

# Certification and Testing in the Product Team era

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- Changes in the certification process
  - opportunities and issues
- Using the shared Certification Testbed (CTB)
- Automation during Certification & Testing

- **Certification will be done inside a Product Team**
- **Opportunities:**
  - Specialized teams of testers
  - Test Frameworks can target Service (product) specific requirements
- **Issues:**
  - Decentralisation needs coordination (using shared testbed)
  - Developers also performing testing / certification
    - Bias? Independent audit? - Separate roles *and environment*
  - Define a common acceptance criteria

- **Consider 2 products, 2 teams:**
- **'weak' dependencies:**
  - Product Team X (PTx) needs production version of Y (by PTy)
  - Shared testbed – See next presentation by Louis
    - Lcg-\* against all production SE types.
- **'strong' dependencies:**
  - PTx needs to install Y and run Y's test suite
  - Internal release between product teams
    - New dCache clients given to UI/WN/VOBOX as an internal release
    - But dCache server has to be tested with lcg-\* as above...
- **Mostly with split client/server products (client integrated into other product)**
  - New dCache server: Who tests that FTS Submissions work?

- (see next talk)
- **All services available?**
  - downtime agreements
- **Access to resources**
  - Can test users save files? - agreements on configurations
- **Product teams support their donated service**
  - Server-side logs available for analysis
- **Configuration changes for special senario testing**
  - lcg-\* fails on a certain dCache nameserver config
  - Testing without disrupting other users of testbed.

- **Current process**

- Install vanilla machine
- Install production release, Configure, Check.
- Install patch (-es in special circumstances)
- Reconfigure / Restart services (if needed)
- Test bugs
  - Update bug status (on original arch / platform)
- Test functionality
  - Regression tests
  - New functionality
- Write up
- Close tasks

- **Transition process**
  - Base install + sanity check automated
    - Virtualisation routine
  - Simplified tools to install patch(es)
  - Automated testing
    - Central repository of tests
  - Automated reporting
    - Wikis / savannah take 'simple' markup – cut n paste files

- **External packages (CA)**
- **YAIM site-info.def**
- **pre/post configuration scripts**
- **(Test) user certificates**
- **'custom' BDII available**



- **Minor**
  - API for deploying machines
  - Updating each component
  - Dynamic generation of site-info.def
- **Major**
  - Multi-node tests – client/server (Lorenzo talk)
- **Unavoidable**
  - MUST have regression tests where relevant (~50% of bugs)
- **Common output wrapper**
  - Use OAT tools?

- **Certification within product teams**
  - Form alliances / partnerships with certifiers
  - Support for new certifiers
  - Shared testbed components provided by PTs
- **Automation**
  - Don't reinvent the wheel (again!)
  - Wrap output