TRENDX GETTING RESULTS GUIDE

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Allen-Bradley • Rockwell Software

Rockwell Automation
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About RSView32 TrendX

RSView32 TrendX™ is an ActiveX control for monitoring real-time and historical process data. TrendX also provides a strip chart recorder display as it collects data.

System requirements

RSView32 TrendX requires RSView32 version 7.60.00. Recommended requirements for RSView32 TrendX are based on the requirements for RSView32, but may require a faster processor or more RAM, depending on the size and complexity of your projects.

**Recommended hardware.** Personal computer with 200 MHz Intel® Pentium® processor and 64 MB of RAM. Individual applications may require a faster processor or more RAM.

**Recommended operating system.** Microsoft® Windows® Server 2003 R2 Standard Edition with Service Pack 2, Windows XP Professional with Service Pack 1 or later, Windows 2000 Server with Service Pack 4 or Windows 2000 Professional with Service Pack 4; Windows Vista Business with Service Pack 1 or later (32-bit) or Windows Vista Home Basic with Service Pack 1 or later (32-bit); Windows 7 Professional (32-bit); and Windows Server 2008 Standard Edition Service Pack 2 (32-bit) are supported.

Installing RSView32 TrendX

The steps below explain how to install RSView32 TrendX software from the RSView32 Extensions CD-ROM to your computer. Before installing RSView32 TrendX, be sure that either RSView32 7.60.00 or RSView32 Active Display System is installed on the computer.

As part of the installation process, RSView32 TrendX creates program folders and modifies registry entries in your computer's operating system. When installing RSView32 TrendX, you must be logged in as a user with administrator rights to allow the installation program to modify the registries.

**Installation steps**

1. Close all open Windows programs.

2. Place the RSView32 Extensions CD-ROM in your CD-ROM drive. The CD-ROM should start running automatically.
If the CD-ROM does not start automatically, run D:\Setup.exe where D is the drive containing the CD-ROM.

3. The setup program lists the RSView32 add-on products available for installation. Click the button corresponding to RSView32 TrendX. Follow the on-screen instructions.

4. In the Select Components window, select either Full Install or Controls Only.
   - To install the complete RSView32 TrendX development and runtime system, select Full Install.
   - To install the RSView32 TrendX ActiveX control with an RSView32 Active Display System client, select Controls Only.

5. After installation is complete, shut down and restart your computer before running RSView32.

Installing ActiveX controls on Active Display clients

When running RSView32 Active Display System, ActiveX controls must be installed on the Active Display Station or client computer in order to show in graphic displays. Using .CAB files and Microsoft Internet Explorer, RSView32 Active Display System (version 7.60.00) can deploy ActiveX components to clients automatically when they need them.

All RSView32 Special Edition software components, such as RSView32 TrendX, include the .CAB files that make automatic installation possible. You do not need to install the TrendX ActiveX control on every client computer, however, you must set certain options in Microsoft Internet Explorer on every client computer. For details, check the Rockwell Software Support Library, http://support.rockwellautomation.com; refer to tech note A1403.

Configure Internet Explorer

The steps below apply to Microsoft Internet Explorer versions 4.x, 5.x and 6.x.

1. From the Windows Start menu, point to Start > Settings > Control Panel.
2. Double-click the Internet options to open its properties.
3. On the General tab, click the Settings button.
4. Select the option: Every Visit to the Page. Click OK.
5. Click the Security tab.

6. If the client computer is on the same intranet as the Active Display Station, select Local Intranet Zone. If the Active Display Station is not local, select Trusted Sites Zone and add the server computer to the Sites list. (If you’re using Internet Explorer 4.0, click the Reset button).

7. Open the Security Settings window:
   - If you’re using Internet Explorer 5.x or 6.x, click the Custom Level button.
   - If you’re using Internet Explorer 4.x, in the Internet Zone box, select Custom, and then click the Settings button.

8. In the Security Settings window, set the option Download Unsigned ActiveX Controls to either Prompt or Enable. Click OK.

9. Click OK to close the Internet Properties window.

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**TIP**
Only RSView32 graphic files (.GFX) saved in RSView32 6.2 or later support the automatic installation of ActiveX .CAB files.
Chapter 2

Getting started with RSView32 TrendX

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Welcome to RSView32 TrendX

TrendX is an ActiveX control that integrates into a software container such as RSView32, RSLogix™, or Microsoft® Visual Basic™, to provide real-time and historical trending.

