

# Overview of Testing activities and status of the testbed

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- **Distributed testbed at the three sites**
- **Testing framework and strategy**
- **Current status of the testbed**
  - What is deployed now ?
- **Priorities and procedure for gLite deployment**

- **Three sites are part of the distributed testbed**
  - CERN, NIKHEF, RAL
- **Each site runs a binary compatible version of Red Hat Enterprise Linux**
  - CERN: SLC3
  - NIKHEF: CentOS 3.2
  - RAL: Scientific Linux

- **Testbed distributed across three sites, CERN, NIKHEF and RAL**
- **OS installation is now automatic at all sites**
  - CERN: quattor
  - NIKHEF, RAL: kickstart – might move to quattor depending on site priorities
- **Deployment of gLite components is via the deployment modules**
  - Only integration builds are installed
- **Quattor based installation**
  - Quattor templates containing rpms lists per gLite component are produced by integration for every integration build
  - Machine profiles are updated with new templates
    - Easy to change which machine a component is installed on
  - Machines are reinstalled
- **Kickstart based installation**
  - Machines are reinstalled using kickstart
  - Deployment modules are used to install rpms for a gLite component
- **Configuration done using post installation configuration scripts**
  - Provided by integration team

- **Test suites written using the xUnit framework**
  - PyUnit for python APIs and CLIs
  - JUnit test framework for Java
  - CPPUnit for C/C++
- **Unit testing is done by the developers**
  - Available in build for many components
- **QMTTest framework**
  - Provided and supported by the tools group and used in LCG
  - Deployed now on the testing tested
  - Used to manage the execution of all testsuites.
- **Other frameworks**
  - Also interested in the NMI framework
  - Not fully evaluated yet but can relook at it next year when we have more tests

- **Documentation**
  - No official gLite installation guide for all components
  - Instructions different for all components on scattered websites
  - Much information was missing or wrong
  - A lot of time was spent in understanding/debugging installation notes and understanding configuration of components
- **Savannah**
  - Cannot search bugs by submitter
  - How do I get statistics
    - How many bugs has Mario submitted ?
  - Duplicate or cross reference of bugs ?
- **SCM cycle**
  - Deploy only integration builds on testbed
  - Previously worked closely with developers debugging problems, testing patches
  - Only test integration builds now
  - All problems reported via savannah

# What is deployed on the testing testbed today ?

- **VOMS server run by NIKHEF**
  - EDG version on RH7.3
- **R-GMA**
  - Registry and Schema at RAL
  - Servlets at all sites
  - No replicated registry yet
- **SEs**
  - CERN: local Castor SRM on testbed and centrally managed Castor SRM
  - RAL: dCache SRM installed
- **gLite IO server deployed at the CERN and RAL**
  - Tested with Castor SRMs at CERN
  - Testing with dCache underway at RAL
- **gLite IO clients deployed at all three sites and tested**
  - Configured to use the central castor service at CERN
  - gLite IO test suite successfully run from all sites



- **WMS, CE, LB**
  - RPMS from latest integration build installed at CERN
  - Many differences and inconsistencies between what “works” on the developers testbed and what is release to testing via the integration process
  - Have not yet successfully deployed a working WMS system on the testbed using official gLite rpms and following available instructions
  - Top priority now
  - Many problems
    - #5525 – can’t locate condor sched on CE
  - Mario will report in detail on the status
- **User interface machines set up at all sites with clients installed**
  - VOMS, R-GMA, gLite IO, globus (vdt), WMS, LB

# EGEE JRA-1 testing testbed

CERN



lxb1409.cern.ch



lxb2030.cern.ch



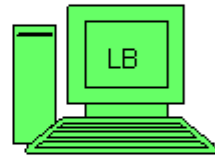
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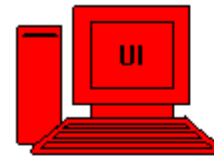


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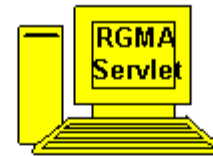


gridftp05.cern.ch

NIKHEF



tbn08.nikhef.nl

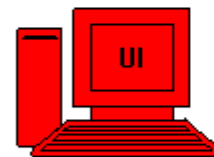


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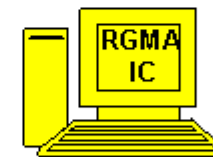


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RAL



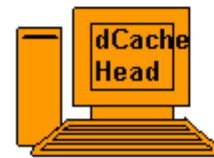
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# What are we planning to deploy next and how?

- **RAL and NIKHEF are installing SRMs locally.**
  - RAL: dCache SRM
  - NIKHEF: lightweight SRM with a gridftp server or dCache
- **Install a gLite IO server locally at all sites and use with the local SRM.**
- **Once the WMS, CE and LB have been successfully deployed at CERN and a basic job submit works:**
  - All sites will deploy 1 CE and 1 WN locally
  - 1 WMS will be deployed at CERN
  - 1 LB will be deployed at either RAL or NIKHEF.
    - Important to test the WMS and LB for 1 VO at different sites.
  - Need to set up a fake BDII for testing
- **For all gLite components, initial validation of installation and configuration is done at CERN first.**
  - e.g. will not deploy the CE/WN at RAL and NIKHEF until we can first successfully deploy them at CERN

- **Will present the status and plans for testing**
  - gLite IO
  - Data catalogues
  - FPS
  - WMS, CE, LB
  - R-GMA
  - Security
- **What is missing**
  - AliEn components
  - Package Manager
  - Data scheduler
  - Not an omission, these are not the top priority and we haven't had time yet