REF542plus
LIB542 4.2
Release Notes
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1 Introduction

This section gives a short description of the most important new features, error corrections and modifications introduced in LIB 542 revision 4.2 (Since LIB 542 revision 4.0.5).

1.1 Delivery LIB542 Software packages

- REF542_MV_PROCESS 1.9
- REF542_RELAY_TOOL_2 2.4
- REF542_DR_TOOL 1.8
- LIB542_ENG_TOOL 1.7

1.2 Documentation

1.3 Device support

- REF542 MC: V2C09 or later
- REF542 plus Release 1 MC: V4C.01 or later
- REF542 plus Release 2, 2.5 MC: V4D.02, V4E.02 or later
- REF542 plus Release 2.6 MC: V4F.06 or later

1.4 Communication support

- LON LAG 1.4
- SPABUS V2.5
- IEC 61850-8-1 only for Relay Setting Tool
1.5 Installation

Installation of LIB542 4.2 is described in the Installation User's Guide for LIB 542 which is included in the delivery.

**Hardware and Software Requirements**

LIB 542 4.2 requires SYS 500 9.2 or higher and LIB 500 4.2 or higher.

**Upgrading from previous Revisions**

The language text files have to be translated.

Pictures created with LIB542 4.0.5 or older revisions, can be used with some restrictions. See the update information section.

**Uninstall previous Revisions**

1. Remove the complete sc\lib4\amod directory
2. remove the following files from the backbone (sc\lib4\base\bbone) directory:
   - inst directory: all index4_a*.txt files
   - use directory: all upda4_a*.txt files
     all path4_a*.txt files
3. edit the following files from the backbone use (sc\lib4\base\bbone\use) directory:
   - Objtypes.ini delete the section [REF542]
   - Tools.ini delete the sections: [LIB542ET], [LIB542PCT], [REF542DRT], [REF542EC] and [REF542ST]
   - Bgu_prod.txt delete all LIB542 related entries
2 Changes to MV_Process

Package Version: 1.9

2.1 New Features

Switch Device
The “Normal State Dialog” has been added to the available sub functions.

2.2 Improvements

Analog Input Print Form Picture
Object state 1 (value invalid) check, as changed attribute causing an event, has been added.

Measurement Picture Function Configuration
The selection list for the type of measurements has been extended, to improve the automatic address calculation inside the LIB542 engineering tool.

Picture Function Configuration
Some common parts from the configuration data files have been rolled out to one common file.

Station, Bay and Switch Devicefunction
The Bay local/remote key, for the indication type using double binary, has been changed to index 10. Before it was on Index 11.

2.3 Error corrections

Switch Device Main Dialog
The switch device main dialog causes a scil error if configured with station type “REF542 / SPANET” and control type “secured command with 5 BO”.

Switch Device Overview Configuration
Save changes after configuration of switch device overview function fails, because of access to a not existing attribute.
2.4 Update Information

The Bay local/remote key, for the indication type using double binary, has been changed to index 10. Before it was on Index 11.

Because of this change, pictures build with previous versions will fail. In order to use it the following steps needs to be done:

1. Delete all Bay type picture functions (API_BAYT)
2. Install a new “Dummy” bay function
3. Delete the “Dummy” bay function
4. Delete the existing process object on index 11
5. Let the POT create the new process object on index 10
3 Changes to Engineering Tools

Package Version: 1.7

LIB542 Pre Configuration Tool

Tool Version: 1.0.6

LIB542 Engineering Tool

Tool Version: 1.3.15

3.1 New Features

LIB542 Pre Configuration Tool

The used font for measurement value presentation in LIB542 classic pictures can be now changed.

3.2 Improvements

LIB542 Engineering Tool

A new input dialog for the analog input sensor configuration has been added.

The address calculation method for analog values has been improved.

This extension can only be used, if measurement process objects has been created with this LIB542 version.

3.3 Error corrections

3.4 Update Information
4 Changes to DR Tool

Package Version:  1.8

Object Type Target Tool: Disturbance Recorder Tool

Tool Version: 2.1.3

4.1 New Features

4.2 Improvements

Support for new REF542+ release 2.6 internal database has been added.

4.3 Error corrections

Object Type Target Tool: Disturbance Recorder Tool

Update procedures
A notification has been added in case of number of available parallel queues are too small.

Upload procedures
The procedure to upload one record stop after reading of 1000 lines in case of big sized records. This has now been corrected.

Decoding of data response has been corrected for the case that an empty string is returned, e.g. “xx:D:XX” which is a valid SPABUS message.

4.4 Update Information

Existing upload command procedures will be automatically upgraded with the first start of a new MicroSCADA application after installation of this version.
5 Changes to Relay_Tool_V2

Package Version: 2.4

Object Type Configuration Tool
Tool Version: 1.3.6

Object Type Process Object Tool
Tool Version: 1.3.5

Object Type Target Tool: Relay Setting Tool
Tool Version: 2.4.9

5.1 New Features

Support for all new REF542+ release 2.6 functions has been added to the internal database.

IEC 61850-8-1 communication support using transparent data transfer has been added.

5.2 Improvements

Object Type Configuration tool
The REF542+ type change, cause the removal of all inserted protection functions. A notification will inform about that fact.

Object Type Target Tool: Relay Setting Tool

Font in parameter input dialog
The font in the parameter input dialog has been changed to the standard font.
5.3 Error corrections

*Object Type Process Object Creator Tool*

This tool was not registered in the Object Type registration database. This also prevents the other object type tools to run properly.

*Object Type Configuration Tool*

*Object Type Target Tool: Relay Setting Tool*

Decoding of data response has been corrected for the case that an empty string is returned, e.g. “xx:D:XX” which is a valid SPABUS message.

5.4 Update Information