

ABB Switchsync PWC600 IED Connectivity Package version 1.1.0.0 Read Me

Dear Reader,

This document describes the system and hardware requirements as well as known issues and limitations of the ABB Switchsync PWC600 Connectivity Package version 1.1.0.0



1. System Specification

1.1 System Requirements

Operating System: Windows 7 / Windows 8 / Windows 8.1 / Windows 10

1.2 Hardware Requirements, minimum/recommended:

Technical data		
Hardware	Minimum	Recommended
CPU	1.5 GHz	2.4 GHz
RAM	2 GB	4 GB
Free hard disk space	4 GB	8 GB
Monitor	1024 x 768	1280 x 1024
Ethernet port	required	required

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2. Fixed problems

Sl. No.	Issue	Comments
1	SST: Mechanical monitoring limits were defined as absolute values. This doesn't take care of the nominal switching time of the circuit breaker. In this release the limits are defined as deviations from nominal circuit breaker timings.	
2	SST: On choosing to define a custom controlled switching strategy, the SST pages for entering that strategy did not give any information on the corresponding default strategy. In the new release, the original controlled switching targets are displayed as a basis for entering a new strategy.	
3	SST: Model name of custom circuit breaker type could not include a dot (.). This restriction is removed in this release.	The following special characters are permitted in CB model name: - (dash) _ (underscore) . (dot) (space)
4	When the signal for switching instant detection selected manually as 'Disabled' or Adaptive correction for electrical making times is not selected, the correction factor for electrical scatter is set to zero. But this value doesn't get zero, when the signal for switching instant detection gets automatically selected as 'Disabled'. This scenario occurs when both the load voltage and current is selection is 'Not connected' in the Reference signal milestone. This bug is resolved in this release	
5	Changing the Nominal control voltage, alter control voltage curve values in Compensation millstone. This is fixed in this release.	
6	In Idle time edit curve under Compensation milestone, when user enters the values in the range of 100-107 for 'Lower limit' of compensation range, SST hangs. This is fixed in this release.	

3. Known issues and limitations

Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
1	SST (Switchsync Setting Tool), which is used for configuring the application, works with a pre-configured IED. Deletion of locked worksheets or function blocks, or modification of the parameters in PST (Parameter Setting Tool) without prior approval of ABB can have erroneous results while working with SST.	See Switchsync PWC600 User manual for permitted changes to the pre-configuration.
2	SST – In rare condition, after installation of PWC600 1.0.2 connectivity package, preview graphs are not displayed on the compensation pages.	Uninstall the connectivity package from control panel and reinstall.
3	SST – Setting control voltage to 0.0 volts in circuit breaker page will result in erroneous results while working with control voltage graphs for compensation.	Enter actual control voltage of the circuit breaker.

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Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
4	SST – After configuration is read from a physical IED into a PCM600 IED object configured with a different circuit breaker model: On opening SST and navigating to Compensation milestone, the subpages in Compensation milestone will not appear properly.	Reselect the new breaker model.
5	After the configuration is written to the physical IED from a PCM600 project and is read back to another PWC600 IED object in the same project, communication to the IED fails.	Restart PCM600
6	When reading the configuration from an IED that has a custom breaker defined, into PCM600 on a different computer than the one that was originally used for configuring the IED, SST will initially remove all milestones after "Circuit breaker" and unselect the circuit breaker model.	Copy the custom circuit breaker definition file to the target computer before starting SST.
7	SST – On Edit graph page: Entering random characters along with TAB key may result in an error that will cause PCM600 to close.	Only enter numeric characters.
8	SST – Checkboxes for selecting an individual compensation curve for graph editing are always disabled in single-sensor mode, for all compensations that support single/three phase measuring.	To edit only the compensation curve for closing, temporarily disable compensation for opening, and vice versa.
9	SST – The pages in the Alarms milestone have different behaviour concerning alarms that are not applicable to a specific configuration: for some cases the alarm check boxes are hidden whereas in other cases checkboxes will be disabled but visible.	
10	SST – On selecting the option to display the circuit breaker data on the Circuit Breaker milestone, all the later milestones disappear from the view. However, data already entered in controls are preserved, the only limitation is that the user has to click through all following milestones again.	
11	SST – When cancelling SST with partial saving, if data entered in an editable field (viz. textbox / dropdown list) violates a constraint (e.g. maximum value) the previous valid value of the setting will be saved. In some numeric fields, values that exceed a maximum limit will be truncated to values within range by removing leading digits, and the resulting value is saved.	When resuming SST, check the displayed data for correctness.
12	SST – After modification of circuit breaker data: If the circuit breaker data are not saved as a custom breaker type and the configuration is written to the IED, a read of configuration initiated from another IED object in PCM600 won't show the breaker model selected in SST.	By definition, when opting not to save the modification as a user defined circuit breaker type, the data will be used only for that specific IED object in PCM600.

