

Document class Release Note
 Document ID 2NGB003046
 Business Unit ABB Oy, Distribution Solutions
 Page 1/4
 Date 2024-04-22

Firmware update release 1.4.3 for SSC600 1.0 Feature Pack 4

Scope

Firmware update release 1.4.3 is for the following products:

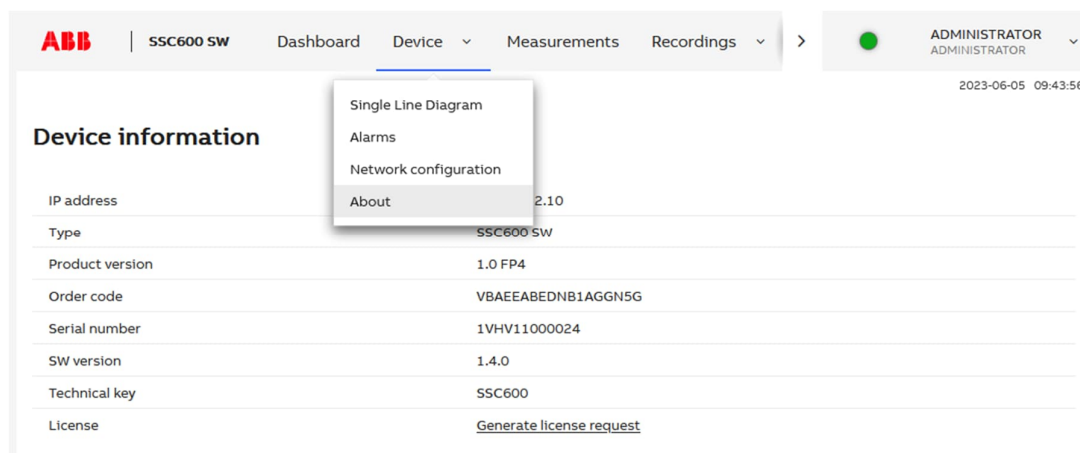
- SSC600 1.0 Feature Pack 4
- SSC600 SW 1.0 Feature Pack 4

To verify that the firmware update applies to the product version, ensure that the last two characters of the order code on the human-machine interface (WHMI) match the corresponding characters of the order code in Fig. 1.

SBAXXXXXXXXXXXX5G
 VBAXXXXXXXXXXXX5G

Fig 1. Order code of the SSC600 and SSC600 SW protection relays

To identify the current firmware revision of the SSC600 or SSC600 SW, please refer to Fig. 2.



The screenshot shows the ABB WHMI interface for an SSC600 SW device. The 'Device information' section is visible, with a dropdown menu open over the 'About' link. The 'SW version' is displayed as 1.4.0. Other details include the product version (1.0 FP4), order code (VBAEEABEDNB1AGGN5G), and serial number (1VHV11000024).

Field	Value
IP address	2.10
Type	SSC600 SW
Product version	1.0 FP4
Order code	VBAEEABEDNB1AGGN5G
Serial number	1VHV11000024
SW version	1.4.0
Technical key	SSC600
License	Generate license request

Fig. 2 Current SW version of the SSC600 or SSC600 SW product

Implemented usability improvement

The firmware update release includes usability improvements but introduces no new functionality. Firmware updates are cumulative.

The following improvements have been implemented:¹

Firmware update release 1.4.3:

HMI

- Enabled showing primary values for power and energy values on WHMI Single Line Diagram.

Protection

- ZNRSRC.Enabled activating/deactivating function inputs from the Tests menu when SSC600 is in Test mode.

Firmware update release 1.4.2:

HMI

- Primary measurements are now supported on Single Line Diagram of the WHMI.
- Some measurements were seen always with bad quality on Single Line Diagram of the WHMI.
- Some event descriptions for programmable logic functions were not available on WHMI after configuration.

Operation

- Manual trigger of disturbance recordings was not working correctly from PCM600.

Performance

- Removing excess log files created to the file system by SSC600 ver. 1.4.0.
- Introduced support for a new communication card variant.

Firmware update release 1.4.1:

¹ The relay firmware update may also include some minor usability improvements not listed in this note.

Operation

- Changed test mode activation to follow Local/Remote -switch position.

Communication

- Improved robustness in a scenario where misbehaving MMS client caused connection to fail.
- Disabled possibility to enable redundant process bus in SSC600 SW when there is no redundant network interface available.

Supervision

- Added additional supervision and repair functionality in case of disk failures.

Protection

- MFADPSDE. Increased protection stability in cases where fault is quickly cleared by some other protection.
- Improve robustness of the application when multiple SPCGAPC instances are in use.

Virtualization

- Fixed KVM template script to enable proper L3 partitioning.
- Changed SSC600 SW startup behaviour for KVM. Earlier it was possible that virtual machine didn't start on first bootup.

HMI

- Improved Network configuration page in SSC600 SW Web HMI to better indicate if ports are enabled in Settings.
- Improved Web HMI stability in case where close to maximum number of recordings were stored on the device.
- Enabled Setting export also for DSTPDIS parameters.

Performance

- Increased performance in cases where frequent setting changes could cause unnecessary CPU usage.
- Improved performance in case all IEC 104 clients were enabled. After change allows running bigger applications.
- Improved overall CPU utilization to enable bigger applications



Date	2024-04-22
Page	4/4
Subject	Firmware update release

Update procedure

Firmware updates represent an integral part of ABB's life cycle management of distribution protection and control relays. The updates ensure optimized usability throughout the relay's entire life cycle by offering the latest improvements. The ideal time for a firmware update would be during periodical testing or a maintenance break.

All SSC600 1.0 Feature Pack 4 (5G) product deliveries dispatched later than April 3, 2024 include the stated relay firmware update 1.4.3. Process of updating the latest firmware to the SSC600 can be found in the Engineering Manual, Chapter 4.6 "IED Update".

Upgrading SSC600 1.0 firmware directly to 1.4.3 is not possible. It is necessary to first upgrade to FP1 or FP2 before upgrading to FP3 or FP4.

Please note that ABB will not be liable for any direct or indirect costs related to the firmware update procedure. The update procedure shall be performed at the sole responsibility of the possessor of the devices.