Release and revision history for EuroCAP

FROM VERSION 1.4.1.24

PROTECTA
HUNGARY

PROTECTION, AUTOMATION AND
CONTROL FOR POWER INDUSTRY

CONTENTS

3.2.2

Released on the 11st of August 2023.

Modifications:

Communication Configurator
- The VLANID setting range is extended and because of it, 0 value can be set.
- From now on, the name "TEMPLATE" cannot be used as an IED name. If this name is used, then EuroCAP will automatically rename it to "IEDNAME". If the user specifies another name than "TEMPLATE", it will be valid and will not be changed by the software. The IED name in the .icd file is still TEMPLATE!
- After function block update data objects could remain with already not valid name in the report control blocks. From now on, Check configuration function will check the validity of DO names in the RCB-s.

Bug fixes:

- After function deactivation, the instance number of function objects that remained active were not regenerated – bug fixed.

Communication Configurator
- If a GOOSE message in the imported .cid or .scd file has not got dedicated VLANID, then incorrectly the value '1' was written into the .go file. From now on, 0 value will be written into .go file in this case.
- EuroCAP made unwanted rewrites in the .cid file of epcs files saved with version 3.2.1, if previously a .cid file had been imported and then the IED name was renamed in EuroCAP.

Logic Editor
- During the sheet import process an error message appeared in case of configuration version 2.10.x.

3.2.1

Released on the 5th of May 2023

New features, improvements:

- Requirement to log-in as Master user with password now removed. Two new user levels introduced: Factory view and an enhanced normal view (which combines the normal and the master views). "Change view" lock icon on the toolbar is now inactive and greyed out.
- The configured clients in the imported SCD file are now visible in the downloaded CID file and the IEC 61850 object tree. To access this feature, firmware requirement must also be met in the device.

Modifications:

Communication Configurator
- IEC 101/104 datatype limits increased for 2.10 system. Limit for objects that can be added to each group in the IEC 101 and 104 configuration extended.
- Address range slots for IEC 101/104 objects now fixable for each group. *Base address* has to be higher than the maximum number of previous object type. As an example, previously, it was possible for "Double point information" objects to occupy slots belonging to "Single point information" objects by setting a low *base address.* This is now supervised by EuroCAP.
- Possibility of creating a *volatile user status* when adding a new IEC 101/104 object is removed.

LCD Editor
- OLM (online measurands) list modified to include function block title.

Bug fixes:

- Opening of an .epcs file by the program was case sensitive. If the case in the name of the file was changed to upper case, the program could not open the file. Bug fixed.
- Problematic search (Ctrl+F) function when searching for text in "Normal logic" or "Fast logic". Bug fixed.
- Minor corrections in the printing of "Feedback documentation" in German language.

Logic Editor
- With "title view" enabled in the Logic Editor, ConnIn and ConnOut still displayed the name instead of the title. Bug fixed.
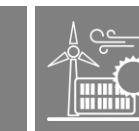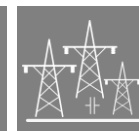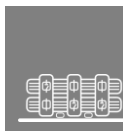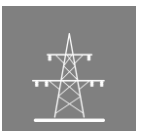
3.1.3

Released on the 15th of December 2022

New feature:

- "Print only the system and parameter settings" option when printing the Feedback documentation using the XML file of the IED.

Bug fixes:

- Fixes of the known issues in versions 3.1.1 and 3.1.2:
  - The structure of the generated .cid file was modified if there was an accentuated letter in any DOI description. This could cause loss of 61850 connection. Fixed.
  - Bug in the export of the LED configuration in versions 2.10.x, which causes errors in the LED configuration after import of an exported LED configuration file. Bug fixed.
  - By using the "Export cards to file" function, the terminal names were incorrect in the exported text file. Bug fixed.

  Logic editor
  - Operation of the Logic editor had become significantly lower in versions 3.1.1 and 3.1.2 – this is fixed.
  - Accentuated letters were accepted in the names of ConnOut signals while this is not allowed. Then, by generating the logic, an undesired error message showed up. Bug fixed; a message shows up if accentuated letters are left in the name.
  - Position of Comment editor buttons has been optimized.
  - By placing a Function block on the logic editor sheet a blank FB symbol appeared, if the user did not select anything from the list and clicked on the OK button. Bug fixed.

  Rack designer
  - Modifying of certain module types could cause the illusory activation of delete tab. Deleting the module was however not possible. Bug fixed. Master user shall be able to remove only binary input and output modules.

Known issues:

- Parameter export in .xls format from the Offline Parameter Set Editor is temporarily disabled.
- In case of IEDs which are operating with older type of CDSP – version 2.8.9.1015 or former – the configuration file can not be downloaded via EuroCAP. It can be done after Firmware update.

3.1.2

Released on the 24th of November 2022

Bug fixes:

LCD editor

By saving a configuration file with EuroCAP 3.1.1 version, a few undesirable changes took place on the LCD editor sheets. These changes could be experienced only after closing and re-opening the configuration file:

- Disabled LCD sheets were enabled.
- Black font colors changed to white. In case of white background, this anomaly made the user think, that the text has been disappeared.
- By dynamic images, the "off" value was deleted from the command field.
- "Confirm before execute" option was enabled in the command field.

For users, who have worked with the version 3.1.1, it is highly recommended that they check the above changes. If they effect their configurations, the bugs can be fixed manually and saved with the new version 3.1.2.

Known issues:

- Parameter export in Excel format from the Offline parameter set editor is temporarily not available.
- Bug in the export of the LED configuration, which causes that there will be errors in the LED configuration after import of an exported LED configuration file.
- Bug in the "Export cards to file" function.
- The speed of the image refresh of the Logic editor is not sufficient.
- The structure of the generated .cid file is modified if there is an accented letter in any DOI description. That can cause the loss of the 61850 connection.

