

Technical Meeting EN-ICE/COMPASS-DCS

Date: 11th May 2011, 11h00

Place: 892 2-009

Present:

Brice Copy (BC), EN-ICE

Ana Sofia Nunes (ASN), COMPASS-DCS

Christophe Pires (CP), COMPASS-DCS

General news:

The COMPASS 2011 Run is delayed due to a problem in the M2 beam line. The beam should not arrive to the experimental hall before 6th June.

The inclusion of the monitoring of the COMPASS polarized target in the general DCS of the experiment is almost completed now. This was needed to accompany the reduction of shifters from three to two people, and to prepare for a future operation of a control room outside building 888. Several new solutions had to be developed, including the integration of a PLC monitoring using the S7 driver from PVSS and a new Modbus server.

PVSS:

The RDB API is not active at moment in the COMPASS production system due to a problem found that makes the history unavailable in trend for some datapoints. Axel Voitier is preparing a fix for this problem.

The COMPASS main PVSS project still shows corrupted data (ENS-1556). When restarting the project, "ghost" alarms and values (that never where real in the past) with very old time stamps show up. The only solution found so far is to export to an ascii file and then delete the alert handling config, then stop and restart the RDB manager, and finally to import the ascii file. COMPASS reports that the option "-repair on" on the Data manager doesn't fix the problem for all datapoints, and the problem is still present in the next restart of the project. This problem exists also in other projects, e.g. in ATLAS.

Action COMPASS: ask for a more permanent solution to this problem. **Edit:** backup copy of the project made available for ETM to make a diagnostic.

Wiener:

COMPASS reported that three additional VME crates are being integrated in the DCS. For two, the integration was without problems. For the third, it was used for the first time a RJ45 socket for CAN, and the crate is not responding to commands (ENS-3076). Some additional investigations will still be done by COMPASS. Edit: done; it is now possible to send ON/OFF commands to the crate.

An attempt was made to monitor one of a series of Wiener low voltage power supplies. It was integrated in a CAN bus with other Wiener equipment, but the power supply switched off by itself. It is possible that a firmware upgrade is needed, since the firmware version is relatively old.

Action COMPASS: ask Wiener in which conditions such a firmware upgrade could be done. **Edit:** done; Wiener has answered.

CAEN:

A new CAEN SY1527 crate was integrated in the DCS without problems.

Benjamin Farnham, from EN-ICE, has made a performance test with a CAEN SY1527 crate with two boards inserted, to check if it was possible to have a polling rate of 1 Hz for channels' voltage, current and state, in such a minimalist configuration, and while keeping the possibility to send commands. The result was quite positive, with the 1 Hz only not achieved at the time of issuing of commands (ENS-2709).

Action COMPASS: contact Ben to ask for the possibility to repeat the test, now with a more loaded OPC server. **Edit:** done; Ben will do the test when he will have the EN-ICE used for tests again available, starting from May 16th.

Iseg:

No news.

OFS (Schneider):

The new OFS OPC server from Schneider is now running stably in the production system. COMPASS asks if there is a need for a registration.

Action BC: check with Geraldine Thomas if any special procedure is needed related to the OFS license. **Edit:** done; no special procedure is needed, because the license is valid for CERN.

ELMB:

COMPASS reported that they found a problem when inserting additional ELMBs to monitor the LV system of one of the electromagnetic calorimeters of the experiment. Apparently an ELMB would block when the third flat cable with 16 signals was connected to it (ENS-3039). The problem was not completely understood, but was solved by adding an additional ELMB to the CAN bus.

DIP:

COMPASS reported that there was an announced change of the name of a DIP

server, that was finally traced back in contact with the DIP server expert (Kris Kostro).

CP asked if the solution he had found to allow the starting of the DIP manager – to disable SELinux – is the recommended one, and BC confirmed it is the case (ENS-3057).

Miscellaneous issues:

COMPASS asked about the status and if there are time estimates relative to the introduction of OPC UA at CERN. BC mentioned that there are tests ongoing with two different toolkits, namely one to control the ELMBs. The OPC-UA can also be used as middleware, and does allow the use of webservices. Still, some of the proprietary OPC servers don't yet have a corresponding OPC-UA available. BC took note of the 5 OPC servers that COMPASS could replace by OPC-UA counterparts: CANOpen (for ELMBs control), OFS from Schneider, CAEN, Iseg and Wiener (“Krakow”).