Discussion Points

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`http://www.hep.ph.qmul.ac.uk/~landon/talks`

Overview

- Installation databases
- Determining cable lengths
- Software tools

Installation databases

- TC equipment database contains racks, crates, modules, cables, cable trays, connectors and their connections. Also the history of connections, present status (installed, tested)
- The same information should not be duplicated elsewhere
  ...but TDAQ configuration DB needs to know about modules, also we dont want test rigs to be included in or dependent on TC database (I assume)
- NB need room on modules for TC barcode stickers!
- not sure if the soon-to-be-extended rack wizard will nicely handle frequent changes of our cabling during commissioning – but may be better than OKS editor or manual XML editing! Installation schedule suggests roughly one set of changes per week
- assume (hopefully) we will have got calibration databases up and running
- what else do we need to store, eg test results etc?

Determining cable lengths

- analogue cables from detector and between receivers and PPMs (via patch panels): all cut to length after installation?
- worry about routing: extra latency if TC insists on long route. Reorganise crates perhaps if all cables from receivers to PPMs must go down under the floor and up again (twice if via patch panels)
- LVDS cables: estimated about 12m – need to measure longest path in real USA15 racks and cable trays – assume all cables will be the same length? (Minimum is roughly 3m less than maximum required)
- other cables: smaller numbers so dont worry so much about excess length – estimates from diagrams plus safety margin should be OK?

Software Tools

Requirements for Installation

- smoothly operating calibration and test procedures integrated with new conditions database, including run type plans in DB agreed with calorimeters
- readout and online monitoring via 9U RODs and ROS
- some offline monitoring and analysis for comparison with TileCal and LAr data as at the testbeam