3.1.1

Released on the 10th of November 2022

New features, improvements:

- FB analogue input assignment has been moved to the logic editor. User can create connections between analogue input modules and the desired function blocks.

Logic editor
- Analogue input assignment to FB's has been realized with blue lines. All other binary signals remain black.

- ConnIn objects have separate analogue and binary signal groups

Modifications:

Toolbar
- Improvement of upload and download icons.

Bug fixes:

- By certain S24 HMI's (23xx,26xx,27xx), the LED title print function did not work properly. Bug fixed.
- Textual arrangement in IEC61850 communication description files was incorrect in some sections. Bug fixed.
- IEC61850 IED name was changing to TEMPLATE by Ed1 to Ed2 switching. Bug fixed.

IEC61850 communication configurator
- EuroCAP accepted numbers and _ symbols as a first character in the IED name. Corresponding to the standard requirement, the IED name can start now only with alphabetic characters.
- Improvement of scroll bar operation in the imported goose messages window.

LCD editor
- By importing LCD sheets, accentuated letters do not show up properly. Bug fixed.

Logic editor

- Accentuated letters in the sheet name could result error messages. Therefore, accentuated letters are not accepted anymore.

Known issues:

- By saving a configuration file with EuroCAP 3.1.1 version, a few undesirable changes took place on the LCD editor sheets. See details in the bug fixes of version 3.1.2
- Parameter export in Excel format from the Offline parameter set editor is temporarily not available.
- Bug in the export of the LED configuration, which causes that there will be errors in the LED configuration after import of an exported LED configuration file.

- Bug in the "Export cards to file" function.
- The speed of the image refresh of the Logic editor is not sufficient.
- The structure of the generated .cid file is modified if there is an accented letter in any DOI description. That can cause the lost of the 61850 connection.

2.4.2.13

Released on the 1st of June 2022

Bug fixes from the version 2.4.2.10:

- Accented and special characters appeared wrong in Object properties windows in certain cases (related to German and Hungarian languages) – fixed.
- Compare function did not work – fixed.
- In the last version a new counter was introduced in the Subscribed GOOSE assignments menu, but with a wrong limit value:12. Now it is increased to the right value: 256.
- The signature file did not work with certain computer configurations – fixed.

2.4.2.10

Released on the 3rd of May 2022

New features, improvements:

- By manual .epcs name modification (e.g in Windows File Explorer), the EuroCAP notifies the user and initiates file saving after opening the modified file. This is to ensure consistent .epcs file name representation in EuroCAP and device web interface.
- Count/Limit added to Subscribed GOOSE assignment sheet.
- Generate Communication Files icon is now available for master users in the toolbar.
- LED title printout is now available on the LED assignment sheet.

61850 communication configurator
- Unused datasets and control blocks are being deleted automatically.
- GOOSE control block settings have been supplemented with repeat rate (Mintime) and supervision time (Maxtime) parameters.
- If the user manually changed the .icd file and loaded it in the configuration, it was possible to have multiple LN's with the same name. In order to avoid this problem, LN name check has been introduced prior to .icd file import.
- LN prefix can start only with letters. Numbers are not allowed anymore, in order to comply with IEC61850 Ed2.

Modifications:

- Minor change in the representation of object title translations.

EuroProt+ Device Configuration
- File ID renamed to Config. Type.

Toolbar
- Minor change in icon colors.

Offline parameter set editor

- Read-only parameters are now appearing in a grey field similarly to the web interface.

Bug fixes:

- If a module is not allowed to be removed in Master view, then the Remove button (X) will be grey.
- By copying objects from one configuration to the other, the object title translation has been lost. Bug fixed.
- IEC101/103 communication description file name for S16 devices does not refer to IEC104 anymore.
- Correction in RIO file generation method. RIO files could not been generated for the latest

version of the Distance protection function.

- Binary parameter modification for master user was only possible for parameters created in master mode. This has been extended for parameters, which were created by designer or administrator too.
- By working on multiple screens, the windows to the different EuroCAP modules popped up always on the default screen, even if the EuroCAP main window was opened on another screen. This has been changed, so the windows of the individual EuroCAP functions are popping up on the same screen as the main window.
- The use of certain special characters in the .epcs name was allowed by EuroCAP but not accepted by the device. Bug fixed.

61850 communication configurator
- Modification in the enumerated parameter fields has been improved.
- Improved window handling

IEC101, DNP3 communication configurators
- Tooltip was not pointing at the right parameter over the cursor was positioned. Bug fixed.

LCD editor
- Active screen counter did not consider the imported screens. Bug fixed.

Offline parameter set editor
- Help text did not show up in the actual language set in EuroCAP. It was always English. Bug fixed.

Logic editor
- Correction in representation of timer block parameters

Known issues:
- Accented and special characters appears wrong in Object properties windows in certain cases (related to German and Hungarian languages.
- Compare function does not work.
- The limit for the new counter in the Subscribed GOOSE assignments menu is wrong: 12, instead of the real limit: 256.
- The signature file does not work with certain computer configuration.

2.3.1.10

Released on the 17th of March 2021

New features, improvements:
- Configuration file includes now digital signature, which will be recognized from CDSP version 2.8.13.2500 and higher. Configuration files created with older versions of EuroCAP can be digitally signed by simply executing a Save As… command in the File menu.
- Uploading and downloading configuration via http/https to and from IEDs with CDSP version 2.8.13.2500 and higher. The program automatically selects the most favorable data transmission channel in the following order according to the CDSP version and the settings of the IED:
  https → http → sftp
- User authentication by uploading configuration file if it is required by the IED. CDSP version 2.8.13.2500 and higher are capable for that.
- IEC 61850 edition number is saved in the .epcs file. By opening the file, the last saved Ed number will be active.
- When removing/modifying a binary I/O module, it is possible now to assign new I/O signals in the place of the removed ones during the process.

