Preliminary performance results of EMI-2 release

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Outline

- Current test infrastucture

- Selection of test cases

- Description of test and tool used for tests

- The results

- Comparison of the results

Current ARC testing infrastructure

- Revision testing

- Functional testing

- Performance testing

- Recording test results and generating test reports

- Autodeploy installation

- http://arc-emi.grid.upjs.sk/tests.php

Why 1000 job test?

- simple relaization

- Test emulates all user actions to submit complex job (input files, output files, complilation of the code)

- The test case cover the functionality in regime when all hidden errors are acumulated and well detectable

The test results of 1000 job submission

Server rc1.grid.upjs.sk-clasic

Performance of job submissin
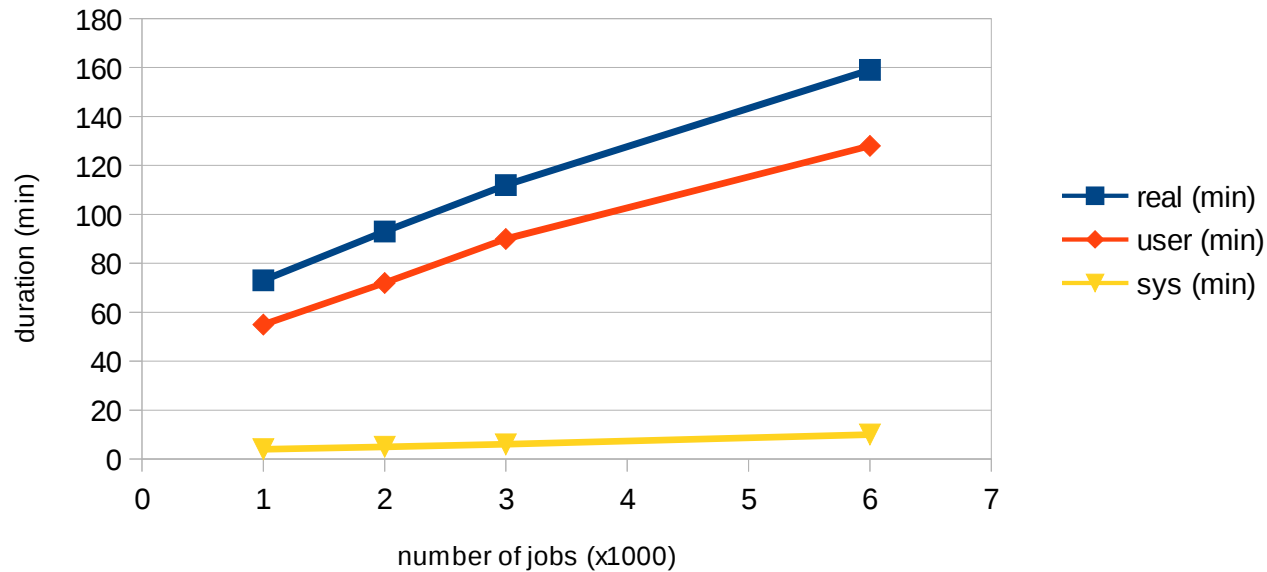
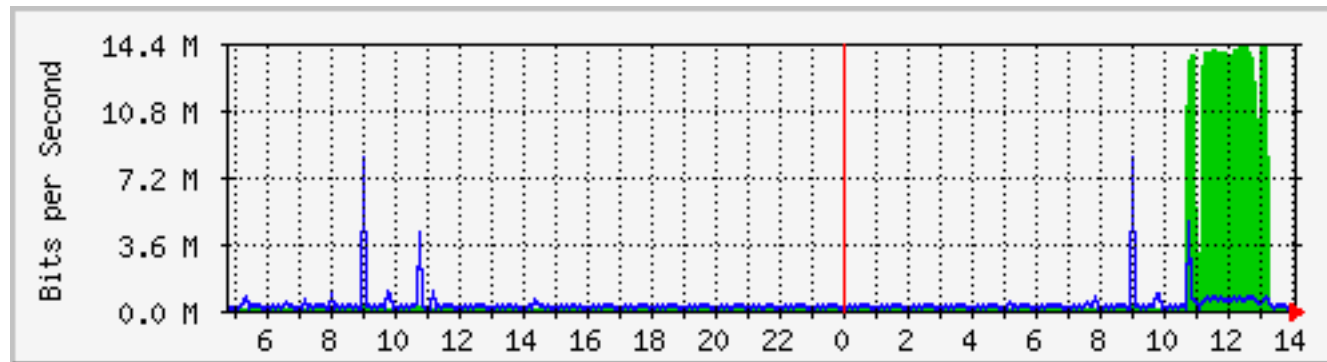Server pgs03.grid.upjs.sk (part of EMI testbed)
real 120 (min)
user 100 (min)
sys 5 (min)

1000 job test-cont.