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Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
13	SST – Not all user interface controls appearing in SST have a direct reference to a parameter in PST (Parameter Setting Tool), and vice versa.	Use SST for changing parameters wherever possible.
14	PST (Parameter Setting Tool) Read/Write Error: Parameter read/write operation may fail if DR is currently storing data in the IED.	Wait until the IED has completed internal write operations (Write icon on LHMI disappeared) before initiating read / write operation from PCM600.
15	PCM600 and Connectivity Package are designed to be run on a local desktop machine, it is not recommended to install ConnPack or documentation on a network location.	
16	PCM600 below version 2.7 will not read IEC61850 communication configuration from the IED. This is indicated by a warning message in the output window at the start of the "Read from IED" operation.	
17	PCM600 Scheduler will not work if authority is enabled in the IED (i.e. Users have been created with "IED Users" tool).	
18	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.	Restart PCM600.
19	If there are multiple IED objects in PCM600 specified with the same IP address: In the event of reboot/timeout from the IED, if an error message "IED is dead or connection lost/Connection to IED failed" is encountered re-start PCM600 before interacting with the IED.	Restart PCM600.
20	Cannot do a compare on-line of different versions of the same IED type.	
21	If attempting 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.
22	When a new blank IED has been created and configured offline (in Configuration Wizard) then "Read from IED" should be preceded by running License update tool in online mode.	
23	In Windows 7, PCM600 Scheduler will not work when started without Administrator rights, as the standard user of Windows 7 cannot start Windows services.	Start PCM600 as Administrator to run Scheduler.
24	To be compliant with COMTRADE format, only use ASCII characters in user defined names of the analog and binary inputs of disturbance report function blocks.	
25	The IEDs' SCL Technical Key property (in PCM600) must be identical to the TechnicalKey parameter under Configuration->Power system->Identifiers->TERMINALID:1, otherwise IEC 61850 communication will not work.	Use "Set Technical Key" tool for matching the Technical keys.

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Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
26	Read/write operations from PCM600 will fail if the user is accessing Settings or Configuration through the LHMI.	Navigate away from Configuration or Settings menu in LHMI before initiating a Read or Write operation in PCM600.
27	During a Common Read/Write operation with an IED, if the communication is interrupted, the user will not see a message "Communication problem". Instead, the message "Object Reference not set to an instance of Object" will be displayed in the PCM600 output window.	
28	If an IED restart message is displayed on the LHMI screen, the user needs to wait until the restart is completed before proceeding with any other operations towards the IED.	
29	User will not be able to delete recordings from the IED if authority is enabled and change lock is activated in the IED.	
30	Online IED Compare configuration in PCM600 ver 2.6 shows errors in output window with respect to GOOSE configuration.	No impact on compare configuration results.
31	SST accepts only a dot (.) for decimal point when entering numerical data.	
32	Entering/editing custom circuit breaker in SST: Maximum number of characters allowed for manufacturer name and model name combined is 34.	
33	If the culture setting in the computer is other than English (US), SST occasionally may fail to save the settings if the edit curve box is enabled in breaker data or compensation page. A warning "Failed to save Switchsync Settings: Value not within range" will be displayed when the 'Finish' button is clicked, during this condition.	Cancel the warning, go back to the pages mentioned, and disable the edit boxes. If this doesn't work, please close the SST and open again.
34	While creating a new circuit breaker data, the default values of upper and lower limit of control voltage compensation are out of the permitted range.	Update actual values as per the circuit breaker characteristics.
35	Connectivity package version is displayed as 1.0.1 in the IED template even if the IED template was created using Connectivity package version 1.1.0, when opened in PCM600 2.5 or PCM600 2.6.	
36	Only PCM600 ver. 2.7 is supported in Windows 10 operating system.	
37	In SST, ablation coefficients C3, C4 and power coefficients P3, P4 text boxes allows typing in of values outside the limit imposed. However the limit validation function doesn't allow the navigation to the next page.	Don't enter values outside the limit specified.
38	SST: Default selection of the lead phase in user defined strategy doesn't follow the application selected in the Controlled Switching milestone.	Select the lead phase manually as per the application requirement.

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Sl. No.	Issue	Workarounds, Clarifications and Helpful Hints
39	When the IED is configured to have only source voltage connected - both load current and load voltage are disabled. In SST, the user can still enable Adaptive correction of opening times, which is even shown as enabled by default.	No impact on application.