RELEASE NOTES FOR *groov* SERVER FOR WINDOWS

Updated: November 24, 2025

groov SERVER FOR WINDOW R4.5f

November 24, 2025

Bug Fixes

KB91355 - *groov* Server for Windows incorrectly reports that a license is invalid

groov SERVER FOR WINDOW R4.5e

November 19, 2025

groov View

Bug Fixes

- KB91038 - Computed Tags lose connection to OPC UA tags after restarting *groov* View
- KB91180 - Size > "Height to Tallest" adjusts gadgets to shortest gadget
- KB91325 - Privilege escalation vulnerability in *groov* View REST APIs may expose API keys of *groov* View admin users

groov SERVER FOR WINDOW R4.5c

May 20, 2024

groov View

Bug Fixes

- KB88159 - Large projects time out before loading in *groov* View Build mode
- KB90422 - Hidden pages do not appear in the Manage Accounts dialog
- KB90740 - Human-readable timestamps in trend downloads only work when downloading a single data series at a time
- KB90760 - Errors when attempting to select CODESYS string variables in *groov* View tag browser
- KB90777 - Only the first 50 configured devices or computed tags appear in *groov* View for editing or deletion
- KB90804 - Using *groov* View Build mode from an external HDMI monitor connected to *groov* EPIC devices may cause application to hang
- KB90805 - Changing the Page menu display results in an empty page when viewed on the EPIC touchscreen or external HDMI monitor
- KB90818 - *groov* View Momentary Button may not work on a Windows device with a touch screen
- KB90856 - Database error when modifying a user in *groov* View Build mode
- KB90870 - OPC UA tag browsing may time out when opening folders with large number of tags

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groov SERVER FOR WINDOW R4.5b

August 30, 2023

groov View

Bug Fixes

- KB90022 - After editing a computed tag's script, output doesn't change
- KB90023 - After editing a computed tag, the computed tag stops working

groov SERVER FOR WINDOW R4.5a

July 5, 2023. Updated: July 27, 2023.

groov View

New Features

- *groov* View now supports secure connections to OPC UA servers/devices. Make sure the server or device complies with one of the security profiles defined in the OPC UA specification (section 6.6).
- You can now hide the navigation bar for Kiosk users. Edit the project settings and enable the Hide the navigation bar for Kiosk users checkbox. The page menu, events icon, and gear menu will not be viewable for Kiosk users.

Enhancements

- You can now set a specific page to be the default page:
  - for a user (by editing the user's account properties),
  - for a group (by editing the group's properties), or
  - for a project (by editing the project's General Settings).
- You can now enable an option to change the format of date/time in downloaded trends to make it easier to read. When you download trend data, enable the Human-readable timestamp checkbox.
- The following improvements can help make the image library easier to use:
  - When you select multiple images, the previously selected images are highlighted.
  - More information about each image is provided:
    - Size of the image in kilobytes (Kb).
    - Usage Count, to indicate the number of times an image is used by a gadget in your project.

Bug Fixes

- KB90171 - Clicking on gadget with broken connection to tag shows blank properties editor
- KB90180 - Cannot change array index of OPC UA array of undefined length
- KB90182 - Configure Dynamic Tags button may not work after adding OPC UA device
- KB90292 - *groov* View displays unnecessary colon when range indicator gadget is oriented vertically
- KB90439 - Change to "No Tag" not applied to gadgets, events, or computed tags
- KB90448 - Previously selectable CODESYS OPC UA tags now show as unsupported in the tag browser
- KB90464 - Gadgets may render over the page menu in View mode
- KB90531 - "between" conditional format rule doesn't work if larger value in left field
- KB90582 - Upgrading a *groov* View project to R4.4 may result in 503 HTTP error
- KB90619 - *groov* View can't access tags on an OPC UA server

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groov SERVER FOR WINDOWS R4.4b

August 4, 2022

groov View

Bug Fixes

- KB90028 - Video gadgets erroneously indicate that trial period ended before it started
- KB90289 - Some users can't see video from video gadgets with proxy option
- KB90330 - Page access permissions reset to All Users
- KB90394 - Cannot select an array index on some OPC UA array tags
- KB90399 - OPC UA tags with Number type are selectable in Build mode, but report type error in View mode

groov SERVER FOR WINDOWS R4.4a

June 16, 2022

groov View

New Feature

- Tools have been added to help you more accurately lay out your gadgets on a page so that they fit on your target screen:
  - **Rulers.** In Build mode, you can display rulers, which appear above and to the left of your page. Rulers display tick marks at every grid unit, with every 10th unit labeled numerically. A thick line on each ruler visually identifies the current location of the mouse. Rulers do not appear in View mode.
  - **Layout Guides.** In Build mode, a horizontal or vertical line that you can place on a page to help you align gadgets or identify the top or bottom of the target screen. The layout guides do not appear in View mode. When you duplicate a page with layout guides, the guides are duplicated, which can help you create consistent layouts between pages.
  - **Page Size Overlay.** A small box that displays in View mode and shows the pixel width and height of the target screen. You can then use this information to set your layout guides. You can turn on the overlay during development and testing of your project, then turn it off before releasing your project for production.
- For security, Text Box Input gadgets now offer an option to mask the text the user types. When a user types a character, *groov* View replaces it with an asterisk.

Enhancements

- Added support for Microsoft Windows 11 Professional and Microsoft Windows Server 2019
- When you duplicate gadgets, the copy is placed at the bottom of the page for both the Desktop and Handheld layouts. If more than one gadget is duplicated—for example, a label and an LED—the copy maintains the same relative positions as the original.
- You can now browse through custom OPC UA data structures to select fields in the structure and use them as tags.
- The following options have been added to improve navigation of *groov* View projects in both Build mode and View mode:
  - If you organized your pages into categories, you can opt to display those categories as folders, where you can expand or collapse the folder to view the pages in that category. The setting to

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enable the folder view is in the View Mode section of the Project settings (in Build mode, click Configure > Project). The default is to display the list of pages as a flat list.

