



# Network Performance and Monitoring

A workshop with the Performance Measurement Platform (PMP)

Lætitia Delvaux, PSNC

WP6T3 Lead in GÉANT GN5-2

NPMW, Prague, Czech Republic

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Public (PU)

GN5-2

# Welcome and presentations

- **Welcome everyone!**
- Thank you to [CESNET](#) for hosting us
- I am **Lætitia Delvaux**, PSNC, WP6T3 Lead
  - WP 6: **Network Development**
  - Task 3: **Monitoring**
  - perfSONAR developer for 15+ years
  - I'm using **she/her** pronouns
- Round table of presentations
  - Name, organisation, area of expertise, knowledge of perfSONAR





## 1.5 days for using PMP and perfSONAR

- **Network Performance and Monitoring workshop**
  - Focus on Performance Measurement Platform (PMP) and perfSONAR
  - GÉANT **WP6T3 milestone**
- perfSONAR introduction soon on **GÉANT Network Automation eAcademy**
- You have a perfSONAR host, right?
  - We will use perfSONAR extensively
  - Your PMP host should be perfect
  - You'll need web and CLI access
- Current perfSONAR system
  - 5.1.4 or 5.2-beta

# Outline day 1: all you can do with your PMP node

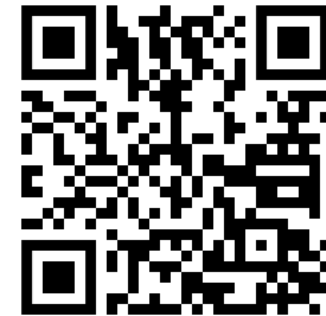


- **How to discover problems in your network using PMP?**
  - What is PMP, and what are its recent evolutions?
  - PMP survey results
  - The perfSONAR Lookup Service
  - **Break from 11:15 to 11:45**
  - Looking for hosts in the Lookup Service
  - Advanced perfSONAR CLI usage (pScheduler)
- **Lunch from 13:00 to 14:00**



# Outline day 1: all you can do with your PMP node

- **How to make the most of your PMP node?**
  - Creating your own dashboard
  - Using OpenSearch and the OpenSearch dashboard
  - **Break from 15:30 to 16:00**
  - perfSONAR past, present and future
  - Analysing PMP data
  - Automating PMP maintenance
- End of workshop day 1 at 17:30
- **Social dinner at 18:30 — Kolkovna Celnice —**
  - <https://maps.app.goo.gl/TgsQFNuSzVYSXRBVA>





## Outline day 2: When is a PMP node not enough?

- **Multidomain performance troubleshooting**
  - Strategies for a perfSONAR deployment
  - Performance troubleshooting
- **Bring your own question**
  - Questions about your deployment
  - Puzzled at some perfSONAR behaviour?
  - **Break from 11:15 to 11:45**
- **Testing for key network characteristics**
  - perfSONAR in Jisc and the UK
  - More questions and examples
  - Workshop conclusions
- **Lunch from 13:00 to 14:00**

## perfSONAR installation Quick Start



- Install instructions are > [here](#)
- New install script (a one-liner, to run as **root**):

```
curl -s  
https://downloads.perfsonar.net/install  
| sh -s - toolkit
```

- Bundle options > [here](#)



**Have a good workshop!**

[www.geant.org](http://www.geant.org)

