



iTest 4.4 What's New

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Overview



New Features for iTest 4.4 include:

- AutomationPanel Updates
- SolutionBuilder Updates
- Driver Updates
- New Python Packages
- New INI Settings
- iTest.BTS Updates

AutomationPanel: Connector Object

In SolutionBuilder's Layouts editor, you can now add connectors between panels. These connectors can then be viewed in AutomationPanel.



AutomationPanel: Simple Potentiometer

The Simple Gauge panel can now be configured as a Simple Potentiometer panel via the following properties:

- Gauge Mode
- Grab Handle Color
- Grab Handle Offset



AutomationPanel: Panel Updates



Chart Panel

- The Chart panel now includes the **Wheel Zoom Needs ALT** property. When set to TRUE, the user must press the **ALT** key, while only using the mouse wheel to scroll, to zoom both the X and Y axes simultaneously.

Gauge Panel

- The Gauge panel now allows you to reset the watermarks via the **Reset Watermarks** right-click option. This option is only available when the **Show Watermarks** property is set to TRUE.

Master Schedule Panel

- The Master Schedule panel now includes the **Edit...** right-click option, allowing you to enter edit mode for the selected master schedule.

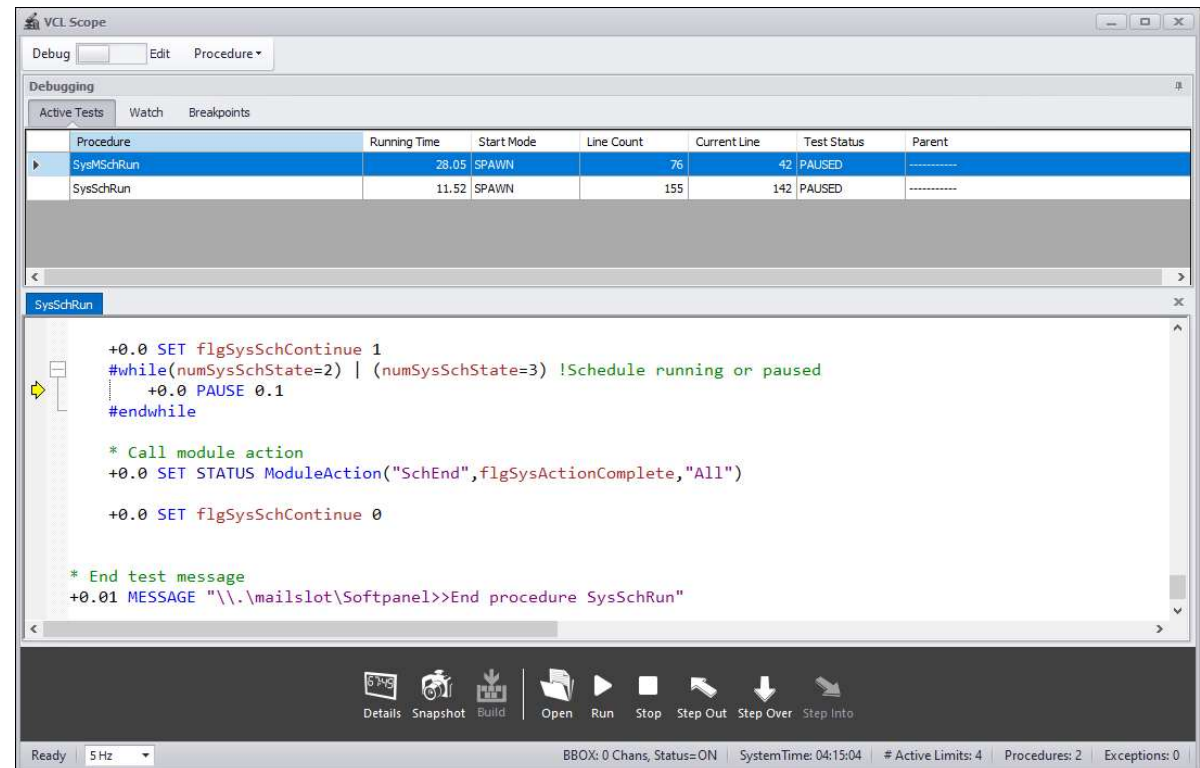
Single Click Edit

- The Simple Channel and Channel Tile panels now include the **Single Click Edit** property, allowing you to edit the channel value with a single click instead of a double click.