Modifications:

Logic editor
- Minor change in General Print settings

Bug fixes:

- Incorrect date appeared in the printed configuration file documentation. Bug fixed.

Rack designer
- By entering and exiting the rack designer without any change, the upload icon became inactive. Bug fixed.

61850 communication configurator
- Minor improvement in window handling
- Data attribute field seemed to be active even if it was not possible to save there any modification. Bug fixed.

2.2.3.8

Released on the 5th of November 2020

New features, improvements:

- Configuration file extension change from .epc to .epcs. The new .epcs is a compressed, secure file format and includes all the configurations files, which were previously generated just before configuration upload to the device. After opening a configuration file with the former .epc format, the upload to the device function will be available only after an .epc to .epcs conversion by the user, which shall be done by clicking on File/Save As... The change of the file format does NOT have the consequence that a firmware update would be needed on the device. This version of EuroCAP is fully compatible with previous versions of the firmware!
- Similar to the web browser, Help Texts are now displayed in the Offline Parameter Set Editor. These texts are marked with a question mark symbol.
- By manually adding an IP address for target device selection, the minimum firmware requirement is shown in the warning message.
- Editing/Removing Trip Assignments is enabled for master view.
- Graphical logic equations of two configuration files can be compared under the menu File/Compare…
- By opening the Function block properties window the "Outputs" and "Owned objects" are also displayed.

Logic editor
- Factory protected sheets can be seen in master view by using password.
- Title view can be activated on a logical sheet by master user in order to show the titles of BI and BO signals.

Rack designer
- By removing an I/O module, the signals assigned to its inputs/outputs can be assigned by the user to somewhere else.

Modifications:

61850 communication configurator
- String length limit modifications for Edition 2.
- Minor improvements for LN moving, DO selecting and LD creating operations.
- Improving dataset properties settings.
- Objects with SR functional constraint can be added to data sets.

Logic editor
- Unused "Locked at" field is removed from Sheet properties.
- Minor improvement in appearance.

LCD editor
- Minor improvement in appearance.

Rack designer
- Minor improvement in appearance.

Bug fixes:

- Fault free source selection for class 2 measurands in the IEC103 comm. configurator.
- Check configuration process interrupted by IEC 61850 DAI error. Bug fixed.

Logic editor
- It was possible to define a Tpar upper limit higher than the indicated value in the brackets. Bug fixed.

61850 communication configurator
- DO's and DA's are both included in the maximum number of dataset items calculation

2.2.2.12

Released on 22nd of April 2020

New features, improvements:

- The changed parameters in the Offline parameter set editor can be set as default with the new "Set as Default Parameters" button
- Feedback documentation: information about subscribed GOOSE assignment added to chapter "61850 communication settings"
- Now the software appears better on 125% and 150% zoomed displays. Further minor improvements in appearance and usability e.g. in LCD editor

61850 communication configurator
- The name and the title of the functionblock are also displayed beside the LN names
- New field in the Properties window of data attributes: Address. The total path of the data attribute is displayed in this field.
- Minor improvements in appearance

Modifications:

- From the binary parameters only those can be seen and modified in Master view, which has been added by the users. The binary parameters owned by the functionblocks are now hidden.
- Rack designer: Upload HW option has been removed.
- The "New configuration" icon is not active any more in Master view.
- The Normal and Fast logic equations can be seen now also in Master view under the Software Configuration/Equations menu.

Bug fixes:

- Disturbance recorder: the signals added in Designer view can be now modified and removed also in Master view.
- When changing the active functionblock in a group of mutually exclusive functionblocks, the previous active functionblock remained displayed as being active, although it got deactivated. Bug fixed.
- When changing an analogue input of a functionblock, there is no more option "nothing".
- There is no warning message more before configuration download if the device's firmware has a higher hotfix version than that of the configuration requirement.
- The File name field on the main page was not refreshed after opening a new file and after Save as process. Bug fixed.
- Timer parameters created in the Logic editor had no unit in the Offline parameter set editor. Bug fixed.

- Feedback Documentation: the binary inputs and outputs received from a RIO device are now also listed.
- Importing the IEC 101/104 description settings now sets also the ASDU control type.

Logic editor
- Conditions for Sheet import improved.
- Refinements in "Overlapping" warning messages for the connecting lines.

Check configuration process
- A description file (EPML) in the configuration file could be sometimes damaged. Now it is checked during the "Check configuration" process, and if it is found damaged, then it will be automatically repaired and the user gets a warning message.
- There is no more warning message if the limit 100 of the data attributes in a 61850 dataset is just reached (100/100), only if it is overstepped.
- The number of warnings due to issues in communication editor were cumulated to the number of errors.

2.2.1.5

Released on 16th of March 2020

New features, improvements:

- Configuration upload: in case of secure file transfer (SFTP), the upload window displays animated dots during connecting. An additional message line is also displayed: "It can take more than one minute in some cases.". Connect time-out is set to 120 seconds.
- Configuration download: in case of manually entered device IP address, the following warning message appears: "By downloading via entering the device IP address, the checking of the RDSP/CDSP firmware versions should be done manually."
- Some improvements in appearance (only examples):

  - The comment for the modules in the Rack designer appears in the Select Module window as a hint.
  - The default width of some columns in the upload and download configuration windows are enlarged.
  - Size and position of the windows of the LCD Editor has been modified and/or fixed.
  - Improvements for multi-screen handling.

