryTalk Tools > Specify FactoryTalk Directory Location.

- **Tip:** To use the utility, you have to log on as an administrator on the local computer.
- 2. Click the **Browse** button besides the field **Computer hosting directory server**.
- 3. In the **FactoryTalk Directory Server Configuration** dialog box, select **Remote computer**, type **Server #2** and click **OK**.
  - **Tip:** To change the Network Directory location, you have to log on as an administrator on the new Network Directory computer (local or remote).
- 4. Click **OK** and then restart **Workstation #1**.

#### Disable redundancy on Server #2

- 1. On **Workstation #1**, open the restored application in FactoryTalk View Studio.
- 2. In the Explorer window, right-click the HMI server and select **Properties**.
- 3. In the **Redundancy** tab, clear the check box **Provide redundancy** using a secondary server, and click **OK**.
- 4. In the Explorer window, right-click the data server **RSLinx Enterprise** and select **Properties**.
- 5. In the **Redundancy** tab, clear the check box **Provide redundancy using a secondary server**, and click **OK**.

#### Disable alarm and event history logging

After you restore the application, the alarm and event history logging is also enabled on **Server #2**. It is recommended that you disable the history logging. Follow the steps below.

- 1. On **Workstation #1**, open the restored application in FactoryTalk View Studio.
- 2. In the Explorer window, right-click the Tag Alarm and Event server and select **Properties**.
- 3. In the **Priorities and History** tab, clear the **Enable history** check box and click **OK**.

## Step 4: Upgrade Server #2

To upgrade the software components, install FactoryTalk View SE and any necessary products updates on **Server #2**.

- 1. On Server #2, close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - **Tip:** If the DVD does not start automatically, run **D:\Setup.exe**, where *D:* is the drive containing the DVD.
- 3. On the Welcome page, select Site Edition Server and click Next.
- 4. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 5. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

## Step 5: Upgrade Workstation #1

To upgrade the software components, install FactoryTalk View Studio and any necessary products updates on **Workstation #1**.

- 1. On Workstation #1, close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - **Tip:** If the DVD does not start automatically, run **D:\Setup.exe**, where *D:* is the drive containing the DVD.
- 3. On the Welcome page, select Studio Enterprise and click Next.
- 4. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 5. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

### Step 6: Migrate the application

To migrate the FactoryTalk View SE application that was restored on **Server** #2, perform these tasks:

• Open the application in FactoryTalk View Studio on page 116

- <u>Verify RSLinx Enterprise shortcuts</u> on page 116
- <u>Test the migrated application</u> on page 116

#### Open the application in FactoryTalk View Studio

To migrate the application, open it in the new version of FactoryTalk View Studio installed on upgraded **Workstation #1**.

#### To open the application:

- 1. On Workstation #1, select Start > All Programs > Rockwell Software > FactoryTalk View > FactoryTalk View Studio.
- 2. Select View Site Edition (Network Distributed) and then click Continue.
- 3. In the **Existing** tab, click the application name, select an application language, and then click **Open**.
- 4. If prompted to convert the application the new version, click **OK**.
- 5. Wait until the HMI server and all project components in the application are loaded, and then leave the application open in FactoryTalk View Studio.

#### Verify RSLinx Enterprise shortcuts

To confirm that data communications are set up correctly in the migrated application, verify that RSLinx Enterprise shortcuts point at the correct devices.

#### To verify RSLinx Enterprise shortcuts:

- 1. In FactoryTalk View Studio, expand the data server **RSLinx Enterprise**, and then double-click **Communications Setup**.
- 2. In the **Communications Setup** editor, select each configured RSLinx Enterprise shortcut, and ensure that it points at the correct device.
- 3. Save the configuration and close the **Communications Setup** editor.

#### Test the migrated application

To test the migrated application, run the application on **Workstation #1**.

- 1. On Workstation #1, start a FactoryTalk View SE Client configuration.
- 2. Ensure that data communications are functioning as expected.

## Step 7: Upgrade selected run-time clients

To upgrade the software components, install FactoryTalk View SE Client and any necessary products updates on the selected run-time clients. Perform these tasks on each client computer. For details, see the procedures that follow.

