



Performance Measurement Platform

What is PMP, and what are its recent evolutions?

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Definition

- The platform consisting of:
 - perfSONAR installation on virtual machines or low-cost hardware nodes
 - Central components including a central Measurement Archive (MA) and a Dashboard
 - Automations and monitoring supporting the maintenance of the service by the PMP operational team

Performance Measurement Platform (PMP)

Performance Measurement Platform (PMP) is a successor of successfully completed perfSONAR Small Nodes in GÉANT project.

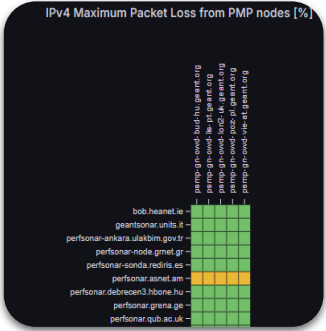


Users

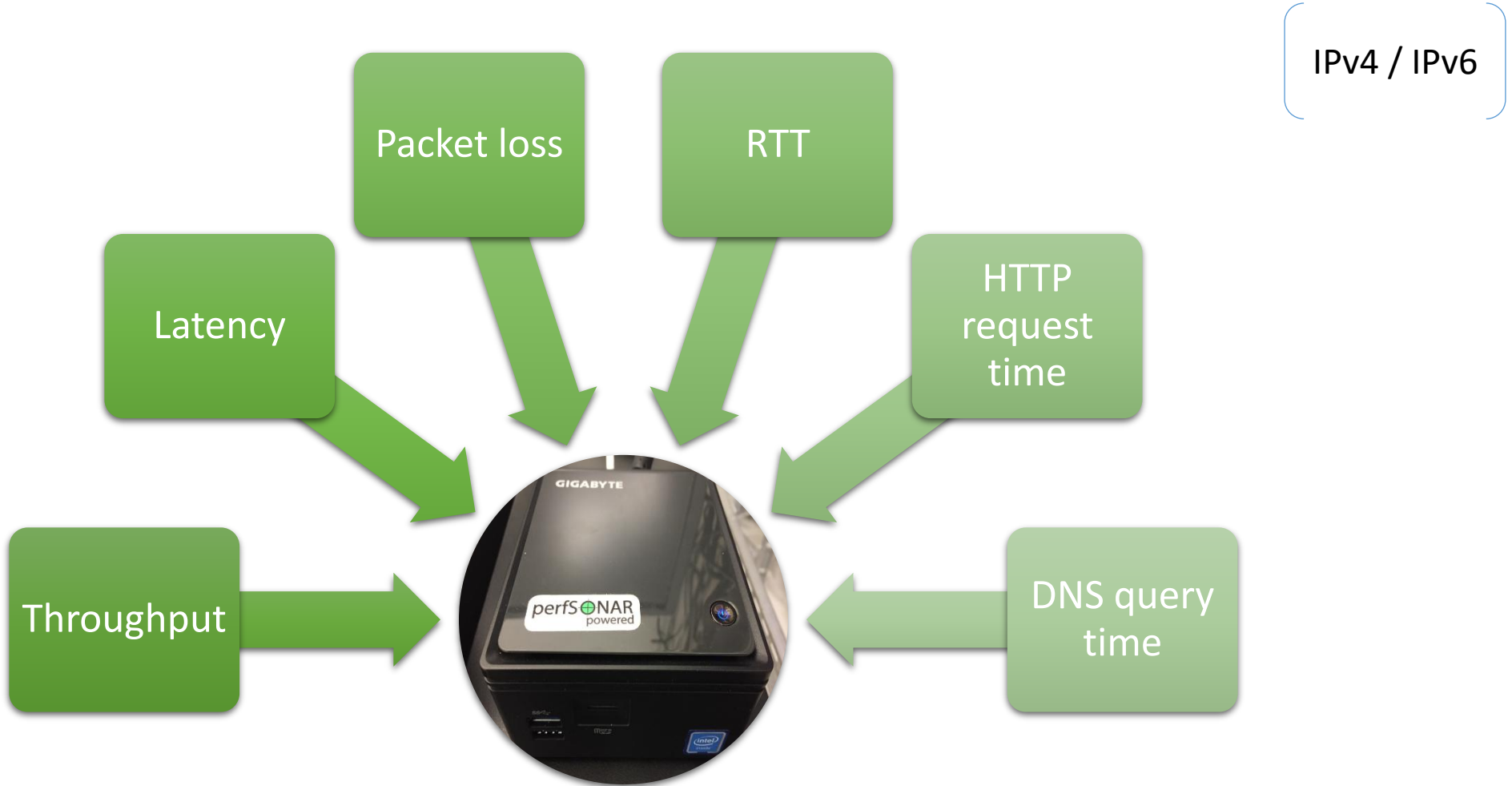
- Nodes are deployed and hosted in GÉANT collaborating organisations in Europe and Africa
- Anyone accessing Dashboard
- Individuals making tests as with any other perfSONAR node
- Priviledged users (hosting organizations) for setting regular tests and having access to CLI

How does it work?

