



Enabling Grids for E-scienceE

# gLite Test and Certification Effort

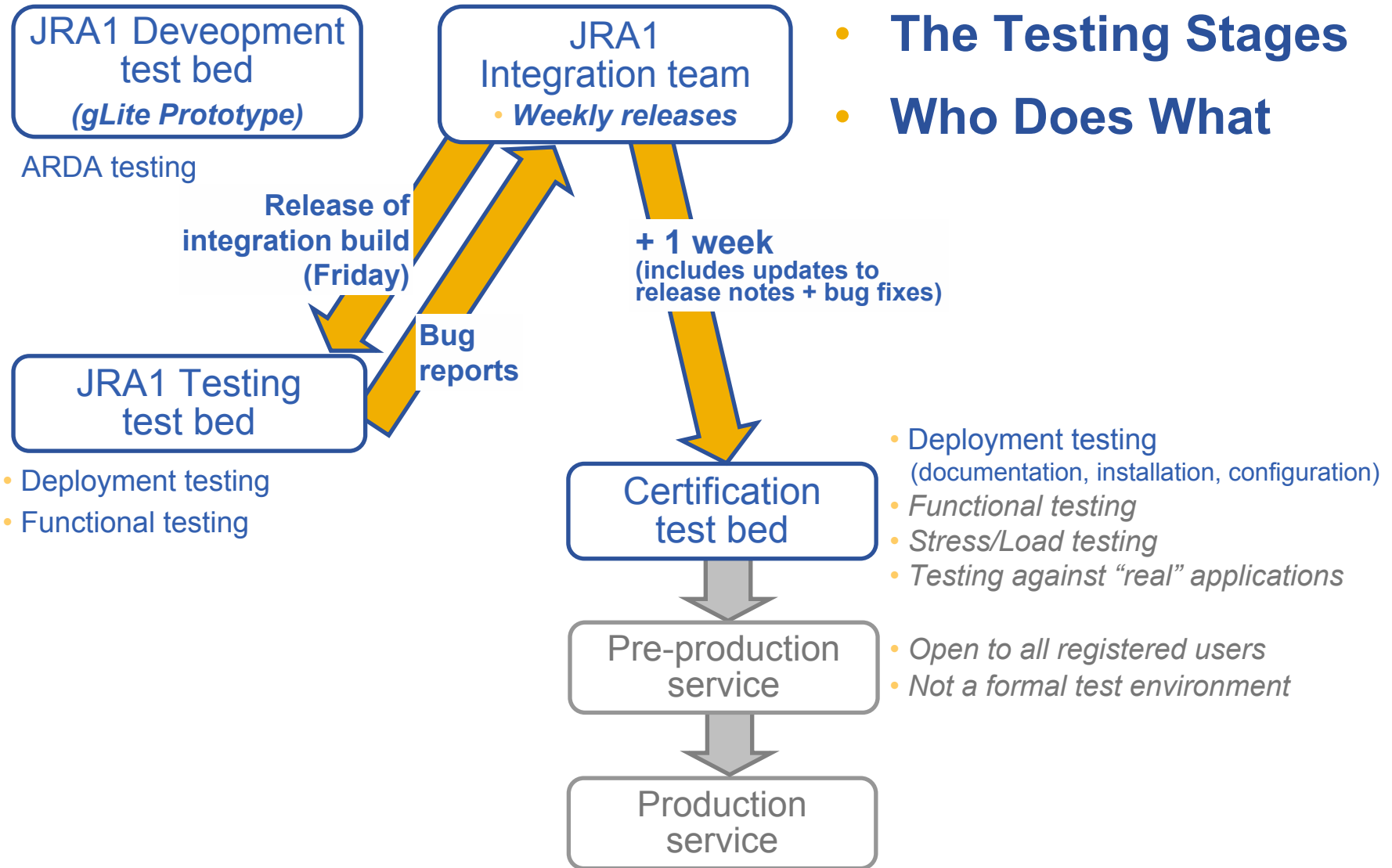
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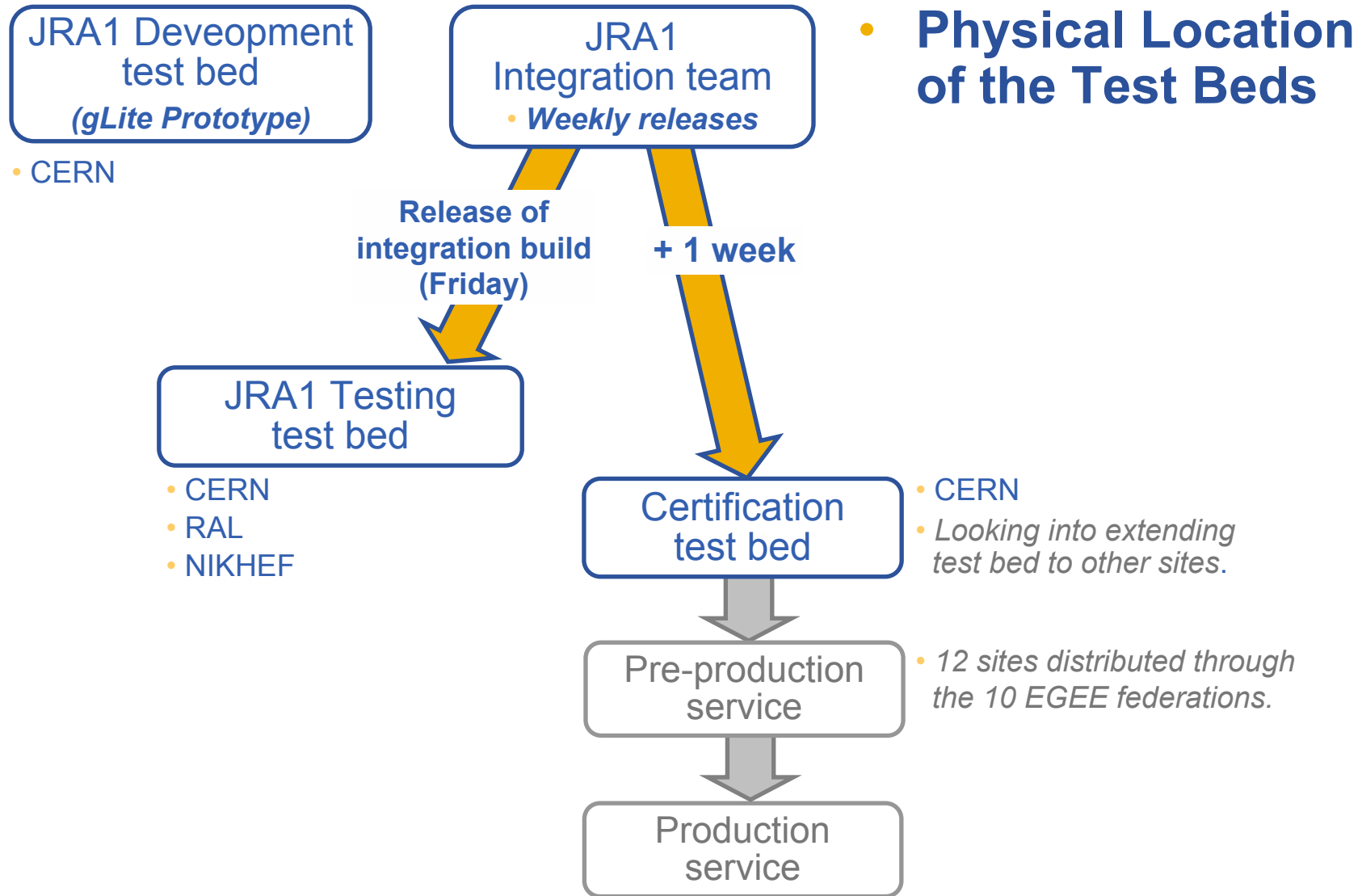


- **Description of the testing process**
  - The testing stages
  - Who does what
  - Physical location of test beds
- **Organisation of the testing effort**
- **Goals, Priorities and Timelines**
- **Current status**

# Description of the Testing Process (1)



- The Testing Stages
- Who Does What



- **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) Continue testing on the JRA1 test bed and Certification.
  - 3) Create a working gLite cluster against which tests can be written and tested (by 11 March).
  - 4) 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.

- **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.

- A basic set of functional test suites developed (gLite I/O, Fireman Catalog, WMS). Included in the releases.
- Weekly releases from integration deployed in the testbed (all services, ~20 machines). Installation and configuration tested.
- With each release deployed, run existing functional test suites (gLite I/O, Fireman Catalog, WMS).
- Report found bugs, write weekly report with results. See:
  - WMS: <https://edms.cern.ch/document/567478>
  - Fireman catalog: <https://edms.cern.ch/document/568048>
  - gLite I/O: <https://edms.cern.ch/document/571060>
- Some efforts reassigned to port LCG certification test suite.
- Fireman catalog functional test suite continues to be evolved with new tests
- 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



# Current Status (Certification)

- **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.**

- **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.**