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LIB 510 manuals

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LIB 510 MV Process Configuration	1MRS751887-MEN
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CAP 505 manuals

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Relay Configuration Tool Tutorial	1MRS751903-MEN
Relay Mimic Editor Configuration	1MRS751904-MEN
Relay Configuration Quick Start Reference	1MRS751905-MEN
SPTO Configuration Tool	1MRS751906-MEN
Protocol Editing Tool	1MRS751982-MUM

Common manual for LIB, CAP and SMS

Tools for Relays and Terminals	1MRS752008-MUM
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1. Introduction

Using this manual

You should read this manual when you start working with the Protocol Editing Tool (in this manual called POD tool) for the first time. The manual describes the functionality of the POD tool, which is one of the engineering tools that are available in CAP 505.

1.1. General

The Protocol Editing Tool is used for creating and editing Protocol Object Dictionary tables and sending and receiving them to/from a device which is connected to the base system computer. Protocol configurations can be created either from the beginning or by using an existing template. A set of standard templates for several protocols is distributed within the POD tool.

The Protocol Object Dictionary is a cross-reference table between the relay application and the protocol. This table defines what information can be accessed from the device, using the protocol interface. Since a device is programmable and may run various application setups (different sets of function blocks), the protocol object dictionary is also fully re-configurable.

1.2. Communication protocols

Used communication protocols for sending and receiving the POD tables are either SPA or LON. This is defined in the General Object Attributes dialog in CAP 505. This means that you do not define which protocol should be used with the Protocol Editing tool.

1.3. User modes

There are two different POD tool user modes:

- Advanced mode, for product development
- Basic mode, for field configuration

In advanced mode it is possible to create new protocol images and modify the structure of an existing configuration. In this mode the full range of POD tool functionality is available. In basic mode it is possible to edit POD table data, upload and download data from and to the device. This manual describes the functionality of the POD tool when it is used in basic mode (field configuration).

2. Using the Protocol Editing Tool

2.1. General

This chapter describes the different menus and functions in the Protocol Editing Tool and how to use these.

2.2. Protocol configurations

There are three kinds of protocol configurations. These configurations are stored in three different places:

- “Work configuration”, which is stored in the \POD directory under the object home directory, e.g. in ..\OBJ0001\POD.
- “User templates”, which are stored in the \POD directory under the project directory OBJ000\Misc\. This is a common place where the users should save custom configurations.
- “Standard templates”, which are included in the object type configurations and they are distributed with the SM/RED package. Users cannot save the custom POD configuration to these locations.

2.3. Starting the Protocol Editing Tool

The Protocol Editing Tool is started from the Project Navigator in CAP 505 (see Figure 2.3.-1).

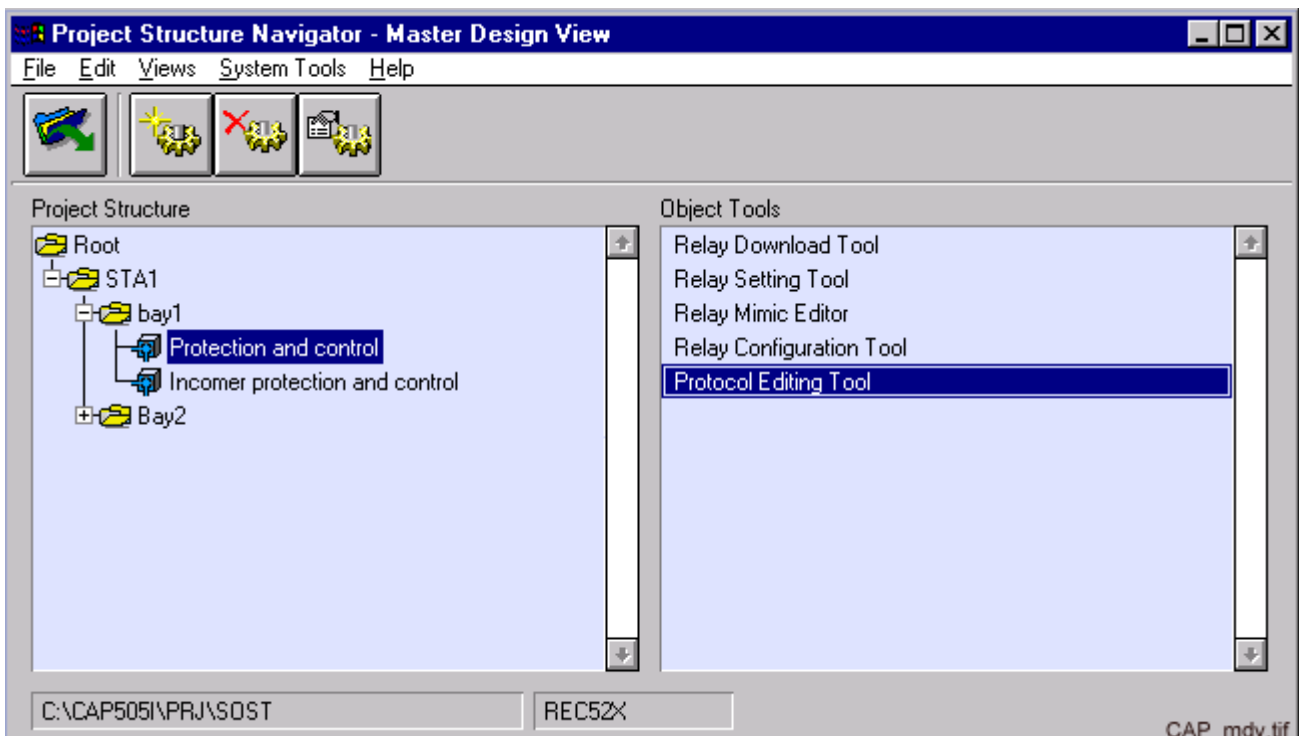


Fig. 2.3.-1 Starting the Protocol Editing Tool

If a work configuration is found in the project folder, this is opened automatically at start-up.

When the POD tool is started a dialog pops up on the screen and the user is asked if there is a connection to the device or not. See Figure 2.3.-2.

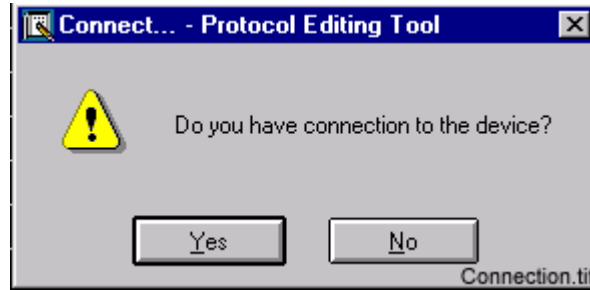


Fig. 2.3.-2 The Connect... dialog pops up when the Protocol Editing Tool is started

If you have a connection to the device and you click Yes, the tool will check if the configuration is consistent and the statusbar in the main dialog will be updated. (Consistency will be explained in Chapter 3.6.2.)

If you do not have a connection to the device click No. If you click yes, without having a connection to any device, the following error dialog will pop up:

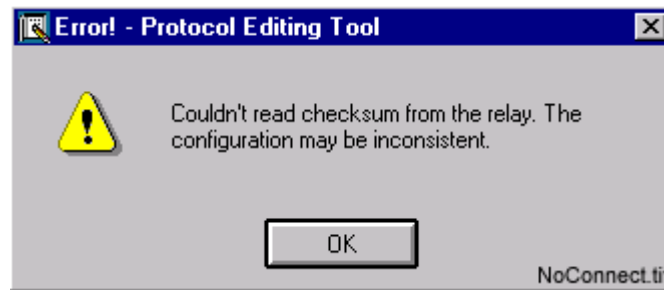


Fig. 2.3.-3 The checksum error dialog

2.3.1.

