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IED Connectivity Package Version 3.4 for Relion[®] 670 series

Release authorized by:

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Dear Reader,

This document describes the system and hardware requirements as well as known issues and limitations of the IED Connectivity Package version 3.4 for Relion® 670 series.

System Specification

Supported Operating Systems

Operating system	Version
Microsoft Windows Server 2012 R2 (64-bit)	-
Microsoft Windows Server 2016	-
Microsoft Windows Server 2019	-
Microsoft Windows 8.1 (32-bit/64-bit)	-
Microsoft Windows 10 (32-bit/64-bit)	-

Hardware Requirements, minimum/recommended:

Technical data		
Hardware	Minimum	Recommended
CPU	1.5 GHz	2.4 GHz
Physical RAM memory	8 GB	16 GB ¹⁾
Free hard disk space	4 GB	8 GB
Monitor	1024 x 768	1280 x 1024
Ethernet port	Required	Required

1) With large projects, it is recommended to have 24 GB or 32 GB of physical RAM.

Fixed issues

Sl. No.	Issue	Comments
1	PCM600 correctly plot distance characteristic for Zone 3 in High speed distance protection for series compensated lines	Valid for version 2.2
2	PCM600 displays Product Definition details in Object Properties window	Valid for versions 2.0 and later
3	PCM600 will also export relay details when events will be exported from Event Viewer Tool	
4	PCM600 displays description of channel/signal as a tool tip in Signal Monitoring Tool	Valid for versions 2.0 and later
5	IED user management tool in PCM600 allows usage of all special characters in passwords that are accepted via LHMI	Valid for versions 2.0 and later
6	It is possible to perform online debug in Application Configuration Tool where online debug might fail with Connection InvalidUserOrPassword error	Valid for version 2.2

Known issues and limitations

Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
1	It is not recommended to install Connectivity Package or documentation on network location	
2	Scheduler will not work if authority is enabled in the IED (i.e. Users have been created with IEDUM)	
3	Blinking LEDs are not resetting when user download new application in to the terminal.	Work around for the problem is that user can reset LEDs through LHMI client.
4	If PCM600 displays "PCM600 is running low on memory" message to the user, then it is recommended to save the current work done by the user then close PCM600, and re-start PCM600 to continue working with PCM600.	Re-start PCM600
5	If there are multiple IED objects in PCM600 connected to same IP address and in the event of reboot/timeout from IED, if user gets "IED is dead or connection lost/Connection to IED failed" message, then the user shall re-start PCM600 before interacting with the IED.	Re-start PCM600
6	Cannot do an on-line compare of different versions of same IED type in PCM600	

Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
7	If user tries to perform read/write operations to an IED from more than one tool in PCM600 at the same time, it is possible that "Function Sequence Error" is shown	Use one tool at a time
8	Before performing Configuration Migration (ICM) from 1.x to 2.0 or 2.1, all defined users in IEDUM should be removed.	
9	CRW – When an IED is configured offline then Common Read should be preceded with Online LUT	
10	For users like Guest, SPA Guest, System Operator & User Administrator though they don't have the privileges to delete the recordings from IED, when they do so the tool will display that the records are deleted in the IED, but in IED they are not deleted.	<i>Valid for versions prior to 670 2.0</i>
11	In SPA/LON protocol only Super User has the privilege to do read/write in all tools (ACT, CMT, PST, UMT, HWT, GDE & CRW etc.	<i>Valid for versions prior to 670 2.0</i>
13	To be compliant with COMTRADE format, only use ASCII strings for UDN.	
14	Before Migration of PCM600 1.5 Projects in PCM600 2.X make sure that Bay Caption is unique	<i>Valid for versions prior to 670 2.0</i>
15	a) The IED Technical Key should not be any IED system file name for 1.0 & 1.B. This one should be ensured for migrated projects from 1.5 to 2.X b) The IED name under IEC61850 FB in PST should be set to IED Technical Keys for 1.0 & 1.B to enable IEC61850 communication c) Writing into the IED with different Technical keys will result in accumulation of zipped ccf files that has to be deleted manually for 1.0 & 1.B	<i>Valid for versions prior to 670 2.0</i>
16	The SCL Technical Key and IEDName parameter under Communication->Station Communication -> IEC61850-8-1 should be same	<i>Valid for 670 1.0 and 1.B</i>
17	The Read/write operations will fail if the user accesses Parameters through the LHMI. The workaround is to navigate away from parameters menu in LHMI before Read/Write operations.	
18	PST write to IED will fail with Swedish or non-Cyrillic characters in SPA protocol	<i>Valid for versions prior to 670 2.0</i>
19	670 IEDs with version 1.0, 1.B does not recognize GSM HW Module. If the user inserts GSM card in the IED and	<i>Valid for 670 1.0 and 1.B</i>

Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
	perform Hardware compare through HWT, the user will not see the difference in the Comparison report.	
20	During Common Read/Write with IED, if the communication is interrupted, the user will not see message “Communication problem”, instead they will see message “Object Reference not set to an instance of Object” in the PCM output window which is expected behavior	<i>Valid for versions prior to 670 2.0</i>
21	<p>After DMT Offline/Online Migration of RED670 1.0/RED670 1.B/RED670 1.Br01 IEDs to PCM600 2.6, LDCMAnalog1 HW Module could be present in Slot 303, 313.</p> <p><i>Work around: Before ICM Migration to RED670 1.2.3, it is advised to export the Signal Matrix Tool report into excel sheet of all the tabs. Once this report is taken, de-select the LDCMAnalog1 HW Module from HW Tool and then proceed for ICM Migration. After ICM Migration, run LUT and the user can select the new HW Module LDCMAnalog2 from HWT and make necessary connections in SMT.</i></p>	<i>Valid for 670 1.0 and 1.B</i>
22	<p>If there is a difference in the parameter settings of “HMI/Screen/DisplayTimeout” between PCM Configuration and in IED, the configuration may not be written to IED for 1.0, 1.B rev 00, 1.B rev 01, 1.1 rev 00 and 1.1 rev 01 IEDs except 1.2.3.3 and above.</p> <p><i>Work around : Please ensure the parameter values are matching between the PCM configuration and in IED before Common Write operation</i></p>	<i>Valid for 670 versions prior to 1.2.3.3</i>
23	<p>For 670 2.0 IEDs:</p> <p>Import of Parameters:</p> <p>if user performs “Import parameters “on PCM600 IED then user may find function version differences on “Import Parameters to IED” window in the following use cases and all the Parameters /Settings may not be imported from XRIO file in to PCM600 IED.</p> <p>Case 1: Import of Parameters /Settings from Ed 1 XRIO file (Exported from PCM600 Ed 1 IED) in to PCM600 Ed2 IED (Configured using config wizard).</p> <p>Case 2: Import of Parameters /Settings from Ed 2 XRIO file (Exported from PCM600 Ed 2 IED (Configured using config wizard) in to PCM600 Ed 1 IED.</p> <p>Workaround: User needs to select “Select all functions”</p>	

Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
	<p>option on “Import Parameters to IED” window and selects “OK”.</p> <p>Import of ACT Templates: If user performs insert a template from MainApplication Template Manager in to Application Configuration Tool (ACT) in PCM600 IED then user may find function version differences on “Template Migration Details” window in the following use cases.</p> <p>Case 1: Import Ed 1 ACT templates (Exported from PCM600 Ed 1 IED) in to PCM600 Ed 2 IED (configured using config wizard).</p> <p>Case 2: Import of Ed 2 ACT Templates (Exported from PCM600 Ed 2 IED (configured using config wizard) in to PCM600 Ed 1 IED.</p> <p>Workaround: User needs to select “Next” option on “Template Migration Details” window and continue the operation.</p>	
24	PCM600 64-bit will not be able to convert (offline migration) PCM600 1.x configurations to PCM600 2.x (x=7, 8, 9). Also, PCM600 64-bit will not be able to perform online migration / Online IED Compare of IED that has PCM600 1.5 configuration in it.	Work around is user need to use PCM600 32-bit.
25	PCM600 2.10 will not be able to convert (offline migration) PCM600 1.x configurations to PCM600 2.10	In order to migrate PCM 1.x configurations to PCM600 2.10, user need to perform step-migration to version prior to PCM600 2.10 (recommended version is 2.8/2.9) and then to PCM600 2.10
26	Do not perform any read /write operation in PCM600 if a setting menu accessed on LHMI.	
27	If 670 version 2.x.0 (x=0, 1) configuration contains MU configuration in ACT, then the MU configuration will be lost in ACT when perform configuration migration (ICM) from 670 version 2.x.0 (x=0, 1) to 670 version 2.2.x (x=0, 1).	
28	During Read/Write operation with IED, sometimes authentication dialog might appear in PCM600 even though no external users exists in IED	Work around is user need to restart PCM600

References

Document no.	Title
1MRG038187	Configuration Migration for 670 series in PCM600 version 2.10 and later
1MRG000507	Data Migration Instruction

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