Status of components on Experimental Services

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Acceptance criteria for the WMS/LB

- **Before being taken in certification:**
  - 5 days consecutive run without intervention
  - 10K jobs/day handled by a single instance of the WMS
  - number of jobs in non-final state < 5%
  - Proxy renewal must work at the 98% level

- **Note that the LB should be installed on a separate machine (that can serve multiple WMS instances at the same time)**

WMS/LB status

- **Easter:**
  - run one week at 15000 jobs/day without manual intervention with 0.3% of jobs in non-final state
- **Stress tests:**
  - almost 27000 jobs/day (only one day running)
- **Check-point patches produced:**
    - #1116 on 02/04/07
    - #1140 on 20/04/07
    - #1167 on 15/05/07
    - #1203 on 21/06/07
  - only patch #1167 is being certified (but not released to PPS yet)
- **Issue: all that is built in the gLite 3.0 environment**
  - We started testing the new RPMs built with ETICS for SL4
    - care has to be paid since Condor is built with gcc 3.2 and requires compatibility libraries. Under test now.

Acceptance criteria for the CE

- **Before being taken in certification:**
  - 5000 simultaneous jobs per CE node
  - Job failure rates due to CE in normal operation: < 0.5%
  - Job failures due to restart of CE services or CE reboot <0.5%.
  - For 2007 dress rehearsals
    - 50 *user/role/submission_node* combinations (Condor_C instances) per CE node
    - 5 days unattended running with performance on day 5 equivalent to that on day 1
  - In the longer term
    - 1 CE node should support an unlimited number of user/role/submission node combinations, from at least 20 VOs
      - *On the gLiteCE requires user switching done by **glexec in blah***
    - 1 month unattended running without performance degradation

CE status and short term

- **The LCG-CE is the only production Computing Element**
  - Runs using GT2 on SL3 platforms only
  - If SL4 is needed the installation should be done in a Virtual Machine
- **Tests of the gLiteCE (using GT2 on SL3) at CERN**
  - Condor 6.8.4 + work around from Condor (~ 1 month ago)
    - 6000 jobs/day with ~98% success rate
    - up to ~4000 jobs simultaneously on the CE
  - Tests of the new BLAH that uses glexec to change the identity being run now
    - Smaller number of Condor-C instances running. So far so good...
- **Tests of CREAM (using GT2 on SL3)**
  - A small test site deployed in Padova; another one identical to the one used for the gLiteCE tests was planned at CERN
  - Since it is not considered acceptable that INFN doesn't have a facility for CE testing, a new site is being deployed at CNAF

CE medium term

- **The gLiteCE and CREAM versions supposed to go in production are those built on SL4**
  - The same code base of those being tested now (gLite 3.1) but:
    - will depend on VDT 1.6.0 (GT4)
    - are produced by ETICS
- **Everything builds but more work also on the packaging is needed. Hopefully they will be ready during the summer**
  - Will follow the same path of UI and WN but should be faster
  - First deployment tests for CREAM have been done
    - A few dependency/configuration issues identified and being fixed
- **Then would need to stress-test them**
- **Another option would be to deploy the SL3 version of the gLiteCE**
  - If the acceptance criteria are met and certification proceeds fast enough

CE longer term

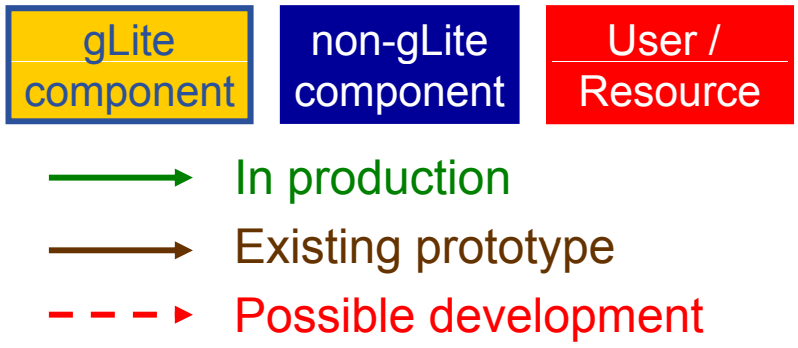
- **The issue in the longer term is the support of all the needed interfaces**

