



Enabling Grids for E-science

gLite IPv6 compliance project tests

Further evolution of the ETICS-based IPv6 tests

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www.eu-egee.org



Information Society
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- **Content**
 - Current testbed
 - Testing activity so far
 - Next steps

- **3 sites : UREC, GARR, CERN(ETICS production)**

- **UREC**

- 2 nodes
- BD-II Top Level
- IP : NAT-PT / dual stack / IPv6 only / IPv4 only



- **GARR**

- 10 nodes (VMware, 8 SCL 3.0.8, 2 SLC 4.0.4)
- UI,WMS,LB,CE,WN, RGMA, BDII, SE, VOMS
- IP: dual stack / IPv6 only / IPv4 only
- NAT-PT being set up at natpt.dir.garr.it
- There's a new **SLC 4 UI** working at dev-4.dir.garr.it



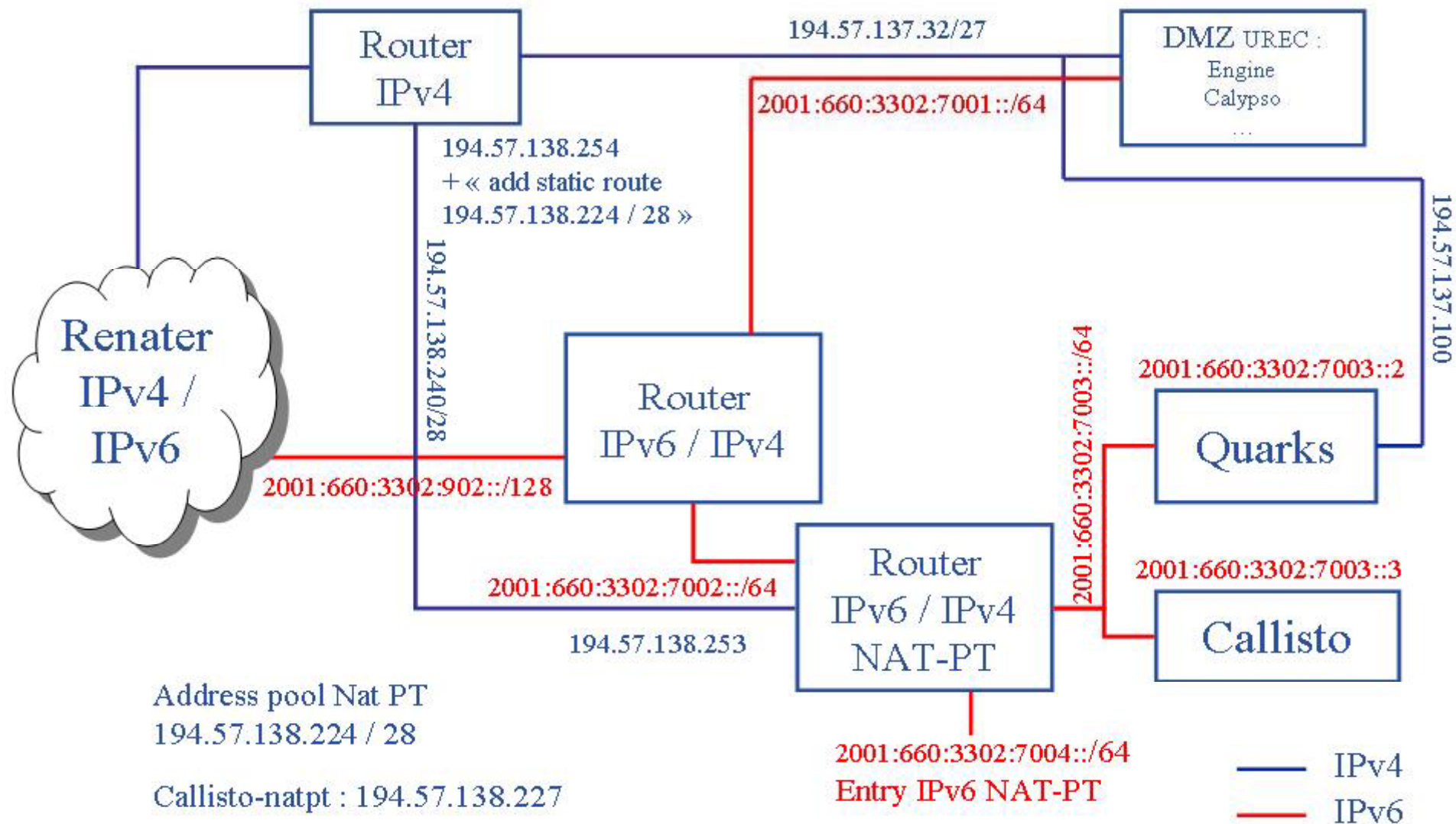
- **CERN**

- ETICS NMI/Condor production infrastructure
 - *Around 40 nodes / different platforms*
 - *No IPv6 stack so far*
- Job migration between UoW and INFN in coming weeks

