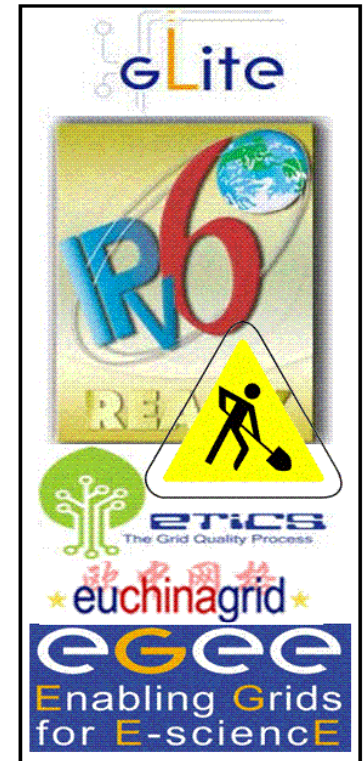


IPv6 testing report and planning

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*Fourth joint ETICS, EGEE, EUCHINAGRID meeting
on IPv6
CERN, Feb 19, 2008*



- **Testbed**
- **Testing report so far and achievements in the last year**
- **Plans and issues for the future**

- **Although we (EGEE SA2) have a limited testbed available, all relevant features are there:**
 - IPv6/IPv4 capable (IPv4/6-only or Dual stack)
 - Extended on the WAN (3 sites: CERN, GARR, UREC)
 - Normally depolying latest gLite release + updates/patches
 - All relevant Workload management modules
 - Some Data Management and InfoSys modules
 - VOMS server supporting VO=(egee, egtest, euchina)
 - 2 NAT-PT gateway routers available
 - *Static protocol translation IPv4/IPv6 to carry out specific C/S studies*

- **UREC, GARR, CERN**
 - 3 IPv6-enabled (dual stack) nodes in the ETICS Metronome production pool

- **Available gLite deployment modules**
 - BD-II (top, site)
 - gLite - WMS
 - CE
 - WN1-2-3
 - RGMA
 - gLite-CE
 - VOMS
 - UI

- **VMware based**
- **HP ProLiant DL 380 XEON**
- **6 GB RAM**
- **2 TB HD**



- **The testbed is right now not really operational**
- **SLC 3 support finished**
 - All nodes being upgraded to SLC4
 - Awaiting phase for gL 3.1 a bit *stretched in time*
 - gL 3.1 profiles already available
- **Installations in progress, just started:**
 - LFC (provided by David Smith)
 - DPM “ “
 - All available gL 3.1 profiles

- **Exactly 1 year ago all of us started a joint collaboration between ETICS, EUChinaGRID and EGEE on IPv6**
 - We have set up our infrastructure
 - Condor metronome installations, updates
 - Installed all testbed nodes
 - Set up NAT-PT routers
 - Started the “gLite IPv6 compliance” test ETICS project (gLite-IPv6)
 - Demonstrated the proof-of-concept
 - *An ETICS job running on the Metronome nodes in Rome and Paris querying an IPv6-ported BD-II server in Paris using NAT-PT*
 - -Other similar tests followed
 - We have enabled the IPv6 quality metrics in ETICS
 - Integrated it in the gLite build system
 - Using a basic IPv6 CodeChecker provided by EuChina
 - Available on demand

- **We have ported a flagship component to IPv6**
 - BD-II
 - And have it inserted in the TO DO LIST for BD-II
- **We have defined an IPv6 testing methodology for the gLite community**
- **We have started opinion-making and IPv6 evangelization within the gLite/EGEE community**
- **We have organized the first IPv6 tutorial for gLite developers (7 attendees, Rome, January the 16th 08)**
 - Got positive feedback on the outcome
- **We have done a first assessment of the gLite compliance of all gLite external components**
- **Defined 2 limits scenarios :**
 - Full ETICS control (full deployments) - External testbed

- **Complete the deployment of all testbed nodes to both SLC4 and gLite 3.1**
- **Testing of the IPv6 compliance of gridFTP on the testbed node**
 - 2 SLC4 nodes in the ETICS metronome pool already installed
- **Finalize (take a second, deeper survey) the assessment of the external components**
- **We just started deploying the IPv6 ported versions of LFC and DPM.**
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- **Produce a full report in the testing of DPM and LFC**
- **Finalize and report on the gridFTP tests (globus 4)**
- **Get the whole testbed back in place**
- **Plan the next deployments and carry out them**
- **Exploit the ETICS automatic deployment features of etics**
 - currently in place and available
- **Improve the codechecker to take into account the pre-compiler macros**
 - #IF DEF

- **1. Actual , gloabal project commitment on IPv6**
 - My question is : will ever IPv6 compliance get into certification ?
- **2. gLite re-structuring in progress**
- **3. Manpower issues ?**
 - Sometimes hard to “keep the pace”
 - A bit spread in location and across 3 projects
- **4. Coordination with JRA-1 and SA-3**