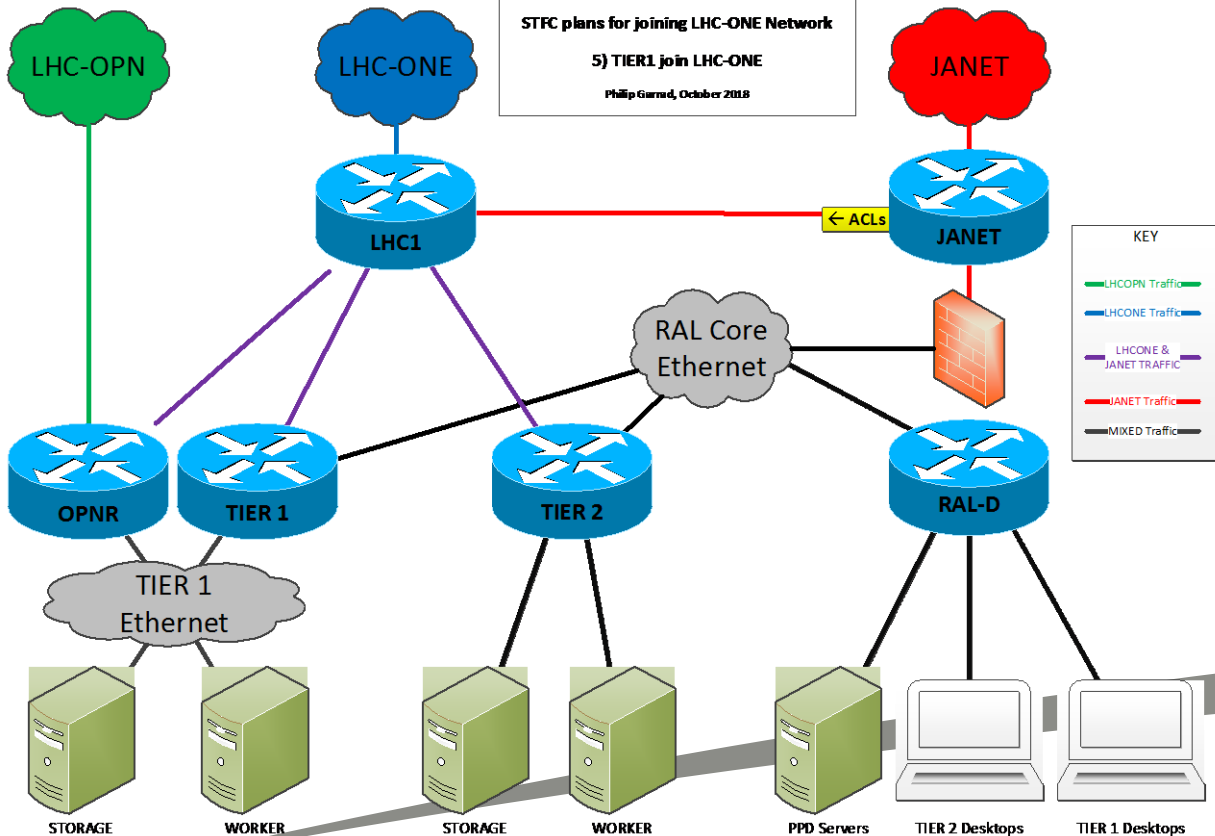# STFC & RAL Tier-1 LHCONE update

Ian Collier

&

Alastair Dewhurst

LHCOPN-LHCONE Meeting, Umeå, June 2019

STFC-RAL Joining LHCONE

LHCONE Status &Time Line

- Peering and IP address allocation expected from JISC in coming days
- PPD Tier-2 will join first.
    - Start with single perfSonar host.
    - Rest of T2 site joins by end June 2019.
- Tier-1
    - Reorganising & sanitising subnets. Completion by August 1st 2019.
    - Advertise new prefix to OPN at start of August.
    - Start Tier-1 joining LHCONE (perfSONAR) later in August.
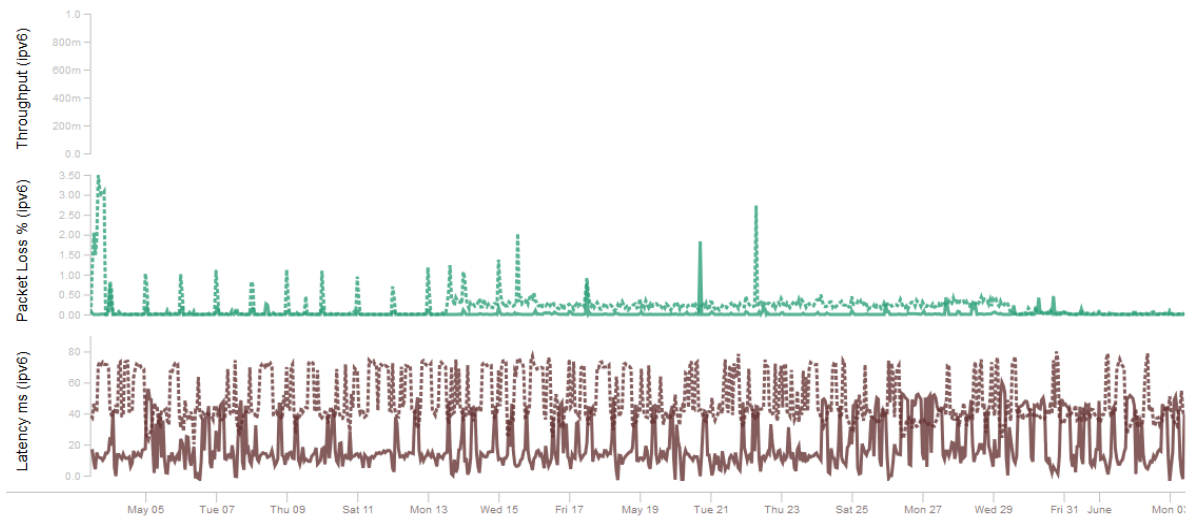   - Rest of T1 to follow after a week or so.

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IPv6 Status

Tier-1 is still seeing unnacceptably high outbound packet loss over IPV6

IPv6 Status

- Firmware update to border routers didn't solve the problem.
- Next step is to connect T1 OPN Router to pair of new border routers.
  - If problem remains at least easier to debug.
- Investigating upgrades to make better use of LHCONE connection
  - Tier-1 only has 40Gb/s links currently.
  - Equipment upgrades may improve matters

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Upgrading LHCOPN link

- Currently 3 x 10Gb/s links from RAL to CERN.
  - 2 separate geographical paths.
  - All land on the same CERN router.
- Site has resilient 100Gb/s links to super JANET.
- For Run 3 planning move to a single 100Gb/s link.
  - Resilience from LHCONE.
  - Landing points TBD.
- Awaiting indications on costs

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Questions?

Ian Collier, LHCONE/LHCOPN,
Umeå, June 2019