To use TrendX, insert the TrendX ActiveX control in an RSView32 graphic display and configure it to display data from RSView32 data logs. Pens on the runtime chart represent data from the tags that you add to the TrendX control. TrendX offers extensive, flexible runtime control. You can add pens on the fly, toggle between isolated and overlapping trend lines, specify unique line configurations, plot one variable against another in XY plots, and print chart data.

Exploring RSView32 TrendX

TrendX integrates into the RSView32 ActiveX toolbar. Simply click and drag to insert a TrendX ActiveX control in an RSView32 graphic display. The RSView32 TrendX control includes a rich set of properties that you can configure during both edit mode and runtime.
Monitoring data values

A single TrendX control can display values for up to 100 tags.

From the TrendX property tabs, you can:

- browse for tags and historical datalog models from an RSView32 project
- add all tags or only selected tags from a datalog model to a TrendX control
- select individual tags whose real-time data you want to monitor

Each tag specifies the data that a corresponding pen graphs on a TrendX chart. You can configure the attributes for each pen, including its color, visibility, width, type (analog, digital, or full width), style (such as dotted, dashed, solid), plot symbol marker for each data point, engineering units, and text description.

Line legend

An optional line legend on the left side of the chart can show attributes configured for each pen. If configured, double-clicking on a dark-bordered hotspot area during runtime opens a corresponding property tab where you can make changes on the fly.
Current value legend
An optional current value legend on the right side of the chart can show pen icons, current pen values, and the time data was last collected.

Value bar
During runtime, simply click a point on a chart, and TrendX displays a value bar that indicates the date, time, and numerical values of the pens for the horizontal position.

Overlaying historical data with real-time data
With TrendX, you can capture a snapshot of graphed data, save it with a filename, and then place that saved data over the top of currently trending data. This feature allows you to easily overlay and compare historical data with current data or any multiple sets of data.
You can configure the TrendX control to allow or prohibit access to overlay functions from the right-click context menu during runtime.

Creating consistent trend views with templates

Save the configuration settings for a TrendX chart in a template, and then apply those settings to other trend charts for a consistent appearance. Templates are also a good way to create a set of different views of the same data, or a quick way to return to a standard display after experimenting with display options.
Changing trend properties during runtime

TrendX provides exceptional flexibility at runtime. During configuration, you determine which properties operators can access at runtime. You can configure a TrendX chart to show or hide each of its tabbed property pages, allow or prohibit certain chart behaviors during runtime, and specify which options to display from the right-click context menu.

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Chart behavior

- ✔ Allow editing legend properties
- ✔ Allow Pan / Zoom
- □ Sync Tag info on start line

Context menu options

- ✔ Allow Pause / Resume scrolling
- ✔ Allow Print
- ✔ Allow Show / Hide value bar
- ✔ Allow snapshot creation
- ✔ Allow overlay options

Scrolling, zooming, and panning through trend data

VCR-style scroll buttons and keyboard commands allow quick and easy navigation through runtime data. If the TrendX control is configured to allow it, you can also click and drag on a chart to zoom in for a closer look at data and quickly pan through data.
Scroll through data with VCR buttons

Zoom in for a closer look

Pan through data quickly

Automating TrendX functions with its object model

TrendX also exposes an object model that provides programming access through Microsoft Visual Basic for Applications™, a programming language embedded in
RSView32. For example, using the TrendX object model, you can attach commands to RSView buttons to open TrendX property tabs, print charts, load templates, and so on. For details, see the TrendX online help.
Quick Start steps

The following steps guide you through configuring and running a simple TrendX chart. This example uses a TrendX sample project that has datalog models already created.

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**TIP**

For details and more information as you work through these steps, click the Help button on any tab.

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**Step 1 - Configure a TrendX chart**

This step uses default settings for quickly configuring a TrendX chart.

1. Start RSView32 and open the project named TrendX Sample.rsv.

   From the Start menu, select Programs > Rockwell Software > TrendX > TrendX Sample Project, or in the directory where you installed RSView32 TrendX, look for TrendX Sample.rsv.