- Install FactoryTalk View SE Client on page 117
- <u>Specify Server #2 as the Network Directory location on client</u> <u>computers</u> on page 117

#### Install FactoryTalk View SE Client

If you already have the **Client Install Portal** feature installed on the HMI server, you can upgrade the clients through a web browser. For detailed instructions, see <u>Install SE clients in a distributed system</u> on page 52. Otherwise, you can use the installation DVD or installation package. Follow the instructions below.

- 1. On the client computers, close all software programs that are currently running.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - Tip:If the DVD does not start automatically, runD:\Setup.exe, where D: is the drive containing the DVD.
- 3. On the Welcome page, select Site Edition Client and click Next.
- 4. Follow the instructions to finish the installation. For more information, see the chapter Install FactoryTalk View on page 37.
- 5. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

#### Specify Server #2 as the Network Directory location on client computers

After upgrading the software on the client computer, specify **Server #2** as the Network Directory location.

#### To specify Server #2 as the Network Directory:

1. On each of the client computers, select Start > All Programs > Rockwell Software > FactoryTalk Tools > Specify FactoryTalk Directory Location.

- **Tip:** To use the utility, you have to log on as an administrator on the local computer.
- 2. Click the **Browse** button besides the field **Computer hosting directory server**.
- 3. In the **FactoryTalk Directory Server Configuration** dialog box, select **Remote computer**, type **Server #2** and click **OK**.
  - **Tip:** To change the Network Directory location, you have to log on as an administrator on the new Network Directory computer (local or remote).
- 4. Click **OK** and then restart the client computer.

### Step 8: Test the migrated application

To test the migrated application before upgrading remaining application computers, perform these tasks:

- <u>Start Server #2 and wait for it to finish starting on page 118</u>
- Run the migrated application on upgraded clients on page 119
- <u>Verify that the system is functioning as expected</u> on page 119

#### Start Server #2 and wait for it to finish starting

If **Server #2** is not already started, start the server and wait for the server to finish starting.

#### To confirm that Server #2 has finished starting:

- 1. On Server #2, select Start > All Programs > Rockwell Software > FactoryTalk Tools > Diagnostics Viewer.
- 2. In the **FactoryTalk Diagnostics Viewer**, check for the following Diagnostics message:

The HMI Server <ApplicationName>//Server #2 is the active server.

Tip: To find a message faster in the Diagnostics Viewer, on the View menu, click **Options**. Then, in the Filter tab, create a **Message** filter with one or more keywords from the message.

#### Run the migrated application on upgraded clients

On each of the upgraded run-time client computers, run the existing FactoryTalk View SE Client configuration file (.cli).

#### Verify that the system is functioning as expected

After the application starts running on the upgraded client computers, verify that display navigation, object animation, communications, alarming (if configured), and other applications features are functioning as expected.

This part involves upgrading the remaining run-time clients and **Server #1**, and restoring the redundancy. After upgrading, **Server #2** becomes the primary server and **Server #1** becomes secondary.

## Step 9: Upgrade remaining client computers

After testing the partially upgraded system, on the remaining client computers, install FactoryTalk View SE Client and point at Server #2 as the Network Directory. Perform these tasks:

- Install FactoryTalk View SE Client on page 117
- Specify Server #2 as the Network Directory for remaining clients on page 117

#### Install FactoryTalk View SE Client

If you already have the **Client Install Portal** feature installed on the HMI server, you can upgrade the clients through a web browser. For detailed instructions, see <u>Install SE clients in a distributed system</u> on page 52. Otherwise, you can use the installation DVD or installation package. Follow the instructions below.

- 1. On the client computers, close all software programs that are currently running.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.
  - Tip:If the DVD does not start automatically, runD:\Setup.exe, where D: is the drive containing the DVD.
- 3. On the Welcome page, select Site Edition Client and click Next.
- 4. Follow the instructions to finish the installation. For more information, see the chapter <u>Install FactoryTalk View</u> on page 37.

## Part 3: Upgrade remaining clients and restore redundancy

5. After installation, install any necessary product updates. For instructions, see Install product updates on page 126.

#### Specify Server #2 as the Network Directory location on client computers

After upgrading the software on the client computer, specify **Server #2** as the Network Directory location.

