



Enabling Grids for E-scienceE

SA3

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www.eu-egee.org



People involved

- *Barry MacEvoy (installation), Janusz Martyniak (testing), (+David Colling).*

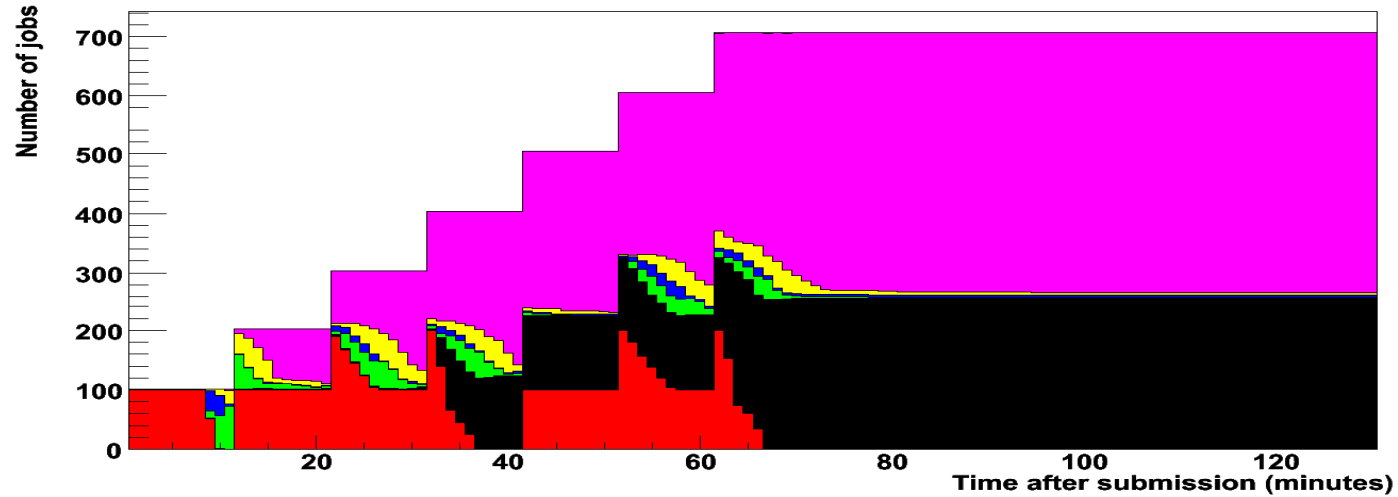
Testbed:

- Dual 2.8GHz PIV with 2GB RAM – Reasonable machines that can run RHE3 or RHE4
- Installation testing as well as throughput testing
- Submit jobs to the production service as we want to push so many jobs through (now as dteam)
- Jobs submitted in batches (10,100,1000) and monitored (typically) every minute.
- Machine load on the WMS + LB machines monitored by atop (improvement on top monitoring used previously).
- Monitoring of jobs and machines all synchronised and automatic
- Logs kept so more fine detailed diagnosis is possible.