2. From the RSView32 Project Manager, create a new graphic display.

3. Insert the TrendX ActiveX control.

   Use the ActiveX Toolbox to insert an ActiveX control, or from the RSView32 menu, select Objects > ActiveX Control.

4. Right-click the control and select RSTrendX object > Properties.

5. On the Pens tab, click the Add/Configure Tags button.

6. In the Tags in Historical Tag Group box, select the datalog model named CureProc, and then click the Add All button.

   Notice that all of the tags included in the CureProc datalog model move to the Tags to Monitor box.

7. Click OK to close the Configure Tags window.

   Notice that the tags from the CureProc datalog model appear in the Pen Attributes box on the Pens tab.

8. Click OK to close the TrendX property tabs.

9. On the RSView32 toolbar, click the Test Run button.

   Watch as the chart simulates data from the tags contained in the CureProc datalog model.
10. To stop the test run, click the Normal button on the RSView32 toolbar.

11. Save the graphic display and name it QuickStart. Leave it open on your screen.

Step 2 ■ Explore configuration options
For more details about the many configuration options available, click the Help button on any TrendX property tab.

1. On the QuickStart graphic display you created, right-click on the TrendX control and select RSTrendX object > Properties.

2. On the General tab, change the chart title to Quick Start Trend.

3. On the Display tab, make these changes:
   - change the background color to light gray
   - in the Line Legend box, deselect Display min/max values
   - in the Line Legend box, change the Pen Caption to Description

4. On the Pens tab, change the width of all of the pens to 3.
   To change the width of all of the pens at the same time, first select each pen in the Pen Attributes box by pressing and holding the Ctrl key while clicking its tag name. In the Multiple Pen Edits box, click Width, select 3, and then click the Apply to Selected Pens button.

5. On the X-Axis tab, change the time span to 30 seconds.


7. Click OK to close the TrendX properties and apply your changes.

8. On the RSView32 toolbar, click the Test Run button.
   Notice the differences in your chart’s appearance.

9. To stop the test run, click the Normal button on the RSView32 toolbar.

Step 3 ■ Capture and overlay a snapshot file
1. Using the TrendX control property tabs, configure the pens, start date and time, time span, and other trending options that you want to include in the snapshot file.

2. Run the RSView32 project.
If you are working in the TrendX Sample.rsv project, close the MainTrend display that opens, and then open the QuickStart display that you created earlier.

3. Allow the chart to monitor data for at least a minute.

4. To capture the chart data, right-click on the control and select Create Snapshot. Save the snapshot with a filename.

5. To add the snapshot file to the current chart, right-click on the control and select Chart Properties.

6. On the Overlays tab, click the Add button. Select the new snapshot file name and click Open.

The Overlay Attributes box on the Overlays tab lists the snapshot file that you added.

7. Click the Pens tab and notice the tags from the snapshot file listed in the Pen Attributes box.

You can change the attributes of a pen from a snapshot file, just as you can change the attributes of any other pen.

8. To close the TrendX property tabs, click OK.

The runtime chart now shows the pens from the snapshot file overlaying the other pens on the chart.

9. To position the overlay, right-click the chart and select Overlays > Relocate > snapshot filename.

The cursor takes the shape of a two-headed arrow. Click and drag the overlay to position it on the chart.

For more precise control, use the Overlays tab to anchor a snapshot file by either position or time. Right-click the chart and select Overlays > Properties. Click the Anchor row to toggle between Position and Time settings.

10. Stop running the project and return to edit mode.

**Step 4 ■ Create and apply a template**

In this example, we save part of our current chart configuration as a template, and then apply that template to a trend chart.

1. On the QuickStart display you created earlier, open the TrendX control’s property tabs. Make sure the display is in Normal, and not Test Run, mode.
2. Click the Template tab. On the left side of the options box, click each property tab name to select it. On the right side of the box, notice the configuration options that are already selected as defaults. For this example, we'll save all of the default settings in our new template.

3. Click the Save Template button. Assign a filename, such as QuickStart Template.

4. Now let’s make some changes to our current chart.
   - On the General tab, deselect the Chart Title.
   - On the Display tab, deselect the Current Value Legend options and the Line Legend options. Change the background color to bright yellow.
   - On the Pens tab, turn Visibility OFF for all pens except the first one.

5. Click OK to close the property tabs. On the RSView32 toolbar, click the Test Run button and notice the changes to the appearance of your chart. Then click the Normal button to stop the test run.

