

LHC[OPN/ONE] → IPv6

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STEINBUCH CENTRE FOR COMPUTING - SCC



activities/requests → require IPv6 readiness

- Actions at Gdb (Nov. / Dez. 14)
 - Status of actions in progress
 - T1s requested to join IPv6 working group: some did since last month, still a few missing
 - looking for sites moving their production endpoints to dual stack

- Atlas proposal:
 - Request that all Tier 1s engage with the HEPiX /WLCG IPv6 task force.
 - Request that all Tier 1s provide a dual stack PerfSONAR machine by April 2015.
 - Request that Tier-2s provide a dual stack PerfSONAR machine by August 2015.

New ipv6 file transfers mesh

Implement at Tier-1 (and some Tier-2) an production like storage environments, for proving IPv6 readiness

Some shell be dual stack and some IPv6 only:

- FTS3
- SRM
 - Different storage systems
 - dCache
 - DPM
 - Storm
 - ...

→ Still space for additional participants



- Request to NRENs for readiness of LHCOPN
 - protocol support
 - No restriction at active network components (router/switch(/DWDM))

- Request to Tier1 sites for:
 - bgp announcement
 - Site role out IPv6 for deployment of dual stack IPv6...
 - first step to deploy IPv6 dual stack PerfSONAR

- Timeline : beginning of April 2015


 IPv6

CH-CERN	513 (CERN) 61339 (CERN-WIGNER)	-	128.142.0.0/16 188.184.128.0/17 188.185.128.0/17 (AS61339)	-	2001:1458:301::/48 2001:1458:302::/48 2001:1459:301::/48
DE-KIT	34878 (FZK)	192.16.166.32/30 192.16.166.36/30	192.108.45.0/24 192.108.46.0/23	2001:1458:302:9::/64	2a00:1398:104::/48
ES-PIC	43115 (PIC)	192.16.166.56/30 192.16.166.60/30	193.109.172.0/24	2001:1458:302:11::/64	2001:67c:1148:200::/64 2001:67c:1148:201::/64 2001:67c:1148:202::/64
FR-CCIN2P3	789 (IN2P3)	192.16.166.40/30 192.16.166.44/30 (not used)	193.48.99.0/24	2001:1458:302:8::/64	2001:660:5009:9::/64
KR-KISTI	1237 (Kreonet)	192.16.166.164/30	134.75.125.0/24	2001:1458:302:29::/64	-
NDGF	39590 (NDGF)	192.16.166.48/30 192.16.166.52/30	109.105.124.0/22	2001:1458:302:F::/64	2001:948:40::/42

■ Tier-1s still missing:

- NL-T1
- IT-INFN-CNAF
- BNL
- FNAL
- ASGC
- Triumf
- RAL
- Russian sites
 - RRC-KI
 - JINR



IPv6

- Request to NRENs:
 - IPv6 routing @ VRF
 - Offer to all connected sites optional IPv6
 - Timeline : August 2015
- Request to Sites:
 - Deploy ipv6
 - and at least IPv6 dual stack PerfSONAR
- IPv6 should get included in the LHCone deployment docu

Questions ?