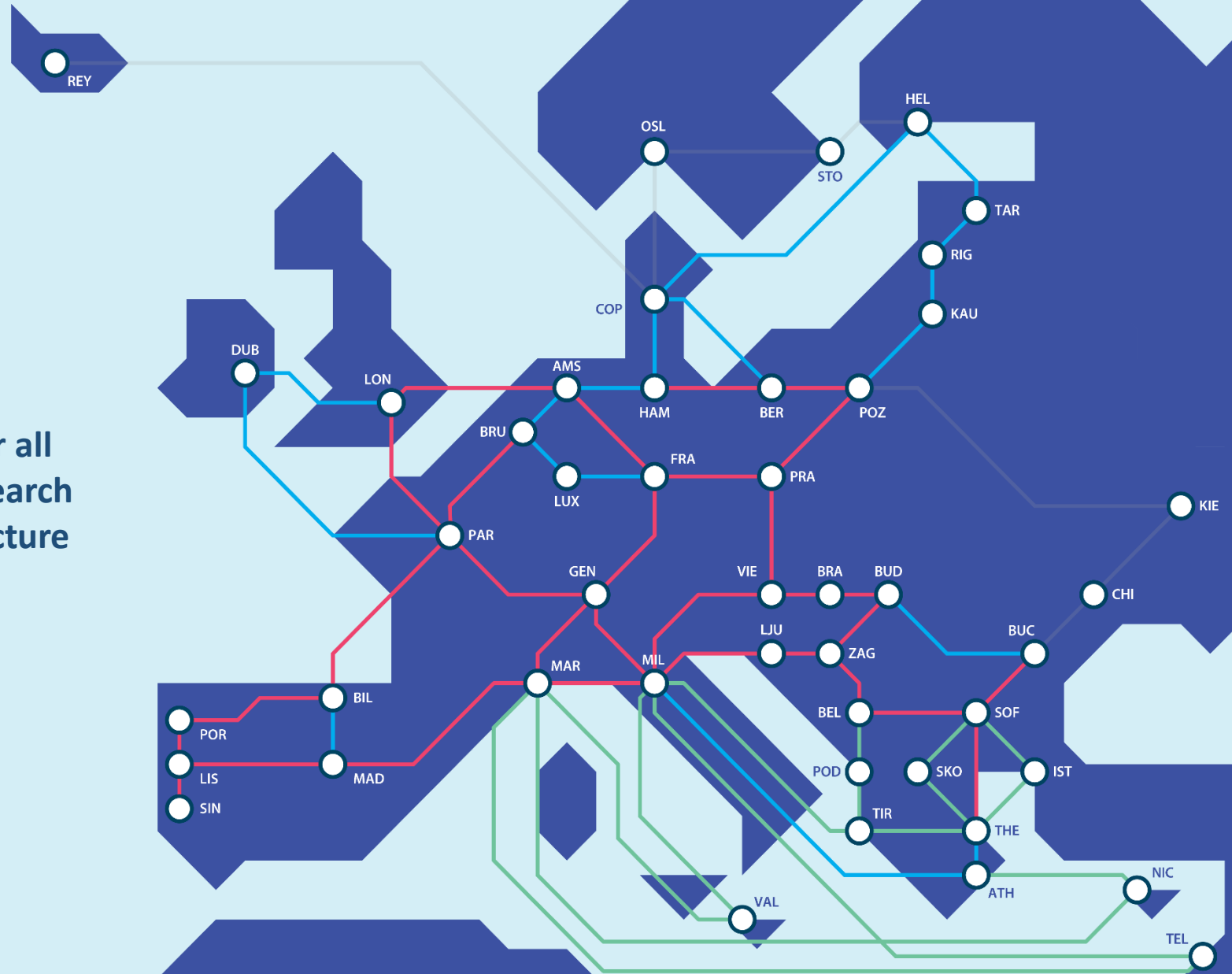


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## GÉANT Vision

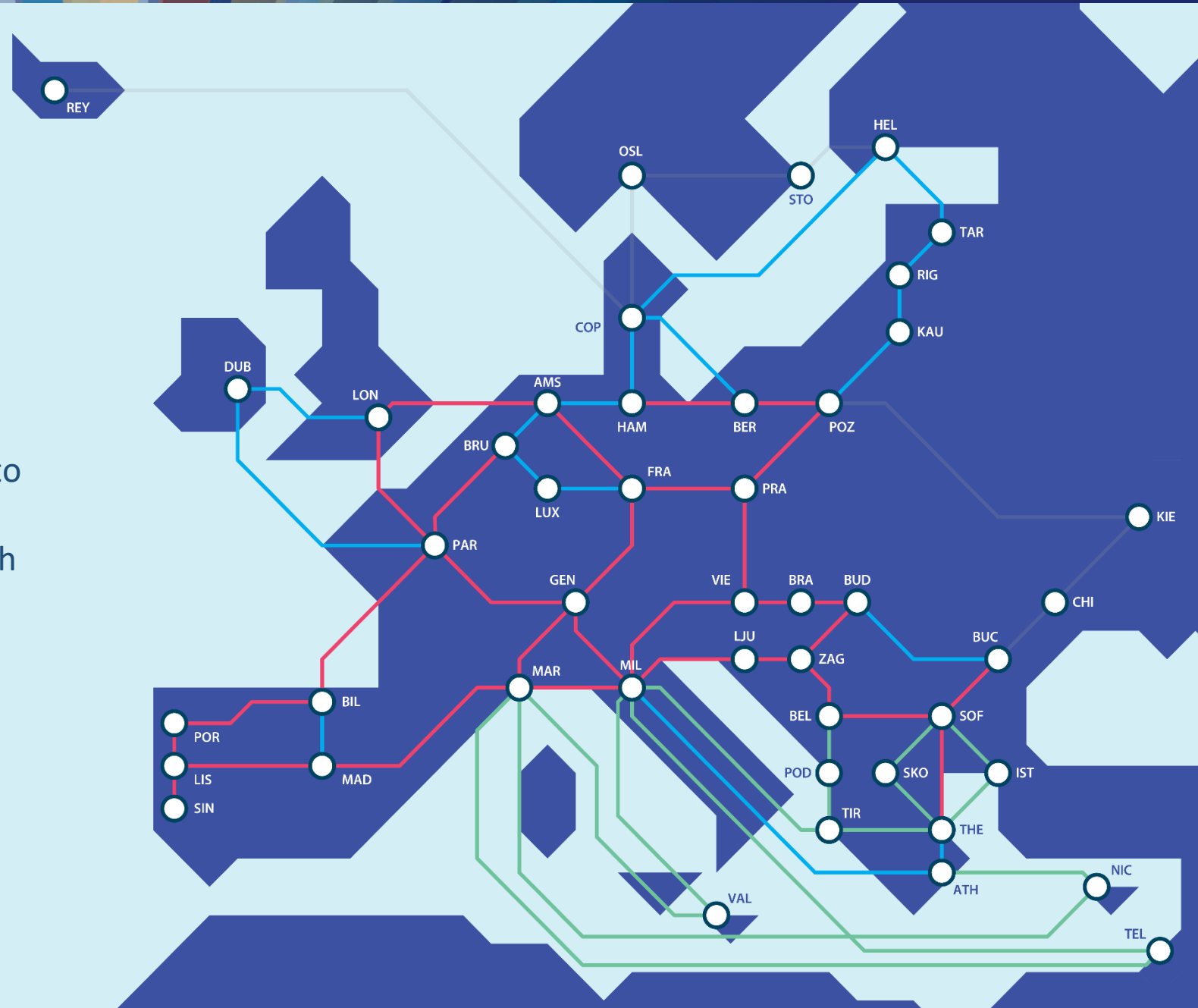
To ensure equal network access for all scientists across Europe to the research infrastructures and the e-infrastructure resources available to them



# GÉANT Network

The GÉANT network interconnects research, education and innovation communities worldwide, with secure, high-capacity networks.

We design, plan, build and operate the large-scale, high-performance GÉANT network that connects European NRENs to each other and the rest of the world for sharing, accessing and processing the high data volumes generated by research and education communities and for testing innovative technologies and concepts.



# At the heart of global research and education networking

