

Atlas Level-1 Calorimeter Trigger

Diagnostic and DAQ Software Status

One, Two
Buckle my Shoe

Overview

- Overview
- Status of Current Work
- Who Who Who
- Test set up
- Open the first parts file
- Merge the subsequent parts files
- Classes appear
- Which May be accessed through the HDMC Module View
- What next, the bridge?

Status of Current Work

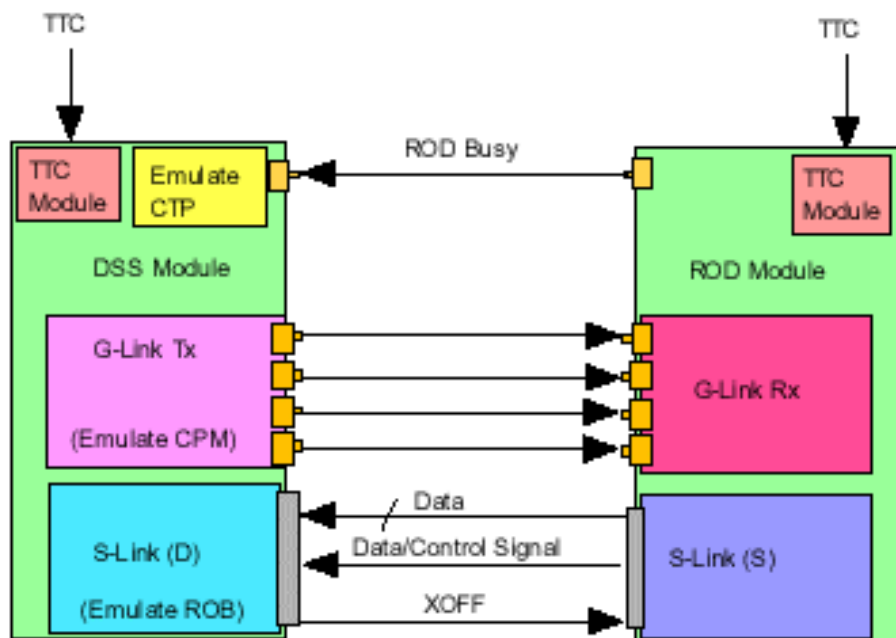
- Last UK software Meeting held 23 November at RAL. News?
 - Arrival of concurrent (linux/intel) board at QMW: evaluation tests underway.
 - Arrival of ROD in RAL PPD Lab (more later)
 - Planned Video conference with Heidelberg cancelled but extensive discussions on whether HDMC should be the way of the future.
 - Rumours of ROD Crate DAQ (See ML's discussion of what happened at the TDAQ Workshop): does this affect our architecture plans?
 - Need to optimise our use of tools. Ideas from the real world (Purify, IDEs, etc).
 - Need to distil slice test plans.
 - Need to formalise documents (URDs etc) in various directions ... calibration, DAQ and so on.

Who Who Who

- Steve joined us but Scott has left.
- Who is there to craft s/w?
 - Bill, Bruce, Murrough and Steve, ~Norman, Reg and Gilles? Any other OO takers?
- Who is doing What?
 - Test vectors: Bill
 - Online stuff (local controller etc), Database: Murrough
 - Histogram displays: Root: Reg. Norman to look at Andre Bogaerts proposal, Steve?
 - Readout, DAQ end of monitoring framework (DataFlow), buffer manager: Bruce
 - User end of monitoring, analyser, simulation: Steve + Bill - Event dump (taking up the direction of Scott, in the context of display?): Steve
 - Calibration: NN
- There are still some big holes!