- In the Events page, a Back icon has been added. When you click on it, you return to the last page you were viewing.
- You can now hide the Events icon so that it doesn't display in View mode. The setting to hide the Events icon is in the View Mode section of the Project settings. The default is to display it.
- The Groov View Styling section of the Project Settings page has been renamed and some of the settings have been renamed/rearranged. The section is now called View Mode. To see the new names of settings and their arrangement, see *groov* View User's Guide (form 2027).

Bug Fixes

- KB84693 - In Build mode of *groov* View, changing gadget z-order only works with one gadget at a time
- KB84815 - Z-order with gadgets is inconsistent
- KB90193 - When copying and pasting groups of gadgets, z-order is not preserved
- KB89845 - *groov* View may hang while using video gadgets with the proxy option enabled
- KB90109 - In Build mode, unable to open an Event for editing
- KB90192 - Gadget pasted to another page has incorrect position/size

groov SERVER FOR WINDOWS R4.3f

October 29, 2021

groov View

Bug Fixes

- KB90022 - After editing a computed tag's script, output doesn't change
- KB90023 - After editing a computed tag, the computed tag stops working

groov SERVER FOR WINDOWS R4.3e

October 26, 2021

groov View

New Feature

- Support has been added for the following new *groov* EPIC I/O modules:
  - GRV-MM1001-10
  - GRV-IVAPM-3

Bug Fixes

- KB89878 - Auto Navigator gadget allows write-only tags to be assigned to it
- KB89919 - groov View may not start when OPC UA tags are inputs to Computed Tags
- KB89626 - Array element field shows -1; can't erase with Backspace key
- KB89985 - Adds, deletes, or edits to computed tags disappear from Configure Tags dialog

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groov SERVER FOR WINDOWS R4.3d

August 16, 2021

groov View

Bug Fixes

- KB89781 - Gadgets using computed tags may show an error when *groov* View starts
- KB89826 - *groov* View hangs due to lag in computed tags

groov SERVER FOR WINDOWS R4.3c

June 11, 2021

groov View

Bug Fixes

- KB89573 - Trend data not restored when groov View project restored
- KB89633 - Saving groov Build pages takes a long time, or on GRV-EPIC-PR1 reports 504 Gateway Time-out
- KB89645 - Events won't load in Build mode if an event is using an invalid tag
- KB89673 - When bit 0 is selected in a gadget using bit picking, the automatic label fails to show "(bit 0)"
- KB89674 - Can't select the last bit in an integer in the gadget properties panel bit selector
- KB89675 - groov View bit writing doesn't work correctly for the upper 33 bits of a 64 bit integer
- KB89744 - All gadgets with Computed Tags stop working
- KB89755 - Page Navigators configured as links or buttons don’t work when Visibility option enabled

groov SERVER FOR WINDOWS R4.3b

April 16, 2021

groov View

New Feature

groov View is now included in the new *groov* EPIC processor, GRV-EPIC-PR2.

Bug Fixes

- KB83816 - Windows Tray Icon for *groov* Monitor Disappears
- KB87773 - *groov* View Virtual Keyboard Off-Center and Behaves Irregularly
- KB89503 - Can't Clear Bit (0-31) Field on Gadget's Properties Panel
- KB89523 - *groov* View Classic Trend Performance Gradually Slows Down
- KB89530 - Can't Set Color or Text for On/Off Text Fields When Data Source is Bit
- KB89539 - Events Not Sending Email on GROOV-AR1 or GROOV-AT1
- KB89545 - Timeout or "The secure channel has been closed" Error While Browsing Static Tags on a CODESYS OPC UA Server
- KB89564 - Delay in Showing Data for Interactive Trends with Long Period

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- KB89631 - Computed Tag Reports Error When Input is String Array Tag

groov SERVER FOR WINDOWS R4.3a

January 20, 2021

groov View

New Features

Computed Tags. You can now create tags that are the result of calculations performed on other tags. Writing calculations in JavaScript, you can convert the value of a tag (for example, convert a Celsius value to Fahrenheit) or combine multiple tags into one value (for example, sum the current levels of all tanks into one value).

Select a Bit from an Integer as the Tag Value. Also known as bit picking, you can now select a bit from an integer to be the value of a tag.

Disable Communication to a Device. You can now disable communication to a device in your *groov* View project. This can be helpful with devices that incur costs: you can disable communication during times you don't need to communicate with those devices. It can also be helpful when a device has not been installed yet or is not available.

Trends Display Average/Min/Max. Interactive trends now display average, minimum, and maximum values for each data point when the zoom level is set to a period larger than the sampling rate. When you set the zoom level to a period equal to the sampling rate, the trend displays the actual value for each data point.

Enhancements

Use Integers to Control Visibility of Gadgets. You can now use integer variables to control the visibility of gadgets.

For more information about these new features and enhancements and how to use them, see the *groov* View User's Guide (form 2027).

Bug Fixes

- KB83954 - If OPC-UA Server Unavailable, Updating Static Tags and Switching to *groov* View May Cause Freeze
- KB88370 - *groov* View fails to load or does not allow user to log in
- KB88691 - Restored *groov* View project is Not Logging Events
- KB89200 - Only 32 Colors Available on LED Gadgets With Non-Boolean Tag Types
- KB89267 - Can't Switch to Build Mode When Using More Than One Percent (%) Symbol in Formatting String
- KB89328 - Video Gadget May Not Load Images in Google Chrome Version 86 or Higher
- KB89350 - At Symbol (@) in Video Gadget URL May Prevent Images From Loading

groov SERVER FOR WINDOWS R4.2c

September 8, 2020

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groov View

New Feature

When you change the time zone on a *groov* Edge Appliance (*groov* Box), the change will be reflected in *groov* View within about a minute.

Enhancement

groov View now checks whether a gadget is invisible at the time it loads a page. If the gadget is set to be invisible, *groov* View does not display it. This may help *groov* View load pages faster. When the value of the gadget's tag (used to set the gadget's visibility) is set to true, then *groov* View displays the gadget.