AutomationPanel: TestStatusDisplay



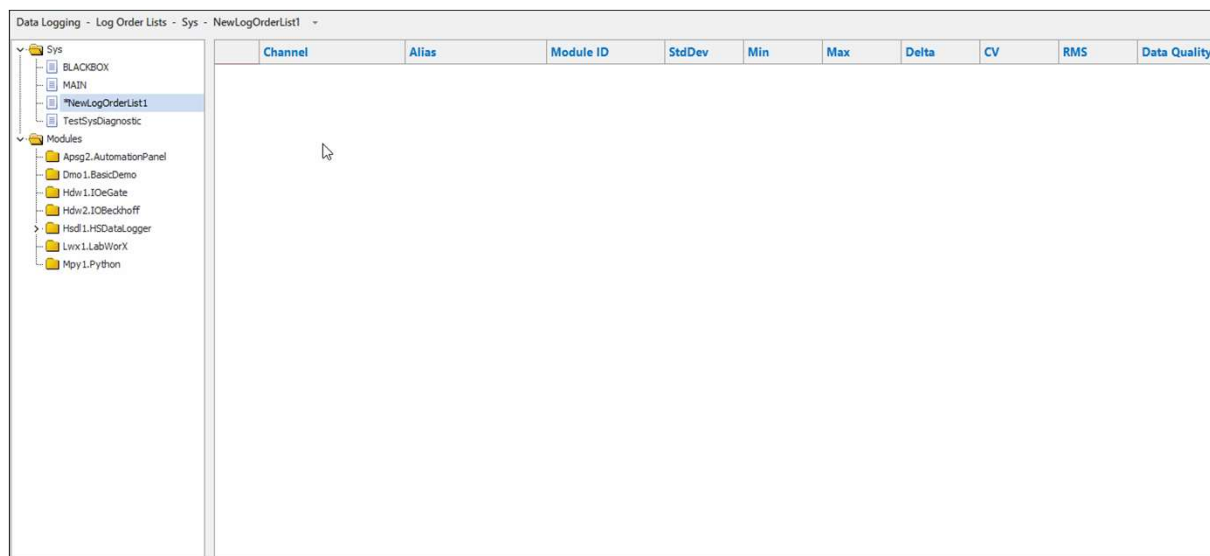
TestStatusDisplay now includes the option to debug active procedures as well as edit available procedures in the solution.