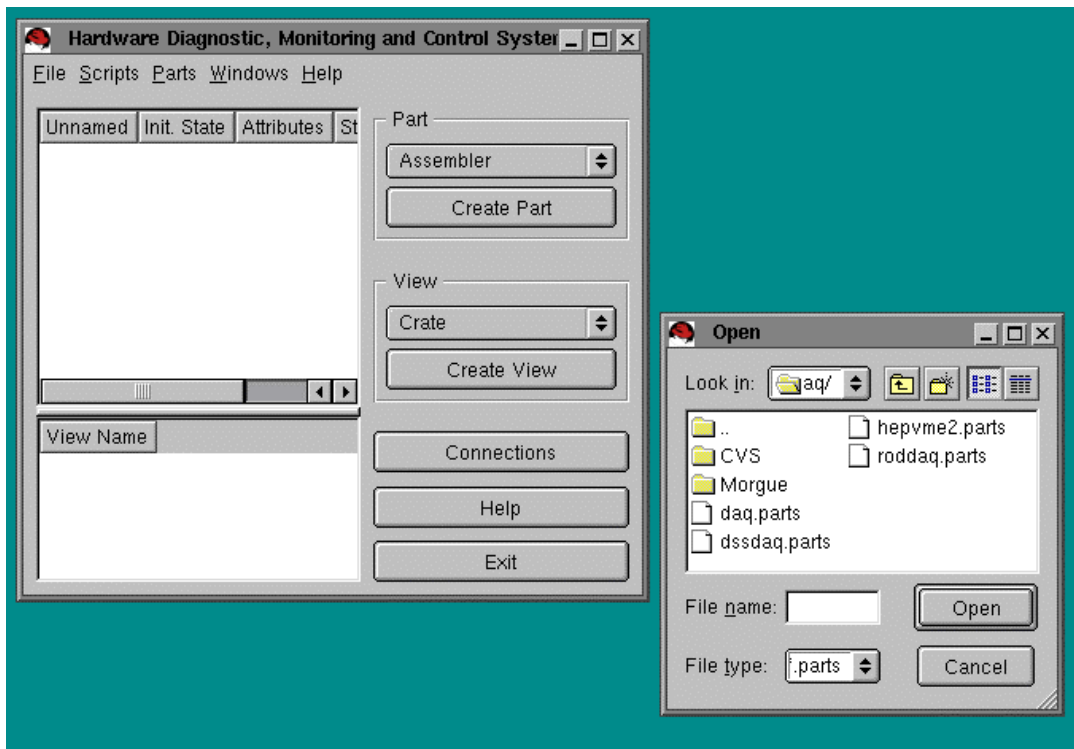
Test Set up

- As in initial system tests (but for the moment without TTC), connect:
 - G-Link from DSS to ROD
 - Slink from ROD to DSS
- Perform *test plan* tests within our environment. (HDMC)
- Test DAQ type methods in DAQ s/w environment.



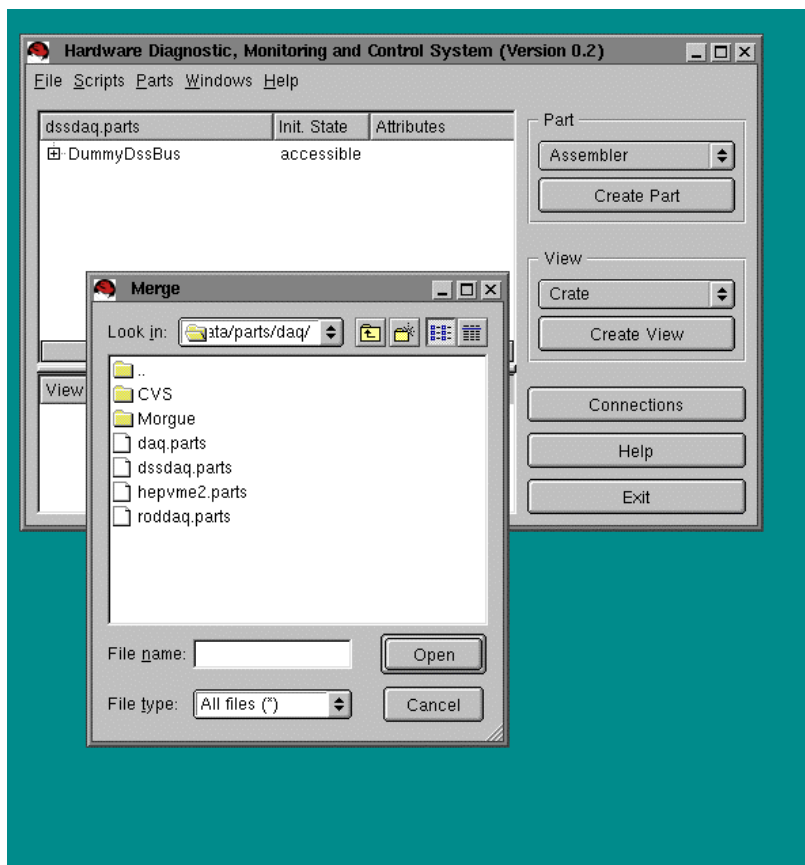
Open the first parts file

- `~/hdmc/data/parts/daq/dssdaq.parts`, which describes the complete register structure of the DSS module

