# egee

Enabling Grids for E-sciencE

# gLite Test
# and Certification Effort

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**Enabling Grids for E-sciencE**

- **Description of the testing process**
  - The testing stages
  - Who does what
  - Physical location of test beds

- **Organisation of the testing effort**

- **Goals, Priorities and Timelines**

- **Current status**

JRA1 Deveopment test bed
*(gLite Prototype)*

ARDA testing

JRA1 Integration team
• *Weekly releases*

**Release of integration build (Friday)**

**+ 1 week**
**(includes updates to release notes + bug fixes)**

JRA1 Testing test bed

• Deployment testing
• Functional testing

Certification test bed

Pre-production service

Production service

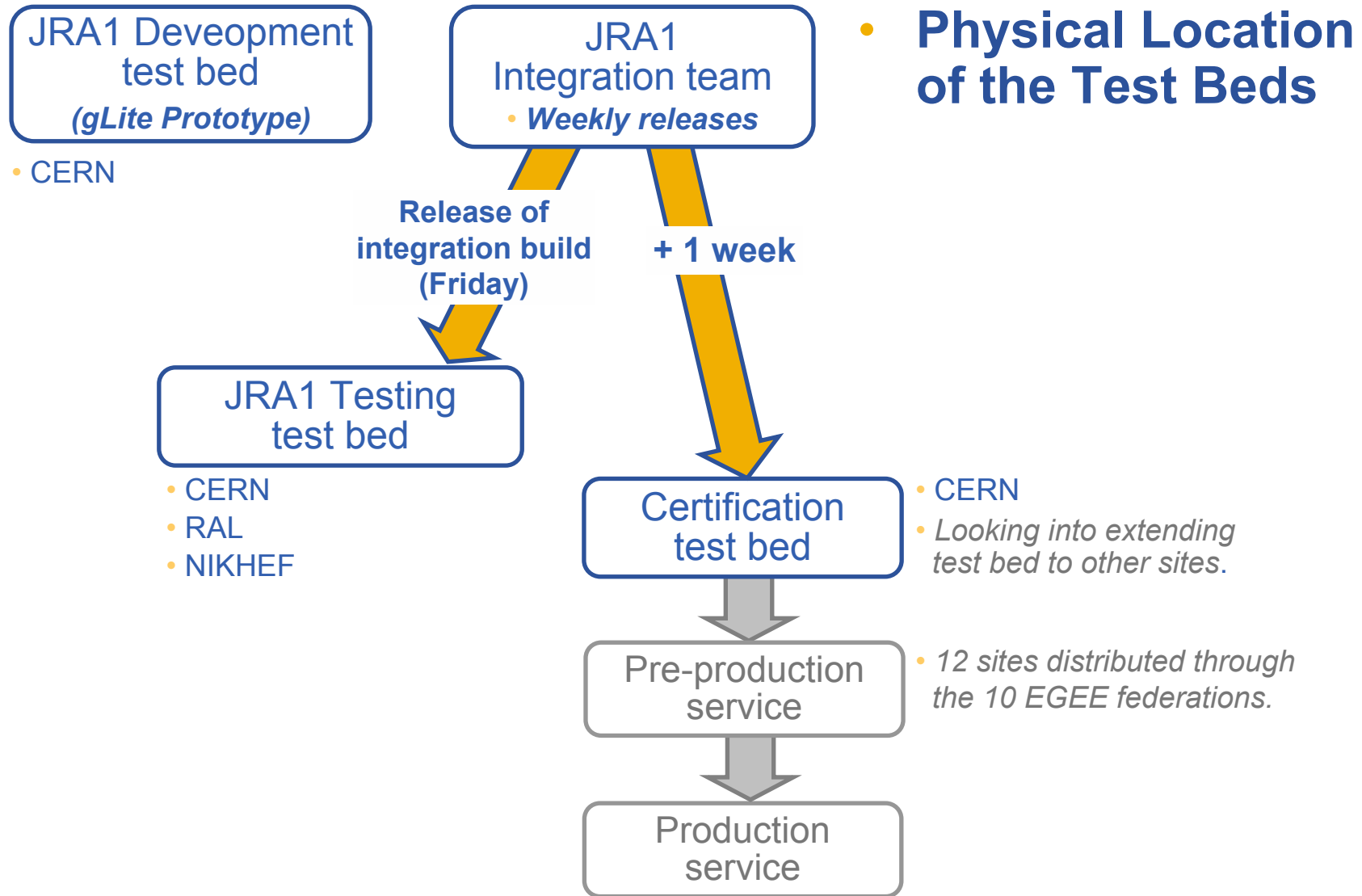- **The Testing Stages**

- **Who Does What**

• Deployment testing
  (documentation, installation, configuration)
• *Functional testing*
• *Stress/Load testing*
• *Testing against "real" applications*

