# Summary on the IPv6 testing activities

**3rd joint EGEE/ETICS/EUChinaGRID meeting on IPv6**
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Mario Reale
GARR mario.reale@garr.it
EGEE SA2 / EuChinaGRID WP2

# Outlook

- Steps forward since last meeting (Lyon, april 17 ) with respect to
  - Status of testbed
  - ETICS-based job submission infrastructure
  - Testing achievements
- Current Issues
- A few requests for the future

Work carried out jointly with **Xavier** and **Marian**

# Major changes ( I am aware of - ☺ ) since Lyon(17 april 07)

- Since last meeting, a couple of new major ETICS releases. Currently running 1.1.0-1
  - etics job status command advertised ☺
- The IPv6 plug-in is now fully available and an IPv6 metric is visible on the ETICS build reports ! ☺
- The NMI pool extended to include IPv6 nodes ☺
- Official endorsing from gLite SA3 of an IPv6 compliant version if BD-II ☺

# Current Status of IPv6 resources

- We've **added 3 IPv6-capable nodes** to the ETICS pools (dual stack nodes)
  - 2 nodes in the pre-production pool
    - quarks.paris.urec.cnrs.fr
    - etics-4.dir.garr.it
  - 1 node in the production pool
    - dev2-4.dir.garr.it
- Need to be dual stack to be able to join the Condor pool
- We can now therefore access IPv6 from the CERN-submitted jobs (despite no IPv6 connectivity at CERN)

# Job Submission

- Currently jobs are submitted:
  - On the pre-prod pool from **lxb1110.cern.ch** manually using the *NMI client*
  - On the production pool using the *ETICS client* (wherever installed) or the *Web Application*

# NMI job submission

- User account on lxb1110.cern.ch
- Use the command

  nmi-submit  nmi-file

- nmi-file contains statements like this:
  - append_requirements = ( host_network_stack =?= "IPv6" ) ++job_network_stack = "IPv6"
  - append_requirements = (Machine =?= "etics-4.dir.garr.it")

# ETICS client job submission

- etics-test ... --remote-platforms slc4_ia32_gcc346 --remote-requirements  client_req_'append_requirements=( host_network_stack =?= "IPv6" )',client_req_'++job_network_stack = "IPv6"'  “gLite IPv6 compliance”

# Testing Achievements

- Reproduced the

  "*Hello NAT-PT BD-II Paris*" job from both the prod pool and the pre-prod pool:

  – An NMI job queries the top level BD-II running under IPv6 in UREC via the NAT-PT gateway from an IPv4 Condor pool node.
    - minor issue with ldapsearch

# Testing Achievements

- Performed the match-making test (Marteen's suggested test) using the GARR WMS node and the UREC BD-II node running IPv6 (via NAT-PT)
  - Configured the WMS to point to the UREC BD-II
  - Executed a glite-job-list-match helloworld.jdl
    - Checked all visible resources for the EGEE VO:
      - Success. ☺

# Testing Achievements

- IPv6 match making:
  - Currently able to target the IPv6 nodes on the pre-production and the production pools by adding the ClassAd reqs to the NMI submit script and in the CLI command respectively

# gLite UI installation

- UI tarball installation: instructions from

https://twiki.cern.ch/twiki/bin/view/LCG/TarUIInstall

- Locally successful
  - Needs to be tested

- Needs to be deployed in a Job
  - Still to be done ! ☹

# gLite UI installation

- There’s a few available scripts to
  - Install and configure the  UI
  - Generate an UI tarball to be deployed

  On CVS:

  org.glite.testsuites.ui-installer

  org.glite.testsuites.ipv6

# Testing achievements

- **Regression test** performed
  - compare LDAP queries to the top level BDII in Paris under IPv4 and IPv6

- See Xavier’s email from yesterday evening ☺

# Current Issues

- No mean to target the IPv6 nodes using the Web Application
- There's not ETICS web service available on the pre-prod pool (minor issue)
- Reqs to be appended to target nodes a bit long ( minor issue) [ =?= , == , … ]
- Getting output from the web still the only option ? (no command to retrieve things locally ? [a la *glite-job-output* ])
- A bit difficicult to understand what's going on if a job keeps staying in "Running"
  - I tried unsuccesfully nmi-rm

# Requests for the future

- Have an IPv6 flag available to targed the IPv6 nodes from the Web Application
- Getting a more straighforward syntax to target IPv6 via nmi-submit  (possibly)
- Standardize and daily exploit UI installation via job
  - What about the ETICS deployment tests of gLite deployment modules ?
- Have co-scheduling available and explained to testing users