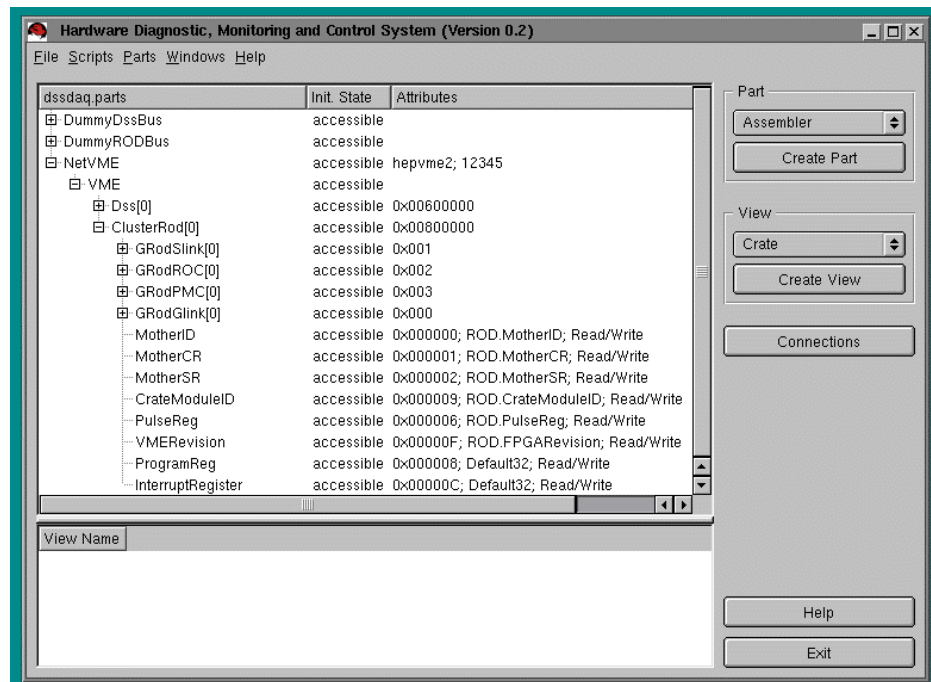
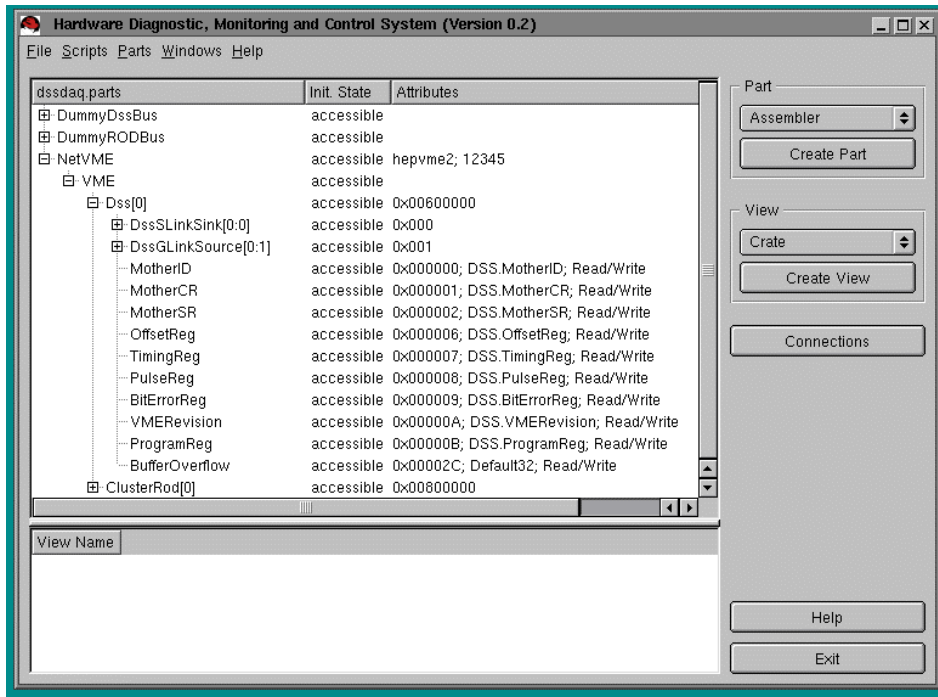