Menus and toolbar

The toolbar and the menus are the same in both user modes (basic and advanced). Some menu options and toolbar buttons are disabled in basic mode because of the mode restrictions.

There are six user interface menus in the Protocol Editing Tool main view. The menus will all be presented in the following sections.

2.3.2.**File menu**

The following figure shows the POD tool file menu. The different menu functions are explained below.

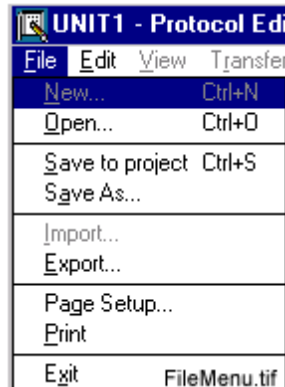


Fig. 2.3.2.-1 The file menu in the POD tool



In basic mode it is not possible to create a new protocol image. This option is only allowed on the advanced level.

Open

By selecting this menu item you can open an already existing protocol configuration/template. You can either open one of the templates, or you can browse for another image on your system. The following toolbar button can be clicked instead of choosing “Open” from the File menu.



Keyboard entry: <Ctrl>+<O>

2.3.2.1.**Save to project**

This option saves the current configuration to the actual project in the object home directory (..\OBJ\xxxx\POD) as a “work configuration”. This is a default directory and you should not change any of the files in this directory with any external tool. It should be considered to be a protected directory.

Keyboard Entry: <Ctrl>+<S>

You can also use the following toolbar button to save your configuration:

**2.3.2.2.****Save as**

This option allows you to save the active file and to enter a new name for the file. This way you can easily save a copy of an already existing file.

2.3.2.3.

Export

This option allows you to export a complete protocol table or only the selected cells in it. It is saved as a text file. After exporting a table you can open its text file and edit it with an external tool, e.g. Microsoft Excel. The columns are separated with tabulator signs. You can also use the toolbar button which is shown below, to export table or just cells in it.



You cannot import a protocol table after exporting and editing it in an external application. Importing is only allowed for the advanced user.

2.3.2.4.

Page setup

This option changes the margins of a page (See Figure 2.3.2.4.-1).

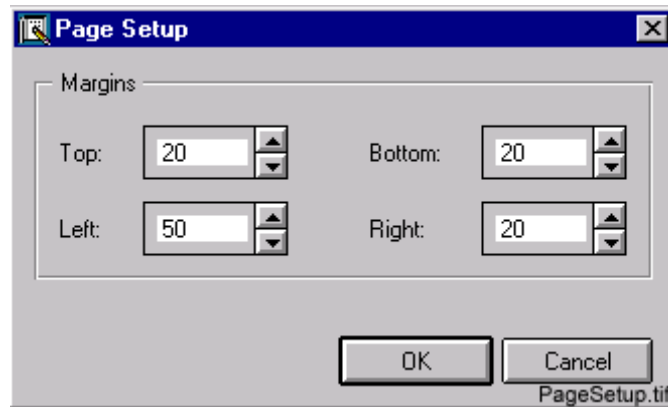


Fig. 2.3.2.4.-1 The Page Setup dialog

2.3.2.5.

Print

You can use the following toolbar button to access the print dialog or choose the print command from the File menu:



More information about the print command can be found in Chapter .

2.3.2.6.

Exit

This function exits the program. The program asks you whether you want to the save unsaved changes or not before exiting. Pressing the following toolbar button exits the tool.



2.3.3. Edit menu

The following figure shows the components of the Edit menu of the POD tool. The greyed functions are disabled when working in basic mode.

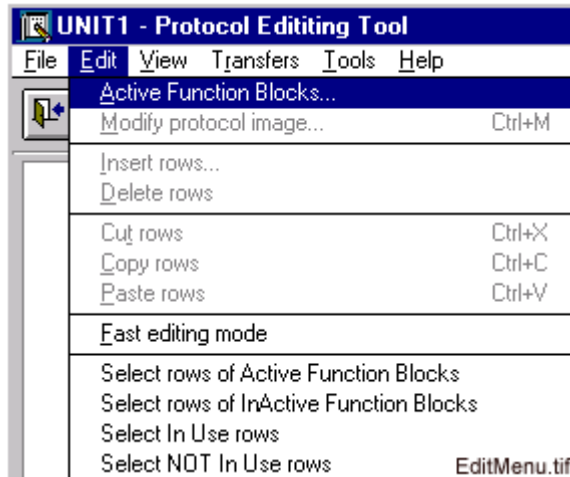


Fig. 2.3.3.-1 The edit menu

2.3.3.1. Active function blocks

Each signal belongs to a function block. The function blocks can be active or inactive (cell texts of InActive function blocks are in italic). In the “Active Function Blocks” dialog, you choose which function blocks should be active and inactive. The viewing options for visible functions block are found in the “Edit” menu.

You find more information about the active function blocks in Chapter 3.5.

2.3.3.2. Fast editing mode

If Fast Editing Mode is chosen, you can change the cell values of the chosen cells in one column at the same time. More information about the fast edit mode is found in Chapter 3.3.3.

2.3.3.3. Select functions

The last four menu functions in the Edit menu are select functions. This means that rows are selected according to one of the below mentioned alternatives. The different alternatives are:

- Select rows of Active Function Blocks.
- Select rows of InActive Function Blocks.
- Select In Use rows, based on the “In Use” column data.
- Select NOT In Use rows, based on the “In Use” column data.

2.3.4. View menu

The view menu contains two toggle menu item groups

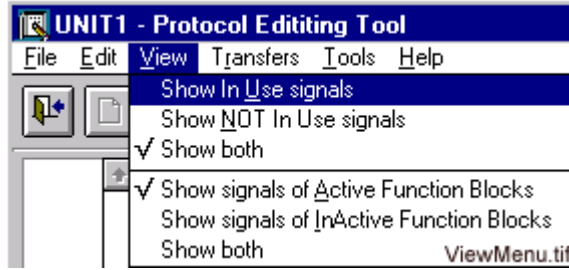


Fig. 2.3.4.-1 The view menu

With the functions in this menu you define which signals you want to view in the POD table. This method of showing the signals can be called virtual filtering. This means that the signals are only filtered out from the user view, not from the configuration. The view menu contains two toggle menu groups with the following options.

In the first group you have the following functions:

- Show In Use signals (Only “In Use” signals will be shown).
- Show NOT In Use signals (Only “Not In Use” signals will be shown).
- Show both (Both “In Use” and “Not In Use” signals are shown).

In the other group you have the following functions:

- Show signals of Active Function Blocks (Only signals that belongs to the active function blocks list will be shown.)
- Show signals of InActive Function Blocks (Only signals that do not belong to the active function blocks list will be shown.)
- Show both (Signals of both InActive and Active Function Blocks will be shown.)

“Show both” is the default menu item for group one and “Show signals of Active Function Blocks” is the default for group two.

2.3.5. Transfers menu

The Transfers menu contains four different functions shown in the figure below (see Figure 2.3.5.-1).

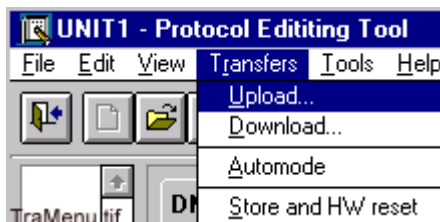


Fig. 2.3.5.-1 The Transfers menu

2.3.5.1. Upload

The upload function transfers all the table cells to the computer.

