

Technical Meeting COMPASS DCS / EN-ICE

Date: 15th January 2010 from 14:00am to 16:00am

Place: Building 892, COMPASS DCS team office

This meeting was attended by:

Catarina Quintans (COMPASS DCS) (CQ)

Christophe Pires (COMPASS DCS) (CP)

Mathias Dutour (EN ICE) (MD)

Note: Some items from the previous meeting have been integrated *in italic*.

Content:

General news:

CQ indicated the restart of the COMPASS experiment is foreseen for the 8th of May 2010. She also mentioned that 2 new detectors, H1 and H2 hodoscopes are to be integrated. This integration consists of controlling modern CAEN High Voltage standard equipment, no particular issues are foreseen at this level.

CQ also indicated that CAEN SY2527 will be used again for SciFiW detector.

Finally CQ indicated she will leave CERN in March 2010 and will continue in the DCS team but with less % dedication. ASN is presently the responsible for the COMPASS DCS.

PVSS / General:

Action MD: *Collect featured information over PVSS 3.9.*

Closed. Information forwarded to COMPASS, this version of PVSS is not being investigated into details as described in the EN-ICE JCOP policy for PVSS releases.

MD announced new PVSS 3.6 SP2 and PVSS 3.8 SP1 patches available.

EDIT: These were officially announced by JCOP to the user community on Monday 18th January.

CQ asked whether the removal of the sticky bits of the underlying OS was still required to run PVSS under the root account. MD offered to check this aspect.

Oracle archiving:

CMP explained the COMPASS' plan to distribute the PVSS project per 2 systems mainly due to its size and with performance optimization in mind. CMP indicated a preliminary test ~~this~~ has been done already on the test project and went fine. CMP also indicated the migration to the last database schema was deployed successfully in the production database. (v.8.1)

Then COMPASS rose some concern w.r.t. the Oracle database access and would need advise in the context of the project distribution. Both systems in the project would need access to the Oracle database in parallel and several technicalities should be clarified with a database expert. MD offered to mention this to PVSS experts for this purpose.

Action MD: Inform PVSS experts of the need for advice on distributed project and related impact and strategies for Oracle database handling.

Action COMPASS DCS: Clarify metrics and request complementary information to Oracle database manager.

Wiener:

Action MD: Contact Wiener to get the fix of the UEP 5021 EPROM for testing

during the shutdown. (Note: MD indicated this action is being delayed due to focus on the Wiener OPC server for the LHC startup)

Done/closed. EDIT: This topic was discussed between MD and Wiener on the 19th January 2010. The following points were presented by MD to CQ on the phone meanwhile:

- Wiener checked the fw. source code and couldn't determine the reason for the display bug both on the front panel display and OPC server. (TRAC ticket #16). Wiener requested again the possibility to have a complete VME crate with UEP5021 power supply, cage and fan tray for a couple of weeks for analysis and fixing.
- Wiener also indicated that fixing this issue would allow to control the device from the new OPC server, however, long run test and operational tests must be carried by COMPASS to confirm.
- In case the tests are conclusive and depending on COMPASS final decision, COMPASS would adopt the new OPC server and acquire related licenses.
- Finally Wiener explained that the CANbus disconnection issues observed by COMPASS may not be fixed by this fw. upgrade as this firmware is not in charge of the CAN connection management. Wiener also explained that fixing this problem would need a separate analysis and development effort subject to payment.

Finally, MD suggested to check first whether the users are willing to continue in this direction, and if yes, the UEP5021 owners should be contacted to determine whether one device could be shipped to Wiener. Also MD reminded that not upgrading hw., fw. and related sw. leads to a situation where there is no support anymore from either the manufacturer of the equipment, JCOP for PVSS integration or both. A situation which should indeed be avoided.

Action COMPASS: Determine preferred upgrade strategy with user for UEP5021 and inform MD.

