

Siemens Technical Action Bulletin No.	STAB19-0114
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<u>TITLE</u>	ST950 Firmware Release 46059 Issue15
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Product	ST900	T400	Cuckoos	Street Furniture	ST950	OTU	INSTATION SOFTWARE	OTHER
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Are Modifications Required?				No			
Retrospective Action Required?				No			
Priority of the Change	URGENT ASAP	ACTION AT NEXT SITE VISIT	ACTION WITHIN 3 MONTHS	ACTION AT NEXT PI	ACTION ONLY IF PROBLEM ARISES	INFORMATION ONLY	
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Introduction

The ST950 Firmware 667/TZ/46059/000 has been updated to Issue15 and is available at [Siemens Traffic Downloads](#)

This new firmware includes several bug fixes and security improvements, the full details of which can be found within the [ST950 Compatibility Handbook](#) (667/SU/46000/000 Issue15 or later).

The following is a summary of the various issues addressed by this release:

- The controller could soft reboot multiple times and subsequently stick in reserve mode or extinguish the signals.
- MOVA Data set loading sometimes caused issues. (The system web page showed MOVA as running, however using the movacomm1 command on webterm reported correctly that MOVA was not running after a data set load).
- MOVA Tools, when used over the local Wifi link, did not work.
- An issue with the internal time system where the Controller and system time drifted apart, resulting in the controller functionality having the incorrect time under some conditions.
- The driver necessary to allow USB connection between the controller and a local users PC has been updated to allow operation with Windows 10.
- Several security updates have been implemented.

Scope

ST950LV & ST950ELV Firmware upgrades

The previous general release of ST950 Firmware was Issue14 and upgrading to Issue15 can ONLY be done from Issues 11 or higher. The controller will refuse to upgrade from earlier versions.

Procedure

To upgrade to ST950 Firmware 46059 Issue15 please follow the following steps:

1. Prerequisites

The firmware package file REL_46059_15_0_6.pkg can be downloaded from [Siemens Traffic Downloads](#)

This file needs to be loaded onto the laptop or mobile device that will be used to access the web browser interface. It is recommended that the web browser interface rather than WIZ is used to perform the firmware upgrade and check the operation of the controller.

There are no known issues with this upgrade but as a precaution it is advisable to also have:

- Replacement ST950 CPU Card
- 667/HQ/46000/002 ST950 Replacement of CPU Card Quick Start Guide

Unlike previous upgrades this Firmware Upgrade does NOT require the Signals to be switched off as during the upgrade the controller will operate in reserve mode (assuming Reserve Mode is configured).

However, it does require Issue11 (or higher) to be running for the upgrade to work. The controller will refuse to upgrade from any earlier versions. If you need to upgrade to Issue11 first, please refer to Technical Bulletin [STAB16-0106](#)

2. Before Upgrading

Check that there is no core dump in the controller log (found in the *Fault Table* page). If there is, then follow the on-screen instructions and delete it.

It is recommended that a restore point is saved before performing an upgrade so that it is possible to return to the existing system if desired in the future. Restore points are managed using the *Status and Configuration – Controller – Heart – Backup & Restore* web page.

The controller can automatically maintain a restore point; this is known as the latest restore point and is listed at the top of this web page. If the time of creation of this restore point is not suitable or timings / settings changes have been made since then, a new restore point can be created by pressing the [Refresh] button. This will take a few minutes.

Press the [Retain] button so a backup of the system in the state before upgrade will always be available on the Heart SD Card. Retaining a backup should only take a few seconds. If problems occur during or after the upgrade, one option available will be to return the system to this Restore Point.

It is important not to turn off the controller while a requested operation is in progress or very soon after it completes as doing so will cause the requested operation to fail. Generally,

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the controller should never be switched off whilst the busy light (i.e. bottom Red LED on the CPU card) is flashing.

3. Performing the Upgrade

It is recommended that the following sequence be used for this firmware upgrade:

- Use the *Status and Configuration – System – Upgrade* page to upgrade the firmware. The Package File named *REL_46059_15_0_6.pkg* is used for this upgrade.
- If a reserve state has not been configured or for safety reason there is concern for pedestrian safety the signals should be switched off and the *Signal Out of Order* boards put out.
- Following the on-screen instructions, the EFC will reboot and enter the reserve state.
- Note that you do not need to press the program button as the upgrade will commence automatically.
- The upgrade to Issue 15 takes approximately 15 minutes during which time if the reserve state has been configured the signals will remain on but pedestrian phases will not run. So, if the site has Peds with RLM, then those Peds will should be disabled and have the *Signal Out of Order* boards put up.
- Once the upgrade is completed and the signals have left the reserve state, go to the system tab and check the Package version is 15_0_6
- It is recommended that a new restore point is created and retained on the Heart.

4. Verify the Upgrade

Use the *System* page to verify that the Package Version is displayed as: 15.0.6

Use the *Fault Table* page to verify that no unexpected faults or notifications are present.

Please check the I/O 10mins after upgrade to ensure all I/O boards are showing that I/O system communications are operational (i.e. flickering green lights on the I/O boards). If not, then the I/O system should be re-started by disconnecting it at the main CPU and reconnecting it, ensuring it re-starts correctly.

Related Documents

[667/SU/46000/000 ST950 Compatibility Handbook](#) Issue 15 (or later) for a list of all the changes.