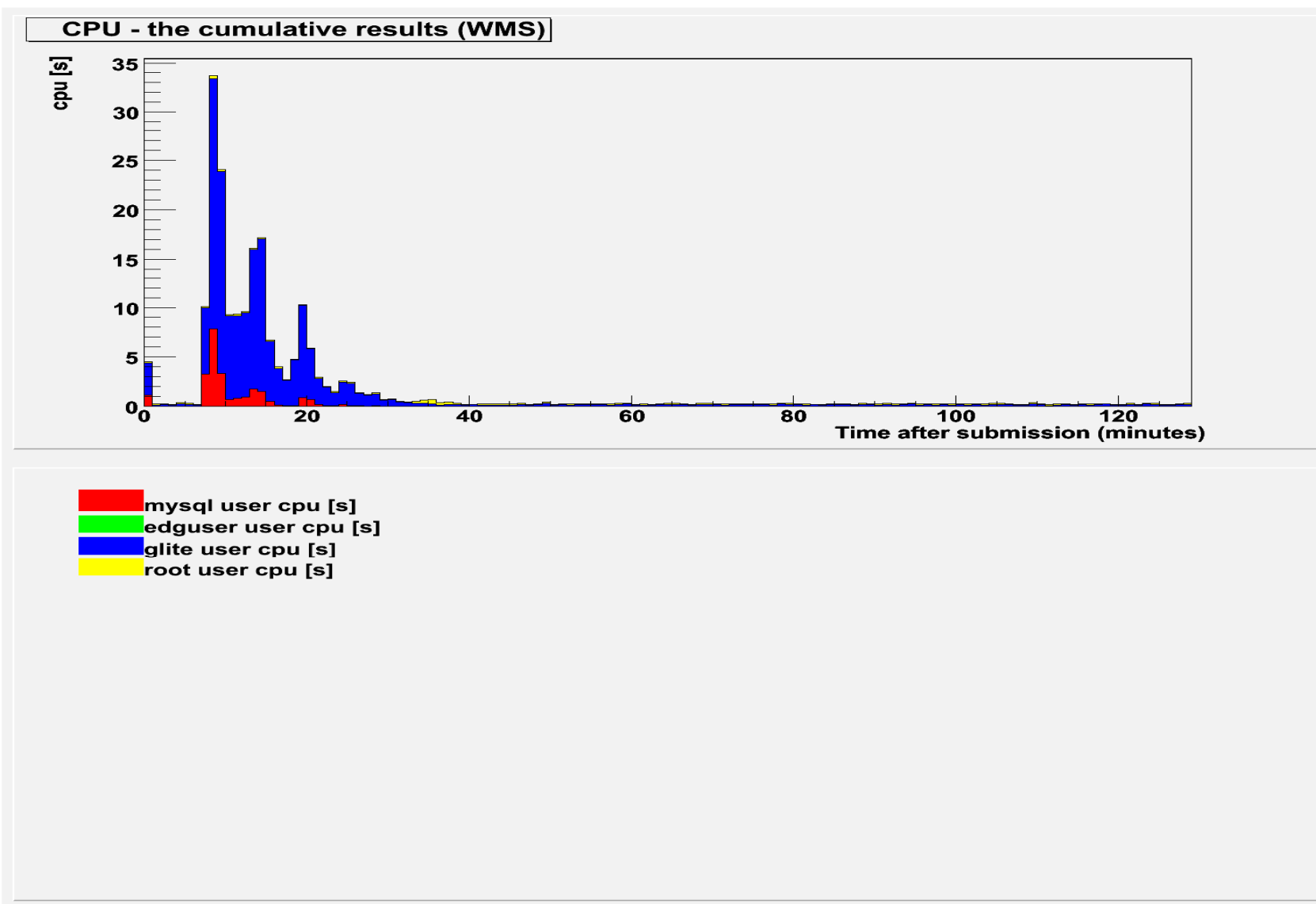
Currently trying to validate/certify SL4 version – some initial thoughts/comments:

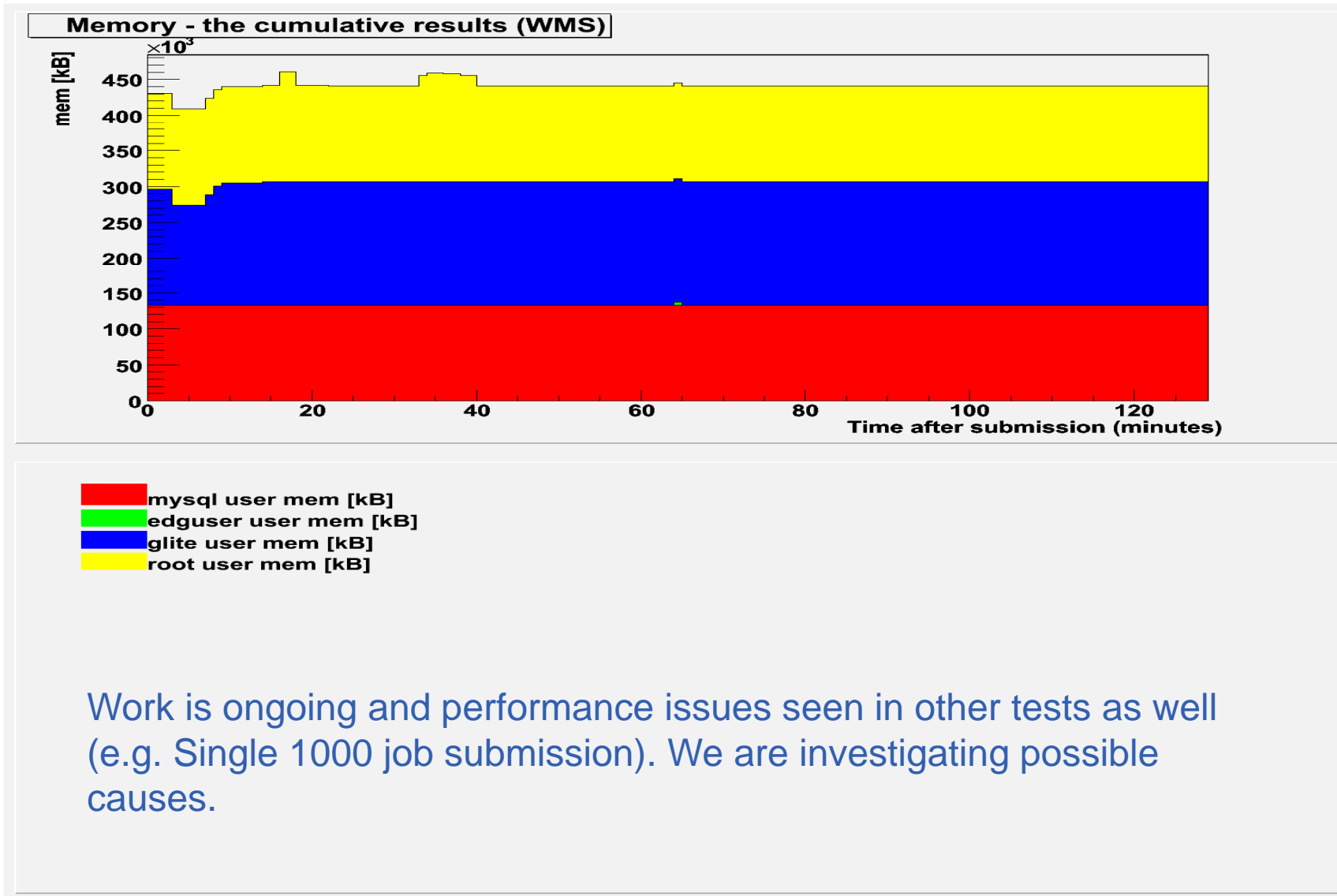
- **Gone back to having WMS and LB on a single machine.**
- **Installation extremely difficult on a standard RHE 4 release (actually made clear on the web pages only SL4 supported, but disappointing)**
- **Throughput testing is at an early phase for this patch but shows that it is not perfect and we are seeing problems and performance that is not as good as previous patch. These could all be configuration issues so investigating.**
- **As one example 7*100 jobs submission at 10 minute interval.**

the cumulative results



- Jobs in the waiting state
- Jobs in the submitted state
- Jobs in the scheduled state
- Jobs in the ready state
- Jobs in the running state
- Jobs Done (Success)
- Jobs Done (Failed)





SGE Porting Work Carried out by Keith Sephton

- **Current version undergoing certification by CESGA as part of official SGE support on LCG-CE**
- **Planned Enhancements:**
 - Replace use of “XML::Simple” module to remove requirement for external rpm package
 - Improve accuracy of job counts in more complex configurations with overlapping queues and locally submitted jobs

- **Initial version developed for use with glite-ce**
- **Needed to work around some bugs/deficiencies in SGE's qstat output**
- **Released to CESGA and LIP for testing & feedback, but glite-ce was dropped shortly after code was released**
- **Did not provide/use BLparser program**
 - BLparser was only used internally by BLAH scripts

- **Waiting for reference PBS version to stabilise before we can start work on SGE support:**
 - Advised to wait until new year for stable version of CREAM... in particular BLAH code is currently being revised
 - BLparser is queried directly by CREAM and is therefore no longer optional
 - BLparser may be awkward to implement for SGE as the default SGE logs don't include all relevant events

- **Preliminary support for handling requests for multi-processor jobs was included in BLAH implementation**
- **We plan to look at recently released code from TCD and verify if any changes are needed to deploy on SGE based clusters**

Reviewed DSA1.6