Then CQ identified 3 UEP 6021 which should be upgraded. We shall proceed on this topic. EDIT: Following this same meeting, it was indicated that the user (with MD's granted support) could proceed with the fw. upgrade of these 3 UEP6021. However, certain values may need initialization through flash program.

Action COMPASS: Determine with MD a date with the equipment owner for the upgrade process to take place and prepare hw. accordingly if necessary.

CAEN:

CQ indicated that the 2 devices SY1527 (+1 spare) used in COMPASS will have a firmware upgrade de-facto, as they will get an electronics upgrade and inspection by CAEN.

MD indicated that following the upgrade, COMPASS with MD could run tests to determine whether the usage of the event mode or polling mode would be the most efficient for COMPASS (dependent on the interest and availability from owners).

Fw. upgrade of the SY2527 to be scheduled.

CAENet/SLiC:

Action MD: *Inform COMPASS of the next CAEN technician visit at CERN, organize meeting.*

Closed/Done. Meeting was cancelled.

CQ also indicated that one or more CAEN SY527 from GEMs may be sent for repair to CAEN. Concerning the SY403 module with factor 10 issue in current reading and setting, CQ will discuss with the equipment owner to decide how to proceed.

Action MD: *provide version of SLiC with configurable HSCAENet timeout, improve identification of the current version installed and the current official release, and provide the source code to COMPASS.*

Closed/done. SLiC modifications have been implemented and extensive tests have been performed by the COMPASS DCS team. (All results available from COMPASS).

Action COMPASS: *when the broken module for SY403 is back from repair, let MD have a look at the one currently in use and eventually test it in his lab.*

Cancelled, see CAENet section above.

CMP indicated that certain commands are not processed/received by the equipment when group commands are issues from the COMPASS DCS.: channels settings fail both in SLC3/SLC4, while SLiC and CAENet HSCAENetTimeout are correctly configured. This behavior has been observed on SY527 and will be tested by COMPASS on the SY403.

MD suggested to verify whether the commands are well sent to the CAENet API and the response correctly received and forwarded to PVSS project. Extra traces in SLiC could be added to this end. MD offered to test this in his lab.

Action COMPASS: Verify whether this behavior occurs as well on the SY403.

Action MD: Reproduce this behavior and analyze in EN-ICE-SIC lab. Custom test-driving program prepared in 2009 by MD could be used to test several situations.

MD indicated that the new version of FESA was delayed and that it will not be compatible with the current one.

ISEG:

CQ indicated that migration of the ISEG component from fwlseg 3.1.2 (PVSS 3.6 SP2) to the new version for PVSS 3.8 SP1, fwlseg 3.3.3, has an effect on the archiving as datapoint structure/naming has changed. Advice on retrieving past and new information in a consistent manner is required, possibly based on experience from other users facing the same issue.

Action MD: Propose a strategy to COMPASS to deal with this issue.

EDIT: A tool has been created to rename PVSS datapoint IDs for a smooth transition. It has been successfully used on the ALICE experiment. MD suggests to contact Lionel Wallet to proceed.

DIP:

Action COMPASS: *call MD if problems with DIP items appear again.*

Closed. This action did not take place since the last regular COMPASS/EN-ICE regular meeting. MD remains indeed available whenever a problem is observed on COMPASS DCS with DIP integration.

According CQ, DIP is used mostly for CEDARS and beam information and users in COMPASS prefer to access beam info through a database. The situation for 2010 has to be clarified and DIP may not be used anymore, at least on the same model as in 2009. COMPASS/ASN (absent from this meeting) is in charge of this topic and will decide how to proceed and integrate this information in the DCS in 2010.

ELMB:

The offset observed by COMPASS DCS team is being tracked in Remedy case CT632165. Several on-site analysis have helped to reduce the probability of occurrence of issues, further tests will be done during the winter shutdown period.

This topic is being followed by ASN who was not present during this meeting.

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