



Remote Production

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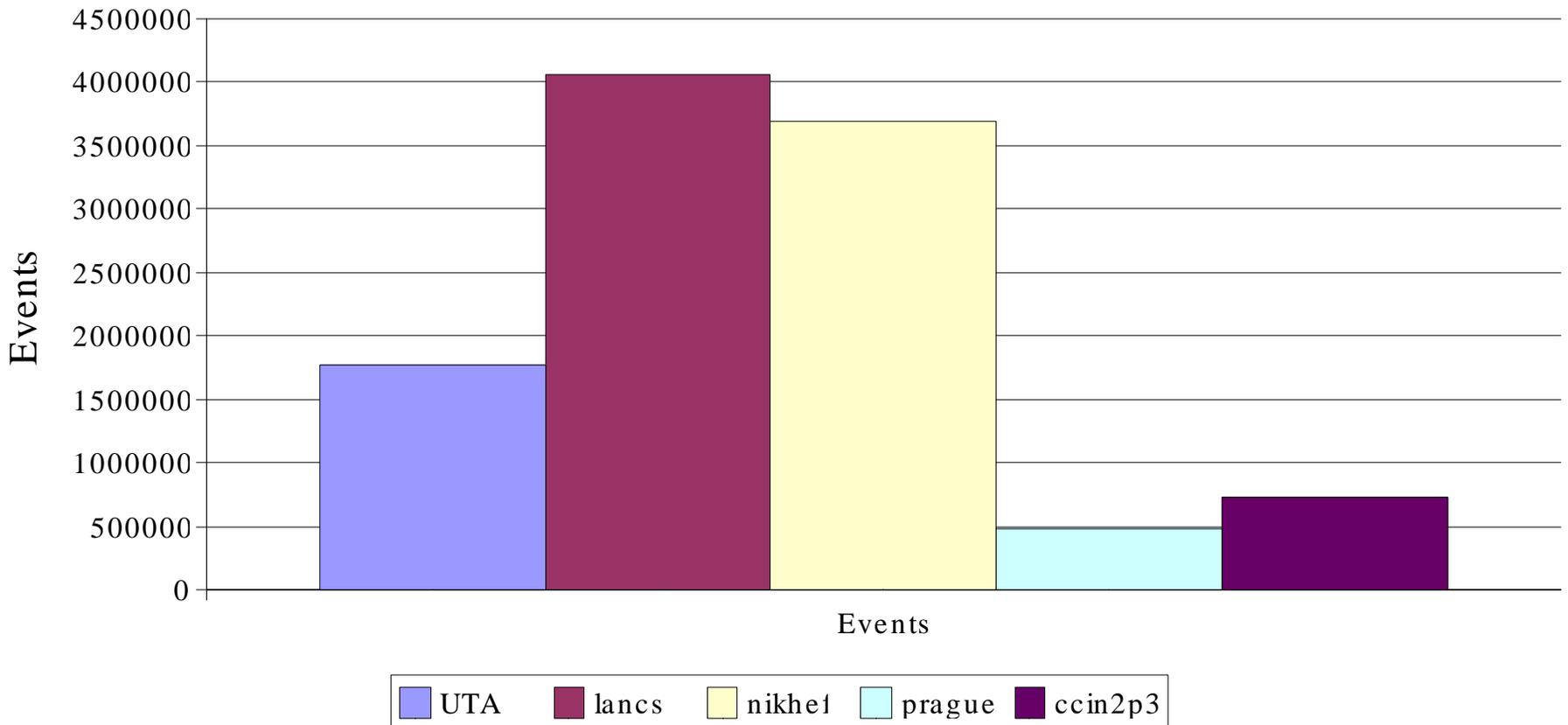
Outline

- / Who are they?
- / What are we doing?
- / Future
- / Limitations
- / Future
- / What Next?

Who Are They?

/ Lancaster, Lyon, Nikhef, Prague, UTA

February Statistics: 10/02/2002: Total=10719237



/ Coming: BU, ICL, Manchester, etc....

What are we Doing?

- / Monte Carlo Production
- / **Software Tarballs Exist**
- / Generation, Simulation (d0gstar, d0sim), Reconstruction, Analyze
- / **All run in p10.XX of some type**
- / **Use MC_runjob to submit jobs at remote site**
- / **Documented: MC Production Web Pages**

What are we Doing 2!

- / SAM - used to store data
- / Lancaster using SAM to get data (in cache)
- / Testing getting data from Enstore
- / Neither Retrieval or Storage is not Automated!

- / **Architecture and Farm Software differ**
- / **Batch Queues**
- / **Network Setup and Connection**
- / **Storage**

Future

- / Develop SAM tools for Remote Job Submission.
- / MC Prototype started.
- / <http://www-clued0.fnal.gov/cgi-bin/MCRequest.py>
- / Develop interface in mc_runjob to submit jobs based on request (remove user intervention)
- / Developing Queue
- / Interface different batch queues
- / mc_runjob and data....

Limitations

/ Suggested Requirements for Remote Processing:

Product be built with RTE

Use mc_runjob or similar for running

Input files in SAM and defined as a project

Request can be stored in SAM based queue

Input Parameters need to be well defined

/ *Major effort needed in book-keeping*

Areas Needing Work

- / Reconstruction
- / Reliable and Current Remote Database Access:
Calibration, Luminosity, SAM
- / Book-keeping:
Unique well defined datasets.
Reproducible
Software and Parameter Versions
OK its more Database stuff
- / Can we distribute tarballs/RTE packages using
SAM

Possible Additional Users

- / Root Engine
 - / Spread large root sample over many nodes
 - / Run root batch jobs on each node and combine results
 - / Very fast thumb-nail processing
- / CPU Intensive Calculations
 - / NLO MC Simulations
 - / PMC jobs

Remote DØ and the GRID?

- / SAM is a GRID.
- / So we are already using one
- / SAM is a collection of tools/products for accessing and organizing data
- / AIM:

To incorporate GRID tools that will improve the function and format of SAM for DØ's Physics Goals

