Studio 5000 View Designer[®] and PanelView[™] 5000 V9

Shipped June 2023 as part of Studio 5000° V35.00.02



expanding human possibility*

V9 provides new features to support development outside of Studio 5000 View Designer® and more security options

- Major new features
 - Import/export
 - Enables FactoryTalk[®] View ME to Studio 5000 View Designer[®] conversion tool
 - Network-based security (Active Directory authentication)
 - Improved controller synchronization
- Other improvements
 - Custom folder icons for the Navigation Menu
 - Side or bottom location option for the Navigation Menu
 - Support for new Studio 5000 Logix Designer® date/time data types
 - Support for P-instructions and PlantPAx® faceplates
 - New LeadingZerosFill property for numeric displays and numeric inputs
 - Support for CIP identity object attributes of Series and Warranty
 - Support for keypad presses while web browser has focus
 - Use the UDT instance .@Name and .@Description in alarm messages
 - PanelView[™] 5510 support for LLDP (Link Layer Discovery Protocol)



Import/Export

- Export Studio 5000 View Designer® project contents into a textual format
- Create content in a defined textual format and import it into your Studio 5000 View Designer[®] project
- Screens, popups, and add-on graphics export as separate text files in a folder structure.
 - Folder structure matches the folders that you define under User-Defined Screens in Project Explorer
- Most project content is exported:
 - Screens and popups
 - Add-on graphics
 - PDF files and images
 - Controller references
 - Navigation menu shortcuts
 - Data log configurations

Export proje	ect	\times
Select a	name and path for exported project content	
Name:	PI32DemoPanel	
Path:	C:\ImportExport Browse	
	Example: C:\Users\Documents	
		_
	Export <u>C</u> ancel	





FactoryTalk® View ME to Studio 5000 View Designer® conversion tool

- The new Import/Export feature will be used as an enabler for a FactoryTalk® View ME to Studio 5000 View Designer® conversion tool availability planned for Q3CY2023
- Workflow:
 - Export your FactoryTalk[®] View ME displays using the "Import and Export..." option on the Displays folder in FactoryTalk[®] View ME.
 - Run the FactoryTalk[®] View ME to View Designer conversion tool.
 - Import the screens into Studio 5000 View Designer[®] using the "Import Project" option on the File menu in Studio 5000 View Designer[®].
- The converter is not expected to be a 100% conversion
 - Simple screen objects such as numeric inputs, numeric displays, string inputs, string displays, simple buttons, etc. should largely convert
 - More complex elements such as a multistate button may not completely convert
 - The converter is expected to focus on-screen content. Other content must be manually created or transferred to your Studio 5000 View Designer® project (data logs, images, etc.).





View ME



Studio 5000 View Designer®

Network-based security

- Authenticate users using Active Directory
- Provides better support for PanelView[™] 5000 terminals used in a larger manufacturing facility where operators often change.
- Prior releases could only authenticate users defined as part of the project, so changing an operator sign in required downloading an updated project.
- In Studio 5000View Designer:
- Define a connection to the Active Directory server.
- Map Active Directory user groups to roles.
- This information is downloaded as part of your project and is used by the PanelView™ 5000 at runtime.
- When a user signs in a PanelView[™] 5000, they are prompted for their Active Directory user name and password.
- Once logged on, they get the access defined for their role.
- The latest ten logons are cached for 24 hours in case connection to the Active Directory server is lost.
- Option to sign in as a local user if local users are defined in the project
- Defaults to local users if no Active Directory server connection is configured.
- Certificates for StartTLS or LDAPS encryption can be loaded on the PanelView[™] 5000 using the pre-defined Certificates settings screen.