#### To specify Server #2 as the Network Directory:

- 1. On each of the client computers, select Start > All Programs > Rockwell Software > FactoryTalk Tools > Specify FactoryTalk Directory Location.
  - **Tip:** To use the utility, you have to log on as an administrator on the local computer.
- 2. Click the **Browse** button besides the field **Computer hosting directory server**.
- 3. In the **FactoryTalk Directory Server Configuration** dialog box, select **Remote computer**, type **Server #2** and click **OK**.
  - **Tip:** To change the Network Directory location, you have to log on as an administrator on the new Network Directory computer (local or remote).
- 4. Click **OK** and then restart the client computer.

#### Step 10: Upgrade Server #1

To upgrade FactoryTalk View SE and supporting software on Server #1, install FactoryTalk View SE Server and set up Server #1 to point at Server #2. Perform these tasks:

- Install FactoryTalk View SE Server on page 120
- <u>Specify Server #2 as the Network Directory for Server #1 on page 121</u>

#### Install FactoryTalk View SE Server on Server #1

- 1. On Server #1, close all open Windows programs.
- 2. Place the FactoryTalk View installation DVD in the computer's DVD drive, or double-click **Setup.exe** within the installation package.

- Tip:If the DVD does not start automatically, runD:\Setup.exe, where D: is the drive containing the DVD.
- 3. On the Welcome page, select Site Edition Server and click Next.
- 4. Follow the instructions to finish the installation. For more information, see the chapter <u>Install FactoryTalk View</u> on page 37.
- 5. After installation, install any necessary product updates. For instructions, see <u>Install product updates</u> on <u>page 126</u>.

#### Specify Server #2 as the Network Directory for Server #1

- 1. On Server #1, select Start > All Programs > Rockwell Software > FactoryTalk Tools > Specify FactoryTalk Directory Location.
  - **Tip:** To use the utility, you have to log on as an administrator on the local computer.
- 2. Click the **Browse** button beside the field **Computer hosting directory** server.
- 3. In the **FactoryTalk Directory Server Configuration** dialog box, select **Remote computer**, type **Server #2**, and then click **OK**.
  - **Tip:** To change the Network Directory location, you have to log on as an administrator on the new Network Directory computer (local or remote). In this case, the new location is remote.
- 4. Click **OK** again, and then restart **Server #1**.

### Step 11: Restore redundancy and finish upgrading

Before finishing the upgrade, you need to enable the redundancy and check the server status. If the status is not right, restart **Server #1** and **Server #2**. Perform the following tasks:

- Enable HMI and data server redundancy on page 121
- <u>Enable alarm and event history logging</u> on page 122
- <u>Confirm the status of primary and secondary servers</u> on page 122
- <u>Start all run-time clients</u> on page 123

#### Enable HMI and data server redundancy

1. On Workstation #1, open the application in FactoryTalk View Studio.

- 2. In the Explorer window, right-click the HMI server and select **Properties**.
- 3. In the **Redundancy** tab, select the check box **Provide redundancy** using a secondary server.
- 4. Under the **Secondary Server** area, type **Server** #1 and click **OK**.
- 5. In the Explorer window, right-click the data server **RSLinx Enterprise** and select **Properties**.
- 6. In the **Redundancy** tab, select the check box **Provide redundancy** using a secondary server.
- 7. Under the **Computer running secondary server** field, type **Server #1** and click **OK**.

#### Enable alarm and event history logging

If the alarm and event history logging is already disabled on **Server #2**, follow the steps below to enable the history logging.

- 1. On **Workstation #1**, open the restored application in FactoryTalk View Studio.
- 2. In the Explorer window, right-click the Tag Alarm and Event server and select **Properties**.
- 3. In the **Priorities and History** tab, select the **Enable history** check box, select the database and click **OK**.

#### Confirm the status of primary and secondary servers

On **Workstation #1**, in FactoryTalk View Studio, right-click the HMI server and then select **Server Status**.

In the Server Status dialog box:

- Server #2 and Active status are displayed in the fields Primary server and Primary status respectively.
- Server #1 and Standby status are displayed in the fields Secondary server and Secondary status respectively.
  - Tip: To switch the Active server to Server #1, click Switchover.

### Start all run-time clients

To ensure that the entire, upgraded application is functioning as expected, run the existing FactoryTalk View SE Client configuration file on each run-time client computer.

## **Common upgrade procedures**

This section contains notes, common procedures and information from the Rockwell Automation Knowledgebase that you may find helpful during installation of FactoryTalk View products.