6. Now let’s apply our template. Right-click on the chart and open the TrendX properties.

7. On the Templates tab, click the Load Template button. Select the name of your template file and click Open.

8. To close the TrendX property tabs, click OK.

9. On the RSView32 toolbar, click the Test Run button to see the effects of loading the template. To return to edit mode, click the Normal button.

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The TrendX Sample.rsv project includes several examples of ways to use templates in your applications.

Step 5 ■ Explore runtime flexibility

Depending on how a TrendX control is configured, nearly all — or none — of its configurable properties can be available to operators during runtime. In this example, we explore some of the options available during runtime.

1. On the QuickStart display you created earlier, open the TrendX control’s properties and click the Runtime tab.
Notice the many options that you can allow or prohibit operators from using during runtime. (For information about any of these options, click the Help button on the tab.)

2. Close the TrendX property tabs. Save the Quick Start graphic display you’ve been working with. (Make sure the display is in Normal, and not Test Run, mode.)

3. Run the RSView32 sample project. Close the MainTrend display that opens first, and then run your Quick Start graphic.

4. Click once on the chart to display a value bar.

5. Right-click on the chart and notice the options available on the context menu. Select Chart Properties. Using any of the tabs, make a few changes to your chart, and then click OK to close the property tabs.

   All of the TrendX property tabs, except the Runtime tab, are available for you to work with.

   The changes you make take effect immediately on the runtime chart, but are not saved with the chart.

6. Move the mouse pointer over the line legend and current value legend and watch for blue-bordered boxes. When you see a box, double-click inside it and notice the available options.

7. To pan through data, click and drag the mouse pointer inside the Y-axis legend on the left side of the chart. Then try dragging the mouse pointer inside the X-axis legend on the bottom of the chart.

8. To zoom in on data, click and drag on the chart. To zoom out again, right-click on the chart and select Undo Zoom/Pan from the context menu.

9. When you finish exploring, close your Quick Start display. Run the MainTrend display and explore the ready-made sample project.

For help with the sample project, click the question mark button on any graphic display to open the online help.
Chapter 3

Getting the information you need

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Using RSView32 TrendX online help

RSView32 TrendX online help provides overviews, reference information, and step-by-step procedures for working with all of the features in RSView32 TrendX.

To open online help while running RSView32 you can:
- click the Help button on any window
- on the RSView32 menu bar, click Help> Contents

Viewing and printing the help contents

For an overview of the RSView32 TrendX help, click the Contents tab, and then double-click the RSView32 TrendX book.

To print a group of help topics, select a book from the Contents tab, and then click the Print button. All of the individual topics contained in that book will print. To print an individual topic, select the topic and click Print.
Using the index

The help index is similar to an index in a book, listing keywords for topics in the help. To see the index, click the Index tab.

Type a keyword to see related entries. To see the topic, click Display or double-click the selected index entry. If there is more than one topic for that index entry, select the desired topic in the Topics Found box and double-click or click Display.

Learning more about using online help

To learn tips and tricks for getting the most out of the built-in help system, on the RSView32 menu bar, click Help>Using Help.

Finding RSView32 TrendX version information

To find the RSView32 TrendX version and serial numbers, click Help>About RSView32 and click the Add-ons button. Select TrendX, and then click the Details button.
Running the RSView32 TrendX sample project

To see TrendX data in action, and to get ideas for building your own TrendX displays in RSView32, tour the RSView32 TrendX Sample project. From the Start menu, select Programs > Rockwell Software > TrendX > TrendX Sample Project, or in the directory where you installed RSView32 TrendX, look for TrendX Sample.rsv.

For more information

For information about RSView32, refer to the following publications.

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Technical support

If you have a question about RSView32 TrendX, please consult this guide or the RSView32 TrendX online help. Or, click Help>Rockwell Software on the Web, and select a home page to view. To use Rockwell Software on the Web, you must have a web browser installed on your computer and a current Internet connection.

If you cannot find the answer, call Rockwell Software Technical Support: 440-646-3434.
When you call, you should be at a computer running RSView32 TrendX and prepared to give the following information:

- product version number
- hardware you are using
- exact wording of any messages that appeared on the screen
- description of what happened when the problem occurred
- description of how you tried to solve the problem
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Installing RSVIEW32 TrendX

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About RSView32 TrendX

RSView32 TrendX™ is an ActiveX control for monitoring real-time and historical process data. TrendX also provides a strip chart recorder display as it collects data.