SolutionBuilder: Adding Multiple Channels

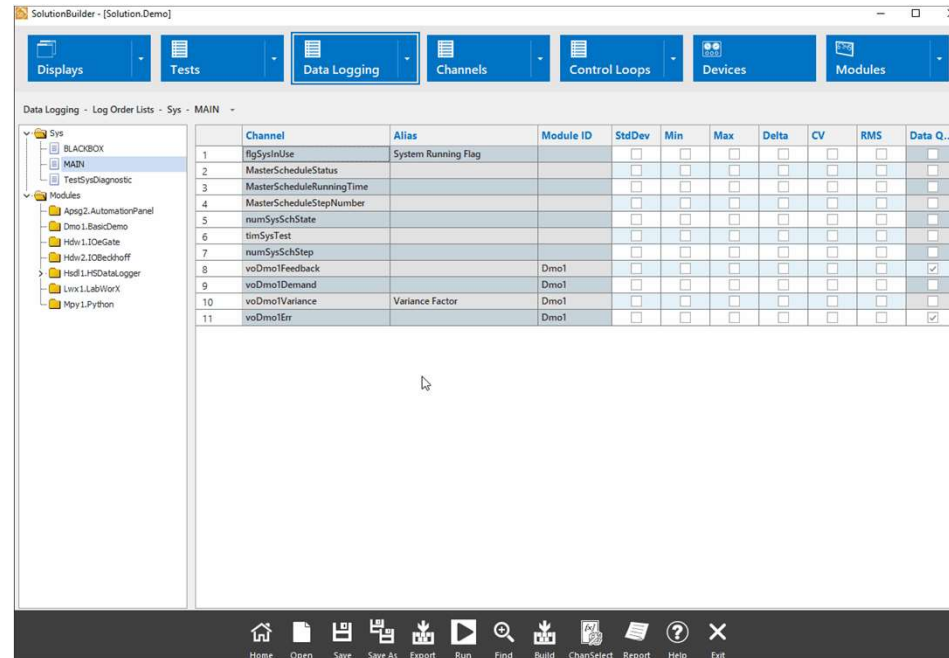


You can now add multiple channels at once to a log order list via the **Insert Before** and **Add to End** right-click options. When one of these options is selected, you can use **Shift + Left-Click** or **Ctrl + Left-Click** to select multiple channels in the Channel Selection dialog.



SolutionBuilder: ChanSelect Tool

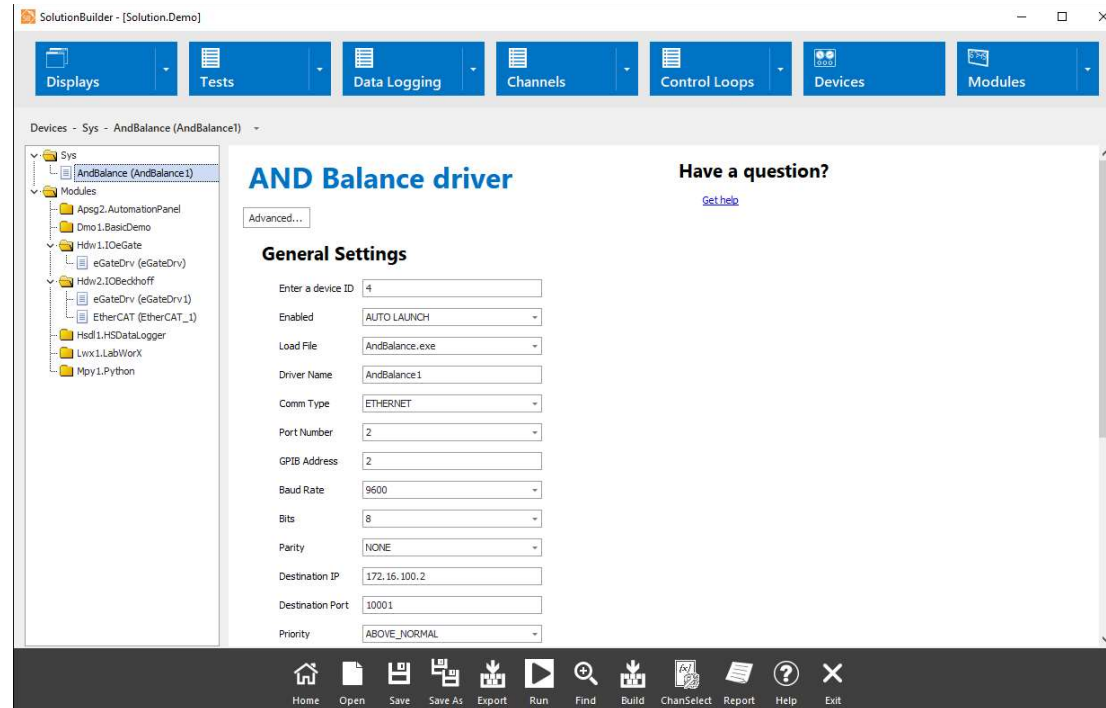
You can launch the Channel Selection dialog from SolutionBuilder's bottom menu, allowing you to drag and drop channels into various editors if applicable.



SolutionBuilder: Devices Editor



SolutionBuilder now includes the Devices editor, allowing you to add, modify, and remove devices.



SolutionBuilder: Find Dialog

The Find dialog in SolutionBuilder has been expanded to include the following filters: **Match whole word** and **Find File Type Filter**. The **Match whole word** checkbox enables you to only include standalone occurrences of the whole string entered in the **Text/Channel** field. The **Find File Type Filter** allows you to specify which results to include based on the selected file types.

Find

Find Type: Text/Channel Name

Text/Channel: flgSysActive Channel...