Bug Fixes

- KB88783 - Level Indicator in vertical orientation is shorter than before
- KB88755 - Trend-pen legend text is displayed in the wrong color
- KB88788 - Hover title for tags in the gadget properties panel is missing
- KB88791 - Clearing a Text Area gadget's text doesn't work
- KB88809 - Conditional formatting inputs may not allow decimal values
- KB88815 - Cannot connect directly to *groov* View using port forwarding
- KB88841 - Conditional formatting on gadgets with a Boolean tag display incorrect formatting
- KB88868 - Level Indicator gadget label is not updated as you edit it
- KB88869 - Range Indicator gadgets show incorrect border around the fill range
- KB88875 - Can't import pages with Oval, Rectangle, Text Area, or Value gadgets
- KB88927 - All *groov* View gadgets connected to the same OPC UA scanner show yellow triangles
- KB88928 - OPC UA servers may return UnsignedByte values when Byte values are expected
- KB88974 - After PAC Control strategy is updated, *groov* View reports tags not available
- KB88979 - Hidden gadgets prevent mouse actions for gadgets lying underneath
- KB89044 - *groov* View reports "This gadget does not have a properly configured tag" for some OPC UA array tags
- KB89054 - The OPC UA tag browser allows you to assign unsupported tags to gadgets
- KB89112 - "Cannot Browse" error when browsing though tags from CODESYS application
- KB89169 - Square Wave A (1 sec on/off) on Data Simulator does not turn on
- KB89188 - Time out error (504) when backing up large *groov* View project to computer
- KB89233 - *groov* View does not display change in data type of a Data Store tag

groov SERVER FOR WINDOWS R4.2b

January 13, 2020

groov View

Enhancements

This release adds support for GRV-R7-MM1001-10, the first in the *groov* RIO family of remote I/O units.

Bug Fixes

KB88803 - Update Auto Tags removes valid tag on I/O unit

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groov SERVER FOR WINDOWS R4.2a

December 16, 2019

Bug fixes

KB88673 - Can't open groov View, groov Manage, or groov Admin from Chrome browser on macOS or iOS

groov View

New Features

- A new Events device is available in the device/tag browser. When you configure an Event, it is added to this device. Then you can use events as input to gadgets.
- You can now make gadgets invisible, based on the value of a boolean tag. The gadget will appear on the page only if the boolean tag value is true.
- Shape gadgets are now available.
- From the browser, you can now print a *groov* View page and all the gadgets on the page will appear at a consistent scale on the paper; the browser's window size will not make them larger or smaller.
- A new gadget, called Auto Navigator, can jump to a specific page in the *groov* View project when its tag value satisfies a specific condition.
- Both Value and Text Area gadgets now support conditional formatting for their data fields. You can configure these gadgets to change the font when the value of the tag meets certain conditions.

You can learn more about all of the new features in the *groov* View User's Guide (form 2027).

Enhancements

- You can now specify the Table Index for array tags directly from Properties window.
- The log viewer has been improved to load faster and be easier to read.
- The *groov* View REST API has been updated to include a way to download the *groov* View logs in either text or JSON formats.
- Enhancements have been made to improve security.

Bug Fixes

- KB86468 - Changes to name or data type of tag not reflected in gadget
- KB87361 - Text doesn't appear for integer or string Value gadget with format field configured with extra text
- KB87382 - Can't add a recently created user to a group
- KB87557 - Changed properties of configured Modbus tag do not take effect
- KB88166 - Changing the name of a data store tag does not get reflected in View mode
- KB88208 - All strings written to manually configured tags on I/O unit devices are encoded in ASCII
- KB88380 - Manually configured MMP tags treated as boolean tags during gadget selection
- KB88479 - Build mode in *groov* View incorrectly reports "No Page" error
- KB88580 - Momentary button doesn't write Release Value to tag
- KB88581 - *groov* View: Mouse clicks might be ignored after page refresh
- KB88635 - Incorrect tag data from multiple Modbus devices
- KB88663 - Gadgets show "can't connect to controller" message
- KB88664 - Strings in *groov* View may contain extra text at the end
- KB88665 - Length field in I/O Unit Tag editor always displays 0x10
- KB88679 - Connection or communication errors with Data Simulator and Local I/O

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groov SERVER FOR WINDOWS R4.1e

October 4, 2019

groov View

Bug Fixes

- KB88505 - Command Button gadget sends '1'; incorrectly interpreted as false
- KB88576 - LED gadgets don't display fill color in iOS/iPadOS 13

groov SERVER FOR WINDOWS R4.1d

August 16, 2019

groov View

Bug Fixes

- KB87607 - Help > groov Public API may result in "Can't read swagger" message
- KB88026 - Open *groov* View in New Tab menu item opens *groov* Manage
- KB88135 - Changing controller's string encoding doesn't take effect immediately
- KB88157 - In Build mode, modules don't appear in correct slot if GRV-CSERI-4 module is on the chassis
- KB88177 - Reading LBCD tag on Modbus device causes "Unknown error" and disconnection from device
- KB88253 - Values for BCD tags display as raw decimal
- KB88276 - Gadget data takes a long time to show on screen
- KB88308 - Momentary buttons may continue writing after release
- KB88312 - Tag browser reports an error on some large folders

groov SERVER FOR WINDOWS R4.1c

May 6, 2019

groov View

Bug Fixes

- KB88193 - *groov* View gadgets may not update when time set back
- KB88221 - Stack Full error and *groov* View flashes yellow triangle on gadgets

groov SERVER FOR WINDOWS R4.1b

March 19, 2019

groov View

Bug Fixes

- KB88093 - Devices show degraded status, frequent yellow triangles

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- KB88107 - Gadgets become unusable; can't navigate through pages
- KB88078 - Gadgets that worked in previous versions may not work in 4.1a and might block access to Build mode
- KB88079 - When Configuring User Configured Tag, Address May Become Corrupted
- KB88103 - Large Projects Time Out Before Loading in Build Mode
- KB88158 - Can't assign certain system tags to some gadget types

groov SERVER FOR WINDOWS R4.1a

February 13, 2019

Fixed Bug

KB87826 - Cannot upload certificate in groov Server for Windows Certificate utility

groov View

New Features

- Licensing changes. You no longer need to purchase Plus or Enterprise licenses. Everyone has access to all features. Be sure you have an active maintenance agreement, so you can update to R4.1a and get everything you may be missing.
- Device health data. Now you can see key information about the devices your *groov* View project connects to, such as:
  - What's the average response time for tag data? Over the last minute, 5 minutes, 15 minutes?
  - How often do we see errors on the device?
  - Is the device in use? Having connection issues?