- **m/w branches:**

- Security AAA components modules (VOMS)
- Workload Managements modules (WMS, LB, CE, WN, Torque, UI)
- Information System modules (BD-II, RGMA)
- Data Management modules (Classic SE)

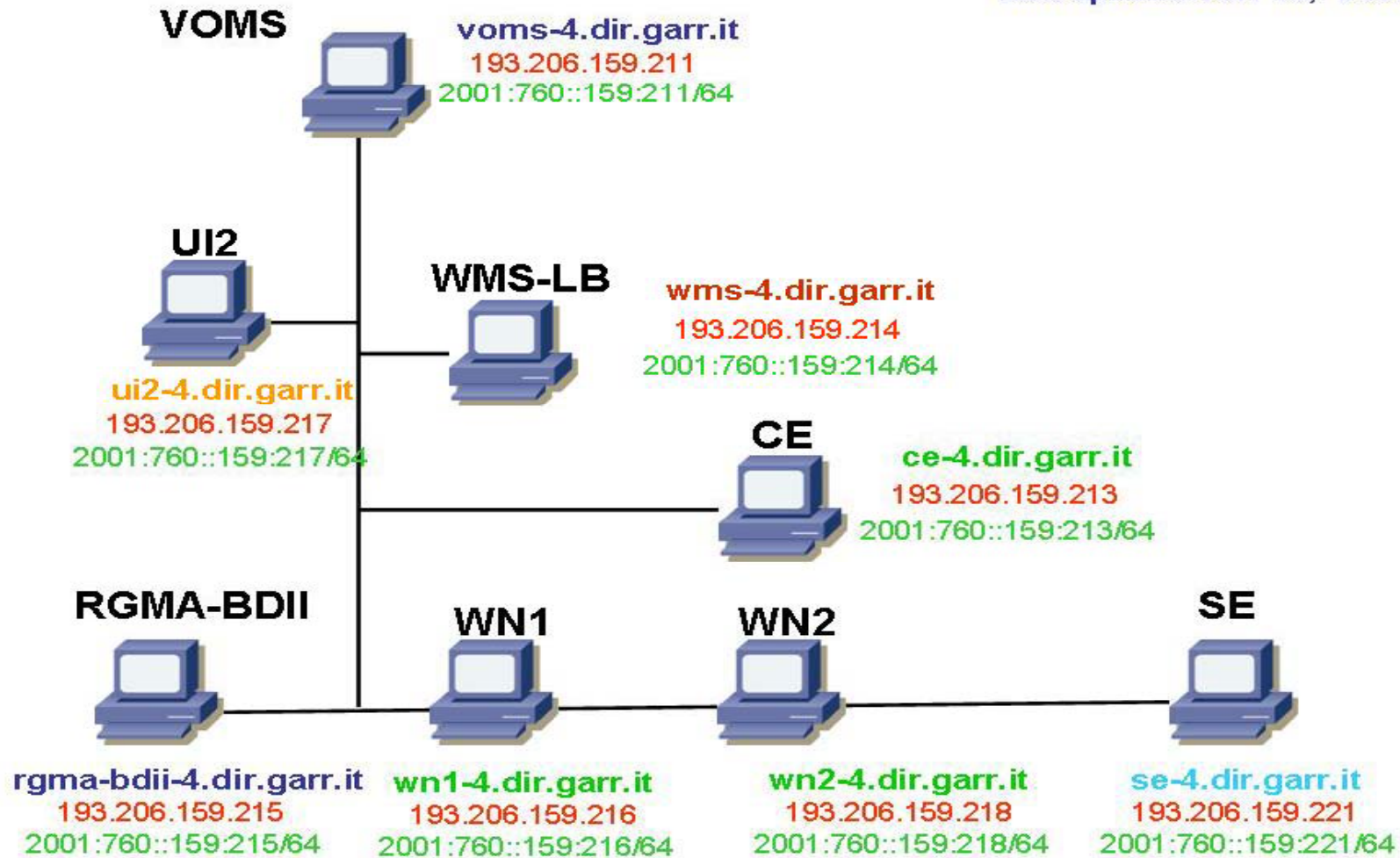
- **UREC**
 - Includes the NAT-PT router for IP protocol translation
 - IPv6 clients can connect IPv4 servers and vice versa
 - *To validate the proposed testing methodology*
 - Currently deploying a gLite top-level BD-II



- **GARR**
 - Based on Virtual Nodes VMWare
 - easy to maintain, update, backup, migrate nodes
 - Managed from a central node(via SSH key) through scripts for
 - *installing gLite on the nodes (altern. to manual local install on the node)*
 - *pushing gLite updates via APT*
 - *IPv management / network configuration (netproto-switcher.sh)*
 - All nodes have double IP address (IPv4 and IPv6) and are registered on the dual stack DNS server

