Technical Meeting EN-ICE/COMPASS-DCS
Date: 30th August 2011, 11h00
Place: Building 892
Present:
Ana Sofia Nunes (ASN), COMPASS-DCS
Christophe Pires (CP), COMPASS-DCS
Ben Farnham (BF), EN-ICE
Brice Copy (BC), EN-ICE

General news:

- The COMPASS data taking will continue until November 7. It has not been very productive up to now, mainly due to beam line problems and to discharges of the superconducting magnet of the polarized target system.
- Dawid Wojcik will be replaced as DBA of COMPASS Oracle databases.

PVSS:

- ETM has been able to reproduce the trending plot problem and confirms it on 3.8-SP2. ETM also says that on 3.10 the problem does not exist (ENS-3279@jira, ENS-3276@jira).
- There was a major success on 29 August 2011 with the tests of ATLAS' DDV tool, to query the COMPASS DCS historical data in a flexible manner (much more than in PVSS trending, with support for more than 8 DPs, support for value comparisons). The tool can be used to bring archived data back online from the replica DB – avoiding, in principle, to keep as much data online as up to now.

PLC:

- COMPASS reported an incident of the COMPASS Polarized Target with a ALSTOM PLC due to a software corruption in the CPU of the PLC – that is, from the point of view of the main DCS of the experiment, behind a proprietary MODBUS front-end. The implementation of a watchdog on the PLC by the PLC experts and its publication by the MODBUS front-end PC are under consideration.

CAEN:

- ENS-2079@jira ongoing - stakeholders have to be convinced that the CAEN 2527 crate is the right choice and to commit to it. To this end BF has agreed to re-run the original CAEN SY2527 crate performance test (as carried out for COMPASS earlier this year), this time with the CAEN SY2527 unit filled to capacity with modules. He expects to be able to run this test in mid-October. He will ask the E-POOL if he can borrow the simulated load and extra modules needed.

DIP:

- CP reported and BC confirmed that changes in DIP publication structure are not supported by the DIP API - a restart of the PVSS API manager and modification of mappings is required.
- COMPASS asked how to manage DIP quality usage in PVSS subscriptions.
  Edit: All the information is in the DIP FAQ http://cern.ch/en-ice/DIP+FAQ

Long Shutdown:

- COMPASS is depending on the SPS proton beam and, according to the latest news, the SPS will possibly be running for tests in 2013.
- COMPASS II will be a restructuring of the existing experiment.
- From the DCS point of view, there are dependencies on:
  - OPC Windows XP server
    - BF reported that Wiener OPC Classic server functions, albeit using a customized configuration, on Windows 7, **it is not currently viable for production usage**.
    - BF and COMPASS agreed that the Krakow OPC server (developed in ATLAS) to control VME crates and power supplies - which helped Wiener getting started about developing their OPC server - works quite well with the old crates.
    - ISEG, OFS, CAEN, ELMB (and LabVIEW) OPC servers, if a migration to OPC OA is to be considered.
  - Windows XP Operating System (BC indicated that CERN will possibly stop supporting it).
  - On medium term, a transition from SLC5 to SLC6 has to be considered, with possible impact on PVSS and SLiC.
  - SliC DIM server has restricted support by CERN.

OPC-UA evaluations

- BF reported that PVSS 3.9 supports an OPC-UA client and that PVSS 3.10 can act both as an OPC-UA client and server, but there are problems with the OPC Security implementation in PVSS.
- The JCOP components relying on OPC will have to be updated.
- Related to this, ASN asked how does one secure an OPC server. BF reported that CERN has produced a DCOM security paper for OPC, presented at http://www.opcconnect.com/dcomcnfg.php

Miscellaneous issues:

- COMPASS reported an incident with heat exchangers (devices used to control the temperature in electronics barracks) – a too cold temperature lead to condensation and water drops on the equipment, damaging it (namely Wiener equipment).