Security A	dministration		?
ж. М	Users Create and configure user accounts	Connection Configure the default domain	
L.x	Policies Configure policies for the target HMI device	Domain Name: rockwellautomation.com Domain Controller: USMKEMSI107.ra-int.com Domain Distinguished Name: DC=ra-int,DC=com Encryption method: O None StartTLS	0
0, ⁰ ,⊘ 0' ¦ 0	Connection and Groups Configure the default domain and manage groups and roles	Groups and Roles Assign roles to user groups by using the group Distinguished Name	
VNC	VNC Configure access rights	Add New User Group Distinguished Name: CN=CVB-ProductOwner,OU= Administrator	User Group 🕂

ogon	
You are using rockwellautomation.co	m
User Name:	
hogank	
Password:	
	Logo
Logged on:	Log
	000000



Improved controller synchronization

Synchronization: the reading of the controller tag and data type information when connecting to a new controller project – online and offline

- Better support for large controller projects.
- Online Display data on the PanelView[™] 5000 more quickly after you download a new project to the controller. Depending on project contents:
- Typically, 15% to 45% faster synchronization for one controller project (almost 2X faster in some cases)
- Up to 66% faster synchronization for a four-controller project (almost 3X faster in some cases)
- Offline Browse tags more quickly In Studio 5000 View Designer after linking an acd file in a controller reference
 - Typically, 5% to 10% faster offline synchronization depending on project contents



Custom folder icons for the Navigation Menu

- Customize folder icons on the navigation menu with icons or your own images
- Make hierarchical navigation more visually appropriate for your specific application









Side or bottom location option for the Navigation Menu

- New option to locate the Navigation Menu on the side of the PanelView[™] 5000 instead of the bottom.
- Use the Width property to define how wide the navigation menu will be when open
 - Allows for longer shortcut captions
- New Search field helps operators find a specific screen shortcut in large projects
- Carriage return in a shortcut caption is automatically interpreted as a space in the side menu
 - Helps you to switch from a bottom navigation menu to a side navigation menu
 - Side menu captions always appear as one line





Support for new Logix date/time data types

- Support for the new Logix date/time data types introduced in Studio 5000® Logix version 34:
 - Duration types: TIME, TIME32, LTIME
 - Time types: DT, LDT
- Supports displaying values of these tags and their associated extended tag properties

Engineering Unit
display for a TIME tag
2300401 microsec

<u>ب</u>	



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Support for P-instructions and PlantPAx® faceplates

- The P-controller process instructions (P-instructions) are now supported.
- Data from these instructions can be read and written, including all extended tag properties.
- PlantPAx[®] faceplates for PanelView[™] 5000 under development
- Planned for a PlantPAx[®] 5.10.01 minor release in September
- Allows the PanelView[™] 5000 to be a local HMI panel as part of a larger PlantPAx[®] system.



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Leading Zero fill for numeric inputs and displays

- You can now configure numeric inputs and numeric displays to fill all empty DigitsBeforeDecimal places with zeros.
- Useful to align columns of numbers.

Properties	→ ╄ ×
Name: NumericDisp	lay_001
	-, F
General	ents
Value 🔧	::LGX.DINTtag
Appearance	
▲ Numeric	
DigitsBeforeDeci	5
DigitsAfterDecin	0
LeadingZero	
TrailingZeros	
Rounding	Nearest ~
LeadingZerosFill 🎕	Z
N Decition and Cize	

00001
00007
00126
02400
00003



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Support for CIP identity object attributes of Series and Warranty

- Tools such as FactoryTalk[®] Linx can now read all identity attributes previously only available on the manufacturing label of the PanelView[™] 5000.
 - Easier to maintain field-mounted equipment without physically accessing the back of a PanelView[™] 5000.

