



Online SW Activities

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- Point 1
- Test Rig
- Upgrade



Online SW at Point 1

- Little update (bug fix) for heavy ions
 - Thought restricted eta TE handling was all done last year
 - But bug found in TE threshold order (spotted by Pete)
 - Code assumed vector of thresholds was in the correct order
 - DetCommon did not guarantee that (accidentally OK in last years tests)
 - Now fixed in L1Calo
 - And in future DetCommon will also provide sorted vectors
 - There is also another bug in offline code
 - Restricted eta ranges for TE thresholds not yet stored in COOL
 - Also fixed by Joerg, should be installed soon (P1 and Tier0)
- Otherwise, online SW very stable



Test Rig(s)

- CERN test rig

- Will soon have new boot server
- Separate home directories will disappear (use AFS home)
- Common setup (/l1c area) already copied to l1calo AFS
 - But needs customisation: distinguish use on lxplus vs test rig

- External test rigs

- Mostly moribund - need reviving for phase 0 upgrades?
 - But missing expertise at local sites...



Upgrade Developments (1)

• New MCM

- Standalone SW developments proposed (not using old test rig)
- Develop ppmSim (but outside usual L1Calo framework)
 - Then have to reintegrate it...

• CMX

- I am not aware of any developments in the last few months
 - Needs to progress... both HW and online simulation

• L1Topo

- Jan Schaeffer taking over from Sebastian Moritz
- Some work expanding programming model and module services
 - Still based on serialised VME interface
 - Need to move to IPbus eventually
 - Lot of intellectual work in common, but code would need porting
- What about online simulation?
 - I understand Joerg & Anna have started from the HLT side



Upgrade Developments (2)

•Phase 1

- Need to make serious start on integrating IPbus
- Outline architecture presented last year
 - Replace VME+HDMC with IPbus
 - Keep module services interface to run control
- Getting urgent for L1Topo



Miscellaneous

•L1Topo installation

- At some point need an ATCA crate installed in USA15
- Expected to go in CTP rack
- Will cause some disruption - CTP unavailable
- Think about a suitable schedule now?
 - There is expected to be a period with no control network
 - Not sure when, maybe September??
- Can we get a ATCA crate with vertical cooling by then?