• *Open to all registered users*
• *Not a formal test environment*

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**JRA1 Deveopment test bed** *(gLite Prototype)*
- CERN

**JRA1 Integration team**
- *Weekly releases*

**Release of integration build (Friday)**

**+ 1 week**

**JRA1 Testing test bed**
- CERN
- RAL
- NIKHEF

- **Physical Location of the Test Beds**

**Certification test bed**
- CERN
- *Looking into extending test bed to other sites.*

**Pre-production service**
- *12 sites distributed through the 10 EGEE federations.*

**Production service**

- **Since mid February JRA1, SA1, NA4 and ARDA have been co-ordinated in their testing efforts.**

- **Daily morning meeting**
  - status briefings from each group
  - Discussions on "hot" topics
  - minutes at
    http://egee-docs.web.cern.ch/egee-docs/list.php?dir=.\Testing\Meeting%20minutes\&

- **Weekly status reports**
  - http://egee-docs.web.cern.ch/egee-docs/list.php?dir=.\Testing\Testing%20Reports\&

- **#1 Goal:**

  **To have a working version of gLite on the pre-production service by the end of March 2005!**

  – The pre-production service will then be used to compare gLite to LCG-2 and identify any areas where improvements need to be made to the gLite middleware.

- **Priorities**

  1) To port the current LCG-2 certification test suite to gLite (by 23 March)
     - The test cases will be as close as possible to those in the LCG-2 certification test suite.
     - Some of the tests need to be re-written.
     - JRA1, SA1 and NA4 are all contributing to this effort.

  2) Create a working gLite cluster against which tests can be written and tested (by 11 March).

  3) To port the Site Functional Test suite to work with gLite (11 March).
     - SFT is a set of tests, run on a daily basis on the LCG production service, that are used to monitor the state of middleware services.

- **In parallel, testing will continue on the JRA1 testing test bed and on the Certification test bed.**

- **Functional tests will start to be written for VOMS and R-GMA _if_ people are made available for this task.**

  - There are currently no functional tests available to cover these areas on the JRA1 testing test bed.

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- **gLite code is frozen except for File Transfer Service and File Placement Service.**

- **UI is not yet released to Certification**
  - This is expected in today's release.
  - Currently using afs based gLite UI.

- **FTS and FPS is expected to be stable within 1-2 weeks.**

- **Integration builds containing bug fixes are released weekly.**

- **Need to write 14 tests for Certification test suite.**
  - 5 of these test the FTS/FPS.

- **Need to review priority of bugs to escalate those which will cause the certification tests to fail.**
  - We would anyway expect these to be high priority bugs.

- **Weekly functional test reports produced.**

- **JRA1 testing team have a working gLite test bed (build I20050225).**

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- **Certification test team do not yet have working gLite service (build I20050228)**
  - As of Friday the jobs were failing in workload management (proxy not passed from WMS to WN). This is under investigation with JRA1.

- **There is currently no gLite User Guide (due end February)**

- **Site configuration model is good and meets SA1 requirements. However, drawbacks were introduced with build I20050218:**
  - Large file: flat file of about 2000 lines to configure 10 services (scales with the number of WNs)
  - Logical separation of User, Advanced, and System level parameters (strong point in the previous configuration model) has been broken.
  - Concurrent editing of the site configuration file is difficult.
  - File is published on an unprotected public web server.
  - These points are being discussed with the JRA1 Integration team.

- **Deployment testing (installation and configuration) of last release to Certification showed up no significant bugs in this area.**

- **NA4 have been writing tests for workload management.**

  – These tests might be re-used for the Certification test suite.

- **NA4 testers received 2 day informal "training" last week, with JRA1 and ARDA.**

  – Covered gLite

- **NA4 will now start writing some of the data management tests needed for the certification test suite.**

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- **ARDA testers have raised questions about the relative performance of LCG File Catalogue and the Fireman file catalogue.**

  – Further testing is being undertaken to obtain data which will give a clear and fair comparison of the services.

- **ARDA testers have also seen a job failure rate of around 10% for "hello world" jobs which are submitted to empty queues (in push mode).**

  – This is on the JRA1 development test bed (gLite Prototype). Certification team will carry out similar testing.

- **In addition, ARDA team saw an average job start up time of 9 minutes for the above jobs.**