

# Experiments and the Grid

## Roger Barlow



THE UNIVERSITY  
*of* MANCHESTER

- D0
- CDF
- Others
- BABAR

# D0

*Based on talk with Iain Bertram*

MC post being re-advertised.

Adapting SAM to use GRID technology in conjunction with Particle Physics Data Grid (PPDG) collaboration. Natural progression to "standard grid middleware" components.

- Condor-G job scheduling component
- Grid Security Infrastructure (GSI),
- Grid Resource Allocation and Management (GRAM),
- Meta Directory Service (MDS),
- GridFTP

See Rodney Walker's talk tomorrow for more D0 grid stuff

# CDF

Post now recruited - Stefan Stonjek starts early June

No dramatic developments - ask Rick for details

# Others

*Based on talks with Dan Tovey and Peter Renton*

Concern about central computing

Tier 1 (for LHC) - Tier A (for BABAR)

What about everybody else?

Old experiments: Aleph, Crystal Barrel...

New Experiments: Antares, Dark Matter...

Requirements small but not zero.

Need voice in decision-making process - CNAP data storage committee wound up.

More EB reps? Open EB?



# BaBar: the Demonstrator

Ran at NeSC opening and it worked.

Impressed small but very select bunch of VIPs

- 1: Remote Metadata query using web interface (but not ldap)
- 2: Authorisation through Grid certificates and dynamic accounts worked
- 3: Job submission spooling worked (fairly) smoothly. Specify host.
- 4: Input sandbox problem solved (again). This is not trivial.
- 5: Output retrieval bit of a kludge. Ideas needed.

# Current status EDG-wise

(Thanks to David Smith)

RB at IC      RC at Bristol      VO (people) at Manchester

CEs all over UK

EDG 1.0.0 and 1.1.1 on UK farms. Awaiting 1.2

Karlsruhe (now German CA) and Italy (Ferrara) starting up

SLAC coming along:

Globus now (2.0 beta), working towards EDG(1.1.4)

Security sensitive.

At the `globus-job-submit ... /bin/echo "Hello World"` stage

# Next steps?

Replica catalog?

SEs to match CEs?

IN2P3 has CE and future RB and wants to get involved

Two RBs???



# Tier A

Hardware has arrived and been commissioned.

Establishing disk areas and queues

Problems with disk hanging and killing queues

- not good for encouraging new users.

Dynamic accounts - security issues need resolving

Upgrade to RH7.2 asap.