# LHCOPN/LHCONE update

Summary from Cambridge (UK) meeting 9th-10th February 2015

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# The meeting

- Agenda: https://indico.cern.ch/event/342059/
- 46 people registered
- At Homerton College.

- Many people from

GEANT participated.


*Cambridge office – 80 people*

*Information currently on www.dante.net*

*Legally established in the UK*

TERENA + DANTE = GÉANT ASSOCIATION

# LHCOPN

- Tier1s are consolidating their LHCOPN connectivity.
- Most of them will use LHCONE for T1-T1 connectivity and to backup LHCOPN, thus dropping direct T1-T1 link.
- At the same time bandwidth to CERN-T0 is being increased.

# LHCONE

- **Belle-II** update: PSNC (PNNL?) has joined LHCONE and they are happy with the data transfers they could achieve over it.
- They need some help on connecting KEK; ESnet and Geant will follow up…. Trying FTS3.
- **CBPF Brazil**: RNF expressed their interest in establishing a LHCONE VRF instance in Brazil to connect the Brazilian Tier2s. Geant will help with sorting out a connection to their VRF via the Clara network.

# LHCONE L3VPN operations

- The network has been stable and only two sites joined since the last meeting.
- BGP filtering with LHCONE communities has been successful.
- ESnet has completed the deployment of their transatlantic network.
- FNAL and BNL are now connected to CERN over the new infrastructure that comprises three transatlantic 100G links.
- It has been agreed that BGP connections between VRFs will be peering and not transit. Transit for remote regions will have to be agreed on a case-by-case approach.

# LHCONE AUP

https://twiki.cern.ch/twiki/bin/view/LHCONE/LhcOneAup

- Several refinements have been agreed
  - Mainly in how to acknowledge the AUP and the roles and responsibilities of the different parties.
- Still to be clarified how Tier3s of the US-CMS and US-ATLAS collaboration can join, since they haven't signed the WLCG AUP.

# Brocade Networks

- Has made a commercial offer (CERN Tier Partner Program) valid for all WLCG sites which will grant a special discount via local distributors.
- The process to follow is described in the slides

https://indico.cern.ch/event/342059/contribution/16/material/slides/

# P2P service

- The activity has made some progress thanks to the collaboration with the AutoGOLE project led by Surfnet.
- One of the main problems to address is the Layer3 routing between the sites; several solutions have been proposed, but they all have drawbacks.

# perfSONAR

- Some progress in improving the status of the sites shown in the LHCOPN and LHCONE dashboards.
- Open Science Grid (OSG) has deployed a network service for WLCG which consist of a datastore, a GUI, a “mesh creation configuration” utility built on information in OIM and GOCDB.
- Also some discussion about IPv6.

Main monitoring types are MaDDash and OMD/Check_MK

Prototype: http://maddash.aglt2.org/maddash-webui
https://maddash.aglt2.org/WLCGperfSONAR/check_mk

Testing: http://perfsonar-itb.grid.iu.edu/maddash-webui/
https://perfsonar-itb.grid.iu.edu/WLCGperfSONAR/check_mk/

Production: http://pfmad.grid.iu.edu/maddash-webui/
https://pfomd.grid.iu.edu/WLCGperfSONAR/check_mk