

Software: where are we?

(short status report on everything)

Consoles

- Consoles reinstalled with new CC7 OS
- One console still in SLC6 in case of problem with CC7 consoles.
- Some pending problems (reported by Eric)
 - Screens go to standby after a logoff/login (problem specially for fixed display)
 - Can start only a CCM
 - 4 screens consoles have graphical troubles due to the video card
- New CCM editor application soon available
 - User friendly in comparison with the old CCM web editor
 - Possibility to check if old Commonbuild links still present in CCM
 - Tool to convert old Commonbuild links to new CBNG links
- New development CC7 virtual machines just delivered to Yannick and Fabio
 - Better performance for JavaFX
 - Connection to virtual machine via VNC (no more NX client)
- REMUS replace RAMSES, work on a standard linux console

Wall Screens

- New screens installed
 - 4 of them have an halo problem
 - One cable missing (console 4)
- Need of 3 different applications to setup the wall screens !!!
 - To control the screens (on/off), select the input (VGA/HDMI), choose the stream a login to a Windows Terminal System is needed
 - New **spsopera** login (password synchronized with **spsop**)
 - HDMI input used for decoder (LINAC/PSB/LEAR/CPS/SPS and LHC Pages 1)
 - VGA input for other streams (LARGERS). Streams selected using the Media Center (no more scripts to edit)
- Eric et Yannick are working on an electronic Whiteboard

CBNG

- A lot of applications already migrated to CBNG (Yannick, Eric, Fabio)
- Application that still need to migrate:
 - Verena applications...
 - Andrea applications...
 - BCT & FBCT (Diego)
 - TBSM (Johan)
 - Synobstacle (Serge)
- CCM application links not fully updated
- CCM will warn if an old Commonbuild application is started
- No more NEXT and PREVIOUS mechanism present in CBNG
- Scripts to start fixed display applications updated (Eric and Fabio)

FGC

- LSA changed (unified) the way the functions are defined, FGC changed accordingly
- SUB_91 library removed, integrated into JAPC
- SPS applications (FGC Status, FGC State Fixed Display, FGC Check, ...) already modified and partially tested
- EquipState acquisition doesn't work (problem reported)
- FGC+ not working in CC7 because RBAC (problem reported to EPC)
- New FGC_94 for Mains digital regulation → Potentially new applications needed...

SPSQC

- RF Oasis Signals (under development)
 - Phase and Synchro signals will be available cycle by cycle
 - Estimation of the Phase and Stable Phase correction calculated in the analysis module
 - Volt/Degree conversion factors will be trimmable in LSA
- Telegram
 - Anthony developed a new FESA class that listen the telegram and republish the most important information
 - Module already added into the SPSQC, still need to define what must be republished by the SPSQC and saved into the logging database for the SPS statistics.
- Injection efficiency
 - Anthony is developing a new (challenging) FESA class that will listen to the PSB, LEIR, CPS and SPS telegram and to the PSB, LEIR and CPS BCTs
 - After the last SPS injection the FESA class check the Beam ID and will define which PSB, LEIR and CPS cycles had the same Beam ID
 - The FESA class push to the SPSQC the PSB, LEIR and CPS BCTs values of the cycles with the same Beam ID
 - The SPSQC will analyze the collected BCT to calculate the PSB/CPS or LEIR/CPS and CPS/SPS injection efficiency and republish it to be saved into the logging database
- Playback
 - A easy way to retrieve SPSQC data is under development
- Trends
 - The SPSQC Online and Playback applications must be capable to display trends (developed not yet started)

Wire Scanner

- James (with the help of Yannick and Fabio) is rewriting the WS application
- Settings for the LHC cycles (time, delay, voltage, filter and pattern) will be in LSA and reloaded by default when a LHC cycle is selected
- Default LHC acquisition will be bunch by bunch
- Simplification of the emittance calculation
 - Speed up fits calculation (using threads)
 - Emittance calculated only one time (and not every time the bunches selection changed)
- Acquisition display redesigned

Kickers

- Eric is updating the Kickers applications adding economy
 - Kickers will not pulse or charge if no beam or not the right dynamic destination is present
 - Possibility to force the kicker pulse
 - AWAKE will now be compatible with LHC cycles
- MKD Flat Bottom dump removed
 - Early dump will replace Flat Bottom dump
 - Early dump and Standard dumps will be always ON

And more...

- Diego delivered a first version of the FBCT delay scan
- Current 2017 two new FBCTs will be delivered
 - New FESA class with different API respect to old FBCT
 - Old application must be adapted or new one developed
- BLMI are migrating in FESA 3
 - For the moment only one front end will migrate in FESA 3
 - FESA 2 and FESA 3 API must be strictly the same (not yet the case)
 - Acquisition property will be simplified (only one extraction)
 - BLM applications modified but still waiting for the final API version of the FESA classes
- RF counters will migrate to a new FESA 3 class
 - Applications partially modified but waiting to be tested with Andrey and Urs
- SPS BQM will migrate to FESA 3
 - Completely new API, big impact on the application
- The existing cycles was cloned in LSA
 - The new 2017 version have a trim history of 2 years
 - The old cycles with the full history are present in the archive
- The Xenon (XE54) particle type was added in the telegram and LSA (also rest mass)
- Johan will ask for more precision of the mains current saved into the logging database