Procedures in this section are:

- Recreate SQL Server 2008 R2 Express instance on page 125.
- <u>Install product updates</u> on <u>page 126</u>.

## Recreate SQL Server 2008 R2 Express instance

SQL Server 2008 R2 Express instance *FTVIEWx64TagDB* is created to store all the FactoryTalk View SE Tags and HMI Alarms data, which HMI Server and View Studio will access. You need to recreate SQL Server 2008 R2 Express instance *FTVIEWx64TagDB* manually under the following cases:

- For some reason you need to uninstall SQL Server 2008 R2 Express instance *FTVIEWx64TagDB* and reinstall it.
- On a computer that has had only the FactoryTalk View SE Client installed previously.

A message shows up asking the user to recreate the SQL server instance if user has not done so.

Tip: If you are installing FactoryTalk View with an existing SQL server, see Rockwell Automation Knowledgebase <u>Answer ID 463910</u> http://rockwellautomation.custhelp.com/cgi-bin/rockwella utomation.cfg/php/enduser/std\_adp.php?p\_faqid=463910 \n.

#### To recreate SQL Server 2008 R2 Express instance:

- 1. If necessary, close all open Windows programs, and then place the FactoryTalk View Site Edition DVD in the computer's DVD drive.
- Locate and run
   D:\Redist\SQLServerEXPR\_2008R2SP2\SQLServerInstall.exe where D:\ is the drive containing the DVD.

## Install product updates

- **Tip:** Windows Installer 4.5 and .NET Framework 3.5 SP1 are required for this procedure.
- Input and confirm a password for the SA account in the SQL Server Install window, and then click OK. Click Guidelines for quick reference of SQL SA User Strong Password Guidelines or see page 42.
- 4. To finish installing the software, follow the instructions in the wizard.

After installing FactoryTalk View SE, you should locate and install patches for the software products on your system. To locate patches, search the Rockwell Automation Knowledgebase for *Patch TOCs* (Tables of Contents). The TOCs contain lists of all available patches for your software. Go to http://rockwellautomation.custhelp.com and select the Search Knowledgebase tab.

A Patch TOC describes updates released for a particular product and version, and provides instructions for downloading and installing the updates on computers where the software is installed.

#### To find Patch TOCs in the Rockwell Automation Knowledgebase:

- 1. In your Web browser address bar, type www.rockwellautomation.custhelp.com, then press Enter.
- 2. On the Rockwell Automation Support Center page, click the down arrow on the Search Knowledgebase tab. Select **By Product.**



3. Scroll down to **Software** and click on **FactoryTalk View SE**. In the Search box, type Patch TOC and click **Search**.

Rockwell Automation UST	Welcome David Chamberlain Rockwell Automation Employees Change Language
Rockwell Automation > Support Cen	er Home → Search Knowledgebase [Log Out]
Chat Live Chat Topics	Search Support Center         Search Knowledgebase       Explore Forums       Submit T Questions       Chat Live       Find My Stuff       Get Help
Submit Request	Advanced Search Search
Forum Results	Find the answer to your question
Quick Links	Software Performance and Visualization (HMI) FactoryTalk View SE
Download Software and Firmware Updates     Request Answer Updates     Eind Your Local Distributor     Find Your Local Rockwell	Results 1 - 10 of 329 <u>466418 - FactoryTalk View - Patch Roll-up for CPR9 SRx</u> Click on the link below to download the latest FTView Patch Roll-up (Latest - Sep. 03.2012) Download the latest patch roll-up here: Important Note: As of December 5, 2011, there are no longer Access Levit: Everyone

In the search results, look for Patch TOCs related to all the products you installed from the FactoryTalk View Site Edition DVD. If necessary, conduct additional searches for other newly-installed applications, including:

- SE Client
- SE Server
- SE Station
- Studio Enterprise
- FactoryTalk Services Platform
- FactoryTalk Alarms and Events
- RSLinx Enterprise
- RSLinx Classic

## FactoryTalk tools and utilities

# FactoryTalk View tools

To run the following tool, select **Start > All Programs > Rockwell Software > FactoryTalk View > Uninstall FactoryTalk View**.

• Uninstall FactoryTalk View is a utility for uninstalling FactoryTalk View components that are already installed on your computer. It does not uninstall components, like RSLinx Classic and FactoryTalk Activation Manager, that are shared with other products. You need to manually uninstall them in Control Panel.