- Minor enhancements in the Logic editor.

Communication configurator
- IEC 61850: multiple data objects can be selected for dragging into a Dataset.
- The prefix and instance properties of the logical nodes can be modified.

Feedback Documentation
- The table about the IEC 61850 datasets contains a new column for the descriptions of the datasets.

Modifications:

- The automatic configuration check before downloading does not need confirmation any more, if there are no warning or error messages.

Logic editor
- The upper limit of the constant timer parameters is set to 2,000,000, similar to the variable timer parameters.

Bug fixes:

- The configuration menu (tree) was totally closed after some actions, like opening new file, change of view, change of language. Now the menu which is currently used will not be closed in such cases.
- Minor fixes in the Logic editor and in the Comm. configurator

Rack designer
- The checking process of the IO-allocations was not executed in some case of special modifications.

Logic editor
- The copied selection of the logic could not be moved, just after reselection.

2.1.3.10

Released on 20th of February 2020

New features, improvements:

- Secure file transfer (SFTP) is supported both when downloading and uploading to and from devices with CDSP firmware version minimum 2.8.13.1530. These devices are appearing in the Upload/Download window with a 🔒 -icon, which signs the secure file transfer. If the IP-adress of the device is set manually, then the user has to check/uncheck the Secure file transfer checkbox, depending on the CDSP firmware version.
- Parameter- and log-files can be extracted from archive files (report.zip) in the menu: File \ Recovery \ Extract Parameter Files, Extract Log Files. This new menu File \ Recovery collects all function of EuroCAP connected with the archive files.
- Every objectlist is sortable now by "Ix", "name", "title", "defined by" and "show order" if the user clicks on header of the proper coloumn. Note: "Ix" of an object is the creation order by default, but it can be modified for some type of objects by the "Move up" and "Move down" buttons (like for disturbance recorder signals, matix inputs and outputs), because this number means also the displaying order for those object types.
- A version history can be added on the main page.
- The all defined objects and the active ones can differ for some types of objects (e.g. Reportable objects of Event recorder) if some functionblocks are deactivated. Up to now only the number of the defined objects and the limit was displayed for every object type. Now the number of the defined objects is in brackets and also the number of the active objects is displayed. If the active one exceeds the limit, the 'Check configuration' function signs this as error, and the configuration cannot be downloaded to any device until the number of them is decreased under the limit. This error is also signed by a red sign on the page of the object.

Count/Limit:
259(393)/256

all defined — active — limit
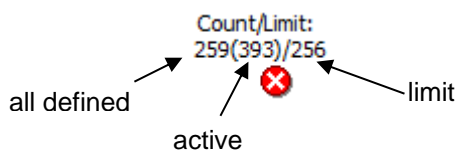
- When a configuration-download process starts, the Check configuration function is automatically executed from now on. If an error is found, the download is not allowed.

- In Master View only the selected objects can be assigned to a functionblock analogue input. The list of allowed objects can be edited in Designer View and above. This helps the users with Master View in the way that they have a limited selection of options for inputs.

- Some improvements in appearance (bellow are listed only some examples):
  - Not editable fields are now disabled in the *Object properties* dialog window; they appear the same way as drop-down lists.
  - The *Translations* button does not show an English flag anymore; it shows a dictionary icon. The same icon is used in the *Object properties* and *Offline Parameter Set Editor* dialog windows.

Logic editor

- If you click on Set DOI description in the local menu of the GGIO16 functionblock (16 channel event collector), then the DOI descriptions will be automatically filled for those channels, to which there is any input connected with filled title property. The descriptions will be that titles. The same happens if you click on 'Refresh' button in the pop-up window.
- It is possible now to put down more inputs or connector inputs at the same time with the use of Shift or Ctrl keys in the input selection and in the connector input selection windows.
- The name of the first selected item is offered when launching the *Search* window
- Generation order can be modified with a new local menu command. *(Generation order -> Set to)*
- 'Create user status' and 'Non-volatile' attributes can be selected for the connector outputs during the creation process in the dialog box.
- When a macro is inserted then generation orders are restored.
- A saved macro can replace an existing one supposing that it is not in use. (Previously the user had to save it with an other name.)

Communication configurator

- IEC 101/104: Insert New Object function: the user can select the object to insert from a list which contains all objects from the proper type. So far the first object from this list was automatically inserted.
- IEC 101/104: In the property window of the datapoints the values are grey which are not modifiable.
- The details of the last imported IEC61850 IED description (.scd or .cid) file are displayed as the property of the root tree node (the .epc file).
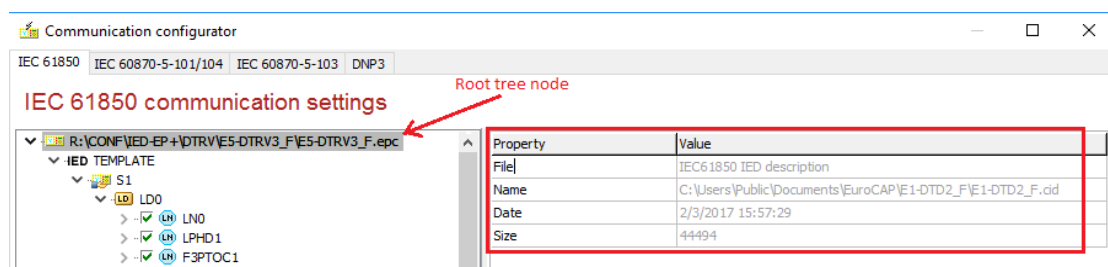
LCD editor

- Create Screen-Control: configurable soft-button for direct switch from an user screen to an other

