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CAP 505 2.4.0-3
Release Note

Introduction

This document describes the new features of the CAP 505 Relay Product Engineering Tools version 2.4.0-3 Add-On package and the corrections made.

Delivery

The CAP 505 2.4.0-3 release delivery includes the following major improvements:

- Support for REC 523 Rev. F remote monitoring and control units, hardware variants with five current transformers, four voltage transformers and nine sensor channels
- Support for REM 543/545 Rel. 2.5 machine terminals, hardware variants with high thresold voltage for digital inputs

Software Requirements

Supported operating systems:

- Microsoft Windows NT 4.0 Workstation
- Microsoft Windows 2000
- Microsoft Windows XP Professional

Supported Devices

CAP 505 2.4.0-3 supports the following protection and control terminals:

- SPACOM product family including SACO annunciators
- Multi-purpose protection relay series REJ/REU 5xx
- Basic range protection relays REM/REF/REU 610
- Medium voltage protection and control terminals REF 541/543/545, REM 543/545 and RET 541/543/545 as well as protection and control relays REC 523 and REX 521

CD Contents

Program files

The CAP 505 Program CD contains the following files:

File name	Description
CAP505_240_A3.EXE	Installation application for CAP 505
README.TXT	Instructions for starting the CAP 505 installation application

The installation application file CAP505_240_A3.EXE is located in the root directory of the Program CD.

Documentation

The product documentation includes the following documents:

Document	Document code	File name
CAP 505 Release Note (this document)	1MRS756761	CAP505_2.4.0-3RNEN.PDF

When you install CAP 505 2.4.0 for the first time, the product documentation will also be installed on the hard disk. The Release Note can be found in the root directory of the Program CD. The documentation is only available in electronic format.

Ordering CAP 505

For information on ordering CAP 505, refer to the chapter *Introduction* of the CAP 505 *Installation and Commissioning Manual*.

The ordering number for CAP 505 v.2.4.0 CD (including 2.4.0-3 Add-On CD) is 1MRS151017.

The ordering number for CAP 505 v.2.4.0-3 Add-On CD (without the main release) is 1MRS151029.

The Add-On package can also be downloaded at www.abb.com/substationautomation.

CAP 505 accessories

The communication cables listed in the chapter *Introduction* of the CAP 505 *Installation and Commissioning Manual* are accessories and have to be ordered separately.

Document Addendum

This section contains documentation that cannot be found anywhere else in the product documentation.

Relay Configuration Tool compatibility

It is recommended not to modify the relay configuration saved with a newer Relay Configuration Tool version with an older tool version (of older CAP 505), since upwards compatibility of the tools is never guaranteed.

In CAP 505 2.2.0-1 and later versions, for example, the Relay Configuration Tool has been modified to support the new virtual channels of REF 541/543/545. This may cause some compatibility problems, if a configuration modified with the new version of the Relay Configuration Tool is used with an older version of the tool.

MMITEXT object in Relay Mimic Editor

It is no longer possible to add a new MMITEXT object (dynamic point for texts) to a mimic picture. This object is not currently supported by any terminal type.

Due to this, chapter 2.8 in the Relay Mimic Editor Configuration Guide is obsolete, and so are all the other references to the MMITEXT object in that manual.

Requirements

A CAP 505 2.4.0 installation is required as a base for the Add-On package.

Other CAP 505 2.4.0 requirements can be found in the CAP 505 *Installation and Commissioning Manual*.

Installation

Installation notes

The installation procedure for the CAP 505 software is described in the CAP 505 *Installation and Commissioning Manual*.

Installation of CAP 505 2.4.0-3

CAP 505 2.4.0-3 can only be installed on CAP 505 2.4.0 or CAP 505 2.4.0-2. In general, the Add-On packages are cumulative, so you only need to install the latest package.

To install the program package, run the installation program (CAP505_240_A3.EXE) for the package and follow the instructions given by the installation program.

CAP 505 can also be installed on top of any previous CAP 505 installation. When doing so, all the projects including the relay configurations remain unchanged.

Changes from previous version

Compared to the previous CAP 505 2.4.0 main release, the CAP 505 2.4.0 Add-On 3 release includes the following improvements and corrections:

Add-On 1

Support added for the following relays

- REM/REF/REU 610, revision C

Changes made to the RED Relay Setting Tool

- If the parameter value storage file could not be written in the Relay Setting Tool at the exit, the incident was ignored. Now the failure is indicated, and exit from the tool is canceled.
- The export of the setting values to the network locations has been improved. Previously the export of the modified setting values always ended in an access error.
- Setting of REM 54x release 2.5 terminals in the Relay Setting Tool could not be made using primary values, even though the transducer settings were in use. This has now been corrected.
- The signal descriptions for the "Int. trig. sign" mask of the REJ 511/521 relay types were in the wrong order. The position of the two middle texts "Trig by to> trip" and "Trig by Io>> start" was inversed.

Corrections made to SPACOM modules

- An error causing logical mistakes in the handling of the switchgroup checksum for SPCU 3C14 and SPCU 1C6 modules has been corrected.
- An attempt to print the settings of a SACO 16A3 or SPAM 051C from the SPACOM Relay Setting Tool produced a SCIL error dialog. This has now been corrected.

Add-On 2

Support added for the following terminals

- REM 543/545 Rel. 2.5 machine terminals, patch release, SW build 4.00
- RET 541/543/545 Rel. 3.0 transformer terminals, patch release, SW build 4.38

Improvements made to the SPA TCP/IP communication configuration

- Configurable relay-specific SPA TCP/IP Connecting Timeout value has been added to better support slow SPA TCP/IP connections (like GPRS).
- The default (fixed) values of some SPA TCP/IP line attributes have been changed to better support slow SPA TCP/IP connections (like GPRS).

Changes made to the Communication Manager

- Encoding of the "tilde" character with SPA communication has been corrected.
- Internal error handling has been improved to ignore occasional "REPF_DC_OBJECT_DOES_NOT_EXIST" errors after a cancelled communication.

Corrections made to RED Relay Setting Tool and RED 500 object types

- "Diff6G" event masks were not editable with REM 543/545 rel. 1.5 and 2.0. This has now been corrected.
- Support for bit-wise setting of the event masks was missing from the REF 543 rel. 3.0 terminal. This has now been corrected.

Changes made to SPACOM modules

- Support for REC 501 with IEC 60870-5-101 has been added.
- Support for SPCN 1D56 module versions 119 D and 200 A has been added.
- Parameterization problems in SPCT 5D54, SPCJ 4D34 and SPTO 6D3 modules have been corrected.

Correction made to the SPACOM Relay Setting Tool

- Cutting of long text labels on the Input Dialog has been corrected.

Correction made to the SPTO Configuration Tool

- Communication was not properly released after the SPTO Configuration Tool had been used. This has now been corrected.

Add-On 3

Support added for

- REC 523 Rev. F remote monitoring and control units, hardware variants with five current transformers, four voltage transformers and nine sensor channels
- REM 543/545 Rel. 2.5 machine terminals, hardware variants with high thresold voltage for digital inputs

Yours faithfully

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