

FUTURE MEMORY REQUIREMENTS FOR BATCH JOBS ON UK TIER 1 CENTRE

The table below shows estimates of the memory requirements for batch jobs for experiments over the next 1-2 years. This information is to assist the planning of the 2009/2010 CPU procurement at the UK Tier 1 Centre.

Experiment/Project	Batch Job Memory	Comment
ALICE	2 GByte	Standard requirement.
BaBar	< 1 Gbyte	
H1	300 MByte	Virtual memory 1.3 GB (all on SL5).
LHCb	1.5 GByte	Virtual memory 3.0 GB (750 MB/1.5GB current).
ILC/SiD	1.5 GByte	Currently use 2 GB queue. At some point, expect to become severely I/O limited. Interested in having a queue for 2 GB across multi cores – using Java threading.
MICE	1 GByte	
MINOS	500 MByte	Don't have precise measurements, but use lcgpbs-grid500M queue.
NA48/NA62	1 GByte	
SuperNemo	300 MByte	Analysis jobs extrapolated to estimate of event size.
UKQCD	4-24 GByte	Not much use of single core jobs. Typically use MPI over few nodes with dual/quad core.