You can also choose to remove all FactoryTalk View application files, for example, archives and HMI project files.

To run the following set of tools, select **Start > All Programs > Rockwell Software > FactoryTalk View > Tools**, and then click the tool you want to run.

- Alarm Migration is software to migrate traditional HMI alarms to FactoryTalk Alarms and Events tag-based alarms.
- **Application Documenter** is a stand-alone utility that provides detailed information on FactoryTalk View SE and ME applications. This utility is a browser that allows you to view the contents of the application's components and the tags used in these components. You can also print and export the information.
- **Application Manager** is software for renaming, copying, deleting, backing up, and restoring FactoryTalk View SE Station and FactoryTalk View ME applications.

For FactoryTalk View SE network applications, use the Application Manager to rename and delete an application only.

- **DeskLock** is software that prevents users of FactoryTalk View SE Client and FactoryTalk View ME from gaining access to the Windows desktop and system keys.
- **Distributed Application Manager** is software to back up or restore network distributed applications within a single tool at a time.
- **FactoryTalk View File Viewer** is software to view and save log files like SE datalog files, ME datalog files, ME alarm log files, dBASE file, and ME RecipePlus files.
- FactoryTalk View SE Cache Management Tool is software to manage the temporary files of HMI Server components.

- FactoryTalk View SE Secure Web Site Setup is software for setting up secure access to application components under IIS (Internet Information Services).
- **FTVIEWUSER Account Reset** is software for resetting the FTVIEWUSER SQL account back to its default.
- HMI Server Backup and Restore is a utility for backing up FactoryTalk View SE HMI servers while they are running. Use this utility when backing up or restoring a stand-alone system, or when deploying a distributed system from one set of computers to another.
- Legacy Tag Database Conversion Utility is software for converting your legacy tag database (before View 6.0) to a new format to work with Microsoft SQL database.
- SE HMI Tag Alarm Log Setup is software for setting up HMI tag alarm logging.
- SE HMI Tag Alarm Log Viewer is software for viewing the contents of HMI tag alarm log files.
- SE Service Manager is a tool that allows you to stop or start the FactoryTalk View HMI Service manually on the computer.
- **Tag Import and Export Wizard** is software for importing or exporting the FactoryTalk View SE Server's tag database.

## FactoryTalk tools

To run the following set of tools, select **Start > All Programs > Rockwell Software > FactoryTalk Tools**, and then click the tool you want to run.

- **Diagnostics Counter Monitor** is software to check the status of tags and to monitor the runtime values of counters and strings that are made available by network clients for diagnostic purposes.
- **Diagnostics Viewer** is software for viewing the contents of FactoryTalk Diagnostics logs, to help with troubleshooting the system.
- FactoryTalk Directory Configuration Wizard is software for setting up the FactoryTalk Network Directory or Local Directory on the computer.
- **Import RSSecurity Configuration** is software for importing RSSecurity setup information to FactoryTalk Security.
- Log On to FactoryTalk is software for logging users on and off the FactoryTalk Directory.
- **Rockwell Software Data Client** is diagnostic software for testing client and server data connections in an application.
- **RSSecurity Emulator Install** is software for installing the RSSecurity Emulator, which emulates an RSSecurity Server for legacy products.
- **Specify FactoryTalk Directory Location** is software for specifying which computer on the network contains the FactoryTalk Network Directory service.

• Windows Firewall Configuration Utility is software for configuring firewall settings for FactoryTalk View.

## Install Microsoft Internet Information Services

When you install FactoryTalk View SE, IIS is installed by FactoryTalk View Setup Wizard automatically. This appendix servers as a reference to help you troubleshoot issues and verify IIS settings.

You must install IIS for FactoryTalk View SE network applications:

- on all computers that will run FactoryTalk View SE Servers (also called HMI servers).
- on engineering workstations that will run all the FactoryTalk View SE software components.

You do not have to install IIS if you plan to develop and run only FactoryTalk View SE local applications.

If necessary, you can install IIS from your Microsoft Windows operating system DVD.