Match whole word: ☐

Find File Type Filter:

Channel Name: flgSysActive

Customer Name: flgSysActive

Module Name: flgSysActive

Find

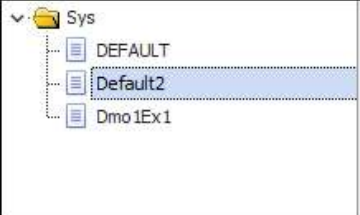
Found 8 matching items.

Description	Text
Channel Definition 'Sys': Channel '...	flgSysActive
Test\Demo1\Demo1Init.TSC(23)	#if (flgSysActive = 0)
Test\Hdw1\Hdw1Init.TSC(24)	#if (flgSysActive = 0)
Test\Hdw2\Hdw2Init.TSC(24)	#if (flgSysActive = 0)
Test\Hsdl1\Hsdl1Init.TSC(23)	#if (flgSysActive = 0)
Test\Lwx1\Lwx1Init.TSC(23)	#if (flgSysActive = 0)
Test\Mpy1\Mpy1Init.TSC(25)	#if (flgSysActive = 0)
Test\SysCoreFunctions\SysInit.TS...	+0.0 SET flgSysActive 1

SolutionBuilder: Limit Groups Editor



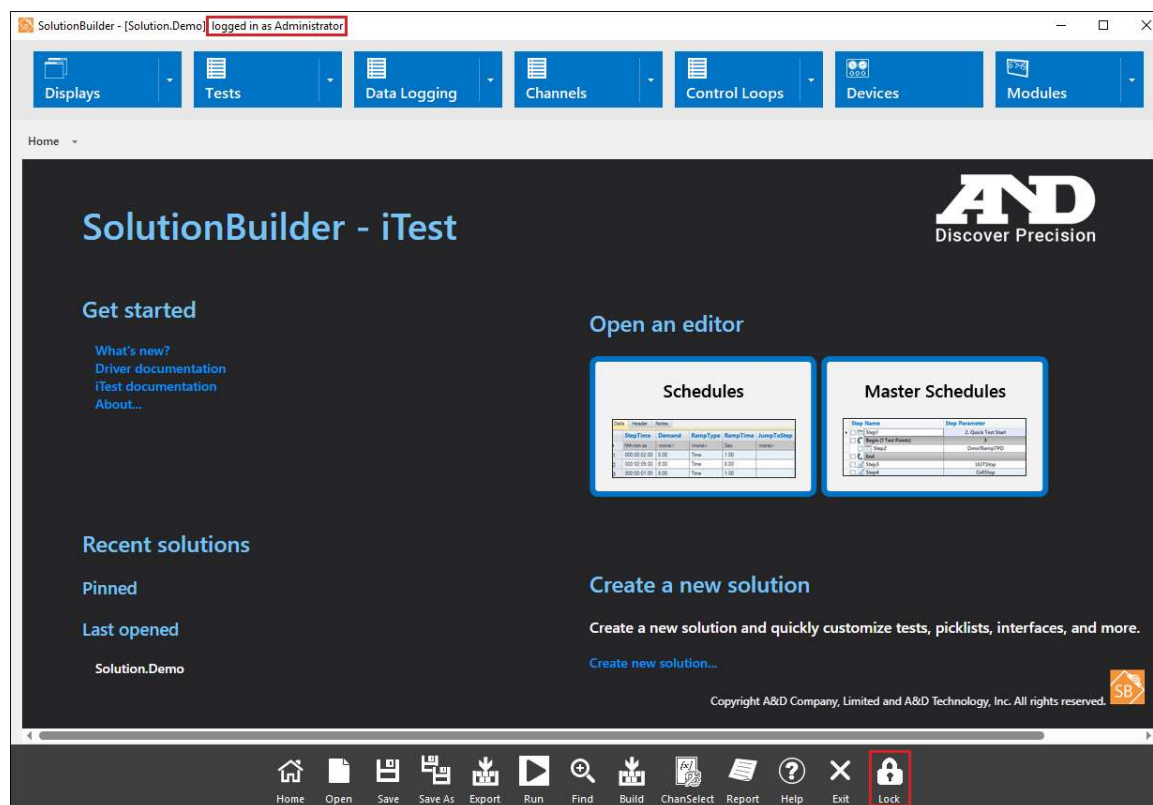
During a running instance of SolutionBuilder, the Limit Groups editor will now display different states for channel rows in a limit group by changing the font, indicating which channels have been added, modified, and removed.

