

GÉANT perfSONAR deployment

GÉANT Operations Centre

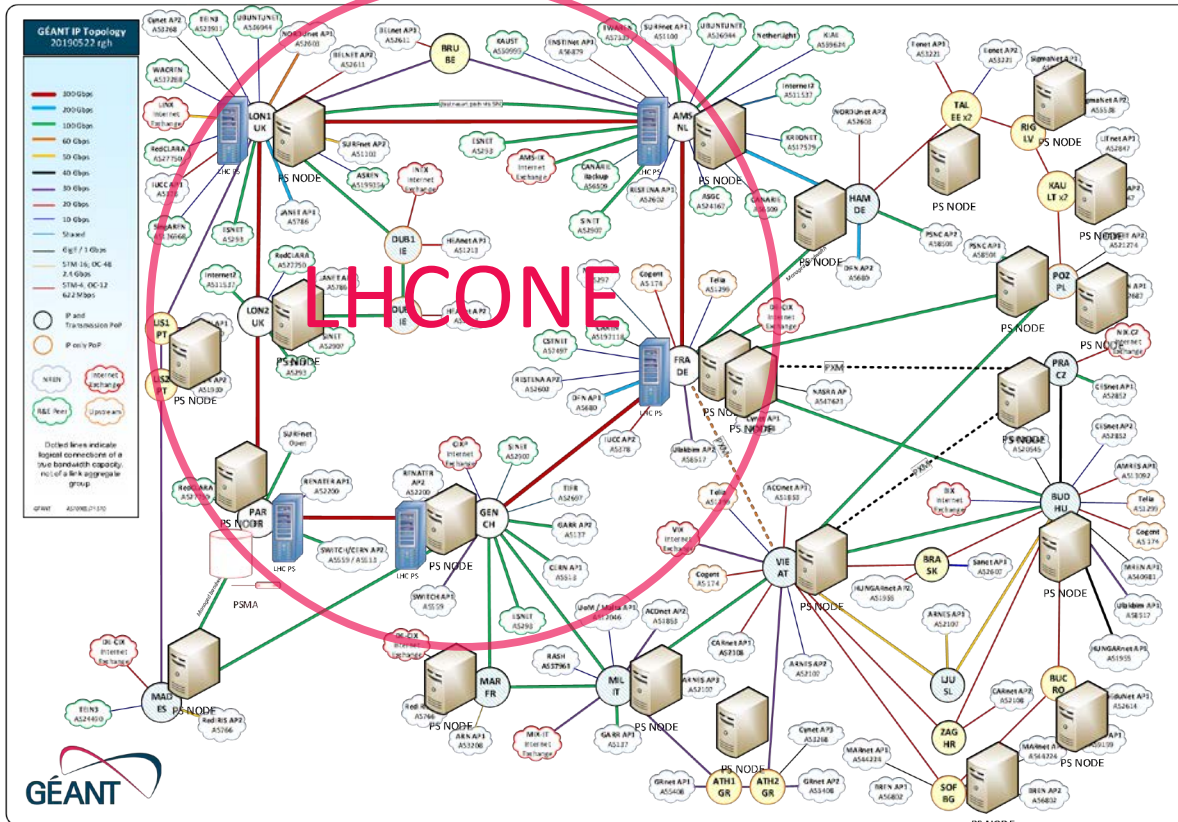
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European perfSONAR User Workshop, London, 5-6 June

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LHCONE VPN – Separate Instances

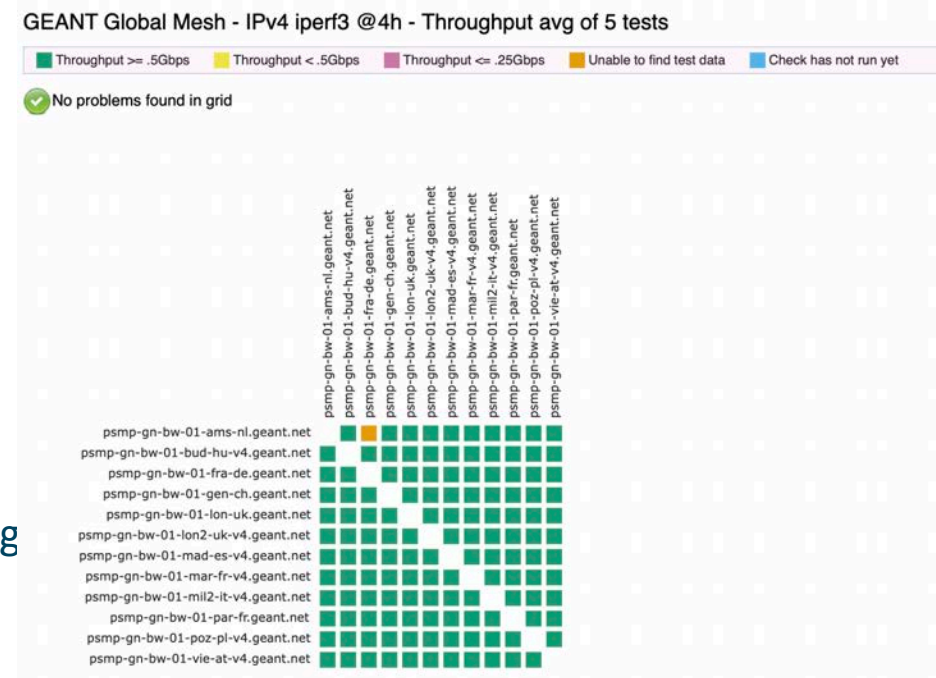


Dedicated hardware for LHC
10G bandwidth testing
interfaces

- Amsterdam
- Frankfurt
- Geneva
- London 1
- Paris

MADDASH Backbone Scheduled Test Matrix/GÉANT OC use of pS

- Sub-set of PS nodes undertake regular scheduled tests between each other to monitor GEANT CORE backbone performance
 - Limited to 12 servers only as per dashboard
- IPv4 & IPv6
- Tests:
 - Throughput
 - Latency and Packet Loss
 - Traceroute tests per perfSONAR interface
- On demand tests for performance troubleshooting



Plans



- Moving to new hardware is likely to be required – some servers still on 1G interfaces and the GEANT backbone is going to 10G minimum, servers are also >3 years old and out of warranty/support
- PS version 4.1 (UBUNTU based)
- Optionally, implementation/adoption of TWAMP in conjunction with Juniper routers

Issues from current production pS 4.0 deployment

- Software stability not good
 - Possibly relates to older hardware or resource exhaustion
 - Software left unstable from stable branch
 - Stability issues left with 4.0 and resolved only for 4.1
 - Looking forward to have it resolved through Ubuntu
- High maintenance
 - Regular restarts
 - Lifecycle management
 - Bug tracing/fixing
- Deployment via Puppet
 - Assures stability of environment (doesn't resolve software issues)
 - Assures conformity and reproducibility



Thank you



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