Computing activities at Victoria

Software

- Testbeam OO development
- Database

Infrastructure

- Linux cluster, IBM-SP
- Proposal for a large mass storage facility



- Grid development (ATLAS Data Challenges)
- Proposal for computing/software personnel at CERN

Database activities

Persistency (storage of LAr data and constants)

- detector description in objectivity
- Storage of geant3 hits in objectivty

Alignment

- Studying requirements for LAr
- How to incorporate survey information
- Use of "conditions-DB" (time-dependent DB)

Calibration

- Waiting for development of conditions-DB by core DB group
- Plan to use it for testbeam

Infrastructure at Victoria

Environment:

- Developing a Linux environment for BaBar/ATLAS
- Plan to port ATLAS software to Victoria in 2002

Hardware

- 40-node Linux cluster
 - Mainly used for BaBar MC generation (one of only a few remote production sites in BaBar) – uses C++ and Objectivity
- 128-processor IBM-SP used for OPAL analysis and interactive work for BaBar and ATLAS
- Proposal for a 400 TB storage facility at Victoria (approx 30% is for particle physics) – decision in Dec 2001

Other work

Grid

- Developed a small Grid testbed and are learning about the Globus toolkit
- Plan to participate in the ATLAS Data Challenges (we are also requesting a significant upgrade of our Linux cluster)

Resources at CERN

- We (ATLAS-Canada) are requesting funds to put 5 computer people at CERN for 6-years to participate in the LHC Grid development (1st review of proposal in October 2001)
- We plan to establish a presence at CERN in computing for database, testbeam, grid and other activities