		Channel	Alias	Module ID	Low Limit	Low Warning	High Warning	High Limit	LL Ignore Ti...
	1	voDmo1Err		Dmo1	-2.500000	-2.000000	2.000000	2.500000	0.000000
	2	voDmo1Demand		Dmo1	1	3	9.000000	10.500000	5
	3	voDmo1LimitDemo		Dmo1	0.000000	1000.000000	7000.000000	8000.000000	0.000000
	4	voDmo1Feedback		Dmo1	-2.000000	-1.000000	12.000000	20.000000	0.000000
	5	voDmo1Ch1		Dmo1	0.000000	10.000000	90.000000	100.000000	0.000000

SolutionBuilder: Locking SolutionBuilder

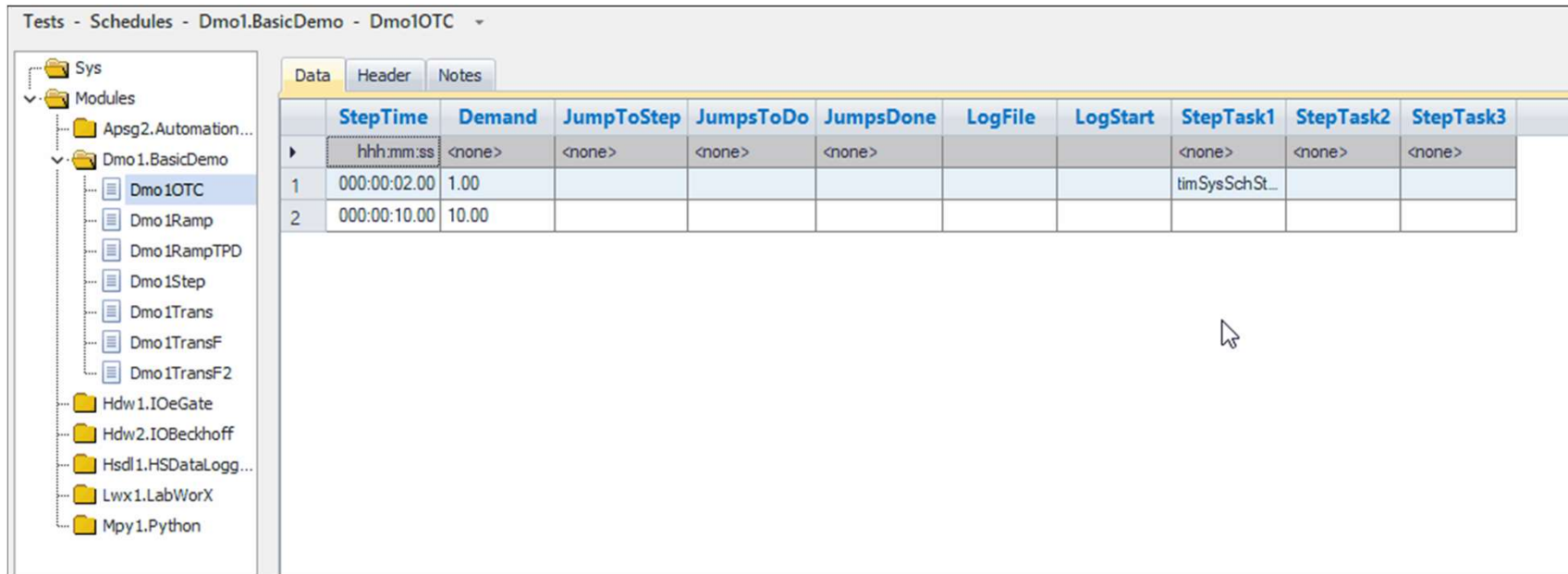


When security is enabled, SolutionBuilder will display the logged in user in its title bar as well as provide a **Lock** button. Clicking the **Lock** button will prevent any further edits from being made in SolutionBuilder until the specified user logs back in.