  Check out the new column in the Configure Devices and Tags dialog box and the new Device Health dialog box, which shows the metrics being tracked. More details are in the *groov* View User's Guide, form 2027.
- Configurable scan rates and communication timeouts. Now you can configure scan rates and timeouts for Opto 22 I/O Units, Opto 22 Controllers, Modbus Devices, and OPC UA Server devices. You can also configure string encodings for most of these.
- Backups for trend data and event notifications. You can also choose to exclude user data from the backup, which may be helpful when sending projects to Opto 22 Product Support.

Enhancements

- Support for new *groov* EPIC I/O modules: GRV-IDCIFQ-12 (isolated quadrature input module), GRV-IICTD-12 (ICTD input module), and GRV-IMAI-8 (milliamp input module with channel-to-channel isolation)
- Per your requests, the "Refresh groov View" option is back in the *groov* View gear menu.

Bug Fixes

- KB86945 - *groov* View pages show a scroll bar when there's nothing to scroll to
- KB87416 - In *groov* View, moving an Edit Value dialog box from a text input gadget jumps the box to the middle of the page
- KB87531 - *groov* View yellow triangle error prevents access to trend features
- KB87623 - After restoring a project on a GRV-EPIC-PR1, *groov* View fails to load with HTTP error 503
- KB87631 - System device "System Uptime" tag is empty
- KB87668 - In *groov* View, clearing ON or OFF latches doesn't work for *groov* digital modules

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- KB87670 - *groov* View doesn't respond to some Modbus device configuration options
- KB87728 - In *groov* View's Build mode, Accounts dialog box won't open; gives "network" error
- KB87729 - If multiple Control Engine devices are used on a single IP address, but on different ports, one device going offline causes errors in others
- KB87998 - *groov* View enters trial mode even though a valid license is installed

groov SERVER FOR WINDOWS R4.0c

June 20, 2018

groov View

Bug Fixes

KB87516 - Mobile devices will not re-subscribe to tags after sleeping for several minutes

groov SERVER FOR WINDOWS R4.0b

June 18, 2018

groov View

Bug Fixes

- KB87475 - Gadgets report error messages when scanning OPC-UA devices while running *groov* View with an expired license
- KB83992 - *groov* View cannot connect to a OPC-UA server after the network connection is lost and then recovered
- KB87477 - Value scaling not working on Round Gauge, Range Indicator gadgets
- KB87478 - *groov* View fails to run and returns a "503 Service Unavailable" message
- KB87496 - *groov* View erroneously shows that it's entering trial mode when running with an expired maintenance

groov SERVER FOR WINDOWS R4.0a

May 21, 2018

groov View

New Features

- *groov* View now runs on the new *groov* EPIC (edge programmable industrial controller) system. *groov* View software is included with the GRV-EPIC-PR1 processor. Authorized users can view the *groov* View HMI you build on the GRVEPIC- PR1's integrated high-resolution touchscreen as well as on mobile devices and PCs. For more on *groov* EPIC, see *groov* System.
- You can now start a new project easily by resetting your project. This new feature makes it easier for system integrators or others who work on multiple projects for different customers or locations. Be sure to back up the existing project first. Then from the File menu, choose Reset Project. All your devices,

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pages, and trend data will be deleted, so you can start over fresh with a new project or restore a different project you need to work on.

Bug Fixes

- KB87151 - Video gadget may be updated at a rate different from the update period.
- KB87274 - Events do not work if the project has run with no tags configured
- KB87299 - *groov* View displays Unicode escape sequence instead of the correct character
- KB87320 - Gadgets may be very slow to receive updates in *groov* View R3.5a or R3.5b.
- KB87384 - Kiosk accounts are logged out after 2 weeks even though the "Do not expire" option is checked
- KB87386 - System log may show missing values for control engine errors

groov SERVER FOR WINDOWS R3.5a

March 14, 2018

Enhancement

Incorporated security fixes and updated time zone information.

groov View

New Features

- You can now configure Opto 22 SNAP PAC I/O units as devices and use their tags in a *groov* operator interface. (Configure > Devices and Tags > Add New Device). When you add an I/O unit, the unit's OptoMMP memory map tags become available in *groov* View.
- Whenever an event becomes active, the event notification (bell) icon now displays the number of active events.

Enhancements

- *groov* View has been optimized to improve performance, responsiveness, and scalability. It can now handle a much larger number of clients without putting additional load on your devices.
- View mode's navigation bar, as well as its setup and login screens, have been redesigned to be easier to use and more readable on handheld screens. Also, tap targets in handheld screens are larger.
- *groov* View now automatically displays and refreshes new and updated pages. Since it is no longer needed, the Refresh *groov* View menu item has now been removed from the Settings (gear) menu.
- You can now access the *groov* Log Viewer from the Settings menu (gear icon > View logs). The Log Viewer opens in a new browser page, and has settings to filter and search for log records.
- To align with our upcoming *groov* EPIC release, the title of this document was changed from README: *groov* App to README: *groov* View.

