

## Consequences of LHC shutdown

- The present shutdown of the LHC has a number of consequences for the planning of WLCG:
  - Capacities and Procurements for 2009
  - Software and service upgrades during the shutdown
  - (Re-)Validation of services for 2009 following changes

# Capacities and procurements

- The WLCG MB has agreed that with the information currently available to us and the present understanding of the accelerator schedule for 2009:
  - The amount of data gathered in 2009 is likely to be at least at the level originally planned, with pressure to run for as long a period as possible this may be close to or exceed the amount originally anticipated in 2008 + 2009 together
  - The original planning meant that the capacity to be installed in 2009 was still close to x2 with respect to 2008 as part of the initial ramp up of WLCG capacity
  - Many procurement and acceptance problems arose in 2008 which meant that the 2008 capacities were very late in being installed; there is a grave concern that such problems will continue with the 2009 procurements
  - The 2009 procurement processes should have been well advanced by the time of the LHC problem in September
- The WLCG MB thus does not regard the present situation as a reason to delay the 2009 procurements, and we urge the sites and funding agencies to proceed as planned. It is essential that adequate resources are available to support the first years of LHC data taking.

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## Upgrade plans

- Since several software upgrades were postponed in anticipation of LHC start-up. We propose that the following changes are addressed in the coming months:
  - See the following →

# Middleware planning

## FTS/SL4

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 This was postponed and will now be deployed. Has been tested extensively.

#### WN/SL5

- Already have a 1<sup>st</sup> installation at CERN, to be tested by experiments.
- Target available on the infrastructure in parallel to SL4

## glexec/SCAS

 Target - enabling of multi-user pilot jobs via glexec. SCAS currently in testing. Essential for analysis use cases with pilot jobs.

#### • CREAM

- Here we should be more agressive: LCG-CE problematic for analysis with many users)
- If the use case is direct submission with no proxy renewal, CREAM is basically ready. Proxy renewal should be fixed in the simplest possible way (reproduce the lcg-CE solution)
- WMS submission will come with ICE, timescale months
- Target maximum availability in parallel with lcg-CE

# iL CG

# Middleware Planning

#### **WMS**

- Status: Patched WMS (fixing issues with proxy delegation) to be deployed now
- ICE to submit to CREAM
  - Not required for certification of CREAM
  - ICE will be added in a subsequent update (but better before Feb. 2009)

### Multiple parallel versions of middleware available on the WN

- Status at the moment it is not easy to install or use multiple parallel versions of the middleware at a site. While the multi middleware versions and multi compiler support are not disruptive, they require some changes on the packaging side and a small adaptation on the user side.
- Target it seems advisable to introduce this relatively shortly after the bare bone WN on SL5.



# Middleware Planning

- Other anticipated upgrades:
  - Glue2 deploy in parallel provides better description of resources
- CE publishing
  - Better description of heterogeneous clusters
- gridftp2 patches
  - These are being back ported to VDT1.6; Important for dCache and FTS



## Re-validation of the service

- All experiments are continually running simulations, cosmics, specific tests (and have been since CCRC'08) at high workload levels – this will continue
- A full CCRC'09 in the same mode as 2008 is not regarded as useful
- But, we will perform specific tests/validations:
  - Service validation if software is changed/upgraded
  - Specific tests (e.g. throughput) to ensure that no problems have been introduced
  - Tests of functions not yet tested (e.g. Reprocessing/data recall at Tier 1s)
- Details of the test programme will be discussed and agreed in the workshop already planned for November