SolutionBuilder: Moving Columns

You can now drag and drop columns in SolutionBuilder's Schedules editor in non-BTS systems.



	StepTime	Demand	JumpToStep	JumpsToDo	JumpsDone	LogFile	LogStart	StepTask1	StepTask2	StepTask3
	hhh:mm:ss	<none>	<none>	<none>	<none>			<none>	<none>	<none>
1	000:00:02.00	1.00						timSysSchSt...		
2	000:00:10.00	10.00								

SolutionBuilder: Miscellaneous Updates



Bottom Menu Customization

- SolutionBuilder can now be customized to show/hide the action buttons available in the bottom menu.

Duplicating Many Channels

- The **Duplicate Many...** right-click option in SolutionBuilder's Channel Definitions editor has been extended to create duplicates of all virtual channels (i.e., virtual output, virtual input, virtual string, virtual output array, virtual string array, and virtual timer).

Launching SolutionBuilder

- When launching SolutionBuilder, you can now specify which *SolutionBuilder.xml* file via the following command-line argument:
 - `SolutionBuilder.exe /xml <XML Filename>`

Drivers: AndBalance



The AndBalance driver now supports the **REPEAT <Secs>** mailslot message, which allows you to change the default polling interval. In addition, the following settings have been added to the driver:

- Log Level
- Polling Interval
- Decimal Place Channel
- Measurement Counter Channel
- Database file

Drivers: EtherCAT Driver



The following enhancements have been added to the EtherCAT driver:

- The mapping process from iTest channels to EtherCAT variables has been significantly improved.
- Support has been added for Service Data Object (SDO) Read/Write and File over EtherCAT (FOE) Read/Write.
- Diagnostics now shows slave codes and errors in English.

Drivers: Supported Interfacing



iTest now supports interfacing to:

- CANoe with Python
- ProveTec with Python
- 64 bit Simulink running on Windows (non-real-time)
- Hioki PW8001 (Hioki Power Meter driver)
- BTC 1120 (Chamber driver)

Drivers: Miscellaneous Updates



Av900 Driver

- The Av900 driver now has a manual control window.

CanNeo Driver

- Support has been added for J1850 CRCs to the CanNeo driver.

HoldEUTool

- The HoldEUTool now allows you to force a channel's value to a specific value.

iTestBackground

- A network monitor feature was added to iTestBackground, allowing you to more easily see where ethernet cables are plugged in (Windows and INtime).

Xenomai

- 64 Bit Xenomai real-time system support has been added.

XCPMaster Driver

- The XCPMaster driver now supports UDP.

Python Updates

Python Packages

- The following Python packages have been added to the `$SYSTEMDIR\PythonPackages` folder:
 - (et-xmlfile 1.1.0) `et_xmlfile-1.1.0-py3-none-any.whl`
 - (openpyxl 3.1.2) `openpyxl-3.1.2-py2.py3-none-any.whl`
 - (pyserial 3.5) `pyserial-3.5-py2.py3-none-any.whl`

iTestExcel.py Python Script

- The *iTestExcel.py* Python script has been added to iTest and utilizes the et-xmlfile 1.1.0 and openpyxl 3.1.2 Python packages. This script allows you to execute the read and write functions for a single cell similar to the Excel Reader and Excel Writer utilities.

Python Version

- Python has been updated to 3.11, 64 bit.

INI Settings: Part 1

The following INI settings have been added/updated:

Setting	Location	Description
CaltableUpdateStatus	Powertek.ini	When set to a Virtual Output channel, Calibration will enter external mode, allowing you to calibrate only one channel at a time.
MasterScheduleResumeShowAdvOption	Powertek.ini	When set to TRUE, the Master Schedule Restart dialog will allow you to resume the master schedule from the previous or next step. This setting is only applicable to non-BTS systems.
PasswordFailedLoginDisable	Config.ini	The number of login failures before the user is disabled, preventing them from logging into iTest.
PasswordMinimumLength	Config.ini	The minimum length for setting a user password in Security Editor.
PasswordSpecialCharacterRequired	Config.ini	When set to TRUE, the user's password will require at least one special character.