You can also choose the upload button from the toolbar (see the figure below).



2.3.5.2.

Download

Downloading means that you transfer a protocol table from the computer to the relay.

Instead of using the Transfers menu you can choose downloading by clicking the Download toolbar button shown below.



More information on uploading and downloading can be found in Chapter 3.6.2.

2.3.5.3.

Automode

You activate or deactivate automode by choosing the function from the Transfers menu. More information on the automode command can be found in Chapter 3.6.3.

2.3.5.4.

Store and HW reset

This function sends a command to the device and the protocol tables are stored in the device memory. Please see Chapter 3.6.4 for more information on this command.

2.3.6.

Tools Menu

There is one function in the Tools menu (See Figure 2.3.6.-1.).



Fig. 2.3.6.-1 The Tools menu

With the Customize function you can customize the tables and choose which columns to be shown in the main dialog. In the Customize window you can also choose how many rows should be visible. For more information see Chapter 3.1.1.1.

2.3.7.

Help menu



Fig. 2.3.7.-1 The Help menu

There is only one item in the Help menu. When choosing this function the following dialog box will open:

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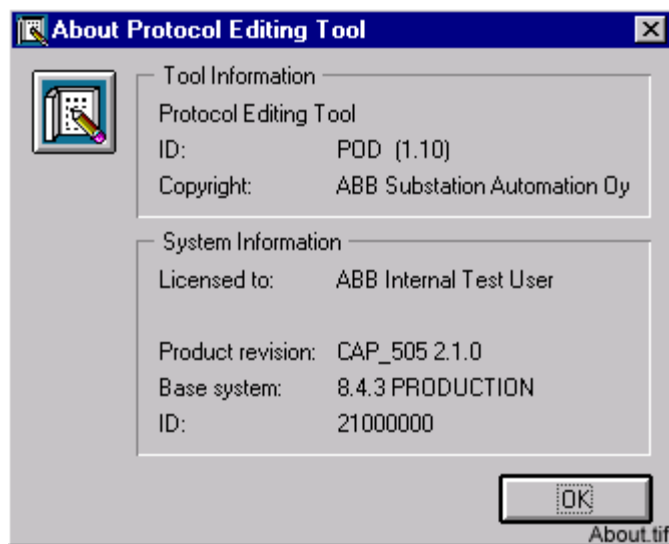


Fig. 2.3.7.-2 About POD Tool dialog

The dialog box About POD Tool contains information on current version of the POD tool.

The two arrow buttons in the upper right corner are scroll buttons.



Scroll one page down.



Scroll one page up.

3. Protocol Editing Tool functionality

This chapter explains how to use the Protocol Editing tool (POD tool).

3.1. Main dialog

A typical view of the POD tool main dialog is shown in the following figure (see Fig. 3.1.-1).

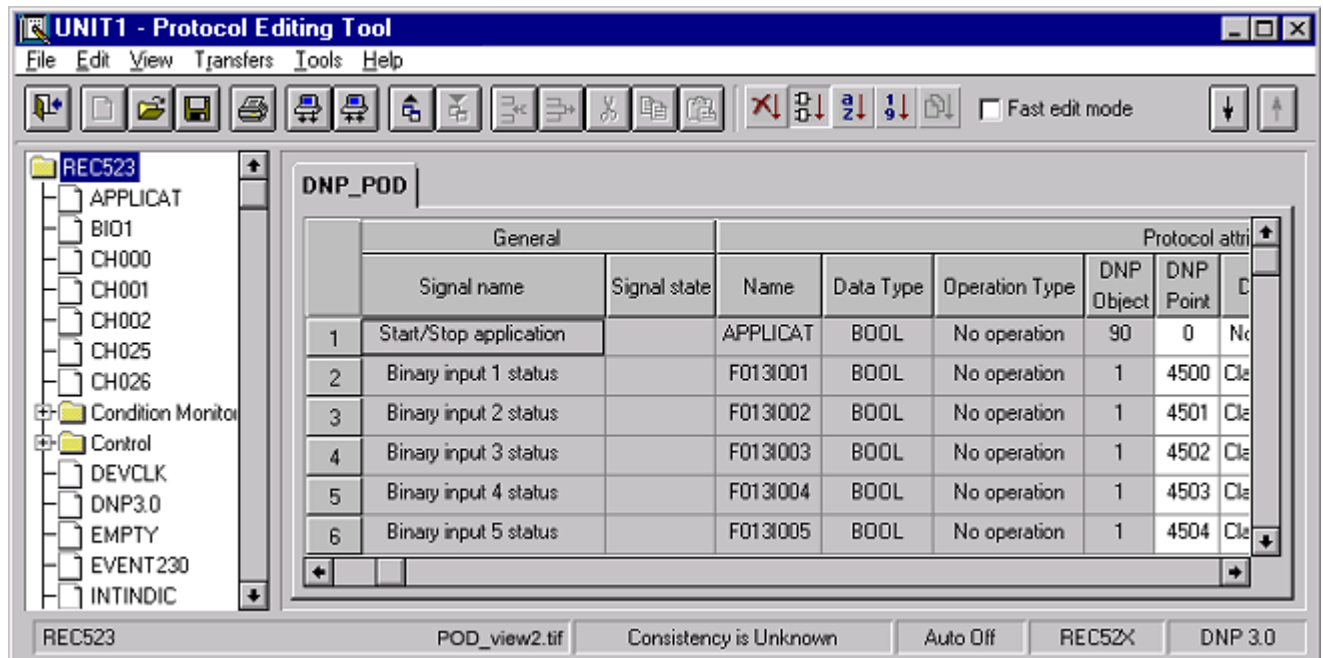


Fig. 3.1.-1 The POD tool main dialog at the basic level

Only the white columns are editable. The grey columns are non-editable.

All the tables from the protocol configuration are shown in the notebook. You can have more than one notebook page. How many you have is defined in the protocol image by the advanced users.

Each table has two column groups: general columns and protocol specific attributes. The first group contains fictive data which is not present in the POD table inside the relay. This data is used only for description of the signals and arranging them in a user-friendly way. The second group represents real data which can be uploaded and downloaded from and to the relay.

The general group always includes three columns. The general group columns are:

- Signal name
- Signal state
- Identification

The identification column is meant for the user. In this column, the user can write own signal names as identification for the different signals in the protocol table.

The statusbar contains five fields:

1. Current path selected in the navigator tree
2. Status field of the consistency between the opened protocol table structures and the tables stored in the relay
3. Text indicating whether “autoload” mode is active or not
4. Object type of the object for which the POD tool is started
5. Protocol identification of the opened configuration.

3.1.1.

Sorting

In basic mode the sorting is virtual. This means that the sorting function does not sort the real protocol table. It is only viewed in a certain way.

The current table can be sorted by different criterion:

- No sorting. The tree is empty.
- By function block. The function blocks are grouped and sorted in an alphabetical order.
- In alphabetical order. The signal names in the “Identification” field are used as a sorting criteria (these names are defined by the user).
- By address. One of the Protocol attributes columns can be assumed as a “address” column and used as a sorting criteria.
- By data type. One of the protocol attributes columns can be assumed as a “data type” column and used as a sorting criteria.



The available sorting criteria is defined in the protocol image, which can only be edited by the advanced user.

The main dialog toolbar contains a panel with five buttons for the sorting functions:

Buttons Functionality



No sorting.



Sorting by function block.