Fixed Bugs

- KB83753 - Can't log in if the time on *groov* box or server is earlier than the creation time of the user account
- KB84010 - *groov* View gear menu does not resize properly with browser window
- KB85792 - Unable to hide *groov* logo on the *groov* View login page
- KB86009 - "groov Box or Server cannot be reached" when *groov* View page uses tags from device configured with IPv6 address

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- KB86132 - In *groov*, failure on a single OPC UA connection may cause tags on working OPC UA connections to fail
- KB86438 - In *groov*, changing a user's password does not log them out
- KB86542 - Page menu items are greyed out after About page is displayed
- KB86546 - *groov* Data Store API reports incorrect errors after free trial expiration
- KB86553 - *groov* Data Store may allow writes after trial period has expired
- KB86714 - *groov* View pages with over 100 gadgets may be slow to load and update
- KB86765 - Trend gadget displays yellow triangle; information box reports a "groov Box or Server cannot be reached" message
- KB86866 - Invalid trend configuration can crash *groov* View
- KB86890 - Numbers greater than 999 are missing commas in Trends
- KB86945 - *groov* View pages show a scroll bar when there's nothing to scroll to
- KB87051 - OPC-UA device tags aren't in alphabetical order
- KB87136 - *groov* View fails to launch and recommends installing "groov version null"
- KB87145 - *groov* View forces you to change your password every time you log in

groov SERVER FOR WINDOWS R3.4c

October 9, 2017

groov View

Enhancement

System and event logging was optimized to decrease the number of writes made to *groov*'s internal storage.

Fixed Bugs

- KB86862 - Events that use OPC-UA tags don't work after *groov* restarts
- KB86921 - Event's status is Inactive when the event is Active (still in debounce period)
- KB86971 - Events stop updating and sending notifications
- KB86972 - *groov* log viewer "Advanced Configuration" settings don't take effect immediately
- KB86979 - *groov* View reports errors for SNAP PAC controllers, but controllers look fine in PAC Control

groov SERVER FOR WINDOWS R3.4b

June 5, 2017

groov View

Fixed Bugs

- KB86674 - *groov* may not correctly restrict access to unregistered devices
- KB86675 - *groov* may fail to close network sockets on Modbus connection errors

groov SERVER FOR WINDOWS R3.4a

May 2, 2017

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groov View

Fixed Bugs

KB86470 - Using the *groov* Data Simulator may incorrectly start trial mode

groov SERVER FOR WINDOWS R3.3b

January 5, 2017

groov View

Fixed Bugs

KB86470 - Using the *groov* Data Simulator may incorrectly start trial mode

groov SERVER FOR WINDOWS R3.3a

December 21, 2016

groov View

New Features and Enhancements

- A new Data Store device has been added so you can put data into *groov* from anywhere (a database, another device or system) and monitor or change it in your mobile operator interface. See the groo v Build and View User's Guide (form 2027) for details.
- Access to new Data Store devices is provided by a RESTful API to *groov*. Data is in standard JSON format. With this new API, you can use the programming tool of your choice to securely access data in a Data Store. Complete API information is linked from *groov* Build and on developer.opto22.com.
- You'll see changes when managing accounts: you can generate API keys for software users (software that accesses data in a Data Store), you can search if you have a long list of users, and you use icons to edit or delete users in the list.
- Starting with this release, when your *groov* version is updated (for example, from R3.2b to R3.3a), clients will also be automatically updated.

Important Note

- On a *groov* Box, updating to *groov* 3.2a or higher requires *groov* Admin version 43 or higher. For more information, see KB85947.

Fixed Bugs

- KB85999 - When restoring a project in *groov* Build, typing in the Project Backup field produces an error
- KB86091 - When scrolling in *groov* View, the page menu and popups are detached from the caption bar
- KB86125 - Internet Explorer deletes text in *groov* text area gadgets when grouped or selected together
- KB86189 - Color changes made to original or duplicate *groov* gadget are applied to both gadgets
- KB86221 - Trend gadgets allow negative periods
- KB86330 - Using Internet Explorer with *groov*, changes to event notification message configuration are not saved
- KB86339 - *groov* may select incorrect tag if 2 or more OPC UA servers are configured with same namespace and tag list

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- KB86362 - Event Editor shows two inputs for event condition value
- KB86363 - Importing Modbus tagnames containing double quotes returns an error, but names are successfully imported
- KB86424 - Writing a very large string to a string tag produces a 413 error
- KB86425 - Trend tags don't show up when you view Tags In Use

groov SERVER FOR WINDOWS R3.2b

October 6, 2016

groov View

Fixed Bugs

KB86282 - *groov* may become unresponsive or crash, and downloading system logs may result in zero byte files

groov SERVER FOR WINDOWS R3.2a

August 2, 2016

Fixed Bugs

KB84407 - In groov Server, Backup project doesn't complete the backup if you have unsaved changes and click "Yes"

KB84422 - groov Server shows "Updates Available" even though just updated

groov View

New Features and Enhancements

- A new System device has been added so you can use tags with system information in your *groov* interface. Available tags include time, date, number of current user sessions, CPU usage, uptime, and others. See the *groov* Build and View User's Guide (form 2027) for details.
- In *groov* View you can now download data from a Trend pen to a .csv file.
- You can see the *groov* version in *groov* View by clicking the gear icon and choosing About.
- Graphics are improved for high-resolution displays.
- Improved color schemes give better contrast.
- Starting with the next release, when your *groov* version is updated (for example, from R3.2a to R3.2b), clients will also be automatically updated.

Important Note

On a *groov* Box, updating to *groov* 3.2 requires *groov* Admin version 43. For more information, see KB85947.

