

ST950 Firmware Release 46059 Issue12

30th January 2018

Product: ST950

Modifications Req: No

Retrospective Action Req: No

Priority of Change: Information only

- ✓ Introduction
- ✓ Scope
- ✓ Procedure
- ✓ Related Documents

Introduction

The ST950 Firmware 667/TZ/46059/000 has now been updated to Issue12 and is available from [➤ Siemens Traffic Downloads](#).

This new firmware includes a number of bug fixes and security improvements.

The [➤ ST950 Compatibility Handbook](#) (667/SU/46000/000 Issue8 or later), details all the changes but the summary highlights are:

- MOVA Phone Home not cleared from fault table
- UTC GP bits assigned to alerts only remain valid for 15 minutes.
- Resolution of the UTC Timing issue
- Upgrading from Stratos 7 to 8 causes MOVA corruption
- MOVA does not set csi MOVA TO port if separate TO bit configured
- Speaking Controller not working on Issue 11
- Pre-existing core dumps are made visible after upgrade
- Sites reporting "Licence Container Damaged"
- Experiencing slow or inaccessible web pages with v11
- Disk becomes full during upgrade

A number of potential security issues have also been addressed by this release. For further details please contact Siemens Poole Engineering (Dave Martin).

Scope

ST950LV & ST950ELV Firmware upgrades

The previous general release of ST950 Firmware was Issue11 and upgrading to Issue12 can **ONLY** be done from Issue11. The controller will refuse to upgrade from earlier versions.

For instructions on how to upgrade earlier firmware issues to Issue 11, please refer to Technical Bulletin [➤ STAB16-0106](#).

Procedure

To upgrade to ST950 Firmware 46059 Issue12 please follow the following steps:

1. Prerequisites

The firmware package file REL_46059_12_0_14pkg 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. We recommend the web browser interface rather than WIZ is used to perform the firmware upgrade and check the operation of the controller.

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There are no known issues with this upgrade but as a precautionary 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 – during the upgrade the controller will operate in reserve mode.. However it does require Issue11 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 recommend 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. In General 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_12_0_14pkg* 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 from 11 to 12 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.
- Once the upgrade is completed and the signals have left the reserve state, go to the system tab and check the Package version is 12_0_14
- 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: 12.0.14

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

5. Note

If a controller is already running version 12 and requires a replacement CPU card, that replacement must be running issue12 or greater firmware. Version 12 Encrypts the Heart and earlier versions are not able to restore the Controller to the Heart.


A CPU running version12 firmware is still able however to restore to an earlier version Heart. For example if a CPU running Version 7 were to fail and the Heart was used to restore that controller using a CPU running version 12 spare. The Heart would successfully restore the Version 12 back to version 7.



Related Documents

> [667/SU/46000/000 ST950 Compatibility Handbook Issue 8](#) (or later) for a list of all the changes.

> [667/HU/46000/000 ST950 and Stratos O/S User Interface Handbook Issue 5](#) (or later) for changes to the user interface.

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