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1 Release Notes ELOP II V5.8

This document contains supplementary notes on fixes and improvements of ELOP II V5.8 that are not yet described in the online help.

The restrictions described in this document must be strictly observed to maintain safety and availability for a controller programmed with ELOP II!

The *About ELOP II* dialog box provides the following information:

Text displayed in ELOP II	Complete version designation
ELOP II V5.8 B5003.7992	ELOP II V5.8.Build 5003.7992IV2

1.1 Compatibility

ELOP II V5.8 can be used for all the following HIQuad operating system versions:

- BS41q/51q V7.0-8

ELOP II V5.8 can be used in PCs with the following operating system:

- Microsoft® Windows 10

The minimum requirements for the computer used to run ELOP II V5.8 are specified on the current HIMA DVD.

In particular with very large projects, old PCs may require long processing times and thus be inappropriate for this task. Therefore, state-of-the-art computers should be used whenever possible. Enhanced hardware features, such as computing power and memory space, result in improved performance.

1.2 Improvements Compared to V5.6 (B1501.9810)

This chapter describes the improvements of V5.8 compared to versions prior to V5.8.

1 Support for ELOP II under Windows 10
ELOP II V5.8 is suitable for Windows 10, see Chapter 1.1.

2 New parameter *H5Com_TCP_BSN* allowing convenient setting of the bus subscriber number (BSN) for IP address generation
If the resource name did not include the BSN, no Ethernet communication was possible between ELOP II and the HIQuad controller.
As of ELOP II V5.8, the resource name no longer has to be extended with the BSN to enable a HIQuad controller to use Ethernet communication. This change no longer affects the user program CRC and no longer induces new acceptance testing by the certification authority.
To switch to Ethernet communication using the new *H5Com_TCP_BSN* parameter, proceed as follows:

To create the *H5Com_TCP_BSN* parameter, proceed as follows:

- In the structure tree, select **Project, Configuration, Resource.**
- Right-click **Resource** and select **Properties** from the context menu.
- In the *Properties* dialog box, select the **More** tab and click the **Add** button.
- Enter the new parameter in the *Edit Properties* dialog box:
  Input field *Property*: **H5Com_TCP_BSNE**
  Input field *Value*: Enter the BSN for this control
  Range of values: 1…99
  The IP address is determined based on this value, see Chapter 1.2.1.

i Ethernet communication between ELOP II and the HIQuad controller runs via the F 8627X module of the HIQuad controller.
The PADT may only be connected via Ethernet, if the *H5Com_TCP_BSN* parameter is identical to the BSN set on the central module (DIP switches 1…7).

The following behavior must be observed in conjunction with the BSN in use:

- Setting the BSN via the *H5Com_TCP_BSN* parameter does not affect the CRC.
- If a valid BSN (1…99) is set in the *H5Com_TCP_BSN* parameter, this number will be used. A BSN included in the resource name is ignored.
- If no valid BSN (1…99) is set in the *H5Com_TCP_BSN* parameter, the BSN contained in the resource name will still be used.
- The BSN entered in the *H5Com_TCP_BSN* parameter is only used for TCP communication. The value from the HIBUS configuration is still required for serial communication.

1.2.1 Using the *H5Com_TCP_BSN* Parameter to Determine the IP Address

The IP address of the F 8627X module is determined using the *H5Com_TCP_BSN* parameter.

The IP address is composed of the network address and the host address. The network address is fixed to 192.168.0.

The last byte of the IP address 192.168.0.x is the host address and is calculated as follows:

- For the F 8627X Ethernet module channel 1 (switch 2/1 = ON)
  Host address = (value of *H5Com_TCP_BSN*) * 2 + 1
- For the F 8627X Ethernet module channel 2 (switch 2/1 = OFF)
  Host address = (value of *H5Com_TCP_BSN*) * 2 + 2

The F 8627X Ethernet module does not enter the RUN state, if BSN > 64 and DIRECT Mode is disabled.

Mode of Operation	Allowed BSN
DIRECT mode on (switch 1/7 = ON)	1…99
DIRECT mode off (switch 1/7 = OFF)	1…64

Table 1: Permissible BSNs

Example:

- Value of *H5Com_TCP_BSN* = 33, module channel 1 (switch 2/1 = ON)
  Host address = 33 * 2 + 1 = 67; IP address = 192.168.0.67
- Value of *H5Com_TCP_BSN* = 33, module channel 2 (switch 2/1 = OFF)
  Host address = 33 * 2 + 2 = 68; IP address = 192.168.0.68

i In a redundant HIQuad controller, ensure that the HSR cable is plugged in (BV 7053). Otherwise, the redundant central module cannot be accessed.

For further details on ELOP II Ethernet communication, refer to the manual for the F 8627X Ethernet module (HI 800 265 E).

1.2.2 IP Addresses in the PADT(PC)

If the *H5Com_TCP_BSN* has changed, the displayed IP address is only refreshed after closing and reopening the dialog boxes.

The IP addresses for channel 1 and channels 2 are displayed in the resource's dialog box.

To call up the *Ethernet Settings,* proceed as follows:

- In the structure tree, select **Project, Configuration, Resource.**
- Right-click **Resource** and select **Properties** from the context menu.
- In the *Properties* dialog box, select the **PADT (PC)** tab. The IP addresses for channel 1 and channel 2 are displayed here.