Fixed Bugs

- KB84703 - *groov* project takes a long time to save if Trends have missing tags
- KB84760 - Using Internet Explorer, PAC Control strategy cannot be updated
- KB84820 - When Chrome browser is maximized, *groov* gadgets may not be properly resized
- KB84822 - Special characters do not appear correctly in *groov* Event Status Viewer

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- KB85806 - OPC UA Static Array may generate index error asking for a negative index value
- KB85817 - OPC UA byte array shows data type error
- KB85818 - SVG image in *groov* does not appear or is out of proportion
- KB85820 - Cannot write an empty string into a Modbus string tag or shorten the string
- KB85832 - Changing text in a copied Text Gadget may affect the original one, and vice versa
- KB85841 - Indicator Buttons don't fully display animated gifs
- KB85910 - *groov* Trend gadget minimum update intervals not enforced
- KB85911 - *groov* Trend gadget properties panel does not convert units in the Period and Update Interval fields
- KB85996 - Failure during *groov* project load can hang the browser

groov SERVER FOR WINDOWS R3.1b

May 9, 2016

Fixed Bug

KB84879 - *groov* Server stops functioning; NoClassDefFoundError exceptions appear in message log

groov View

Enhancements

Communication failures now appear in *groov* Message Logs, to help debug the cause of communication errors.

Fixed Bugs

- KB85570 - *groov* logo always appears when using View on an iPad
- KB85673 - Results for Modbus scalers used with array tags are incorrectly rounded
- KB85713 - *groov* dynamic tag array not operational
- KB85737 - In *groov* Build, a configured Event condition displays incorrect boolean settings
- KB85738 - Setting Lower Hysteresis in an Event condition produces error
- KB85755 - PAC Controller message queue shows -12 error when *groov* project tries to get table information
- KB85756 - *groov* View shows yellow triangle "trying to connect" error on gadget with Data Simulator tag
- KB85796 - In *groov* Build, OPC UA Static Array tags are disabled in the Tags tree
- KB85813 - *groov* Event Notification email not saved if only tag(s) are added
- KB85839 - OPC UA dynamic array shows incorrect index range in event notification email editor

groov SERVER FOR WINDOWS R3.1a

March 10, 2016

groov View

New Features

- New global Project Settings let you use your own custom logo and colors in *groov* View. You can also freeze the title bar in *groov* View so it is always visible, even when users scroll down.

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- You now have much greater control over the size, color, and formats of both graphic and text elements in gadgets. For example, you can make LEDs very small to support a dense array of them, specify font sizes within Trends and Gauges, change the color of live values, and much more.
- When you select multiple gadgets of the same type (for example, all LEDs or all Round Gauges), you can change properties for all of them at once.
- A new Image Library holds all images used in your *groov* project so you can easily locate and manage them. The same image can appear in multiple places, and when you change the image, all instances are updated.
- A new Image Indicator gadget displays images to indicate status or value. For example, you could have multiple cutaway images of a tank, each one picturing a different level between empty and full.
- Button gadgets can now be skinned with images.
- The LED gadget can show multiple colors to indicate multiple values or states, not just on and off.
- Page Navigator gadgets can be displayed as text links, buttons, or images.
- On a Modbus/TCP device, you can now read from or write to bits within an address.
- An Annual Maintenance Renewal Reminder appears in *groov* Build when your license is about to expire or has already expired. Click the reminder for renewal information and instructions.

Enhancements

- The Tags In Use dialog box now includes Events, and you can sort tags by name, controller, page, or gadget.
- Visual indicators in *groov* View let you know about loading progress, out-of range values, +/- infinity, NaN, and Invalid BCD states.
- You can set many gadget properties independently for mobile and desktop views in order to maximize their utility based on screen size.
- The Events Status and Log on mobile devices have been improved for usability.
- Range Indicators and Round Gauges have been improved to handle larger values: you can make text smaller and scale values (for example, change grams to kilograms). Also, tic marks are limited to a total of 200 marks.
- NAN and INF values have been added to the Data Simulator.

Fixed Bugs

- KB83952 - Grayed out tags in the tag browser can be assigned to incorrect gadgets
- KB84713 - Missing incompatible project warnings
- KB84754 - Out-of-range Modbus tag address causes *groov* to freeze
- KB85313 - In *groov* View, Round Gauge and Range Indicator gadgets may not show complete marker values
- KB85483 - Security issue identified and corrected
- KB84755 - In *groov* View, illegal address error or incorrect string may appear in Modbus tag
- KB85192 - *groov* events cannot reference strategy table indexes
- KB83938 - In *groov* Build, erratic browser window behavior when dragging gadgets to the page
- KB84280 - In *groov* Build, dialog boxes stay open when a user is logged out by an Admin
- KB84778 - Even if a *groov* event is disabled, the save changes dialog pops up when no changes are made
- KB84779 - Group Header gadget doesn't render well when font size is too big for grid size
- KB84864 - In notification editor, editing an array tag defaults to index 0, regardless of the index chosen
- KB84908 - "Log out all users" does not log users out of the View Logs screen
- KB84872 - The Value gadget does not display a NaN
- KB84983 - In *groov* Build, minor overridden tic marks disappear if gadget has non-zero minimums
- KB84184 - In *groov* Build, initial image may fail to load for Video gadget

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- KB84801 - Page Navigation gadget's page selector appears to support multiple links

groov SERVER FOR WINDOWS R3.0e

January 13, 2016

groov View

Fixed Bugs

- KB85374 - *groov*'s error symbols break starting in Chrome 48.
- KB85284 - Moderate to heavy load causes unreliable event reporting.
- KB85396 - Windows 10 Edge 25 browser misaligns gadgets in *groov* View.
- KB84986 - *groov*'s Operator security level lacks a logout option.

groov SERVER FOR WINDOWS R3.0d

September 14, 2015

groov View

Fixed Bugs

KB85057 - Adding or configuring a Modbus device on a Solo license causes *groov* to stop working.

groov SERVER FOR WINDOWS R3.0c

August 31, 2015

groov View

Fixed Bugs

- KB84792 - Web browser error ("weak ephemeral Diffie-Hellman key") occurs when trying to connect to *groov*.
- KB85021 - *groov* Server's pre-installed SSL certificate signature uses obsolete SHA1 digest.