FactoryTalk Linx Net	etwork Browser 🛛 🗖 🔀
# ∅ @, Q, ? ∨	Q.▼ Filter ▼
DESKTOP-R7DLUJC	
192.168.1.92, PanelView 5510 10.4" Touch, 2715P-T100	CD PanelView 5510
92.168.1.151, 5069-L3100ERMS2, TestTagsV34MRSZ_PI2	23Demo
192.168.1.182 + Add Anchor	PanelView 5510 9.0" Wide Touch. 2715P-T9WD PanelView 5510
192.168.1.184, C Refresh	
192.168.1.189. 1 271	General Device Locator
rowsing networ	Device Name: 2715P-T9WD PanelView 5510
1 EDS Upload	Vendor: Rockwell Automation/Allen-Bradley
	Product Type: 24
	Product Code: 1206
	Revision: 9.001
	Serial Number: 00F9FFDA
	Catalog Number: 2715P-T9WD
	Manufacture Date: 2018/10/11
	Hardware Revision: 1.001
	Warranty: 65712696
	Series: A
	Faults:
	Device Path: DESKTOP-R7DLUJC!AB_ETH-1\192.168.1.152
	EDS File Name: 0001001804B609XX.EDS



Support for keypad presses while web browser has focus

• A keypad PanelView[™] 5510 can now use the Ln and Rn keys to trigger project events even if the web browser is open and has focus.





Use UDT instance .@Name and .@Description in alarm messages

- V9 can now display the name or description of a UDT tag within an alarm message.
 - In prior releases, an alarm message could only display the name or description of a <u>member</u> of a UDT.
 - Useful for creating alarm messages containing a description related to an Add-On Instruction instance, for example.

The data type "Conveyor" has its Description used in the alarm message

Alarm Message Editor		×
Message: /*S:0 %Conveyor.@Description*/ has a motor fault		Add Variable Variable: Select Tag Extended Properties Tag: Conveyor Extended Property: @ Description Use Fixed Width: 12 + characters
	~	<- Add



Support for LLDP (Link Layer Discovery Protocol)

- A PanelView[™] 5510 can now support LLDP to report its connection information to a neighboring network node.
- New checkbox on the pre-defined network configuration screen to enable/disable LLDP.
- The PanelView[™] 5510 will now appear in the neighbor information on the controller's configuration page in FactoryTalk[®] Linx.

	몲	🗹 LLDP Pr	otocol					
		🗹 Enable E	Ithernet	Link 1				
		🗹 Au	to nego	tiate				
	恭	Link spec	ed:	🛞 10 Mbp		Link duplex:	🛞 Half	
		DESK	(TOP-R7D	LUJC!AB_ETH-1	\192.168.1.1	51		?
Internet	Protocol	Port Configuration	Network C	Configuration	IP Mode	CIP Security	LLDP	
Layer Disc	overy Protocol (Ll	.DP) permits detection of cor	inected device((s).				_
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bal LLDP S	itatus:	LLDF	Datastore:					
Enable	d	LLD	P Data Tab	le Object				
rameter	Configuratio	n						
	/al (5-32768 s)	Hold	Multiplier (1-1	00)				
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nsmit Inter			P					
nsmit Inter	nuration and	Douise Connected						
nsmit Inter	guration and	Device Connected						
nsmit Inten	guration and	Device Connected		N	eighbor Infoma	ation		
nsmit Inter n Confi Port	guration and Outgoing Enabled	IP Address	Port	N Device Name	eighbor Infoma Revision	ation Mac Address	Vendor	
nsmit Inter N Config Port A1	Outgoing Databled	IP Address	Port	N Device Name	eighbor Infoma Revision	ation Mac Address	Vendor	



Notable anomaly fixes

- Screen navigates or popup open commands with a missing target now given a warning on verification.
- Element added to a group in the Graphic Explorer now added in the correct z order instead of always on top.
- A V6 project missing an Alarm Summary shortcut can now convert to V9.
- Gradient fill color on a popup background working again in V9. Stopped working in V8.
- Improved error indication when popup caption has a binding error.
- Improved error message when using invalid characters for a project name.
- Fixed conversion failures for projects originally created with early versions of View Designer.
- Fixed cases where "find/replace" results could have additional scripting text.





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