



Yunex Traffic Technical Bulletin

STAB23-0143

ST950 & Stratos Outstation Licence Update

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Introduction

The ST950 and Stratos Outstation main processor PCBs have been updated with a new on-board Smart Card Reader device. This device can experience intermittent communication issues, which can eventually lead to the Facilities licenced from the smartcard to be disabled despite a valid licence being present on the smartcard.

Symptoms of this issue include a **Licence x not available** fault table entry and various associated *system Log* errors, see the example fault text below:

```
Licence for UTMC OTU + MOVA 8 streams 1-2 not available, 31 hours grace period left
```

Priority of Change: *Upgrade if problems are experienced with the affected Hardware variants*

Scope

Identification of the new PCBs:

Description	PCB Part Number	Variant	Requires Patched Firmware version
ST950 CPU Board	667/1/46010/xxx	/102	667/TZ/45059/000 v28.1
Stratos Outstation	667/1/47160/xxx	/002	667/TZ/52255/000 v15.1

If problems are experienced with licenced facilities, it is advised that the above hardware variants are updated to run the associated firmware releases.

It is not necessary to update older hardware variants

The Hardware variant information can be found by navigating to the *System* webpage and checking the *Platform – Hardware Type* value:

Platform:

Item	Type
Hardware Type	667/1/47160/002_01,2022/11/11,Gemini 3 CPU Card
Platform Type	linuxEFC
Serial Number	11429648
Ethernet MAC Address	00:30:E6:FF:8B:68
Security Patch Level	September 2022
GVP Signature	a5c30c6bbf4bc2febb89189430faff48b244ee00ecce104a6ff04cc63ba99640

Procedure

Upgrade to the version of firmware: ST950 v28.1 and Stratos Outstation v15.1

It is recommended the firmware is upgraded locally so that any trouble shooting issues can be resolved immediately. For the Stratos Outstation only, a remote upgrade should resolve the problem without requiring a site visit – but please see the trouble shooting section for the potential issues.

Step 1: Connect to the ST950 / Stratos Outstation web pages

Step 2: Add a configuration setting to prevent the licence ‘not present’ issues occurring after start-up

Open a *Terminal* window and enter the following `cfgitem` command:

```
> cfgitem licensesystem/checkPeriodS -1
new value for "licensesystem/checkPeriodS" set to "-1"
```

Step 3: Upgrade the firmware

Upgrade the firmware to the following versions depending on the platform:

Platform	Firmware version
ST950	667/TZ/45059/000 v28.1
Stratos Outstation	667/TZ/52255/000 v15.1

These are available to download from [Yunex Traffic Technical Downloads](#)

To upgrade the Firmware please follow the instructions in the following handbook:

- 667/HQ/46000/009 - ST950/Stratos Outstation Firmware Upgrade Quick Start Guide

Once the upgrade is complete, please use the System page to verify that the firmware has been upgraded correctly and the Package Version is displayed with the version in the table above.

Step 4: Ensure the ST950 / Stratos Outstation reassumes expected operation after start-up

Wait for the red LED to stop flashing to indicate the ST950 / Stratos Outstation firmware upgrade and start-up sequence is complete.

Confirm that no Licence related entries are listed in the Fault Table.

If the ST950 / Stratos Outstation is configured to connect into Stratos, then check Stratos connection is achieved. To do this then navigate to the **System-Settings-Comms-Stratos Status and Configuration** webpage. Stratos connection may take a few minutes to finalise. Eventually the **Stratos Link** item should show the **Connected** status.

System - Settings - Comms - Stratos

Default	Item	Value
<input type="checkbox"/>	Tenant Pass Phrase (Not Set)?
<input type="checkbox"/>	Tenant Name ?	Firmware Lab
<input type="checkbox"/>	Site Location ?	
<input type="checkbox"/>	Unique Site Name ?	ash test1
<input type="checkbox"/>	Unique Site ID ?	1668186802056
<input type="checkbox"/>	Stratos Link ?	Connected
<input type="checkbox"/>	Stratos Credentials ?	Active
<input type="checkbox"/>	Smartcard Secure Store ?	Available
<input type="checkbox"/>	Smartcard Version ?	2

Save Reload

Trouble Shooting

Unable to resume normal operation after following the above procedure

If under the unlikely event that connection to Stratos is not achieved and/or the installed licences are not recognised on start-up, please reboot, and try again.

Stratos connection unsuccessful on start-up symptoms:

- **System-Settings-Comms-Stratos Status and Configuration** webpage shows the *Stratos Link* value is permanently showing **Initialising**
- and the System log fills up with the following errors

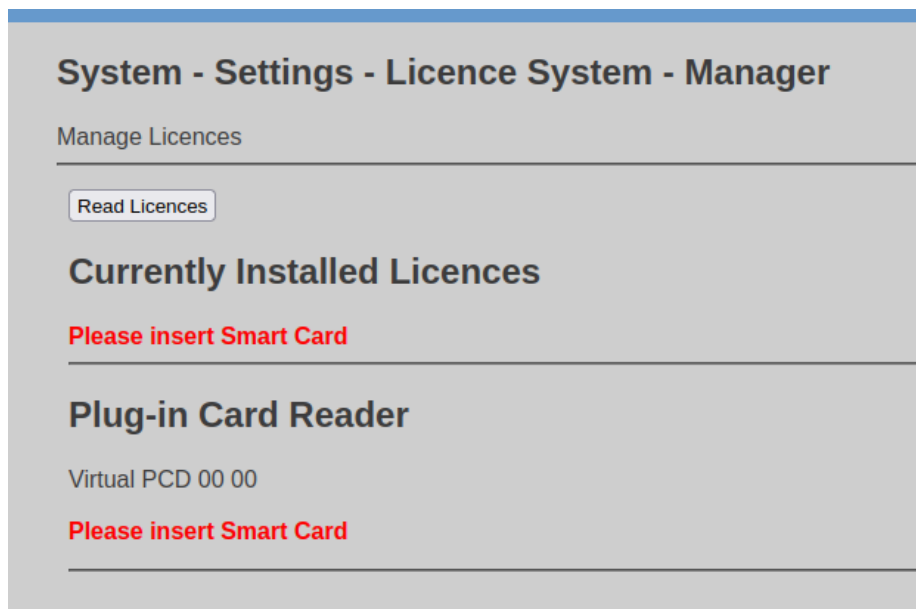
```
Tue 17 Jan 2023 10:48:48 GMT E(OpenVPN): Cannot set authentication mode
Tue 17 Jan 2023 10:48:48 GMT E(OpenVPN): Cannot fetch P12 File from Secure Store
```

Installed Licence not found at start-up symptoms:

- Fault Table entry present stating a running Licenced facility is unavailable e.g:

```
ControllerMonitor is unavailable, requires one of the following licenses: UTMC OTU +
MOVA 7 streams 1 - 2, UTMC OTU + MOVA 7 streams 1 - 4, UTMC OTU (Stratos
Outstation), UTMC OTU + MOVA 8 streams 1-2, UTMC OTU + MOVA 8 streams 1-4
```

- From **System-Settings-Licence System-Manager Status and Configuration** webpage an attempt to **Read Licences** returns the **Please insert Smart Card** text instead of the expected installed list of licences.



Related Documents

- **667/HU/46000/000** User Interface Handbook for ST950 and Stratos Outstation
- **667/HQ/46000/009** ST950/Stratos Outstation Firmware Upgrade Quick Start Guide (Issue2 or later) for instructions on how to upgrade firmware