# **Configuration Database**

### Murrough Landon – 15 March 2000

#### **Existing Database Formats**

- Old DAQ uses C structure saved as binary data
- Diagnostics uses Tcl script
- HDMC uses formatted text file
- ATLAS DAQ will use OO database
- Would like to move to one scheme!

#### **Inputs**

- Erics list of configuration data
- Existing DAQ -1 database schema
- HDMC class model

#### **Objectives**

- Extend/modify DAQ -1 schema for our classes
- Additional schema of level 1 specific classes
- Define Data Access Library (DAL) to read DB objects into runtime objects (different classes)
- All beautifully documented, reviewed etc!

## So Far...

#### **Diagrams and Tools**

- Recently used rather flaky shareware Mac program (ObjectPlant) to make some diagrams (see separate files)
- DAQ -1 used Software through Pictures (StP) in the past but now seem to be moving to Together/C++, Together/Java.

#### **Hardware Configuration**

- DAQ -1 schema has Modules and Crates. Can imagine DAL to produce suitable top level Parts for HDMC and evolving DAQ system.
- Lower level Parts still from text files (eg partial Part hierarchies?)
- Questions about Bus vs Crate in HDMC (see separate file).
- Not obvious how to save top level only HDMC Parts back to database. But maybe this is not required.

#### **Other Stuff**

- Nothing yet for run parameter type settings. For test activities we probably want these more dynamic than typical database objects?
- Leave physics trigger settings (thresholds, etc) to the CTP for now?
- Connections between modules, mappings to towers, cells etc. Really not sure how to do this.
- Some vague ideas on calibration data...
- Eric suggested a module inventory, service history database.
  Should be implemented soonish or probably never...