System requirements

RSView32 TrendX requires RSView32 version 7.60.00. Recommended requirements for RSView32 TrendX are based on the requirements for RSView32, but may require a faster processor or more RAM, depending on the size and complexity of your projects.

Recommended hardware. Personal computer with 200 MHz Intel® Pentium® processor and 64 MB of RAM. Individual applications may require a faster processor or more RAM.

Recommended operating system. Microsoft® Windows® Server 2003 R2 Standard Edition with Service Pack 2, Windows XP Professional with Service Pack 1 or later, Windows 2000 Server with Service Pack 4 or Windows 2000 Professional with Service Pack 4; Windows Vista Business with Service Pack 1 or later (32-bit) or Windows Vista Home Basic with Service Pack 1 or later (32-bit); Windows 7 Professional (32-bit); and Windows Server 2008 Standard Edition Service Pack 2 (32-bit) are supported.

Installing RSView32 TrendX

The steps below explain how to install RSView32 TrendX software from the RSView32 Extensions CD-ROM to your computer. Before installing RSView32 TrendX, be sure that either RSView32 7.60.00 or RSView32 Active Display System is installed on the computer.

As part of the installation process, RSView32 TrendX creates program folders and modifies registry entries in your computer’s operating system. When installing RSView32 TrendX, you must be logged in as a user with administrator rights to allow the installation program to modify the registries.

Installation steps

1. Close all open Windows programs.

2. Place the RSView32 Extensions CD-ROM in your CD-ROM drive. The CD-ROM should start running automatically.
If the CD-ROM does not start automatically, run D:\Setup.exe where D is the drive containing the CD-ROM.

3. The setup program lists the RSView32 add-on products available for installation. Click the button corresponding to RSView32 TrendX. Follow the on-screen instructions.

4. In the Select Components window, select either Full Install or Controls Only.
   - To install the complete RSView32 TrendX development and runtime system, select Full Install.
   - To install the RSView32 TrendX ActiveX control with an RSView32 Active Display System client, select Controls Only.

5. After installation is complete, shut down and restart your computer before running RSView32.

**Installing ActiveX controls on Active Display clients**

When running RSView32 Active Display System, ActiveX controls must be installed on the Active Display Station or client computer in order to show in graphic displays. Using .CAB files and Microsoft Internet Explorer, RSView32 Active Display System (version 7.360.00) can deploy ActiveX components to clients automatically when they need them.

All RSView32 Special Edition software components, such as RSView32 TrendX, include the .CAB files that make automatic installation possible. You do not need to install the TrendX ActiveX control on every client computer, however, you must set certain options in Microsoft Internet Explorer on every client computer. For details, check the Rockwell Software Support Library, http://support.rockwellautomation.com; refer to tech note A1403.

**Configure Internet Explorer**

The steps below apply to Microsoft Internet Explorer versions 4.x, 5.x and 6.x.

1. From the Windows Start menu, point to Start > Settings > Control Panel.
2. Double-click the Internet options to open its properties.
3. On the General tab, click the Settings button.
4. Select the option: Every Visit to the Page. Click OK.
5. Click the Security tab.

6. If the client computer is on the same intranet as the Active Display Station, select Local Intranet Zone. If the Active Display Station is not local, select Trusted Sites Zone and add the server computer to the Sites list. (If you’re using Internet Explorer 4.0, click the Reset button).

7. Open the Security Settings window:
   - If you’re using Internet Explorer 5.x or 6.x, click the Custom Level button.
   - If you’re using Internet Explorer 4.x, in the Internet Zone box, select Custom, and then click the Settings button.

8. In the Security Settings window, set the option Download Unsigned ActiveX Controls to either Prompt or Enable. Click OK.

9. Click OK to close the Internet Properties window.

**TIP** Only RSView32 graphic files (.GFX) saved in RSView32 6.2 or later support the automatic installation of ActiveX .CAB files.
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Welcome to RSView32 TrendX

TrendX is an ActiveX control that integrates into a software container such as RSView32, RSLogix™, or Microsoft® Visual Basic™, to provide real-time and historical trending.

