GE VERNOVA

UR Setup Release Notes

UR Family

Version 8.60

Publication Reference: GER-4977A

Publication Date: 8 October 2024

Table of Contents

1 Summary

This document contains the release notes for EnerVista UR Setup 8.60 for the Universal Relay (UR) family of products.

This release note is applicable to the products: B30, B90, C30, C60, C70, C95, D30, D60, F35, F60, G30, G60, L30, L60, L90, M60, N60, T35 and T60.

1.1 Date of release

Firmware 8.60: October 8 2024

2 Features

2.1 Added support for two independent transformer differential elements in the T60 transformer protection system

Description: T60 relays version 8.60 now have two independent transformer differential elements when the order code includes the "additional transformer differential" software option.

2.2 Increased the number of RxGOOSE DPS Inputs from 16 to 128

Description: To accommodate product firmware changes, the number of RxGOOSE DPS Inputs has been increased to 128.

2.3 Enhanced verification of authenticity for the firmware binary file when upgrading firmware

Description: For UR devices 8.60, the product firmware binary file has an additional signature for enhanced data authenticity.

Because of this change, UR relays prior to 7.6x cannot be upgraded to version 8.60 directly. They first need to be upgraded to a version between 7.6x and 8.5x, then upgrade to version 8.60.

2.4 Added support for the transformer differential element in G60 device

Description: G60 relays now provide a transformer differential protection element so that both the generator and the step-up transformer can be protected by differential protection in a single relay. This feature is enabled by the "additional transformer differential" SW option.

2.5 Added support for 3 DSP modules in the G60 generator protection system

Description: UR 8.60 G60 relays now support 3 DSP modules.

2.6 A new setting 'RxGOOSE Quality Check' has been added under IEC61850/Server Configuration

Description: A new setting "**RxGOOSE Quality Check**" allows you to configure the relay to either accept or reject GOOSE messages with invalid or questionable quality. When the option 'Accept Invalid or Questionable q' is selected, the RxGOOSE inputs with invalid or questionable quality are accepted and processed.

2.7 SSH Server authentication provides enhanced cybersecurity with key fingerprint

Description: When the cybersecurity option is selected, the UR Setup software will read the relay's fingerprint (host key) and provide a warning message, which asks the user whether to trust the host or not. The user has the chance to abandon the connection before entering a username and password.
This fingerprint is saved in the Windows Registry. When UR Setup connects to the same UR device each time, it compares the host key fingerprint with the one cached in the Windows Registry. If there is difference in the host key fingerprint, UR Setup displays a

warning message. This allows the user to check whether it is a valid host-key change, or the host IED itself is different.

2.8   A new relay diagnostics file is included in the Service report

Description: A `Factory Reload Cause.txt` file is included in Service report. This file contains information about why relay settings were reset to their defaults.

2.9   Added a new command under Maintenance

Description: The new command **Change Power Supply** has been added under "Maintenance". This allows you to apply the relevant changes to the relay's order code and to add or remove a redundant power supply.

2.10   Added new Split Phase Actual Values screen

Description: The following Split Phase Actual Values screens were added.

- Split Phase Current (PU) A
- Split Phase Current (PU) A
- Split Phase Current (PU) B
- Split Phase Current (PU)C
- Load Current (PU)

2.11   Removed R-GOOSE subscription

Description: A UR 8.60 device will not be able to subscribe to R-GOOSE messages. On the IEC61850 RxGOOSE Message screen, **Main CPU R-GOOSE** has been removed from the RxGOOSE Mode options. When converting a previous version offline device to version 8.60, if a R-GOOSE message is subscribed, a warning message will popup informing user to change the RxGOOSE message before conversion.

2.12   Removed "Factory Use Only:Login" function

Description: The "Admin/Factory Use Only:Login" menu item has been removed.

3 Bug Fixes

3.1 Corrected the IEC61850 MaxTime and TAL fields in CID file

Description: In previous UR Setup versions, the IEC61850 CID file had the MaxTime and the TAL fields the wrong way round. In version 8.60, UR Setup correctly populates the MaxTime and TAL fields in the CID file.

Workaround: None

3.2 UR Setup crashes when attempting to import customer's SCD file

Description: LSN-22448/SR-12384 CSE reported a concern about UR SETUP v8.40, when they used the offline window "Import Device from SCD". The UR SETUP crashed. This was because the SCD file was missing the XML prolog information. Version 8.60 added a validation warning message for missing XML prolog information.

Workaround: The customer can add XML prolog information to an SCD file to avoid this issue.

3.3 Power system 'Alternate Freq and Phs Reference' setting value is not exported correctly

Description: When exporting an offline device to a `.csv` file, it was noticed that the Power System *Alternate Freq And Phs Reference* setting value in the CSV file, does not match the original setting value. This was corrected in version 8.60.

Workaround: None

3.4 L90 - Direct IO Issue After file conversion from v600 to v780

Description: Issue with "Direct I/P 2-X On" operands being defaulted to "OFF" in Flex Logic Equation Editor, after converting their v600 files to v780 (and v850). This is corrected in version 8.60

Workaround: None

3.5 Several current elements settings do not print/preview correctly

Description: A Customer observed 4 discrepancies when they compared a Print/Print Preview of their settings file, against the values shown in the UR Setup. This was corrected in version 8.60.

Workaround: None

3.6 Software Crash while performing Print Setting with UR Setup 8.51

Description: UR Setup 8.51 crashes when printing settings, if the Metering Property unit field contains character %. This was corrected in version 8.60.

Workaround: Do not use the character %.

3.7 OriginalSclRelease ="4" is added to the IID/CID file produced by UR Setup 8.51

Description: OriginalSclRelease ="4" is added to the IID/CID file produced by UR Setup 8.51. This was corrected in version 8.60.

Workaround: None.

3.8 UR Setup Logical Designer cannot set Digital Element index > 48

Description: The UR Setup Logical Designer shows a compiling error when the Digital Element index is set to more than 48. This was corrected in version 8.60.

Workaround: None.

3.9 UR SETUP v8.21 failed to open the COMTRADE files generated by DR60

Description: UR Setup reports the following error `Device: DR60A should be 740 version or up, for IEEE Standard 2013` when opening the COMTRADE files generated by DR60. This was corrected in version 8.60.

Workaround: None.

3.10 Relay GFP crash when DNP UDP port number set to 20028

Description: A Customer configured the relay to use DNP port 20028 and the relay hung. This happens when DNP channels 1 and 2 are set to **NETWORK-UDP** and **DNP TCP/UDP** with port numbers 20028 or 20029 simultaneously. UR Setup 8.60 implemented a warning message to not allow setting of DNP channels 1 or 2 port to **NETWORK-UDP** and **DNP TCP/UDP** with port numbers 20028 or 20029 simultaneously.

Workaround: Do not set both DNP channel 1 or 2 port to NETWORK-UDP and DNP TCP/UDP Port Number to 20028 or 20029 simultaneously.

4   For Further Assistance

For product support, contact the information and call center as follows:

GE Grid Solutions
650 Markland Street
Markham, Ontario
Canada L6C 0M1
Worldwide telephone: +1 905 927 7070
Europe/Middle East/Africa telephone: +34 94 485 88 54
North America toll-free: 1 800 547 8629
Worldwide e-mail: multilin.tech@ge.com
Europe e-mail: multilin.tech.euro@ge.com
Website: https://www.gevernova.com/grid-solutions/multilin