Sorting in alphabetical order according to the signal identification.



Sorting by address number in numerical order.



Sorting by data type

3.1.1.1.**Using the navigator tree**

The navigator tree is built according to the sorting mode that is in use.

No sorting

If the current sorting mode is “no sorting” the tree will be empty.

Other sorting modes

The main purpose of the navigator tree is to find a specific cell in a fast and easy way. When an object is selected in the tree, the table is scrolled to the position in which the first row corresponding to the object will be selected.

The navigator tree has a root node and underlying objects, which correspond to the cell texts of a specific column. The table is sorted according to the cell texts in the specific column. This means that these cell texts are used as a sorting criteria.

The following warning dialog will pop up if you edit one of the cell values in the column which the sorting is based on. To update the sorted list, you must change to another sorting mode and then change back to the original one.

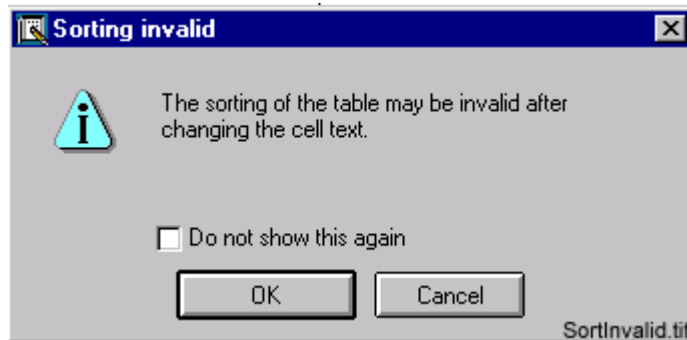


Fig. 3.1.1.1.-1 The invalid sorting warning dialog

3.1.2. Customizing tables view

The user can choose which columns should be visible in each table. This is defined in the “Customize” dialog which is opened from the Tools menu. See Fig. 3.1.2.-1. In this dialog you can also define whether the navigator tree should be hidden or shown (the navigator tree can be found on the left side of the main dialog).

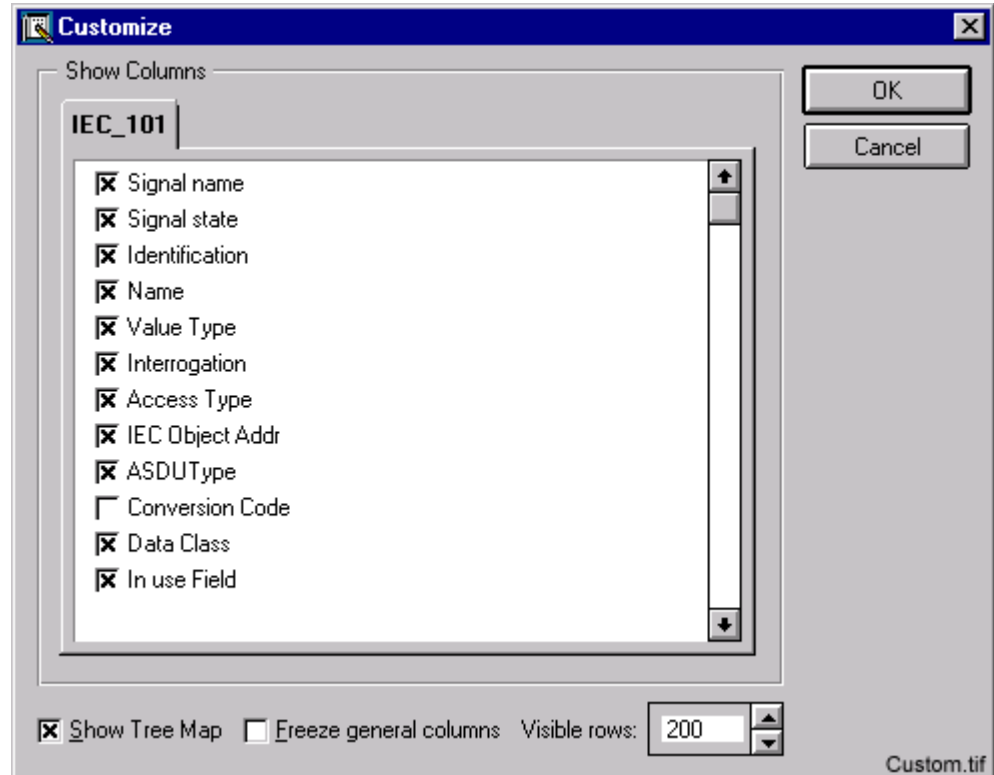


Fig. 3.1.2.-1 The Customize dialog

The check boxes on the notebook pages correspond to general or protocol specific columns of the tables. The table titles are shown at the top of the pages. Please note that there might be columns that are not shown when the tool is in basic mode.

By selecting or deselecting the “Show Tree Map” checkbox, the user chooses whether the navigator tree should be shown or hidden.

The user can also freeze general columns. If a general column is frozen, it is “locked” in one position and not scrolled horizontally when you scroll the horizontal scroll bar.

The number of visible rows defines how many rows can be shown in the main dialog. It defines how many rows are shown at a time without changing to another page. The smaller the number, the less rows are shown. If the number of rows in a table is higher than the number of visible rows in the “Visible rows” field, you can use the arrows in the top right corner of the main view to jump a section up or down.

3.2. Opening a protocol template

When the POD tool is started, and a possible work configuration of the object has been loaded and edited, it is possible to open another protocol configuration using

the menu File -> Open.. command, or the “Open” toolbar button. When you choose “Open” the following dialog appears on the screen:

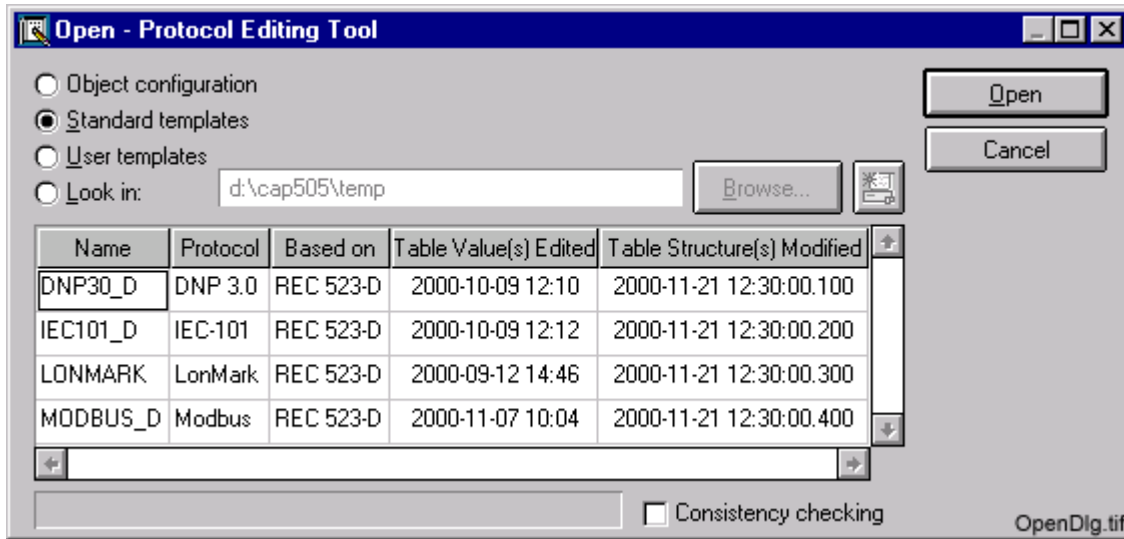


Fig. 3.2.-1 The Open dialog

Table 3.2.-1 Explanation of the table columns in the open dialog

Table Columns	Explanation
Name	The name of the configuration/template.
Protocol	The name of the protocol.
Based on	This field defines what device the configuration/template is suited for.
Table Value(s) Edited	The date when the table was last edited.
Table Structure(s) Modified	This field contains the checksum. The checksum is based on the time and date when the configuration/template was last edited (See Chapter 3.6.2 for more information).