Network traffic on the segment during 1000 job submission test

Comparison of the results for ARC CE (WS)

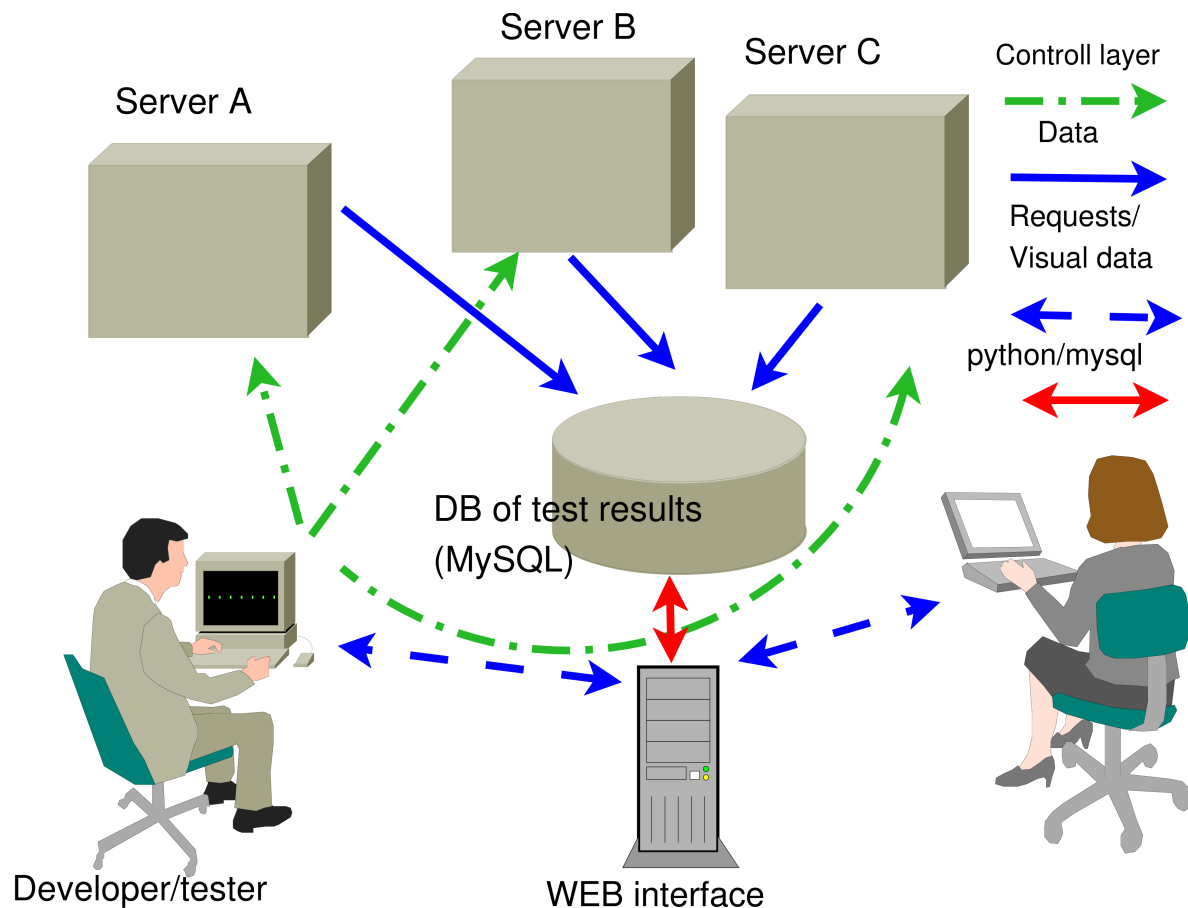| Time (minutes)	ARC 1.1.0	ARC 2.0.0
real	11	44
user	3	7
system	1	2

Testing of reliability of job submission

ARC CE configuration	ARC 1.1.0	ARC 2.0.0
classic	1	1
WS	1	0.8-0.85

Demonstration of tool for performace testing

- http://node1.grid.upjs.sk/performance1.php

Conclusions

- New performance and reliability issues was detected

- The performance of job submission to the dedicated server for ARC v. 2.0.0 seems to be lower than for ARC 1.1.0

- The reason of performance issue is not known

- We plan to perform more detail performance study for the most common test cases