

WLCG pre-GDB IPv6 workshop

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Aims of pre-GDB IPv6

- CERN is running out of IPv4 network addresses
- Other resources/sites likely to follow soon(ish)
- WLCG needs all outward facing services being run on dual-stack IPv4/IPv6 systems to support IPv6-only clients
 - When and which services not yet decided
- Aims of today:
 - Present the recent work HEPiX IPv6 working group/WLCG task force
 - Provide guidance on the configuration and management of systems and sites
 - Encourage others to deploy IPv6 to join the testing activities
 - Discuss future plans
 - Allow time for discussion and questions (a challenge!)

HEPiX IPv6 Working Group

- Started back in 2011 (after regular discussions for years!)
- Consider how IPv6 should be deployed in HEP
 - Worldwide Large Hadron Collider Grid (WLCG)
- Readiness and Gap analysis
- HEP applications, middleware, security issues, system management and monitoring tools, end to end network monitoring tools, operations
 - One reason why communities have not adopted IPv6
- Run a distributed HEP testbed
 - to help explore all the above issues
- Collaborate with WLCG IPv6 task force
- Not driving every site's implementation of IPv6!
 - But can share experiences and information

Thanks to ...

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... and others not named here!

Today's agenda

- <https://indico.cern.ch/event/313194/>
- Technical background
- IPv6 at CERN
- File transfer testing
- Status and configuration of some services
- Experiment testing and plans
- Site status and experiences
- Next steps

Further info

- HEPiX IPv6 web

<http://hepixonweb.cern.ch>

- HEPiX IPv6 wiki

<https://w3.hepixon.org/ipv6-bis/>

- Working group meetings

<http://indico.cern.ch/categoryDisplay.py?categId=3538>

- WLCG Operations IPv6 Task Force

<http://hepixonweb.cern.ch/content/wlcg-ipv6-task-force-0>

- Paper accepted for publication in proceedings of CHEP2013