

DIGSI-5-QN0019:

DIGSI 5 QUICK NOTES
Loading firmware

This issue of DIGSI 5 Quick Notes covers:

- What happens if setting file and device firmware don't match?
- How to update relay firmware
- How to select firmware version when creating a setting file
- How to change a setting file to be used with a relay with different firmware

QUICK GUIDE TO: What happens if setting file and device firmware don't match?

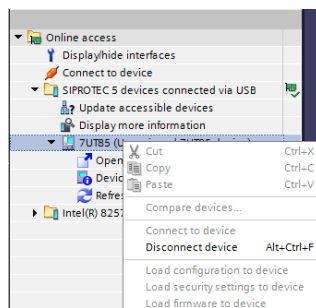
When attempting to load a setting file, if the setting file specifies a different version of relay firmware to the firmware currently in the relay, then a warning will be given, and the setting file cannot be loaded.

Firmware is loaded separately to settings.

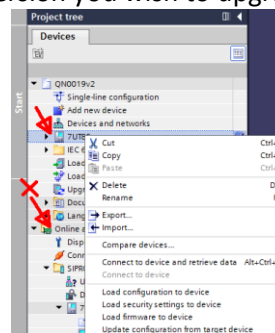
QUICK GUIDE TO: Updating relay firmware

Refer to the 'SIPROTEC 5 Operation' manual 'Firmware and Parameter Set Update' section for full details on how to update firmware. **The following example uses DIGSI V7.9** with a USB connection to the relay however, Firmware upgrades via Ethernet interface is also possible.

- 1 The Firmware upgrade options are only provided from the menu from the relay in the Project File – NOT the online instance. Therefore you must have a Project with the matching relay (same short code and same firmware). This therefore requires you to have the DIGSI driver version that matches the existing relay and the driver that matches the firmware version you wish to upgrade to.

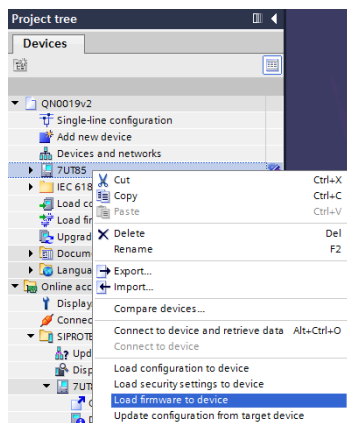


No Load Firmware option for online instance



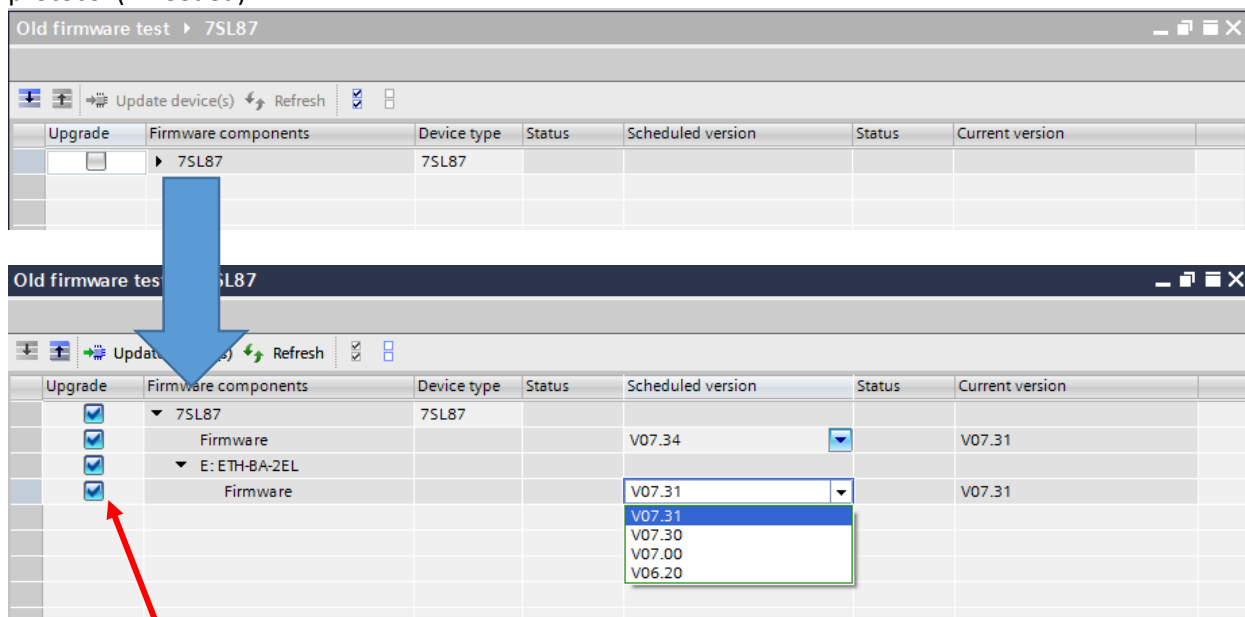
Load Firmware option in Project file instance

- 2 For this example, connect via USB to the target relay, created a new project and copied the online instance to the Project. You may have also used the original project file, or created the relay in the project file using “Add new device”



Note if copying online device to project using an earlier DIGSI version, you will get the plug-and-play warning. Refer DIGSI 5 Quick Note 00017.

- 3 The Firmware update screen is shown, but the initial view needs expanding, to show the specifics of the upgrade. Make sure you expand the selection for the Ethernet Interface to upgrade the Communication protocol (if needed).