Merge the subsequent parts files

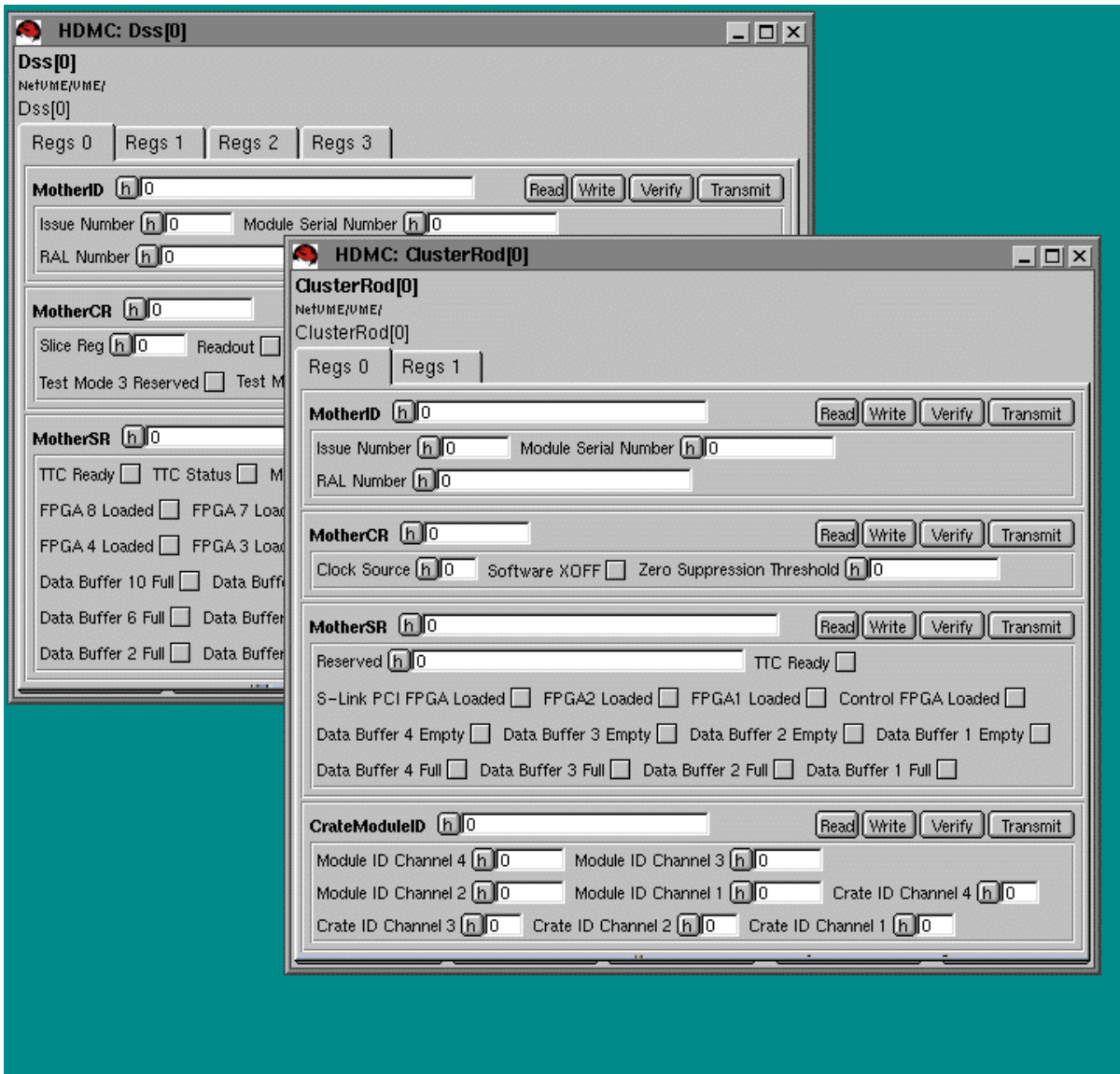
- ~/hdmc/data/parts/daq/roddaq.parts, which describes the complete register structure of the ROD module.
- ~/hdmc/data/parts/daq/daq.parts, which describes the modules to be used, along with their actual net bus and which registers belong to which classes.



Classes appear



Which may be accessed through the HDMC Module View



What next, the bridge?

- Check all bit functionality:
 - Link Ready bits?
 - Buffer Full Bits.
- Complete DAQ classes and action methods.
- Reiterate basic tests through DAQ classes.