To use TrendX, insert the TrendX ActiveX control in an RSView32 graphic display and configure it to display data from RSView32 data logs. Pens on the runtime chart represent data from the tags that you add to the TrendX control. TrendX offers extensive, flexible runtime control. You can add pens on the fly, toggle between isolated and overlapping trend lines, specify unique line configurations, plot one variable against another in XY plots, and print chart data.

Exploring RSView32 TrendX

TrendX integrates into the RSView32 ActiveX toolbar. Simply click and drag to insert a TrendX ActiveX control in an RSView32 graphic display. The RSView32 TrendX control includes a rich set of properties that you can configure during both edit mode and runtime.
Monitoring data values

A single TrendX control can display values for up to 100 tags.

From the TrendX property tabs, you can:
- browse for tags and historical datalog models from an RSView32 project
- add all tags or only selected tags from a datalog model to a TrendX control
- select individual tags whose real-time data you want to monitor

Each tag specifies the data that a corresponding pen graphs on a TrendX chart. You can configure the attributes for each pen, including its color, visibility, width, type (analog, digital, or full width), style (such as dotted, dashed, solid), plot symbol marker for each data point, engineering units, and text description.

Line legend

An optional line legend on the left side of the chart can show attributes configured for each pen. If configured, double-clicking on a dark-bordered hotspot area during runtime opens a corresponding property tab where you can make changes on the fly.
Current value legend

An optional current value legend on the right side of the chart can show pen icons, current pen values, and the time data was last collected.

![Current value legend diagram](image)

Value bar

During runtime, simply click a point on a chart, and TrendX displays a value bar that indicates the date, time, and numerical values of the pens for the horizontal position.

![Value bar diagram](image)

Overlaying historical data with real-time data

With TrendX, you can capture a snapshot of graphed data, save it with a filename, and then place that saved data over the top of currently trending data. This feature allows you to easily overlay and compare historical data with current data or any multiple sets of data.
You can configure the TrendX control to allow or prohibit access to overlay functions from the right-click context menu during runtime.

Creating consistent trend views with templates

Save the configuration settings for a TrendX chart in a template, and then apply those settings to other trend charts for a consistent appearance. Templates are also a good way to create a set of different views of the same data, or a quick way to return to a standard display after experimenting with display options.
Changing trend properties during runtime

TrendX provides exceptional flexibility at runtime. During configuration, you determine which properties operators can access at runtime. You can configure a TrendX chart to show or hide each of its tabbed property pages, allow or prohibit certain chart behaviors during runtime, and specify which options to display from the right-click context menu.

Scrolling, zooming, and panning through trend data

VCR-style scroll buttons and keyboard commands allow quick and easy navigation through runtime data. If the TrendX control is configured to allow it, you can also click and drag on a chart to zoom in for a closer look at data and quickly pan through data.
Scroll through data with VCR buttons

Zoom in for a closer look

Pan through data quickly

Automating TrendX functions with its object model

TrendX also exposes an object model that provides programming access through Microsoft Visual Basic for Applications™, a programming language embedded in...
RSView32. For example, using the TrendX object model, you can attach commands to RSView buttons to open TrendX property tabs, print charts, load templates, and so on. For details, see the TrendX online help.
Quick Start steps

The following steps guide you through configuring and running a simple TrendX chart. This example uses a TrendX sample project that has datalog models already created.

For details and more information as you work through these steps, click the Help button on any tab.

Step 1 — Configure a TrendX chart

This step uses default settings for quickly configuring a TrendX chart.

1. Start RSView32 and open the project named TrendX Sample.rsv.

From the Start menu, select Programs > Rockwell Software > TrendX > TrendX Sample Project, or in the directory where you installed RSView32 TrendX, look for TrendX Sample.rsv.

2. From the RSView32 Project Manager, create a new graphic display.

3. Insert the TrendX ActiveX control.

Use the ActiveX Toolbox to insert an ActiveX control, or from the RSView32 menu, select Objects > ActiveX Control.

4. Right-click the control and select RSTrendX object > Properties.

5. On the Pens tab, click the Add/Configure Tags button.

6. In the Tags in Historical Tag Group box, select the datalog model named CureProc, and then click the Add All button.

Notice that all of the tags included in the CureProc datalog model move to the Tags to Monitor box.

