Technical Meeting COMPASS DCS / EN-ICE

Date: 9th October 2009 from 14:30am to 15:30am
Place: Building 892, COMPASS DCS team office
This meeting was attended by:
Catarina Quintans (COMPASS DCS) (CQ)
Christophe Pires (COMPASS DCS) (CP)
Ana Sofia Nunes (COMPASS DCS) (ASN)
Mathias Dutour (EN ICE) (MD)

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

Content:

General news:
MD mentioned that all of the SCADA and Front End has finished moving to Prevessin in building 864, including labs. He offered to give a visit to COMPASS DCS team at their convenience.

PVSS / General:
COMPASS DCS team rose several questions concerning PVSS 3.9. Despite it will not be a supported version in the context of JCOP, CQ asked whether EN-ICE would investigate it, and what are the main changes and new features.
Action MD: Collect featured information over PVSS 3.9.

Oracle archiving:
CQ indicated the Oracle database is being accessed by physicists in parallel to the archiving process through simple scripted queries. A login being used by several users allows such access to the COMPASS DCS database.
No particular issues have been observed since then. However, there are three main worries:

- First that datapoints renamed during the archiving process are not properly re-aligned properly by the users extracting data. Previously this was controlled by the COMPASS DCS team.
- Another concern relates to the lack of clear identification of which users is accessing the database, when and for what purpose. The current mechanism is based on disciple and secrecy of a login and password.
- Finally there is the worry that very heavy/parallel queries could alter the archiving process. As a preventive measure, tests were performed in the past by COMPASS DCS team with this respect, but one cannot guaranty such problems cannot rise someday.

CQ explained the Oracle team provides COMPASS DCS team with metrics of the database usage. MD advised to clarify their exact meaning and relevancy to be efficient for usage evolution tracking and post-issue analysis.

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

MD also indicated that the list of queries reaching the database would be useful to advise users. All agreed the current mechanism shall be replaced/improved for the next run.

Wiener:
ASN mentioned the loss of the connection to a Wiener CANbus featuring old (not fw.- upgraded) VME crates. This situation is recovered by disconnecting/reconnecting the CANbus on the front end PC running the Wiener OPC server (Krakow). To determine whether this is an issue related to the Kvaser driver of the physical connection itself, MD advised to first try to disable/enable the Kvaser driver when the problem occurs.

In any case, over the winter break the upgrade of the old Wiener equipment fw. and EEPROM will proceed as agreed:
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)

CAEN:
From previous meeting:
Action COMPASS: *provide the hardware and performance requirements for the future, so that MD can check compatibility with recent CAEN hardware.*
Action MD: *Provide numbers related to performances for the readout from LHC experiments.*
MD recommended to upgrade the fw. of the 2 SY1527 CAEN mainframes used in COMPASS during the shutdown. CQ reminded that a discussion with the owner of the equipment shall be organized before to proceed.

CAENet:
Concerning the SY403 module with factor 10 issue in current reading, MD proposed to organize a visit with a CAEN electronics engineer to COMPASS on their next visit. It would also be the opportunity to assess the issue of a CAENet crate resetting on a regular basis with a CAEN hardware expert.
Action MD: Inform COMPASS of the next CAEN technician visit at CERN, organize meeting.

ISEG:
Nothing to report.

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

DIP:
Action MD: *check the exact meaning and usage of the self test mechanism, and*

if the documentation that refers to it is uptodate. Closed. MD explained this mechanism and indicated it assess the functioning of the local API manager (COMPASS) and of the DIP DNS (EN-ICE). It does not assert the correct content of the other DIP publishers COMPASS is subscribing to. MD also indicated this mechanism is rarely used and the DNS are failsafe, maintained and monitored by EN-ICE.

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

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 on the following machine development breaks.

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