Enhancements

- Momentary Button gadget can optionally detect when communications are interrupted between *groov* and a controller.
- Security updates
- Performance improvements

groov SERVER FOR WINDOWS R3.0b

June 17, 2015

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groov View

Fixed Bugs

- KB84875 - Missing tags in Event Triggers will disable editing.
- KB84861 - In Firefox, text can't be copied from Event Message Logs.
- KB84849 - The Paste keyboard shortcut (Ctrl-V) doesn't work when pasting to a different page.
- KB84848 - On iOS-based devices, *groov* title bar hotspots work inconsistently with the touch interface.
- KB84846 - Strings display "no value found for tag" when used as project tags in notification emails.
- KB84829 - The Line type in the Trend gadget can't be selected.
- KB84819 - The QNAN tag isn't displayed properly in Event Status logs.
- KB84818 - In Internet Explorer and Firefox, Event Status Viewer button stops working when you change pages using the Page Menu list in *groov* View mode.
- KB84816 - In Internet Explorer and Firefox, Event Status Viewer doesn't display correctly in Build mode.
- KB84808 - In *groov* Build, Modbus/TCP device slave IDs above 247 are not allowed.
- KB84805 - Changed Opto 22 controller IP address does not immediately appear in the gadget palette.
- KB84799 - In *groov*, clicking on the View Events Status page opens up tab with no scroll bars.
- KB84794 - Event triggers using decimal values are not rounded off in *groov* View.

groov SERVER FOR WINDOWS R3.0a

May 18, 2015

groov View

New Features

- Event notifications: Now you can set up events based on one or more conditions and automatically alert selected personnel by email or text message when an event occurs.
- *groov* Solo: This new licensing option is for one Modbus/TCP device or one SNAP PAC. It offers a lower price for entry-level customers.
- Data Simulator: A built-in virtual device with a wide variety of tags allows testing and demonstrating *groov* screens without having to connect to a live machine or system.
- Improved page editing: Now you can select and drag multiple gadgets, add a grid to help page layout, and easily align and resize gadgets.
- Do not expire option for kiosk users: A new project option prevents kiosk users from being logged out. This can be used for TVs or other displays that need to remain on for long periods of time.
- Restore project in Build: Projects can now be restored in *groov* Build.

Enhancements

- Security for IP Cameras is now supported.
- Labels can now be moved to the left of a gadget.
- You can now double-click a tag to update it in the Update Tag for Gadget dialog box.
- If you refresh your browser while in Build, it will stay in Build mode.
- Error reporting has been improved.

Fixed Bugs

- KB83470 *groov* gadgets cannot immediately write values after connection to a PAC has been lost and restored.

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- KB84016 The Trend gadget displays the time for the device accessing *groov* rather the time for the *groov* Box location.
- KB84423 After *groov* R2.3a or R2.3b upgrade some gadgets produce tag not configured error.
- KB84398 In *groov* Build, tags from PAC controllers running the same strategy are indistinguishable from each other.
- KB84470 Modbus array sizes are not dynamically updated when changed.
- KB84098 The *groov* logo cannot be hidden in *groov* View on MAC OS and mobile iOS devices.
- KB84457 *groov* usernames and passwords cannot include special characters (%, &, etc.)
- KB84235 Timeout may occur when trying to log into *groov*.
- KB84242 Missing Page Background label.
- KB84297 CA-signed SSL certificate generated by *groov* SSL certificate utility cannot be installed.
- KB84302 When *groov* password is mistyped the "Create groov Build Account" indicator remains spinning
- KB84319 In *groov* Build, Modbus tags are not auto-selected in Update Tag dialog box
- KB84669 *groov* logo flashes when switching from *groov* Build to *groov* View even though logo is turned off

groov SERVER FOR WINDOWS R2.3c

January 29, 2015

groov View

Fixed Bugs

- KB84423 After *groov* R2.3a or R2.3b upgrade some gadgets produce tag not configured error.
- KB84417 *groov* may become unresponsive, you may be unable to login, or a login timeout occurs.
- KB84432 Can't turn on/off digital output point using Modbus communication in *groov* App

groov SERVER FOR WINDOWS R2.3b

January 20, 2015

groov View

Enhancement

Security-enabled IP cameras can now be used with the Proxy setting for *groov*'s Video gadget.

Fixed Bugs

- KB84390 *groov* trends used with tables read only index 0.
- KB84389 In *groov*, Modbus writes don't take array indexes into account.
- KB84406 If smooth lines are chosen for a trend gadget, the gadget may not show data.

groov SERVER FOR WINDOWS R2.3a

January 5, 2015

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groov View

New Features

- Support for Modbus/TCP. A new communication driver allows *groov* to act as a Modbus/TCP master and communicate with Modbus/TCP slave devices with an Ethernet connection.
- Diagnostic Logging. Now you can view the log messages that *groov* generates to help diagnose problems.

Enhancement

- *groov*'s protections against hacking attacks have been improved so that *groov* is now more secure than ever.

groov SERVER FOR WINDOWS R2.2c

September 22, 2014

groov View

Fixed Bug

KB84045 A security issue was identified and corrected.

groov SERVER FOR WINDOWS R2.2b

August 29, 2014

groov View

Enhancements

- The Graph gadget is now called a Trend gadget.
- The non-viewable area is now called the page stash.

Fixed Bugs

- KB84007 In *groov* View on a mobile Android device, the gear symbol menu only displays the Refresh *groov* View option.
- KB84000 A popup in *groov* R2.2a says that an older project is not compatible.
- KB83684 Objects disappear from the Desktop & Tablet window in *groov* Build.

groov SERVER FOR WINDOWS R2.2a

August 20, 2014

groov View

New Features

- Gadgets can now read and write the current value of an up or down timer tag.

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- Update notification added. *groov* automatically checks Opto 22 servers for updates to *groov* App, *groov* Admin or both, and provides information on any available updates.
- A variety of new background colors have been added to *groov* Build, including many dark page background colors up to black. Gadgets now change color automatically to adjust to the Page background color.
- A new non-viewable scratch pad area adjacent to a page's work area allows you to put work-in-progress gadgets that not currently part of the project. Moving a gadget to the scratch pad only affects the current view, so you can have a gadget appear in the scratch pad of one view but not the other.
- New Momentary Button gadget. Similar in appearance to the Command Button gadget, a Momentary Button can simulate the behavior of a normally open or normally closed button. It writes a value once when it is pressed, and once when it is released.