The user can select a configuration from the object configuration (“work configuration”) directory, from the standard or user templates directory or from the custom directory.

If the user selects the “Look in:” option and types a path in the path field, then the following button should be pressed in order to update the configurations list.



The custom path can also be specified with the File chooser after pressing the “Browse..” button.

The “consistency checking” check box will be enabled if the selected device supports consistency checking.

When the check box is selected, the POD tool tries to read checksums from the range of channels of the device, and then compares them with the checksums read from the protocol configuration files. The configuration is considered consistent if its

checksum is the same as the value read from the channel corresponding to the protocol number of the configuration. Consistent configurations are shown in the list with white background color. Configurations that are colored grey, are used for inconsistent configurations.

Inconsistency means that General values and Protocol attribute values might not match. The general values are stored in a file and the protocol attribute values are uploaded or downloaded from/to the device. (If a row was missing in the General columns, and protocol attribute values would be uploaded to the computer, there would be inconsistency as the row values in the table would not match.)



It is strongly recommended that you use a consistent configuration. If you still want to open an inconsistent configuration, it is recommended that you first upload the whole POD table from the relay.

You can download a table in a normal way. The first time you download a table you have to download all cells in the table (if a POD table is inconsistent you can only download and upload all the cells in the table). Please see Chapter 3.6.1 for more information. After uploading an inconsistent table, the signal names will be lost. Therefore all function blocks and their signals can be considered inactive (the cell texts are therefore italic). In this case the settings in the "Active Function Blocks" dialog have no meaning.

If the "Show signals of Active Function Blocks" function is chosen, the table fields seem to be empty. Choose "Show signals of InActive Function Blocks" from the "View" menu in order to view the table. FB sorting is not possible in an inconsistent table.

Editing a table is done according to standard procedures. Since the signal names are missing, you might need to refer to a protocol manual for guidance.

3.3.

Editing tables

Some of the columns in the main dialog tables are not editable at the basic level. These columns are the "Signal name" and "Signal state" general columns. Some of the protocol specific attributes can also be read-only at the basic level. (This is specified by the advanced level users in the protocol image.)

The tables in the main dialog can be edited in three different ways:

- Direct text edited in a table cell after double-clicking the cell or by pressing "Enter" when the cell is active.
- In an external dialog, which appears when a cell has been double-clicked. This is the case of e.g. the protocol specific column which is handled as "In Use" column and the column types that require external dialog for editing ("Option group", "Switch group" etc.)
- In an external dialog after a couple of cells have been selected in the "Fast edit" mode.

Which one of the methods is used depends on the column type, column display mode and “Fast edit” mode status. When some cells of the protocol specific columns have been modified, the cell texts are shown with blue color.

3.3.1.

Column types

The current version of the POD tool supports the following editing types of the protocol specific columns:

- Numeric
- String
- Option group
- Combination option group
- Switch group
- Hexadecimal

These types are used only while editing table cells and when presenting data in a user-friendly form. Internal protocol data is always stored in text form, e.g. “F000V001”, “10.267”, “123” etc.



Column types are defined in the protocol image and they cannot be changed at the basic level.

3.3.2.

Column display modes

There are three different display modes of the protocol specific columns:

- advanced
- hexadecimal
- raw

Do the following to switch between these different modes:

- 1 Select an editable cell or column.
- 2 Click the right mouse button and choose “Display format..”

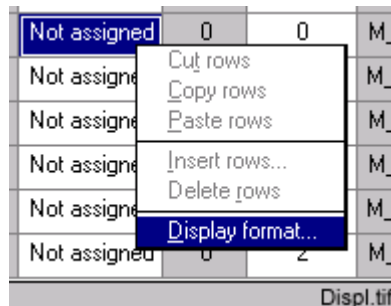


Fig. 3.3.2.-1 Selecting the Display format

- 3 Choose, from the pop-up dialog, the column display mode that you want and click OK.

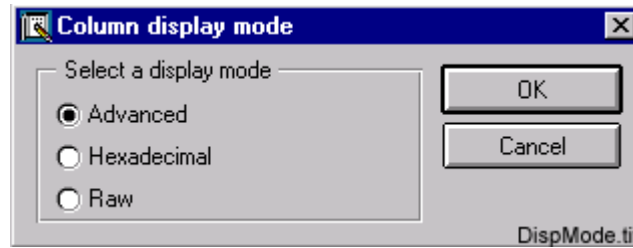


Fig. 3.3.2.-2 The Column display mode dialog

All cell values in the edited column will have the same display mode. The settings work for the column where at least one cell has been selected.

While showing the data, the cell text is converted to a decimal value and this value is converted to a string in hexadecimal format. In case of a conversion error, “#VALUE!#” is shown in the cell.

In the “raw” mode, direct cell editing is used for all column types. The cell text is shown in the table as it is.

A column in a table can be described in the protocol configuration as “In Use” column. For such a column, neither the column type nor the display format have any meaning. The cell data can have one or two representations (“Yes” or “No”). Editing is done in a pop-up dialog with combo pop-down control.

3.3.3.

Fast edit mode

The “Fast edit” mode is enabled/disabled from the edit menu or by checking/ unchecking the box in the upper right corner of the main view. See Fig. 3.3.3.-1.

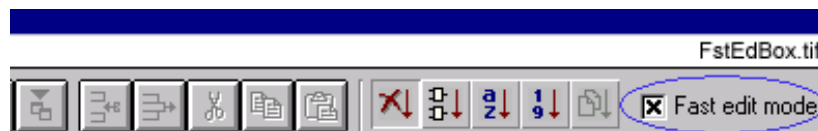


Fig. 3.3.3.-1 The “Fast edit mode” checkbox

When this mode is enabled, a pop-up dialog appears on the screen when you select one or several cells in a column (see Fig. 3.3.3.-2). All the cell data is edited in one step. This concerns all general and protocol specific columns.

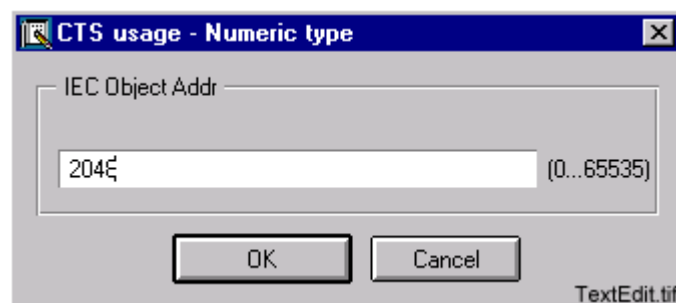


Fig. 3.3.3.-2 The “Text edit” dialog

The same pop-up dialog opens when you edit a single cell without using the “Fast edit” mode.

The “Fast edit” mode is disabled if you choose cells from more than one column at a time. The “Text edit” dialog will not appear on the screen. “Fast edit” mode works only for one column at a time. The reason why the mode is disabled when choosing more than one column, is that different columns can have different types, and editing of the cell values is therefore not possible.

