IPv6 testing plans

25 Jan 2013

Short term – next 6 weeks

- Add sites to testbed
 - Glasgow (DPM storage end point)
 - Fix DESY
 - Others?
- Is GridFTP mesh still useful?
- Understand Tony's performance problems
- Tony will test on IPv4
- CMS PhEDEx with DPM – Other storage?
- LHCb tests Glasgow, RAL job submission & CVMFS
- Lxplus at CERN?

SL5 or SL6?

- Short term use sl5
- There are advantages moving soon to SL6 soon
 - And coupled with install of new version Globus
 - Rebuilding FTS needs to be done again
 - But with EMI version not FTS V3
- Ramiro will install SL6 and GridFTP next week
- General approach always use latest released versions (e.g. Globus, GridFTP, ...)

Testing on production resources

- Phase 1 confidence that dual-stack breaks nothing production in IPv4
 - Limited number of node types
 - Limited number of sites
 - What? When?
 - After the summer conferences? Or a few sites before then?
 - One site CE, another site SE
 - Need suitable logging for post-mortem
 - If it works we could leave on to allow more IPv6-testing
 - How much advance testing do we need on our testbed?
- Phase 2
 - Functionality and performance testing for IPv6 of the CERN "model"
 - More node types
 - More sites
 - When?
- Phase 3
 - Complete 24 hour test
 - Turn on dual stack everywhere
 - When?

What end point are we aiming for?

- All required services dual stack
- Allow for IPv6 only clients
 - Worker nodes
 - UI?
 - Others?
- CERN worker nodes will need access to AFS servers at CERN
- Do we assume there will always be a Phase IV non-routable address too?
- What do we have to do about tunnels, proxies etc?
- Do we worry about WMS, LRMS?
- Pilot job frameworks?
- Virtual machines?

Off-site Services required by IPv6-only worker nodes?

- SEs
- Experiment pilot job frameworks
- Dual stack on all public-facing services
- At what point do we require all Tier 1 and all Tier 2 to be able to route IPv6, DNS etc.
- Do we need UI on IPv6? Assume no