- 1. Open Windows Control Panel, and click Programs.
- 2. Under **Programs and Features**, click **Turn Windows features on or off**. The **Windows Features** dialog box will open.
- 3. Click the checkbox to the left of **Internet Information Services** to enable settings.
- 4. Expand the **Web Management Tools** folders, and then expand the **IIS 6 Management Compatibility** folder.
- 5. Select the **IIS Metabase and IIS 6 configuration compatibility** check box.
- 6. Expand the **World Wide Web Services** folder and then expand the **Application Development Features** folder.
- 7. Select the **ASP** check box. The **ISAPI Extensions** check box should then be selected automatically.
- 8. Under the **World Wide Web Services** folder, expand the **Common HTTP Features** folder.

Install IIS on Windows 8.1, Windows 8, or Windows 7

- 9. Select the WebDAV Publishing checkbox.
- 10. Under World Wide Web Services folder, expand the Security folder.
- 11. Select the **Windows Authentication** and **URL Authorization** check boxes.
  - Tip: If IIS is installed correctly, you should be able to open the HMI server status page on localhost first, then from another computer. To test this, open Internet Explorer, in the address field, type http://localhost/rsviewse, or http://computername/rsviewse then the Enter key.

Install IIS on Windows Server 2008 or Server 2012 The steps vary slightly. Follow the on-screen instructions that apply to the operating systems you are using.

- 1. Select Start > Administrative Tools > Server Manager.
- (Windows Server 2008) In the Server Manager window, under Roles Summary, click Add Roles.

(Windows Server 2012) In the **Server Manager Dashboard** window, click **Add roles and features**.

- 3. Use the Add Roles Wizard (or Add Roles and Features Wizard) to add the **Web Server (IIS)** role.
- 4. To install the Web Server, some additional Windows features might need to be installed. In each case, click **Add Required Features**.
- 5. In the Add Role Services (or Add Server Roles) page, expand Common HTTP Features, and then select WebDAV Publishing.
  - Tip: If you are running on Windows Server 2008 Standard Edition with Service Pack 2, the steps to install WebDAV are different. See Install WebDAV on Windows Server 2008 on page 136.
- 6. Click to expand **Security**, and then select the **Windows Authentication** and **URL Authorization** check boxes.
- 7. Click to expand Application Development, and then select ASP.
- 8. When prompted to install ISAPI Extensions, click **Add Required Role Services**.

The following example shows the installation for Windows Server 2008.



- 9. Click to expand Management Tools and then expand IIS 6 Management Compatibility.
- 10. Under IIS 6 Management Compatibility, select **IIS 6 Metabase Compatibility**.

The following example shows the installation for Windows Server 2008.



2008

Install WebDAV on

**Windows Server** 

- 11. Click **Next**, and then accept the default selections at each remaining step of the wizard by clicking **Next** until all of the steps are complete.
- 12. At the end of the wizard, click Install to install the Web Server role.
- 13. After you have installed the Web Server role, install WebDAV, as described in the next section.

WebDAV allows remote clients to connect to HMI servers located on a computer running Windows Server 2008 Standard Edition with Service Pack 2.

With Windows Server 2008 Standard Edition with Service Pack 2, Microsoft no longer automatically distributes the IETF WebDAV extensions to HTTP (as defined in RFC 2518). For Windows Server 2008 Standard Edition with Service Pack 2, download and then install these extensions from Microsoft at:

#### Microsoft WebDAV Extension for IIS 7.0 (x86 or x64)

http://www.iis.net/download/webDAV

**Tip:** If IIS is installed correctly, you should be able to open the HMI server status page. To test this, on the desktop click Start, click Run, type http://localhost/rsviewse, and then press Enter.

## Use unattended installation

The unattended installation is an automated installation method that you can use to install FactoryTalk View. You can typically use the unattended installation during large-scale rollouts when it might be too slow and costly to have administrators or technicians interactively install the FactoryTalk View software on individual computers.

In the unattended installation, you enter a specified command line with multiple parameters. During the installation process, instead of prompting you for installation and configuration information interactively, the process follows the parameters you specified in the command lines.