Additionally, the IP addresses for channel 1, channels 2 and PC communication are displayed in the resource's project documentation.

To call up the *Ethernet Settings* and *PC Communication,* proceed as follows:

- In the structure tree, select **Project, Configuration, Resource.**
- Right-click **Resource** and select **Documentation, Res Docu** from the context menu.
- In the *Res Docu* dialog box, select the **Parameters** tab to access the IP addresses for channel 1, channel 2 and PC communication.

1.3 Fixes in V5.8

This chapter describes problems in versions prior to V5.8 that have been resolved in V5.8.

1 Program name not displayed in the tab
In editing mode, the program name (TYPE instance name) was not displayed in the tab name. This could cause confusion if several instances were open. [HE28553]

2 GoTo... function jumped to the incorrect connector. [HE30246]

3 Online test in ELOP II no longer functional or only functional to a very limited extent
In a serial network used for PADT and HIPRO-S communication, the online test could be operated to a very limited extent or could not be operated at all. [HE28246]

1.4 Restrictions of V5.8

1 Event number cannot be assigned.

The event number can be assigned twice if the event attribute and a hardware system variable are set in the *HW Assignment* menu item of a variable. After deleting the variable, the hardware system variable retains the event number. This event number cannot be assigned to another variable as long as it is used for the hardware system variable.

Workaround:

- In the user program, open the declaration dialog box for the variable.
- Activate *Assign Tag Name* and select the hardware system variable previously connected.
- Click *Update.*
- Deactivate *Assign Tag Name.*
- Click *Update.*
- Save the user program.

[HE21204]

2 When generating non-reloadable code, ELOP II displays POU instances as changed. When adding POUs and subsequently generating non-reloadable code, ELOP II can display the POU instances (HEADER variables) as changed even if they were not changed.
Workaround: Generate reloadable code. [HE12676]

3 Large force images cannot be loaded into the controller.
Operating system version as of BS41q/51q V7.0-8 (07.14) rejects to load large force images with more than 60 modified forced variables.
Workaround: Perform major changes to the force image in smaller steps with a maximum of 60 changes each and load them.

It is also possible to save force images after a maximum of 60 changes each, and then to load them into the controller. If doing so, ensure that the images are loaded in the same order as they have been saved! [HE19490]

4 Online change of system parameters may have no effect.
Safety parameters may be changed online and loaded into the controller. The controller applies or ignores the changed settings depending on the **Parameter Online Change** safety parameter. However, since these settings are stored in the controller's working memory due to the loading process, they are also identified and displayed as safety parameter changes, although their application is prevented by the safety parameter.
In particular, this occurs if the **Parameter Online Change** is set to FALSE and then transferred to the PES during online operation. The displayed details no longer correspond to the settings actually used in the controller.

Workaround: Manually document the settings in use when **Parameter Online Change** is set to FALSE, so that they can be reset. [HE19818]

5 Code generation aborted after language switching.
If one or more system function blocks from the ELOP LIB are used in the user program and code is generated, switching the language in ELOP II may prevent further code generation. After aborting the code generation, the following message in German or English is displayed:

```
Fehler beim Erhalten von Typ-Informationen für Typ-ID
Error on obtaining type information for type ID
```

Workaround: After switching the language in ELOP II, open and save the user program. In doing so, the system function blocks from the ELOP LIB used in the user program are updated. The code generation can then be performed. [HE25508]

6 ELOP II demo version can only be used read-only.
The ELOP II demo version does not function in accordance with the official description "DemoRestrictions_local.html" and can only be accessed read-only.
Unlike in previous versions, small user programs with up to 10 POUs can no longer be created with an ELOP II demo version as of V5.1. [HE26632]

7 No offline simulation of customer project with VAR_EXT and VAR_GLOB possible.
VAR_GLOBALS as ActionName are not supported in ELOP II and unfortunately not prevented either. However, if VAR_GLOBALS are used as ActionName, the program type is then corrupted and cannot be repaired in ELOP II.
VAR_EXT and VAR_GLOB can no longer be used as ActionVars. [HE28983]

8 ELOP II termination or windows switching between Maximize and Minimize.
This behavior occurs in conjunction with serial communication between PADT and PES and one of the following:

- A button is used, e.g., *Initialize Communication* or *Exit*.
- More than one control panel are open and the user switches between them.

Workaround: Change to Ethernet communication between PADT and PES.
[HE28932]

9 MONO reload via serial connection aborted.
If a mono system's reload is performed via the serial connection, the central module enters the ERROR STOP state.
Workaround: In mono systems with serial connection to the PADT, always load the central module by performing a download. [HE31236]

1.5 Upgrading from a Previous Version to ELOP II V5.8

Observe the following points:

- ELOP II versions as of V3.0 can be installed simultaneously and operated by the same Windows user. Separate installation paths must be specified to install different ELOP II versions.
  A new registration is required whenever switching between ELOP II versions. To do so, administrator rights are needed.
- Projects that were created with a version as of V5.1 need not be converted.
- Projects that were created with a version prior to V5.1 need be converted. Observe the conversion instructions provided in the *New Features ELOP II V5.1* manual (HI 800 185 E).