Technical Meeting COMPASS DCS / IT-CO

Date: 29 October 2008 from 11:00am to 12:30am

Place: Scada Lab

This meeting was attended by: Mathias Dutour (ITCO) (MD) Piotr Golonka (ITCO) (PG)

Ana Sofia Nunes (COMPASS DCS) (ASN) Christophe Pires (COMPASS DCS) (CP)

Content:

General news:

The SPS beam stopped the 6th October as a side effect of the LHC issues. The "post run commissioning" period took place the 6th and 7th October. The results collected in various areas made of this approach a success.

CQ is now only present physically at CERN only once a week per month during the winter season. ASN will leave CERN as well during this period while CP stays.

COMPASS 2009 run:

For 2009 the SPS beam is scheduled for the 4th of May. Hadrons and Muons beams shall be available for COMPASS. The handling of these 2 modes of running the experiment will affect the DCS and some changes in the DCS implementation are foreseen. (E.g. ConfigurationDB) The expected behavior of the DCS system to handle the beam mode transition is to be clarified by COMPASS DCS team for ITCO to provide more efficient support.

Action COMPASS: Provide a description of the expected behavior of the DCS system and list of identified risks.

CP indicated a Calorimeter has to be integrated in the COMPASS DCS PVSS project representing potentially ~20000 DPEs. The calorimeter data is actually available in a MySQL database. Expectations and means to integrate the calorimeter in COMPASS DCS have to be identified.

Action CP: Schedule a separate meeting with ITCO to address this point.

PVSS / General:

PG indicated the testing of PVSS 3.8 is in progress. The LHC experiments raised some interest for this new PVSS version which may be adopted for the next LHC run. There are no particular 3.6>3.8 migration issues identified yet by ITCOBE. PG foresees the migration recommendation possibly early next year. ETM support of PVSS 3.6 will in any case be reduced when the PVSS 3.8 version is officially available. PG indicated ITCO plan is to support PVSS 3.8 when recommended and only back-port fixes on PVSS 3.6. PG enumerated some of the PVSS 3.8 improved features (Archiving, GUI ported to new Qt, Alerts, trending, dev. Environment, etc...).

PVSS/Archiving and ConfigurationDB:

ASN indicated These tests went fine, the data migration of the previous runs to Oracle was successful and from then on the PVSS project is running, with reduced functionalities for the shutdown period, with data being directly archived into Oracle.

PVSS/ConfigurationDB:

ASN thanked PG for the support. The archiving tests went fine although a small problem was reported with data points potentially corrupted while loading a configuration DB.

Action CP: Open Remedy case, provide detailed information and PVSS logs to Piotr.

Wiener:

From previous meeting:

Action MD: MD proposed to look at the UEP6021 with which it is not possible to communicate.

Note: This action was not performed as the equipment is now used in the run. MD suggested using a machine development break => 3days to check the crate in case something goes wrong during analysis. COMPASS to contact Mathias when suitable for this action to take place.

MD proposes week 45 or 46 to address this point. CP to confirm.

Action MD: check with Paul Harwood if there are available power bins compatible with the power supply used and confirm the results of the test.

Done: Firmware issues were identified and reported to Wiener. The fix shall come by the end of the year as promised by Wiener. See below.

MD indicated that Wiener agreed to provide the new OPC server for COMPASS to perform tests during the Winter break, (free of charge for testing purpose). For these tests, the Fantray EPROM firmware of UEL4020 (HI 5.07) tested by MD will be corrected and given back to COMPASS by the end of 2008. The proposal is to upgrade an entire CANbus with this new EPROMs, control the crates with the new OPC server for COMPASS to report any issue. If no communication issue is detected, the problem of blocking crates would be considered solved by this new fan tray firmware / OPC combination. MD strongly recommends this approach to reach a situation with support from Wiener, the sooner the tests can start the better. ASN indicated a discussion with the COMPASS Front End coordinator shall take place to address this issue.

Action COMPASS: Check whether this strategy is acceptable.

Action COMPASS: Identify and organize the setup for these tests. (Possibly a dedicated PVSS project, an entire CANbus upgraded). ITCO will help to get this setup right.

CAEN:

Action MD: Propose a test catalogue to COMPASS, provide related test results on SLC4. Done, action closed. Report sent to COMPASS, used to tune testing strategy.

Action MD: Modify CAEN SY527 program to generate a log file and try to

reproduce the fake readings behavior with this set-up. Done, action closed.

MD indicated the report of joined COMPASS/ITCO tests were sent to CAEN. CAEN is starting investigating on the problem using these results and "verbally" recognized there is possibly a problem with the delivered library although nobody else reported issues.

Concerning the obsolescence management of CAENet equipment and software, CAEN will provide to CERN a model of their foreseen strategy before the end of the year. The intention is for CAEN to clarify the level of support end users can expect w.r.t. their equipment and software on the long term.

Also MD and CAEN recommend a discussion to take place for COMPASS to present to CAEN its foreseen plans for the next runs regarding the CAENet devices and discuss potential support extensions, solution replacement etc...

Action COMPASS: Identify the right interface at COMPASS for such discussion.

DIP:

Action COMPASS: check how COMPASS DAQ gets data from CESAR. Not yet investigated.

Action COMPASS: ask the TN network administrator to maintain the development machine trusted in TN until the end of the Run.

Done, action closed. The trusted mechanism stopped at the end of 2008 run.

Action COMPASS: Make sure the router for proper COMPASS<>TN networking bridge will be in place before the next run.

ISEG:

CP reported problems occurred while restoring ISEG module configuration from ConfigurationDB where the VSet was changed from nominal operation voltage (1640 V for most of the channels used) to 0 V. A remedy case if opened to track this issue (PG).

CP also reported some unexpected oscillations of the voltage measurement on all ISEG modules. The problem went away after a complete power cycle and could not be reproduced. Lionel Wallet is following the problem and will report the information to ISEG. It is still unclear whether this is a side effect of the issue reported here above.