Data Scouting tests in TR9

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Getting DS Events

- run athenaHLT with modified TriggerMenu package (files left by Joerg)
  - upload to test DB
- run athenaHLT from test DB
- localhost partition tests
  - could not run successfully due to other problems
    - preliminary testing mostly with athenaHLT
  - spotted that rerunLVL1 did not work there
- the original Muon DS chain did not work for our purposes
  - no DS events (with 2014 – M4 – data)
- Catrin merged Joerg’s changes with the present TriggerMenu
  - she added a few other muon chains with different energy levels but this didn’t work either
  - she then added the chain - HLT_id_cosmic_ds
  - we got DS events then
First time we got this, all DCMs and HLTPUs terminated
- the DCM wasn’t handling multiple HLT results properly - crash
- in the next event, HLTPU found no DCM when requesting ROBs and aborted
Andrea managed to understand and fix the problem in the DCM on the fly
- emergency path was applied
a DS stream was successfully produced by the SFO’s
- wrong contents – full events with 2 HLT results
- the first thought was that this was due to a problem in the DCM that prevented correct PEB in some cases
  → observed in cost monitoring
  → DCM removed ROB IDs it did not recognized from the PEB list
  → the ROB id of the HLT result and of the CTP fragment were not part of the IDs the DCM recognized...
  → after removing all rob ids, an empty PEB list would remain → full event building
  → this was actually not the case!
- it turned out that the HLT was already returning an empty PEB list
  → bug report opened in Jira to follow this up
  → bug since corrected in the steering (ResultBuilder)