Offline parameter set editor

- New RIO templates for the two new variants of the Distance protection functionblock:

  a) with independent arc resistance parameter for ph-n and ph-ph faults
  b) with independent characteristics for ph-n and ph-ph faults

Modifications:

- The objects of the inactive functionblocks are not visible any more in Master View. Therefore the active / inactive state icon does not appear as well.
- The object identifier numbers are not visible any more, as they were not informing.
- The 'Imported files' button is not visible any more.
- Some names and also the structure of the configuration-tree has been modified. The typeidentifier numbers of the different objects are not visible in the configuration-tree any more, only in the "Type" columns. The location- and namechanges in the configuration-tree are summarized in the following table:

Old location and name	Current location and name
Hardware configuration	
Rack designer	Not more in the configuration-tree, it can be reached only from the upper icon bar and from the Project menu.
IO Signals \ Analog inputs \ Measured channels	IO Signals \ Analogue Inputs \ Measured signals
IO Signals \ Calculated channels	IO Signals \ Analogue Inputs \ Calculated signals
IO Signals \ Analog outputs \ Output channels	IO Signals \ Analogue Outputs \ Measurement
IO Signals \ Binary inputs \ Filtered inputs	IO Signals \ Binary Inputs \ Filtered signals
IO Signals \ Binary outputs \ Relay contacts \ Fast L1 contacts	IO Signals \ Binary Outputs \ Trip & Signal contacts \ Sync close contact
IO Signals \ Binary outputs \ Relay contacts \ LED def.	IO Signals \ LED assignment
IO Signals \ Control inputs \ Control channels	*Software configuration* \ Control
IO signals \ Direct ETH \ Direct binary receive	IO signals \ Communication \ Received binary signals
IO signals \ Direct ETH \ Direct binary send	IO signals \ Communication \ Sent binary signals
IO signals \ COMMCPU binary receive	IO signals \ Communication \ Busbar communication \ Received binary signals
IO signals \ COMMCPU binary send	IO signals \ Communication \ Busbar Protection \ Sent binary signals

Software configuration	
Functions \ Installed FBs	Installed Functionblocks
Functions \ Visible FBs	Installed Functionblocks \ Visible on HMI
Functions \ Measured variables \ On-line measurands	Measured Values \ On-line
Constants	Not more visible in Master View.
Functions \ Parameters \ Binary parameters	Parameters \ Binary
	Parameter description: new
Functions \ Parameters \ Parameterset change	Parameterset change
Functions \ Busbar protection	Busbar Protection
Events \ Event channels	Event recorder \ Reportable objects
Disturbance recorder \ Binary inputs	Disturbance recorder \ Binary signals
Disturbance recorder \ Analog inputs	Disturbance recorder \ Analogue signals
Counter \ Counter functions	Counter \ Signals
Counter \ Time stopper	Counter \ Cumulative Timer
Matrix \ Rows	Matrix \ Inputs
Matrix \ Coloumns	Matrix \ Outputs
Trip signals \ Trip assignment	*Hardware configuration* \ IO Signals \ Trip definition \ Assignment
IEC61850 \ External GOOSE references	IEC61850 \ Subscribed GOOSE assignment
System \ ConfigID	Not more visible in Master View.
System \ TimeSync source	System \ Time Sync \ Source

- Event recorder \ Reportable objects: the name 'include HMI' has been changed to 'Event list'
- Feedback documentation: events with Event list = 0 value are not listed (these events do not appear in the Event recorder of the device). Consequently, the HMI column is removed.

Logic editor

- There are warning messages instead of error messages when a generated equation is too long or when the total stack exceeds limit. This way the user logic can be generated and saved, only the download process is disabled in these cases. The warning message appears for every long equation to help correcting.
- If a part of the logic was selected and then moved, but overlapping resulted, then the logicpart was moved back to the original position and the selection was disappeared. Now the logicpart is moved back in this case too, but the selection remains.
- 'Create status' attribute of connector outputs is renamed to 'Create user status'

Rack designer

- The type of VT modules can be modified also in Master View.

Offline parameter set editor

- The default language is now the selected language of EuroCAP, if this language is imported to the .epc file.

LCD editor

- Set up LCD screen size: the option "Other" has been removed.
- Some texts have been changed:
  PiDB File Version to *Database version*;
  Import Picture DB to *Import Picture Database*;
  Export Picture DB to *Export Picture Database*
- Displacement of buttons to the bottom of the panel

Bug fixes:

- When the count of a certain data reached (but not exceeded) then a warning appeared during configuration check.

Logic editor

- If a timer parameter was copied and pasted (Ctrl C + Ctrl V), then the Check Configuration function wrote an error message after the first logic generation.
- When a selected part of the logic was copied then the connected wiring was also calculated into the new position.
- After junction-moving a trace was left on the sheet.
- *"References to XXX are not adjusted"* error message appeared for new junction points when generating the logic.

Communication configurator – 61850

- the value of 'Rpt enable max' property of report control blocks were not set from the imported .cid file
- Now the configuration revision number of the affected Control Block is automatically increased when a functionblock is added, removed, activated or deactivated and when a Logical Node's ownership is changed. The increase is executed when the Code and parameter files have been generated (build process of the .epc file).

LCD editor

- Now the caption of the Cancel button is translated correctly.

