Contribution ID: **32** Type: **Presentation**

IPv6 Testbed for ARC-CE

Tuesday, 18 September 2012 14:20 (20 minutes)

Description of the work

The idea is to use IPv6-only in all aspects of testing: installation, configuration and testing of Arc client and server. For doing that a lot of other services have to be IPv6-ready, such as IPv6-enabled repositories for installation, IPv6-ready resource manager, scheduler and VOMS for submission etc. We encounter problems on different levels, beginning with a resource manager (Slurm, Torque and SGE are currently not working with IPv6). After establishing a fully functional ARC-based cluster using v6 protocol, we should also test its security, stability and provide monitoring for it. But this will happen in the subsequent steps.

Wider impact of this work

IPv6 testing is necessary if we want to deploy IPv6 clusters in the future.

Printable Summary

IPv4 exhaustion is becoming a reality, it will soon be impossible to deploy or even enlarge big clusters, clouds or other services which are based on IPv4. Transition to IPv6 is (or it will be) mandatory.
At Arnes we have set up an IPv6 testbed in 2012, used for ARC server and client testing. Services are tested using dual-stack and IPv6-only, though our goal is to prepare a cluster that is completely functional using IPv6-only. Beside the cluster's functionality, it is also necessary to think about its stability and security. In this presentation we will discuss the setup, testing and experiences that we have gained so far.

Primary author: Mrs KRASOVEC, Barbara (Arnes)

Presenter: Mrs KRASOVEC, Barbara (Arnes)

Session Classification: Network Support

Track Classification: EGI Operations (Tiziana Ferrari: track leader)