The following example shows how to set inactive function blocks off:

- 1 Select “Show Signals of InActive Function Blocks” from the “View” menu.
- 2 Set Fast edit mode on
- 3 Click the “In Use” column header
- 4 Edit all fields in one step in the specific column

3.4.

Exporting tables

The user can export all rows or selected rows from the current table to a text file. This can be done using the Export command from the File menu or by using the Export toolbar button. The following dialog appears on the screen when Export is chosen:

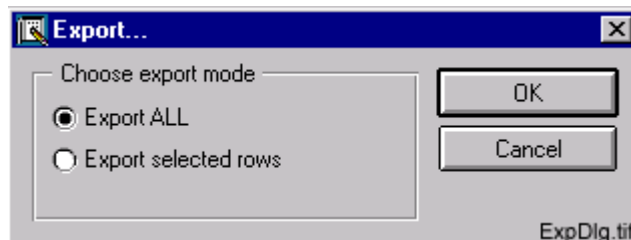


Fig. 3.4.-1 The “Export...” dialog

After pressing OK, a file chooser dialog opens, and the user can set the path to the text file. The text file contains the cell data of the exported rows in raw text format (without any conversion) according to the column type or display mode.

You will see some empty columns in the exported file. This is due to the advanced level functional needs. Some columns are only visible on the advanced level. These columns will always be printed, although they are not visible at the basic level.

3.5. Changing active function blocks

When selecting the Active Function Blocks from the Edit menu, the following window opens. In this window the user can choose which function blocks are active and which are inactive (cell texts of inactive function blocks are *italic*).

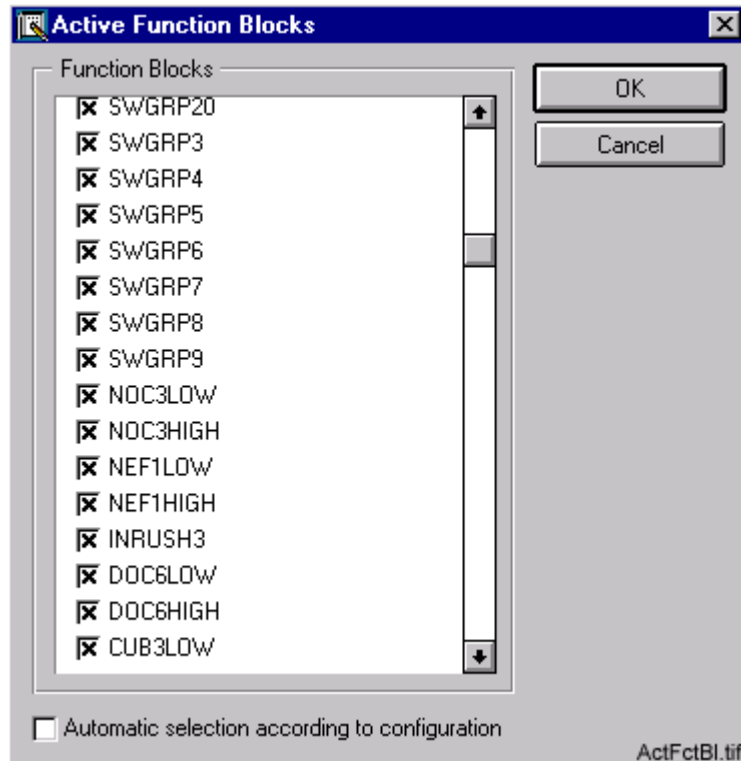


Fig. 3.5.-1 The Active Function Blocks dialog

Active function blocks are selected manually from the list.

If you click the “Automatic selection according to configuration” check box in the lower left corner, the function blocks will be selected automatically according to the relay configuration. The relay configuration is done with the Relay Configuration tool found in CAP 505. The function block list will be updated at the start-up of the “Active Functions Blocks” dialog.

After you have made your selections and pressed OK, the main tables will be redrawn. You can save the “Active Function Blocks” settings with the protocol configuration by using the “Save” or “Save as” commands.

3.6. Communications

The POD tool provides the following communication operations with a connected device:

- Uploading and downloading the POD tables.
- Reading and writing a checksum which is used for consistency checking.
- Sending “store” and “hardware reset” commands.
- Reading diagnostics variables.

3.6.1.**Uploading and downloading the table cells**

You can find the Upload/Download functions from the “Transfers” menu or from the toolbar buttons. When you choose Upload the following dialog opens:

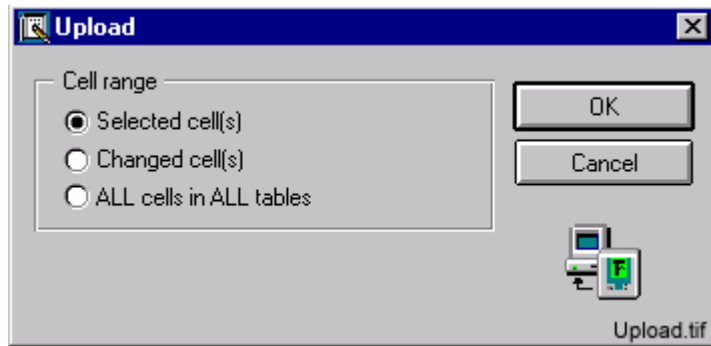


Fig. 3.6.1.-1 The Upload dialog

Changed cells are marked with blue text in the table.

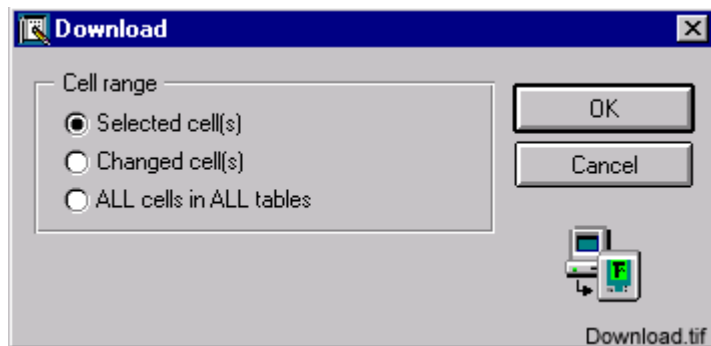


Fig. 3.6.1.-2 The Download dialog

The first two options will be enabled only if the opened configuration is consistent. If the consistency is unknown, they are disabled. If the configuration is inconsistent, they are also disabled and, in case of uploading, the following warning dialog appears before the communication dialog opens:

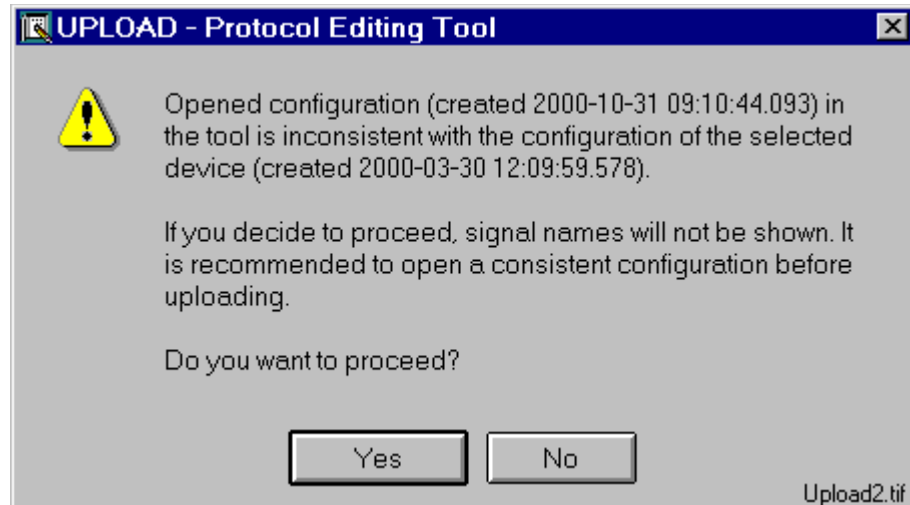


Fig. 3.6.1.-3 The warning dialog which appears when uploading an inconsistent configuration

If the user confirms the operation, all general columns will be cleared after full uploading. Please see Chapter 3.2 for more information.