2.1.2.9

Released on 8th of July 2016

New features, improvements:

- Downloading is not allowed to a device which has a lower RDSP and/or CDSP firmware version number than the one required by the EPC file. The following error message appears: *The XXXX firmware version of the device is not suitable for this configuration!* In other cases, the *Revision mismatch* window may appear where you can continue or cancel downloading. There is also shown which firmware does not match: *The XXXX firmware version of the device might not be suitable for this configuration!* The required version number now contains also the EPC firmware number, like "'2.8.13.2020". When a fixed device firmware is required by the EPC file then a new line appears: *This configuration requires a fixed XXXX firmware version*.
- There is a new button on the *Event channels* and *Control channels* property sheets: the *"-> Title"* button copies the content of the *IEC61850 DOI description* column to the *Title* column for all selected lines. When the current language is English then the original value, otherwise the translated value of the object's title will be modified. Please select lines carefully because the titles will be overwritten without confirmation. This feature is useful because the *IEC61850 DOI description* field can be filled already in the Logic editor where the connections of e.g. a GGIO16 or Con4Ch are defined.
- The list on the *IEC 61850 Logical Nodes* property sheet is sorted by the owner Function Blocks (the *Defined by* column). The contents of the ICD / CID files are not affected.

Offline parameter set editor

- The parameter set can be exported to an MS Excel file and it can be imported from an MS Excel worksheet.
- During parameter file loading the version field of the fileID is not ckecked, only the FileID. If this FileID is different from the FileID of the current configuration, then parameter file loading will be executed, only a warning message will appear.
- The version field of the fileID is not written in the parameter file any more when it is saved (to avoid incompatibility problems).

Communication Configuration:

- Now you can create a Dataset in the following ways:
  - from the local menu of LN0 (right click on LN0)
  - by dragging a DO from a logical node to LN0
- You can move a DO from one Dataset to another (to avoid exceeding limits).
- You can create an RCB from the local menu of a Dataset.
- In the object tree, an RCB is below the linked Dataset.
- LNs can be sorted by name (except for LN0 and LPHD1).

- The bubble hint window is shown for a longer time (to be able to read long texts).

Check configuration function

- The *Check configuration* function is checking also the maximal number of IEC 61850 objects (datasets, FCDAs, RCBs and GCBs). When a limit is exceeded then only a warning message appears (previously it was an error message); the configuration can be downloaded to the device. The same is true for object mappings in IEC 60870-5-101/103/104 and DNP3 communications.
- It is also checked already whether there are only matrix rows or columns defined; when matrix rows exist then columns must also exist and vice versa.

Feedback documentation:

- The type of the front panel is also printed on the Rack design page of the printed documentation (the same way as in the Rack Designer window).
- The Feedback Documentation has got a new style.
- Only those objects (parameters, on-line data, etc.) are printed, which are displayed on the HMI or on the webpage of the device, but not the hided objects.

<u>LCD Editor</u>

- Enumerated parameter variables can be selected as source for the Dynamic Image and Dynamic Label objects.
- The number of the checked screens is limited to 20. If there are checked more, the user gets error message after clicking the Generate button: *The limit of the active screens is exceeded! Please deactivate x of them!*
- The prefix of the Analog will be filled automatically with the Russian translation if there is in case of the Online Measurands.

Bug fixes:

- IEC61850 Data Attribute mapping: Only the NamPlt/configRev, NamPlt/d and NamPlt/dU attributes were mapped; other DA mappings were ignored in NamPlt.
- LCD Editor: In case of opening an LCD screen file the image files of the DImage objects of the opened LCD screen can be empty. (Before this fix the image files after the first empty image file were not imported.)
- Offline parameter set editor: If there are missing parameters in a .par file which is loaded to a configuration compared to that which are in the configuration then the value of them are set to the default. (Before this fix these were set to the minimum value.)

<u>Feedback documentation:</u>

- The format of file date-time on the Configuration files page of the printed documentation is now the same as on the cover page (and other places).
- The value of the Netmask parameter in the Station bus section, on the System settings page of the printed documentation is now printed as dotted decimal text instead of CIDR notation bit count, like "255.255.0.0" instead of "16".

2.1.1.11
Released on 9th of November 2020

New features, improvements:

- New icon has been introduced to select between the Edition 1. or Edition 2. version of the IEC61850 implementation. (future option only)
- Open From Archive: you can also open the .epc configuration file from within a report.zip file with the new *File | Open From Archive*… menu command. When the file is opened, you are offered to save it with its original name (much like when you upload a file from the device).
- Print From Archive: you can print the feedback documentation directly from the report.zip file. The new command is available with the *File | Print Archive File* menu item and with the corresponding speed button on the toolbar. The former Print speed button is not available anymore; the former Print command has to be launched from the main menu. Please note that the .epc configuration file is not opened by the program, it is printed directly from the .zip archive file. This function will be available to use with report.zip files generated from devices with CDSP version 2.8.13.**1520.**
- When a language other than English is selected, you can still modify the original (English) title and translatable parameters together with their translations in the *Object properties* window. Now a flag appears next to a translation instead of the "Translation" label.
- Functions blocks now also have a version number. The version is displayed in the Function Block Properties window. Only an Administrator can modify the version.

<u>Rack designer:</u>

- Handling of max. 6-slot wide modules.

Bug fixes:

- The bugs are fixed which are described in the "Known issue" paragraph of the 1.5.1.14 version.
- After sheet import process of the Logic Editor "Internal error 2" warning message appeared in some cases, which had no meaning. This will not appear any more.
- Offline parameter set editor: writing the version number to the File ID when saving the .par file and checking the File ID and the version number when reading the .par file.

1.5.2.14

Released on 18th of September 2015

New features, improvements:

- New fields in the main page: RDSP and CDSP version and hotfix numbers. These fields are visible in Master View only if min. one of the version numbers is greater than 0. These fields are filled in the factory in Designer view and sign the minimum firmware versions with which all functionality of the configuration will be available in the device. If the user downloads a configuration to a device which has firmware files with smaller version numbers, a warning message will appear, but the download process will be enabled. Details about the reasons of these firmware version recommendations can be found in the document "Release and revision history for EuroProt+ firmware - Release 2.8.13".

