Mu2e Computing Needs for FY11 & FY12

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April 14, 2010

NuComp Steering Meeting

Life Cycle Overview

- 2011 Major milestones and/or activities
  - CD-1 review Q1 CY 2011 (CD-2 review Q1 2012?)
  - Detector development and testing:
    - CRV, (Straws?). Work in AD and TD on beams and magnets.
  - Simulation:
    - Continuous code development; a few months of production MC.
  - Data processing and analysis: test beam. PSI +??
- 2012 Major milestones and/or activities
  - Detector development and testing: as above
  - Simulation: as above
  - Data processing and analysis: test beam ?

Justification for Resources

(estimated data types/sizes and CPU uses)

- Disk: 2 TB added per year
- Tape: 10 TB added per year
- Int. login and batch: 4 to 8 "seats"; 10-15 by summer 2012
  - Now using ilcsim(2)
- Grid: peaks to O(100) slots; DC level O(10-20)?
  - Same level as now (which we are not yet fully using).
- Servers for DB, Web, special purpose: web site and docdb.
- Special CD manpower needs, e.g. Database Applications development, monitoring tools, et cetera.
  - CET and SSE O(2-3) FTEs (outside of this discussion?).

Processing Beyond FNAL

- Do you plan to use resources beyond those at Fermilab?
  - Possible but no definite plans.
- If so,
  - Where?
  - for what activities? Production MC simulation
  - at what level (relative to FNAL work)?
- Estimate
  - data transfer needs: O(0 to a few TB) /year.
  - Software or services needed at Fermilab to support this?
    - I think this is in the noise, especially for small values of "a few".

Summary

Need	FY 2011	FY2012	Comments
Disk (TB)	2 TB	2TB	Per year purchase
Tape (TB)	10 TB	10 TB	Per year purchase
Int./batch (cores)	5-7	5-8	Increment per year.
GRID (slots)			Peaks to 100; DC 10-20.
Servers	???		
Personnel	2 FTE, CET+SSE	2 FTE, CET+SSE	

The End