Enhancements

- Graph gadget:
  - If a page in *groov* contains a Chart gadget that has accumulated data, when the page is opened, the Chart gadget is immediately full of data.
  - If *groov* Box or *groov* Server is rebooted, previously scanned values are retained.
  - You can now have up to four pens per chart.
  - The maximum length of a chart is now 7 days.
  - Longer scan rates are now allowed.
- Page editing:
  - Sizing handles are improved and no longer affected by a gadget's z-order.
  - Page resizing now occurs smoothly. Previously, when a page was resized, the gadgets resized in a jumpy fashion.
- Video gadget: The new lock aspect ratio property maintains the shape of the video display.
- Value gadget: Previously the states were either on or off for Boolean tags. Now the states can be customized to something more meaningful such as open/closed or yes/no.
- Default tag names: The default tag names are now the name of the tag instead of just Label.
- A new Edit menu includes a number of commands that were previously available only by right-clicking in the interface.
- In *groov* View on touch devices, there is improved response with links and buttons.

Fixed Bugs

- KB83209 Value Limits for gadgets cannot handle very large numbers.
- KB83225 qNaN on analog output module causes *groov* error.
- KB83397 Graph gadget does not properly display error or warning icons.
- KB83686 Slider and checkbox return to current value during confirm prompt.
- KB83687 Slider confirm prompt appears when continuous attribute is enabled.
- KB83712 Text Input write errors cannot be cleared.
- KB83721 Pressing Enter or OK multiple times when changing the password in *groov* Build causes an error.
- KB83836 Under certain conditions *groov* may fail to import a PAC Control strategy.
- KB83661 Numeric keypad does not work in some text input boxes for *groov* gadget properties.
- KB83665 *groov* gadget text in Internet Explorer 11 does not stay within the gadget's window box boundry.
- KB83680 Entire multi-select group is de-selected in *groov* Build when you click outside a gadget boundary.
- KB83825 *groov* silently enters trial mode after *groov* has started.
- KB83950 Gadgets don't render properly in Chrome version 36.

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- KB83943 Configure Devices and Tags dialog is limited to 50 devices.

groov SERVER FOR WINDOWS R2.1c

March 14, 2014

groov View

Fixed Bug

KB83710 - Reimporting a strategy in *groov* Build resets the controller's port to 1.

groov SERVER FOR WINDOWS R2.1b

March 11, 2014

Fixed Bug

KB83707 - Groov Server Fails to validate license file and reports a "Date provided was invalid" error.

groov View

The bug fixed for this version of *groov* App applies only to *groov* Server. For more information, please see the readme for *groov* Server for Windows.

groov SERVER FOR WINDOWS R2.1a

December 18, 2013

groov View

New Features and Enhancements:

- Static tag browsing has been added for OPC-UA servers. This improves *groov*'s performance and enables *groov* to handle very large OPC server configurations.
- A new Log Out All Users function in Build allows an admin user to force all users to log off.
- The Slider and Level Indicator gadgets now can be used vertically as well as horizontally.
- The Page Navigator gadget now has a label property that allows you to use a custom label instead of just the page's name.
- The Page Navigator gadget can now be linked to external web pages.
- The Video Gadget now has a reverse proxy service option. For *groov* clients outside of the firewall, this eliminates having to configure the firewall for each IP camera.
- The Video Gadget now has an optional Update Period property which can be set for each instance of the gadget.
- You can now install .NET as part of the *groov* server installation.
- To accommodate short page names, the page menu in View has a larger area for selecting a page. Previously, the touchable area was only as long as the page name, so it was very difficult to select short page names on a small mobile device.
- Groov App has better performance and response time.

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Fixed Bugs

- KB83307 Error messages may not disappear after range problems have been fixed.
- KB83429 *groov* App password reset does not work for account holder.
- KB83468 Loading Tags dialog box stuck after changing user password andlogging out.
- KB83569 Changes to a *groov* dynamic tag's namespace index are not immediately shown.
- KB83584 The Network Info dialog box for *groov* Server Monitor is blank.
- KB83690 Internet Explorer 10 and 11 behaviors affect *groov* on an Intranet.

groov SERVER FOR WINDOWS R2.0c

December 18, 2013

groov View

Enhancement

For OPC-UA servers that use non-standard settings, you can now specify a namespace index for dynamic tags.

Fixed Bugs

- For OPC-UA dynamic tags, when a valid value is entered for the array size in the Add Dynamic Tag dialog box, the Update Dynamic Tag button is sometimes disabled preventing you from saving valid changes.
- KB83521 Page navigator gadget does not work with default Android browser.

groov SERVER FOR WINDOWS R2.0b

December 10, 2013

Fixed Bug

83535 - *groov* Server for Windows SSL certificate utility is not working and crashes.

groov View

This release was only for *groov* Server for Windows. For information, see form RM_GROOV_SERVER_WIN.

HOW TO GET HELP

If you have any questions about *groov* Server for Windows, you can call, fax, or e-mail Opto 22 Product Support.

Phone: 800-TEK-OPTO
(800-835-6786 toll-free in the U.S. and Canada)
951-695-3080
Monday through Friday,
7 a.m. to 5 p.m. Pacific Time

Email: support@opto22.com

Opto 22 website: www.opto22.com

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NOTE: *Email messages and phone calls to Opto 22 Product Support are grouped together and answered in the order received.*

When calling or emailing for technical support, be prepared to provide the following information about your system to the Product Support engineer:

- Version information for *groov* Server for Windows and/or *groov* View.
- A description of your system equipment:
  - Computer CPU type, speed, memory, and operating system
  - Controller model and firmware version
- A description of your Setup and Configuration: how it is connected, the purpose of each device, external connections, and networks
- Specific error messages or other diagnostic indications.

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