7. Click OK to close the Configure Tags window.

Notice that the tags from the CureProc datalog model appear in the Pen Attributes box on the Pens tab.

8. Click OK to close the TrendX property tabs.

9. On the RSView32 toolbar, click the Test Run button.

Watch as the chart simulates data from the tags contained in the CureProc datalog model.
10. To stop the test run, click the Normal button on the RSView32 toolbar.

11. Save the graphic display and name it QuickStart. Leave it open on your screen.

**Step 2 ■ Explore configuration options**

For more details about the many configuration options available, click the Help button on any TrendX property tab.

1. On the QuickStart graphic display you created, right-click on the TrendX control and select RSTrendX object > Properties.

2. On the General tab, change the chart title to Quick Start Trend.

3. On the Display tab, make these changes:
   - change the background color to light gray
   - in the Line Legend box, deselect Display min/max values
   - in the Line Legend box, change the Pen Caption to Description

4. On the Pens tab, change the width of all of the pens to 3.

   To change the width of all of the pens at the same time, first select each pen in the Pen Attributes box by pressing and holding the Ctrl key while clicking its tag name. In the Multiple Pen Edits box, click Width, select 3, and then click the Apply to Selected Pens button.

5. On the X-Axis tab, change the time span to 30 seconds.


7. Click OK to close the TrendX properties and apply your changes.

8. On the RSView32 toolbar, click the Test Run button.

   Notice the differences in your chart’s appearance.

9. To stop the test run, click the Normal button on the RSView32 toolbar.

**Step 3 ■ Capture and overlay a snapshot file**

1. Using the TrendX control property tabs, configure the pens, start date and time, time span, and other trending options that you want to include in the snapshot file.

2. Run the RSView32 project.
If you are working in the TrendX Sample.rsv project, close the MainTrend display that opens, and then open the QuickStart display that you created earlier.

3. Allow the chart to monitor data for at least a minute.

4. To capture the chart data, right-click on the control and select Create Snapshot. Save the snapshot with a filename.

5. To add the snapshot file to the current chart, right-click on the control and select Chart Properties.

6. On the Overlays tab, click the Add button. Select the new snapshot file name and click Open.

The Overlay Attributes box on the Overlays tab lists the snapshot file that you added.

7. Click the Pens tab and notice the tags from the snapshot file listed in the Pen Attributes box.

You can change the attributes of a pen from a snapshot file, just as you can change the attributes of any other pen.

8. To close the TrendX property tabs, click OK.

The runtime chart now shows the pens from the snapshot file overlaying the other pens on the chart.

9. To position the overlay, right-click the chart and select Overlays > Relocate > snapshot filename.

The cursor takes the shape of a two-headed arrow. Click and drag the overlay to position it on the chart.

For more precise control, use the Overlays tab to anchor a snapshot file by either position or time. Right-click the chart and select Overlays > Properties. Click the Anchor row to toggle between Position and Time settings.

10. Stop running the project and return to edit mode.

**Step 4  Create and apply a template**

In this example, we save part of our current chart configuration as a template, and then apply that template to a trend chart.

1. On the QuickStart display you created earlier, open the TrendX control’s property tabs. Make sure the display is in Normal, and not Test Run, mode.
2. Click the Template tab. On the left side of the options box, click each property tab name to select it. On the right side of the box, notice the configuration options that are already selected as defaults. For this example, we’ll save all of the default settings in our new template.

3. Click the Save Template button. Assign a filename, such as QuickStart Template.

4. Now let’s make some changes to our current chart.
   - On the General tab, deselect the Chart Title.
   - On the Display tab, deselect the Current Value Legend options and the Line Legend options. Change the background color to bright yellow.
   - On the Pens tab, turn Visibility OFF for all pens except the first one.

5. Click OK to close the property tabs. On the RSView32 toolbar, click the Test Run button and notice the changes to the appearance of your chart. Then click the Normal button to stop the test run.

6. Now let’s apply our template. Right-click on the chart and open the TrendX properties.

7. On the Templates tab, click the Load Template button. Select the name of your template file and click Open.

8. To close the TrendX property tabs, click OK.

9. On the RSView32 toolbar, click the Test Run button to see the effects of loading the template. To return to edit mode, click the Normal button.