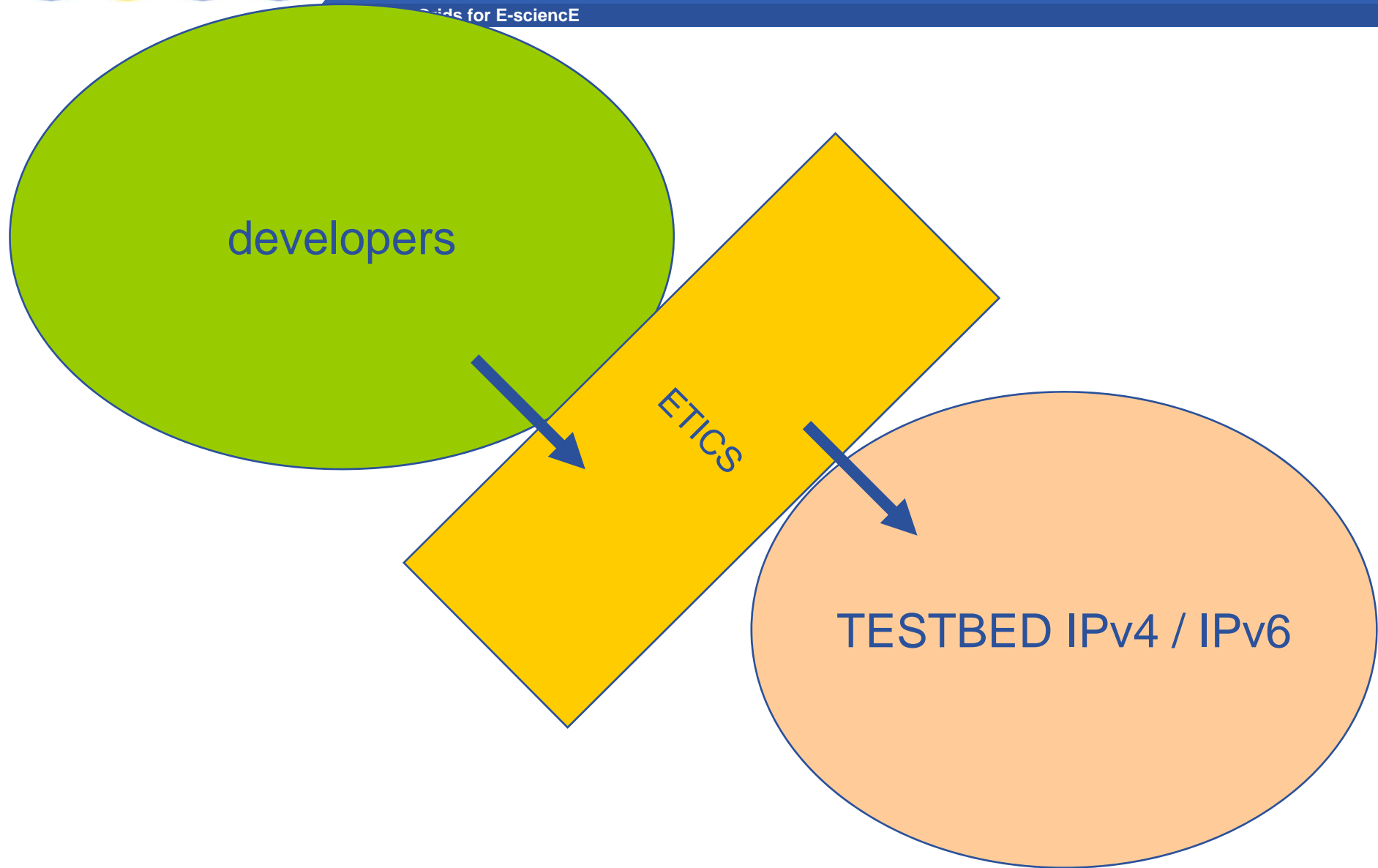
- **CERN**
 - The whole ETICS production infrastructure
 - etics.cern.ch

Last updated: Jan 19, 2007



- **We have a CVS now at org.glite.testsuites.ipv6**
 - access requires providing AFS id

- **“gLite IPv6 compliance” ETICS project set up**
 - 3 registered users/admins
- **org.glite.testsuites.ipv6 test component created**
- **succeeded in the first demo test job**
 - Manually pre-installed BD-II server in Paris (using ext.testbed)
 - Test commands defined within ETICS gLite IPv6 compliance project
 - Idap query to the top level IPv6 BD-II in Paris(UREC) from the IPv4 NMI node (CERN)
- **Both client CLI submission and remote test via Web Application successfully exploited**



- tried SLC 4 installation via gLite SA3 tarball within an ETICS job
 - failed
- *install_certs_userspace* YAIM function failed
 - “couldn’t download CA rpms”
 - a debugging test job with only the failing “wget ca_*.rpm” code was successful : **further debugging required**

- **Install UI via ETICS job**
- **Involve other external testbed components**
 - WMS, RGMA, LFC
 - let WMS in GARR point to the BD-II in UREC and try glite-job-list-match and glite-job-submit
 - try using rgma client commands from the UI on the ETICS NMI node via an etics test job
 - try file registration using and LFC catalog (to be installed) on the classic SE at GARR
- **Try the complete set up (install & config) of glite metapackages on ETICS nodes**
 - get ready for the D-day when we'll deploy IPv6 compliant servers
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