Before installation, keep in mind:

- If you are using Windows Server 2012 R2, Windows Server 2012, Windows 8.1, or Windows 8, .NET Framework 3.5 is required. You need to manually install it first. For detailed instructions, refer to http://msdn.microsoft.com/en-us/library/hh506443.aspx.
- If you are using Windows Server 2008 SP2, you need to install WebDAV manually. For detailed instructions, see <u>Install WebDAV on</u> <u>Windows Server 2008</u> on page 136.
- If you use RSNetWorx on your computer, RSNetWorx v10.00 or later is required. We recommend that you upgrade it to v21.00 or later.
- 1. Close all open Windows programs.
- 2. Open the **Command Prompt** window:
  - (Windows Server 2012, Windows 8.1, and Windows 8) Press the Windows button+R. In the Open text box, input cmd and click OK.
  - (The other supported operating systems) From the Windows **Start** menu, select **All Programs > Accessories > Command Prompt**.
- 3. In the **Command Prompt** window, navigate to *D*:\, where *D*:\ is the drive containing the FTView installation DVD.

In this example, type D: and press Enter.

4. Type a command line with the following syntax:

Setup /Q

# Perform unattended installation

```
/AcceptAllLicenseItems
/Product=product_name
[/AdobeReader]
[/UserName=user_name]
[/Organization=organization_name]
[/SqlSaPwd=sql_server_password]
[/SerialNumber=serial_number]
[/ProductKey=product_key]
[/AutoRestart]
```

After you press Enter, the installation process starts with the parameters you specified.

For detailed description about each parameter, see <u>Parameters</u> on <u>page</u> <u>138</u>. You can also type **Setup** /? in the Command Prompt window, and press **Enter** to view the help information of all parameters and examples.

Tip: The User Account Control dialog box may show after you press **Enter**, click **Yes** to continue. The unattended installation requires the administrator permission.

## **Parameters**

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

If your installation package is Personalized Edition, the following parameters will be ignored during installation:

- /UserName
- /Organization
- /SerialNumber
- /ProductKey
- /Q

(Required) Specifies whether to use the unattended installation.

If omitted, the other parameters will not take effect and the installation will start with Setup Wizard.

#### /AcceptAllLicenseItems

(Required) Specifies that you read and acknowledge all license agreements, and agree to continue the unattended installation.

If omitted, you cannot continue the installation.

#### /Product\_product\_name

(Required) Specifies which product will be installed. The value must be quoted by quotation marks (" "), for example, /Product="Studio Enterprise".

The product name must be the one of following:

- Studio Enterprise
- Site Edition Server
- Site Edition Client
- Site Edition Station
- Stand-alone RSLinx Enterprise Server
- Stand-alone FactoryTalk Directory Server

#### /AdobeReader

(Optional) Specifies whether to install Adobe Reader.

If omitted, Adobe Reader will not be installed.

#### /UserName=user\_name

(Optional) Specifies the user name.

#### /Organization=organization\_name

(Optional) Specifies the organization name.

#### /SQLSAPWD=sql\_server\_password

(Optional) Specifies the password for the Microsoft SQL Server SA (System Administrator) account. The value must meet strong password policy requirements.

The parameter is required when you are installing one of the following products:

- Studio Enterprise
- Site Edition Server
- Site Edition Station

#### /SerialNumber=serial\_number

(Optional) Specifies the product serial number.

If you want to get activation keys during installation, the parameter is required.

#### /ProductKey=product\_key

(Optional) Specifies the product key.

If you want to get activation keys during installation, the parameter is required.

#### /AutoRestart

(Optional) Specifies whether to restart the computer automatically after the installation.

If it is specified, the computer will be restarted automatically after the installation.

If it is not specified, you will be prompted to restart the computer after the installation.

You can find the installation logs and check the installation status in the following directory:

- (32-bit operating systems) C:\Program Files\Common Files\Rockwell\Install Logs
- (64-bit operating systems) C:\Program Files (x86)\Common Files\Rockwell\Install Logs

**Examples** 

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

## **Example 1**

```
Setup /Q /AcceptAllLicenseItems /Product="Studio
Enterprise" /AdobeReader /SqlSaPwd=myPassword@123
/SerialNumber=0123456789 /ProductKey=ABCDE-FGHIJ
```

means:

- FactoryTalk View Studio Enterprise will be installed.
- Adobe Reader will be installed.
- Microsoft SQL Server will be installed and the system administrator password will be *myPassword@123*.
- The setup will get activation keys during installation if the serial number 0123456789 and product key ABCDE-FGHIJ are valid.

## Example 2

Setup /Q /AcceptAllLicenseItems /Product="Site Edition Client" /AutoRestart

means:

- FactoryTalk View Site Edition Client will be installed.
- The computer will be restarted automatically after the installation.

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