   **TIP** The TrendX Sample.rsv project includes several examples of ways to use templates in your applications.

### Step 5 • Explore runtime flexibility

Depending on how a TrendX control is configured, nearly all — or none — of its configurable properties can be available to operators during runtime. In this example, we explore some of the options available during runtime.

1. On the QuickStart display you created earlier, open the TrendX control’s properties and click the Runtime tab.
Notice the many options that you can allow or prohibit operators from using during runtime. (For information about any of these options, click the Help button on the tab.)

2. Close the TrendX property tabs. Save the Quick Start graphic display you’ve been working with. (Make sure the display is in Normal, and not Test Run, mode.)

3. Run the RSView32 sample project. Close the MainTrend display that opens first, and then run your Quick Start graphic.

4. Click once on the chart to display a value bar.

5. Right-click on the chart and notice the options available on the context menu. Select Chart Properties. Using any of the tabs, make a few changes to your chart, and then click OK to close the property tabs.

   All of the TrendX property tabs, except the Runtime tab, are available for you to work with.

   The changes you make take effect immediately on the runtime chart, but are not saved with the chart.

6. Move the mouse pointer over the line legend and current value legend and watch for blue-bordered boxes. When you see a box, double-click inside it and notice the available options.

7. To pan through data, click and drag the mouse pointer inside the Y-axis legend on the left side of the chart. Then try dragging the mouse pointer inside the X-axis legend on the bottom of the chart.

8. To zoom in on data, click and drag on the chart. To zoom out again, right-click on the chart and select Undo Zoom/Pan from the context menu.

9. When you finish exploring, close your Quick Start display. Run the MainTrend display and explore the ready-made sample project.

   **TIP** For help with the sample project, click the question mark button on any graphic display to open the online help.
Chapter 3

Getting the information you need

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Using RSView32 TrendX online help

RSView32 TrendX online help provides overviews, reference information, and step-by-step procedures for working with all of the features in RSView32 TrendX.

To open online help while running RSView32 you can:

- click the Help button on any window
- on the RSView32 menu bar, click Help > Contents

Viewing and printing the help contents

For an overview of the RSView32 TrendX help, click the Contents tab, and then double-click the RSView32 TrendX book.

To print a group of help topics, select a book from the Contents tab, and then click the Print button. All of the individual topics contained in that book will print. To print an individual topic, select the topic and click Print.
Using the index

The help index is similar to an index in a book, listing keywords for topics in the help. To see the index, click the Index tab.

Type a keyword to see related entries. To see the topic, click Display or double-click the selected index entry. If there is more than one topic for that index entry, select the desired topic in the Topics Found box and double-click or click Display.

Learning more about using online help

To learn tips and tricks for getting the most out of the built-in help system, on the RSView32 menu bar, click Help>Using Help.

Finding RSView32 TrendX version information

To find the RSView32 TrendX version and serial numbers, click Help>About RSView32 and click the Add-ons button. Select TrendX, and then click the Details button.
Running the RSView32 TrendX sample project

To see TrendX data in action, and to get ideas for building your own TrendX displays in RSView32, tour the RSView32 TrendX Sample project. From the Start menu, select Programs > Rockwell Software > TrendX > TrendX Sample Project, or in the directory where you installed RSView32 TrendX, look for TrendX Sample.rsv.

For more information

For information about RSView32, refer to the following publications.

**Getting Results with RSView32**
Rockwell Software
Publication ID:
VW32-GR001D-EN-E

**RSView32 User’s Guide**
Rockwell Software
Publication ID:
VW32-UM001C-EN-E
Also available on the RSView32 installation CD-ROM and from the Programs>Rockwell Software>RSView32 menu.

**Getting Results with RSView32 Active Display system**
Rockwell Software
Publication ID:
VW32AD-GR001C-EN-E

Technical support

If you have a question about RSView32 TrendX, please consult this guide or the RSView32 TrendX online help. Or, click Help>Rockwell Software on the Web, and select a home page to view. To use Rockwell Software on the Web, you must have a web browser installed on your computer and a current Internet connection.

If you cannot find the answer, call Rockwell Software Technical Support: 440-646-3434.
When you call, you should be at a computer running RSView32 TrendX and prepared to give the following information:

- product version number
- hardware you are using
- exact wording of any messages that appeared on the screen
- description of what happened when the problem occurred
- description of how you tried to solve the problem
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