Bug fixes:

- The bug is fixed which is described in the "Known issue" paragraph of the 1.5.2.12 version.

Known issues:
- If German language is selected, the functions of the icons in the menubar are mismatched.
- The "Launch EuroCAP" function during the install process does not work.

1.5.2.12

Released on 2th of September 2015

New features, improvements:

- Added major and minor version number to the File ID text.
- New columns in the *Event channels* section of the printed Feedback Documentation: the *HMI* column shows the *Include HMI* parameter value of the object; the *Value* column displays the possible range of the recorded value.
- There is a new column in the list on the *Event channels (9)* and *Control channels (43)* property sheets. The *IEC61850 DOI description* column shows the first non-empty description of the mapped Data Objects (the owners of the mapped Data Attributes).

Communication Configuration:

  – Now the translated title of the referred object and its owner Function Block is displayed.
  – The printed Feedback Documentation also shows translated titles in two separate columns (*Function* and *Title*).

Logic Editor:

  – When a Function Block owns one or more IEC61850 Logical Nodes then you can set the description of the contained Data Objects by right clicking on the symbol of the function block.
  – Introduced Macro List Update function: unused macros are updated, new macros are loaded from the selected folder.

Rack designer:

– The user in Master view is able to remove binary input and output modules, which have been added in designer mode.

LCD Editor

– Picture database: new button for deleting all LCD pictures.

Bug fixes:
- When the language of the EuroCAP was not set to English, then the translation of the titles of the events could not be modified.

Logic Editor:

– In some cases, the *ConnOut move* function did not work properly.
– When you change the name of a ConnOut which is visible outside of the Logic Editor then its references are now also changed to the new name.

Offline Parameter Set Editor

– In case of a matrix with 32 columns, the value of the last column in the parameter list was inverted.

Known issue:

A problem comes up in those cases when two connector outputs are overlapped by each other, and in one of them the "create status" option is chosen. When exiting the logic editor with the generate button, a connector output object from the logic page (where the overlapping happened) is placed to the empty parameters/properties of all objects (i.e. blink items for LEDs which had not any blink item assigned to them before, triggers for events which had not trigger condition before etc.).

1.5.1.10
Released on 24th of February 2015

New features, improvements:

- The title of the (first) "ConfigID (100)" object appears on the Device Configuration property sheet as a "Customer ID", right below the "File ID"; from Master View it can be edited.
- From Master View you can show details about the imported files with the "Details" button on the Device Configuration property sheet
- **LED definition (5) objects can be exported to and imported from an XML file.** The imported object's parameters are loaded into the object with matching I/O "Connector", including the original (English) title and its translations, but not the objects "Name" and "GeoGraphic address" which are not modified. When the "On Item name" or the "Blink Item name" refers to a non-existent object then the parameter is changed to "Object?" and an error message is added to a report list which appears when the import operation is finished. If the object's name does not match with the imported name then a warning message is added to the report list, although there should not be any reference for the object in the configuration.
- When the display language is not English (the default) then translated object properties (title and parameters, like a unit) are also shown in the *Object properties* dialog window and the original (English) value cannot be edited.
- There is a new column in the list on the Inputs sheet of the Function block properties window: an "A" in the column "M" shows that the input can be reassigned in Master View (the letter "A" may vary in different languages, like "Z" in German language).

Feedback documentation:

- Printed documentation has been re-designed.
- You must supply an RSEP XML file containing system and parameter settings instead of PAR files used in earlier versions. The XML file can be extracted from the device.
- IEC 61850 and DNP3 communication settings are also printed.

Communication Configuration:

- A source object cannot be assigned to multiple IEC 103 measurands II and/or control items.
- The generated ICD and CID files contain also those DOIs which have a description.

Logic Editor:

- All user logic sheets can be exported to and imported from file in one step.
- You can import Function Block of a sheet even if the relay in the current configuration has more inputs or outputs. The name and position of the imported FB IOs must match the ones of the relay in the current configuration.
- The color of the Function Block is different (white) when it is not assigned i.e.: when there is no such FB in the configuration.

Rack Designer:

- Now you can launch the rack designer also with the Project | Rack Designer… menu item and the Rack Designer speed button on the toolbar.
- TRIP, power suppliers, PSTP modules can be changed in Master View.

LCD editor:

- Autofill of LCD analog label suffix
- Moving the LCD-objects by cursor keys
- Change LCD suffix automatically based on the Source object. (Suffix of the analog parameters is not editable.)

Offline Parameter Set Editor:

- The units are displayed in the selected language.

Bug fixes:
- The tree and / or list on the property sheet did not refresh when translations were changed.

Rack Designer:

- S24 LED-label print zoom fix
- Binary I/O can be deleted and readded in Master View without closing the rack designer

LCD editor:

- It wasn't possible to export a disabled LCD Screen

Offline Parameter Set Editor:

- Fixed the printing problem in the offline parameter set editor

1.4.4.9
Released on 28th of August 2014

New features, improvements:

- Feedback documentation: Now you can print the documentation of the current .epc file optionally together with the selected .par (parameter settings) file(s). Please note that when there are unsaved changes then first you have to save the file to be able to print the documentation.

- When translation is available, the object's title is translated to the program's chosen language on the following property sheets (up to now only German language is available in addition to English):

  - all object lists, like status variables or IO signals (in the Title column);
  - Installed and Visible Function Blocks (after the colon)
  - Connector Allocation (in the Name column and also in copied or printed output)
  - Hardware Configuration

- The *Check configuration* function is checking also the maximal number of IEC 61850 objects (datasets, FCDAs, RCBs and GCBs). In case if they exceed the limit, an error line signs it, but the device will run with this configuration (green device LED).

