Summary of the discussion about LVL1 and TTC
With
Philippe Farthouat and Ralf Spiwoks

September 19th, 2002

Giuseppe introduced the aim of the meetings that is to extract and define the current system architecture, establish that in a document and use it as a base for the AWG work.

The LVL1 and TTC systems are well established since long time and well documented in the LVL1 TDR. Therefore in this case we concentrated the discussion on the still unresolved issues.

Main issues:

Interface between TTC/LVL1 and Detector. Work is in progress on the physical interface. It will be used for local and remote interface to CTP by the sub-detectors and is an integration of the LTP and DCTPI interfaces.

DAQ for LVL1. The LVL1 needs some help from the DAQ for setting up the ROD Crate DAQ. There is the need of getting the ROS software soon and do the few changes for the ROD Crate DAQ functionalities. The configuration database is also an issue for LVL1. There is the problem on how to extract trigger menus from the actual configuration of the LVL1 hardware. This issue has not been discussed in the Configuration DB working group. Another issue is that the database is not used to store several different configurations and at the moment the file system is used for such functionality.

Report of errors. The mail error reporting mechanism is foreseen to happen through the Online Crate Controller. It is foreseen to have one controller task per partition. Again also in this case the ROD Crate DAQ is to be used by LVL1.

Monitoring in test setups. In setups where the output link is not essential there is the need of monitoring at the ROD Crate level and across several ROD Crates. The amount of data to be monitored can vary a lot (as for sub-detectors). This mechanism open an issue about the control networks that is at the moment the candidate to receive this traffic. The monitoring and the configuration requirements have been never specified to an extent such to allow an understanding of the shaping the control network (or of an ancillary network for monitoring). What is also unclear is the type of data to be monitored: histograms or floats?