In DIGSI 7.9 if the project has more than one device and the relays are connected via Ethernet, then the screen will show all accessible relays, allowing them to be updated in one step.

The list of available versions of firmware that is shown depends upon what versions of device drivers have been loaded into DIGSI 5 for that relay family.

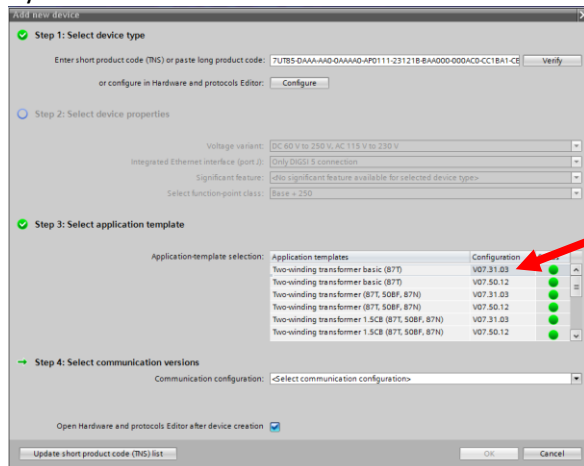
Check the Upgrade box for relay and/or modules to be updated, select the firmware version.

The “Update device(s)” is enabled, which when clicked begins the update. One of the columns that will appear in the above screen is “Confirmation ID”, this will need to be entered to allow the upgrade to proceed [default is 222222].

QUICK GUIDE TO: Creating a setting file for a specific relay firmware

If creating a setting file from scratch for a specific relay firmware, make sure the desired DIGSI Device Driver is installed in DIGSI 5

- 1 When adding a new device, ‘step 3’ defines the firmware version. The choices available is defined by the device drivers that have been loaded into DIGSI 5.



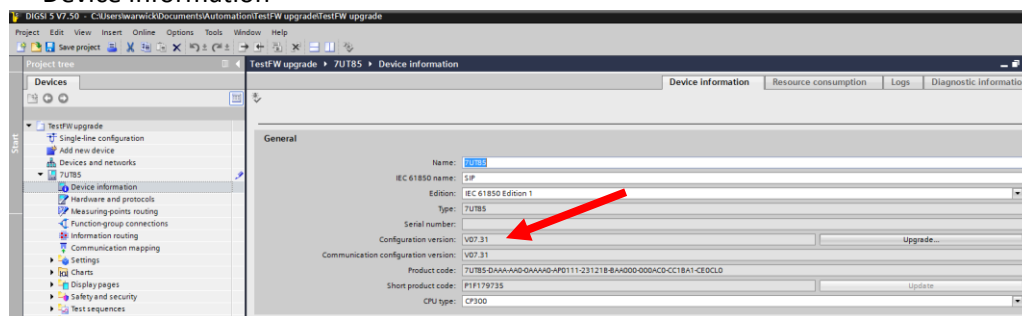
Step 4 defines the protocol version.

QUICK GUIDE TO: Updating a setting file to use with a different relay firmware

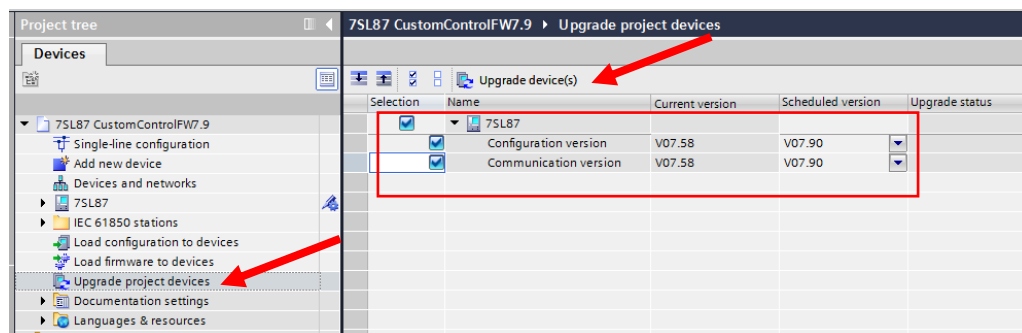
It possible to update the firmware specified in the setting file. Note that it is only possible to advance the setting file version, you cannot downgrade setting file version.

While upgrading a setting file is a reasonably quick and automated task, new firmware may add new features or require some changes and/or add new settings with default values. Caution is recommended.

- 1 The firmware versions for an existing setting file can be confirmed via:
"Device information"



- 2 The firmware and protocol version can be updated in the setting file. In DIGSI 5 V7.9 selecting 'Upgrade project devices' from the Project Tree...



The available choices are dictated by the DIGSI 5 device drivers loaded.

You **cannot** downgrade the version.

With DIGSI 5 V7.5 use the upgrade button located in the Device Information Screen

The screenshot shows the 'Device information' screen in the DIGSI 5 V7.5 software. The 'General' tab is active, displaying fields for Name (7UT85), IEC 61850 name (SIP), Edition (IEC 61850 Edition 1), Type (7UT85), Serial number, Configuration version (V07.31), Communication configuration version (V07.31), Product code (7UT85-D), Short product code (P1F1797), and CPU type (CP300). An 'Upgrade...' button is visible next to the Configuration version field. An 'Update configuration version' dialog box is open in the foreground, showing options to update the device-configuration version and communication-configuration version. The 'Available versions' dropdown for the device-configuration version is set to 'V07.50'. A red arrow points from the 'Upgrade...' button in the background to the 'Upgrade' button in the dialog box.