It is strongly recommended that you use a consistent configuration.

If some of the cells were modified and shown with a blue text color, the cell text becomes black after up/downloading.

3.6.2.

Consistency checking

An opened configuration is assumed as “consistent” in the following cases:

- The checksum has been read from the protocol channel of the device and it is the same as the sum read from the protocol files.
- All the cells of all the tables have been downloaded and the checksum has been sent to the device.
- If the checksum could not be read from the device after full uploading of the tables from the device, the configuration is also consistent.

If the object does not support the checksum verification, the opened configuration will be consistent only after uploading or downloading of tables.

The checksum will be recalculated for the opened configuration if the table structure is modified (row or column count, row order changed). Modifying a table structure is only allowed to the advanced user. This means that the checksum will not be recalculated at the basic level.

Current consistency status is shown on the status bar of the main dialog.

3.6.3. Autoload mode

The “Autoload” mode can be activated by using the “Automode” command from the Transfers menu. In this mode, selected cells of protocol specific columns are uploaded automatically to the computer. When you have edited specific cells and the cell data is modified, the changed cell texts will be downloaded to the device automatically.

This mode will be disabled if the opened configuration is inconsistent with the POD tables stored in the device.

3.6.4. Store and hardware reset

What command (“Store” and “HW Reset”) you will have in the Transfers menu depends on what device you are using. If the device requires both “Store” and “HW Reset” commands to activate the POD table in the device, both will appear in the menu. If the device requires only “Store” command, this will be the command found in the Transfers menu.

When the “Store” command is executed, the following dialog appears on the screen:

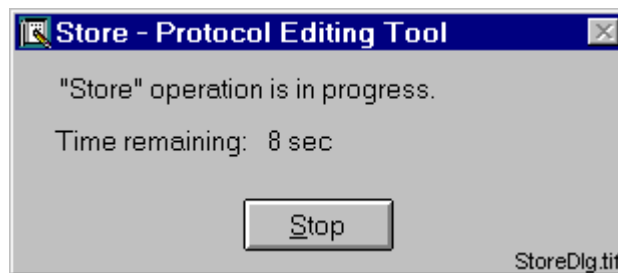


Fig. 3.6.4.-1 The “Store” command dialog

If the “Stop” button is clicked, the program does not wait for the relay to complete its operation.

3.6.5. Reading diagnostics information

The diagnostics information is updated in the device after the conversion of the visible POD table to the operational table. The visible table is the table that is downloaded to the device. The conversion is done during the device start up or after sending the “HW Reset” command.

After downloading all the tables to the device, the POD tool asks the user whether to read the diagnostics information or not. (This happens only if the diagnostics function has been enabled.) If the user answers yes, the POD tool performs device needed operations (e.g. store or reset commands) before the diagnostics information is read. Please read the user manual for information on your device.



The reading of diagnostics is enabled or disabled in the protocol image. This can only be edited when the tool is in advanced mode.

When the variables have been read, the result of the operation will be shown in the following dialog:

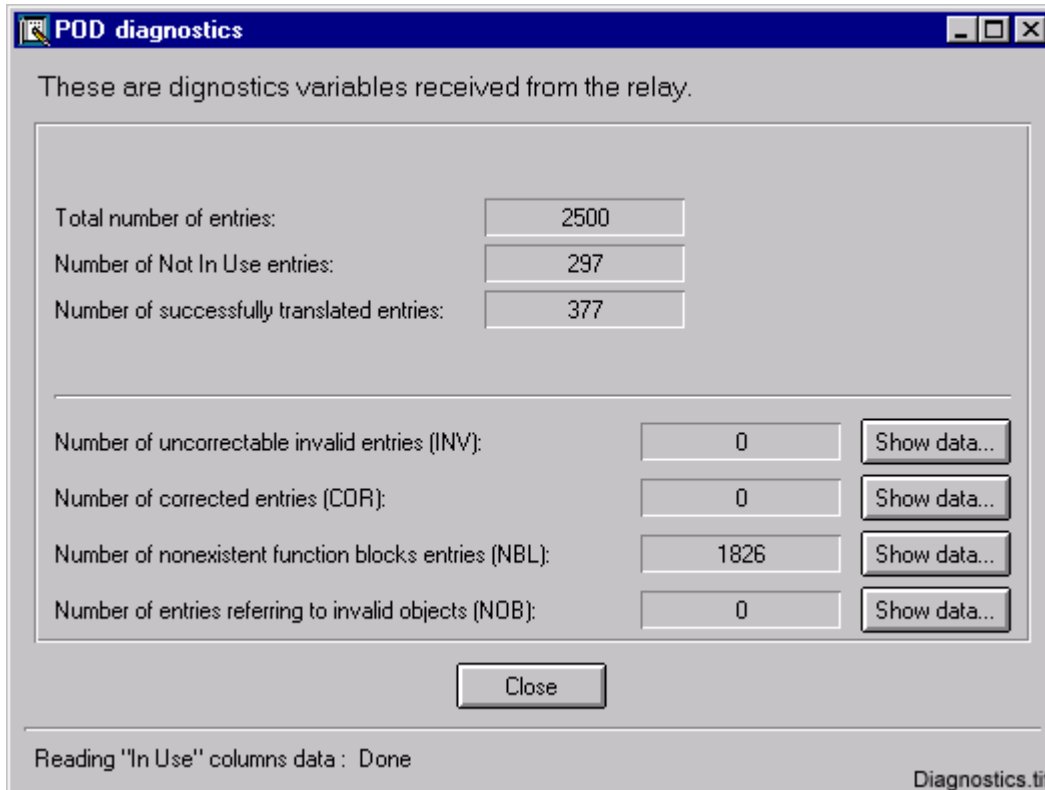


Fig. 3.6.5.-1 The diagnostics results dialog

Just after this dialog is shown, the POD tool starts asynchronously to read the “In Use” column cells from all the tables that have a “In Use” column. When the operation has succeeded, the “Show data..” buttons are enabled. The user can then, by pressing these buttons, see details of errors during the visible->operational POD tables conversion in a dialog (see Fig. 3.6.5.-2).

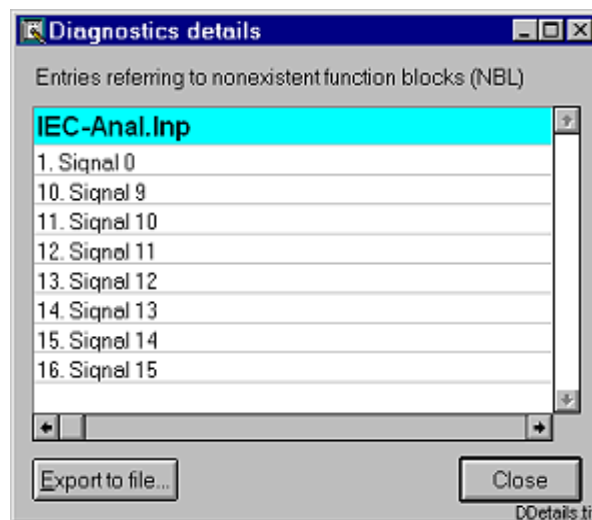


Fig. 3.6.5.-2 The diagnostics details dialog

3.7. POD binary file

A binary file will be created automatically when the Protocol editing tool is closed. This binary file is created as it may be useful in other CAP 505 tools.