  Object references in trip assignment (4444) object parameters are mandatory, they are now also checked. The device will be got in emergency state (red device LED) in case if this error is in the configuration.

- The *Open Configuration* file browser window now shows the folder of the recently opened file; the offered file name contains only the name part instead of the full path name.

Rack designer

  - In Master View a current transformer card can be replaced with another current transformer card. CT+/5153 is an exception of the modules. After overwrite of a CT-module to this module two extra analog channels are generated. If this module is overwritten, the extra channels will not be removed automatically – designer level is needed.

LED titles:

  - can be saved as image
  - The number of LED titles printed can be selected.
  - Print preview: zoom level can be selected
  - LED Title Print The language of the printed LED titles can be selected (when translation is available)

LCD editor

  - The user screens can be exported one by one
  - In Master View it is possible to export and import the LCD picture database

Logic editor:

  - you can cut a part of a logic and paste on an other place or sheet.

Bug fixes:

- Column headers were not translated on the Connector Allocation property sheet.
- *Translated properties* dialog: translation can be cleared (removed) again

- *File | Import | IED description*: the *max* element in *RptEnabled* was not imported (it was set to 2). Now it is set to the number of enlisted clients.

- Rack Designer Preview - Save preview image to file -> Now the extension is added to the filename

- Offline parameter set editor: When .par-file is imported and parameters are missing, warning message will pop-up instead of error message. Unknown parameters get simply ignored.

Logic editor

- Bug connected to moving ConnOuts is fixed.

- Objects created in Master View can be removed and renamed on the same or higher view level.

- You can close the window without confirmation when there are no unsaved changes.

- You have to confirm the deletion of a macro.

- The components in the Import Sheet window now follow the size of the window.

- You cannot import a sheet when there are unsaved changes.

1.4.3.9

Released on 5th of March 2014

New features, improvements:

- Downloading .epc file to device is allowed in normal view, as well.
- A Function Block can be moved up and down in the Installed FBs list in Master View (previously it was available only in Designer and higher view modes).
- Connector allocation property sheet is now fully Unicode compatible. The Terminal column was moved to the beginning of the row.
- Control channels sheet (Hardware configuration/IO signals/Control inputs/Control channels) contains new column: IEC 61850 Data Attributes (same as in Software configuration/Events/Event channels)
- The *Check Configuration* operation is now checking non-existent and inactive objects mappings in DNP3, IEC101/104 and IEC103 communication parameters.
- The Visible FBs list contains only the active function blocks (which are not deactivated in the Installed FBs list).   Core Function Blocks (which cannot be deactivated, because they are used in the Logic editor or the deactivation is forbidden) are shown with grayed check icon in the Visible FBs list. Hiding a core FB requires confirmation.

Logic editor

- There is a new panel next to the "Generate" and "Cancel" buttons. It shows the limit and the current stack size of the CPU (stack size: number of operations). The current stack size displaying does not change during editing, only at the next opening of the Logic editor. The stack size is an important information because after exceeding the limit the graphical User Logic can not be generated, just after the stack falls again below the limit.

- Connector outputs can be moved from one sheet to an other.

- Sheet import:

  - new matrix columns and logic parameters can be created during import process in the Import input window.

- if in the imported sheet there are function blocks and/or contact outputs for which in the destination configuration there are no corresponding FBs (or they are used on other sheet)/ enough outputs, warning windows will pop up when importing. These windows list the missing FBs or the number of missing outputs, than exits from the import.
- The generation order number of an object can be changed in direction to the first generated object with "Alt + down arrow" and to the last with "Alt + up arrow" key combinations. The same can be done with right mouse click on the object-> "decrease" and "increase" commands. (In the older versions of EuroCAP the same key combinations had the opposite meaning, and instead of "decrease" and "increase" there were Move up (direction first generated object) and Move down (direction last generated object) commands.)

Communication configurator

- IEC 61850 LN prefix can be now 6 characters long; prefix + instance cannot exceed 7 characters.

Bug fixes:

- In case when in a group of mutually exclusive FBs there was a function block which was used in the Logic editor, an other FB in the same group could be activated. (To know: the group of mutually exclusive FBs can be set in Installed FBs sheet-> Function block properties. If two or more FBs are in the same group, and the group index is greater than 0, than only one FB can be active from these FB-group.)

Logic editor

- If two lines were side by side with one raster difference, and the open connector of a junction on one of the lines were touched the other line, nothing could be connected to this junction.
- If modifications has been done in the Logic editor, confirmation is needed after clocking "Cancel" from now.
- Every timer parameter can be connected from now to more instances of timer macros.

1.4.1.24
Released on 29th of May 2013

New features, improvements:

- The program has got a multi-language interface. Currently supported languages are English and Deutsch (German).
- The IEC 61850 tabbed sheet of the *Communication Configurator* window has been redesigned. Now any LN in any LD can accept a GOOSE input. Refined other protocols.
- Event channel objects have got a new property sheet: IEC61850 Data Attribute references are also shown in the list.
- When the total power consumption of the rack designer cards exceeds the 90% of the total nominal power of the power supplier(s), the consumption is shown with a different color in the status bar. Additionally a warning message is shown at the closing of the rack designer window. When the power consumption exceeds the nominal power the rack designer cannot be saved.

Bug fixes:

- If German language was selected, loading of parameter files (.par) created by 1.3.x.x version of EuroCap in Offline Parameter Set Editor could not be executed
- Several enhancements and bug fixes in the Logic Editor.