INI Settings

The following INI settings have been added/updated:

Setting	Location	Description
PythonScriptExcludeFilter	Powertek.ini	A file name filter for Python scripts, where applicable scripts will not be editable via AutomationPanel's File > Edit > Script... menu option.
SecurityLogEventViewer	Config.ini	When set to TRUE, security related messages are written to EventViewer.
SystemLogDirStatic	Powertek.ini	When set to TRUE, the active SystemLog folder is set to the \$DATADIR instead of an archive subfolder.
UserExpirationDays	Config.ini	The number of days until the username expires.

iTest.BTS Updates



Cell Voltages Panel

- The Cell Voltages panel now supports the **Y Axis Max Channel** and **Y Axis Min Channel** properties. These properties allow you to specify channels to use as the maximum/minimum value for the Y axis.

Distributed System

- iTest.BTS can now be run on a distributed system.

iTest to OS Compatibility Matrix



iTest to OS Compatibility	Windows	Test Automation												
		iTest 4.4	iTest 4.3	iTest 4.2	iTest 4.1	iTest 4.0	iTest 3.9	iTest 3.8	iTest 3.7	iTest 3.6	iTest 3.5	iTest 3.4	iTest 3.2	iTest pre 3.2
GUI OS	Windows 11 Pro	✓	✓	✓	X	X	X	X	X	X	X	X	X	X
	Windows 10 Pro	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	X
	Win 7 Pro 64bit	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	X	X
	Windows XP	X	X	X	X	X	X	X	X	X	X	✓	✓	✓
RTOS	Xenomai	✓	✓	✓	✓	✓	✓	X	X	X	X	X	X	X
	INtime 7.X	✓	✓	X	X	X	X	X	X	X	X	X	X	X
	INtime 6.3	✓	✓	✓	✓	✓	✓	✓	✓	X	X	X	X	X
	INtime 5.2	X	X	X	X	✓	✓	✓	✓	✓	✓	X	X	X
	INtime 4.2	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	X	X
	INtime 3.13	X	X	X	X	X	✓	✓	✓	✓	✓	✓	✓	X
	VxWorks (VM4500)	X	X	X	X	X	X	X	X	X	✓	✓	✓	✓
Legend														
Supported									✓					
Not Compatible									X					

OS to RTOS Compatibility Matrix

OS to RTOS Compatibility	Windows	RTOS				
		INtime 7.X	INtime 6.X	INtime 5.2	INtime 4.2	INtime 3.13
Host OS	Windows 11 Pro	✓	X	X	X	X
	Windows 10 Pro	X	✓	X	X	X
	Win 7 Pro 64bit	X	✓	✓	✓	X
	Windows XP	X	○	○	○	✓
Legend						
Supported				✓		
Not Compatible				X		
Unsupported but should work				○		

iTest Product Life Cycle Matrix



Product Version	Year																
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
iTest 2.3	✓	✓	✓	○	○	○	○	○	X	X	X	X	X	X	X	X	X
iTest 3.0	-	-	✓	✓	○	○	○	○	X	X	X	X	X	X	X	X	X
iTest 3.1	-	-	-	✓	✓	✓	○	○	○	X	X	X	X	X	X	X	X
iTest 3.2	-	-	-	-	✓	✓	✓	○	○	○	X	X	X	X	X	X	X
iTest 3.4	-	-	-	-	-	-	✓	✓	○	○	○	X	X	X	X	X	X
iTest 3.5	-	-	-	-	-	-	-	✓	✓	○	○	○	X	X	X	X	X
iTest 3.6	-	-	-	-	-	-	-	-	✓	✓	○	○	○	X	X	X	X
iTest 3.7	-	-	-	-	-	-	-	-	-	✓	✓	○	○	○	X	X	X
iTest 3.8	-	-	-	-	-	-	-	-	-	-	✓	✓	○	○	○	X	X
iTest 3.9	-	-	-	-	-	-	-	-	-	-	-	✓	✓	○	○	○	X
iTest 4.0	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	○	○	○
iTest 4.1	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	○	○
iTest 4.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓	○
iTest 4.3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓	✓
iTest 4.4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	✓
Legend																	
Current Version										✓							
Bugfix Only										○							
Not Supported										X							
Not Available										-							