3.8. Saving a protocol configuration

A protocol configuration can be saved in the “work” directory, in the “user templates” directory or in a custom place. The “Save to project” command from the File menu is used for saving the configuration in the “work” directory. With the “Save as” command you can choose to save the configuration in the “user” directory or in another custom directory.

The user template is always stored in the active project. The template is project specific. If you want to use the same template in another CAP 505 project, you cannot save it in the work directory or the user templates directory. You have to save the template in a custom place in order to have access to it from other projects.

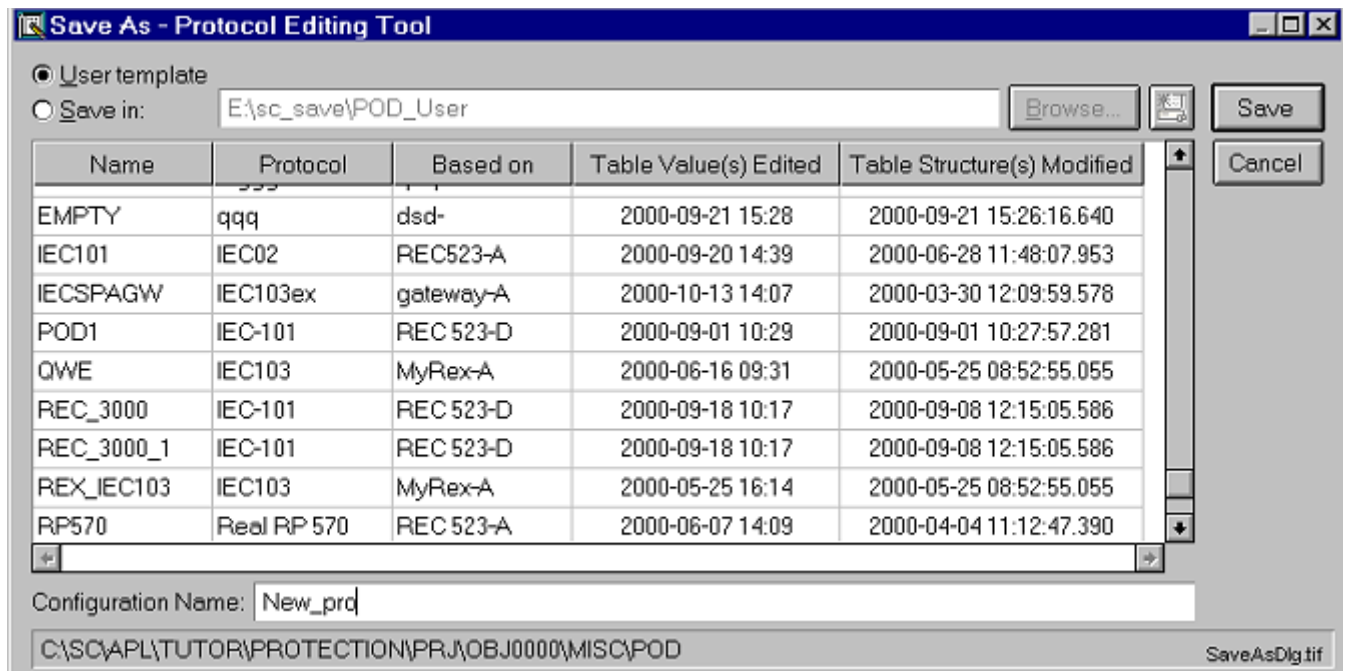


Fig. 3.8.-1 The “Save as” dialog

A configuration can be chosen from the list or typed manually in the “Configuration Name:” text field. If a given configuration name already exists, the user will get a notification of this when he presses the Save button. In the appearing confirmation dialog the user is asked to confirm or reject the operation.

If you want to save the configuration as a user template, you choose the “User Template” option and give a name for the configuration. The configuration will be stored in the project.

3.8.1. Taking backups

It is recommended that you take backups. You can save the backup in the “User template” directory (see Fig. 3.8.-1) or in a custom place. Choose the “Save in..” option and browse to a directory where the configuration will be stored.

Printing

An opened configuration can be sent to the printer with the “Print” command from the File menu. After the print dialog opens, the user can choose the printer properties and start printing.

In the view menu you define which signals to be shown in the table. Depending on the settings here, you will have different printouts, since only the signals which are shown in the table, are printed.

The following information is included in the printout:

- The date and time of printing.
- The date and time of last configuration modification.
- Protocol type.
- Relay type and its version.
- Object identification.
- The signals that are shown in the table.

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Customer feedback

About this chapter

This chapter contains information on how to send customer feedback.

Customer feedback database

Customer Feedback is a Lotus Notes database which ABB companies can use to report errors, make improvement proposals and queries related to products manufactured by ABB Substation Automation Oy. The Customer Feedback database is connected to the change management system of ABB Substation Automation Oy, which handles all error corrections and improvements made to the products.

Please note that the Customer Feedback database is primarily intended for writing reports about released products. If you are using, for example, a beta release in a pilot project, this should be clearly stated.

Writing a customer feedback report

When writing a Customer Feedback report the following general instructions should be taken into consideration:

- Write the report in English.
- Write only one error report, query or improvement proposal in a Customer Feedback Report.
- If you are reporting an error, try to isolate the error as well as possible. Describe the sequence of events and actions causing the error. If any error messages or other debug information is provided by the system, please write it down. Include also information of the system, e.g. a system diagram, revision information and configuration data.
- If you are making an improvement proposal, try to describe how the improved function should work. Avoid providing solutions. Information about the importance of the improvement, e.g. number of projects that require the improvement, helps us to make the decision whether and when the improvement should be implemented.

To make a Customer Feedback Report, select Feedback Report from the Create menu. This opens an empty Customer Feedback document. Fill out the fields listed below. A question mark next to a field provides help for filling out the field.

- 1 Subject. This should contain a short description of the issue. A more detailed description can be given in the Description of Feedback field below.
- 2 The type of Feedback: Comment/Improvement, Query or Complaint/Error.
- 3 Customer Information
- 4 Reporting Information. This should contain detailed information about the product in question.
- 5 The person who you want to send the feedback to and whether you want to get a reply from that person or not.

6 Information related to internal handling of the report (not obligatory).

7 Category

You can issue the report by clicking the Issue Feedback button. This will send the report to the selected person and change its status to “in progress”.

Actions

When ABB Substation Automation Oy receives a Customer Feedback report it is analysed by a sales person or a representative of the technical support. The analyser may ask for additional information in order to complete the analysis. After the report has been analysed, the following actions will be taken:

- In case of a clear error the report will be moved to the change management system of ABB Substation Automation Oy. In this system the error will be analysed in detail and corrected in a future patch release or major release depending on the severity and impact of the error.
- In case of an improvement proposal the report will also be moved to the change management system where it will be considered as a requirement for future releases.
- In case of a query an answer will be provided.

When Customer Feedback reports are handled in the change management system, the outcome can be one of the following:

No Actions

This means that it is decided that the report requires no further action. For example, if the problem is caused by a configuration error, it belongs to this category.

Will be implemented in patch/current release

This means that the correction or a new feature will be available in the next official program release.

Moved to future release

This means that the new feature will be available in a new program release in the near future.