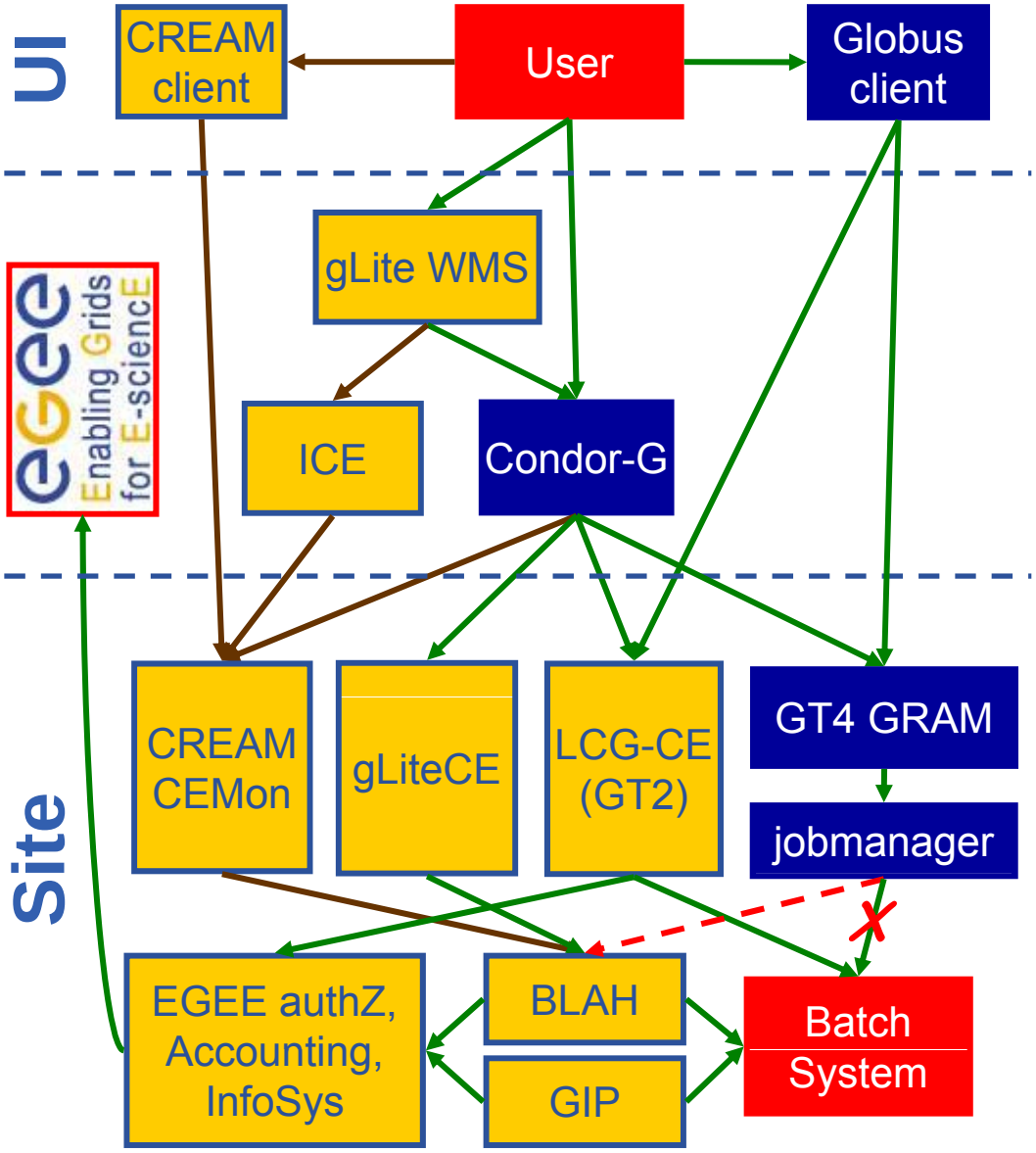
➔ **LCG-CE (GT2 GRAM)**
- Condor-G and Globus client
- Will disappear

➔ **gLite-CE (Condor-C+GSI)**
- Condor

➔ **CREAM (WS-I)**
- Condor-G, ICE and Cream client

- **Support of Globus client:**
  - GT4 → BLAH submissions?





Issue: internal testing

- **The Experimental Services improved the quality of the JRA1 services significantly. Question:**
  - Could a better internal testing in JRA1 have improved the situation without the need of Experimental Services?
  - ➔Not with the current level of effort. INFN is doing internal functionality testing on ~25 machines used to build and test on different platforms and configurations for all services developed
    - Testing of the CE at the scale of experimental services would require ~25 machines (configured with virtual CPUs so that there are hundreds of batch slots) + UI, WMS, LB.
    - For comparison the certification testbed has 100 machines and requires 8.8 FTEs (from the EGEE-II proposal) to maintain it.
  - ➔Use cases would be missing: many issues were found only with real use cases from the experiments
- **Don’t forget that resources for integration and certification are in SA3...**

Next steps

- **We cannot afford more delays on CREAM**
  - It was exposed to users on the preview testbed since the beginning and it was found usable at that scale
  - More aggressive tests are being done on a still too small site
  - INFN has now agreed to provide the resources for a CREAM CE for tests at the scale of the acceptance tests
- **Then we need SA3 to start considering it for certification**
- **Note that BLAH is common to CREAM and gLiteCE so all tests done on the gLiteCE are implicitly testing also part of CREAM**
- **CREAM is a new product: we need to foresee enough time to make it production quality**
- **The gLiteCE is still needed to fill the gap**