## **Product Integration (testing)**



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### outline



EMI "integration" products

• Integration (inter-component) tests

- Howto move forward?
  - —Long list of questions

### Integration tasks of DNA1.3.2



- DNA1.3.2 product table already lists "integration tasks"
- These are products that created via "some integration" activity
- No real ownership
- The list:
  - -EMI-UI
  - -EMI-WN
  - —Glite-yaim-core
  - Torque server config
  - –Torque wn config

## Testing in EMI certification (1/2)



- Product development (RfC)
  - Development of test suit
  - -Unit tests
  - -Product Team responsibility
- "Pre-certification" testing
  - -Follows a test plan
  - Various tests including deployment tests are executed on "in-house" resources
  - -Some tests are run on the testbed
  - –Concluded with a test report and "certified" state
  - Product Team responsibility

# Testing in EMI certification (2/2)



- Certified product gets rolled-out on the testbed
  - –SA2 Testbed task deploys the "release candidate" product
    - how do you know that something is a release candidate?
  - -Then what?

#### Questions:

- –Do we know how many/which bugs were caught during testing?
  - Could be a useful metric to measure testing efficiency
- –What happens if bugs are discovered during testing?
  - Certification process?
  - Available fixes?

### Integration tests



### Excerpt from the Testing policy

- Type: Mandatory
- The execution of **inter-component tests** is triggered by the release manager and relies on the use of the <u>EMI testbed</u> [R12]. Inter-component tests are the final stage before going to Production and they are done on certified software products. The exact context and procedure to run and monitor the result of these tests still needs to be understood.

### Integration tests



- Who defines those?
- Who writes those?
  - –Will every integration test turned into a Nagios probe?
- Integration tests vs. testbed and certification process:
  - -When are the integration tests run?
  - –Who runs those? (Nagios framework?)
  - –What happens to the test results (test report update)?
  - -What is the role of the testbed (team)?
  - -How does integration testing affect certification?

## Integration team???



- Mandate:
  - -Update testing policy, define workflow
  - Definition and prioritization of inter-component (multiproduct) tests
  - Execution of the tests (goal to automate things)
    - Including producing lightweight reports
  - -Composed of: ???
    - Testers from key PTs
    - Active contribution is required
  - -Lead by: ???
    - Deputy: Danilo Dongiovanni