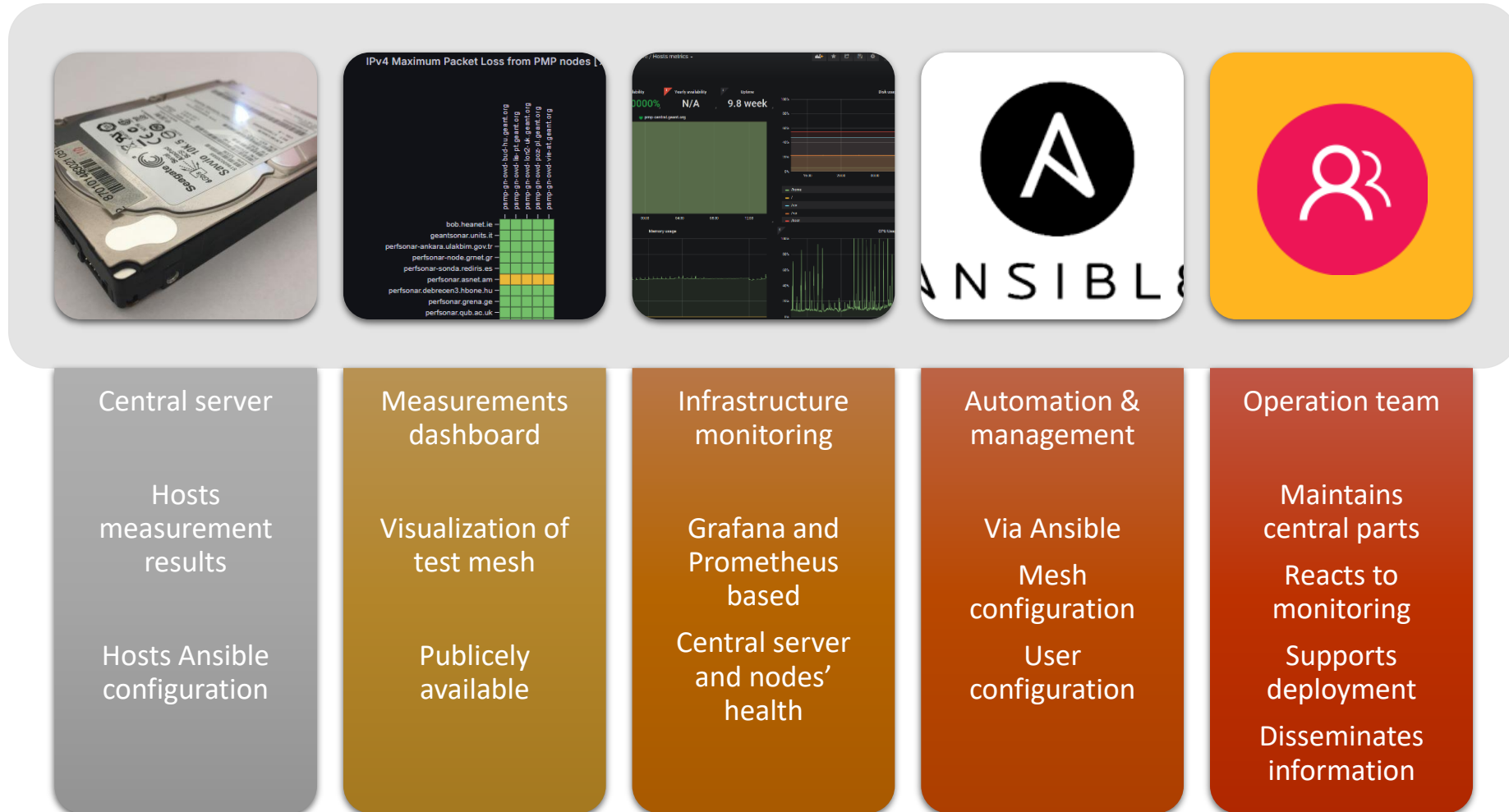
- Coupled with 5 GÉANT MPs to create a partial mesh for regular testing
- Central components operated and maintained by the GÉANT project



Regular testing



Central components



PMP service approach to perfSONAR deployment



Multidomain



Selection of organizations and critical points in the network



Comprises of different equipment



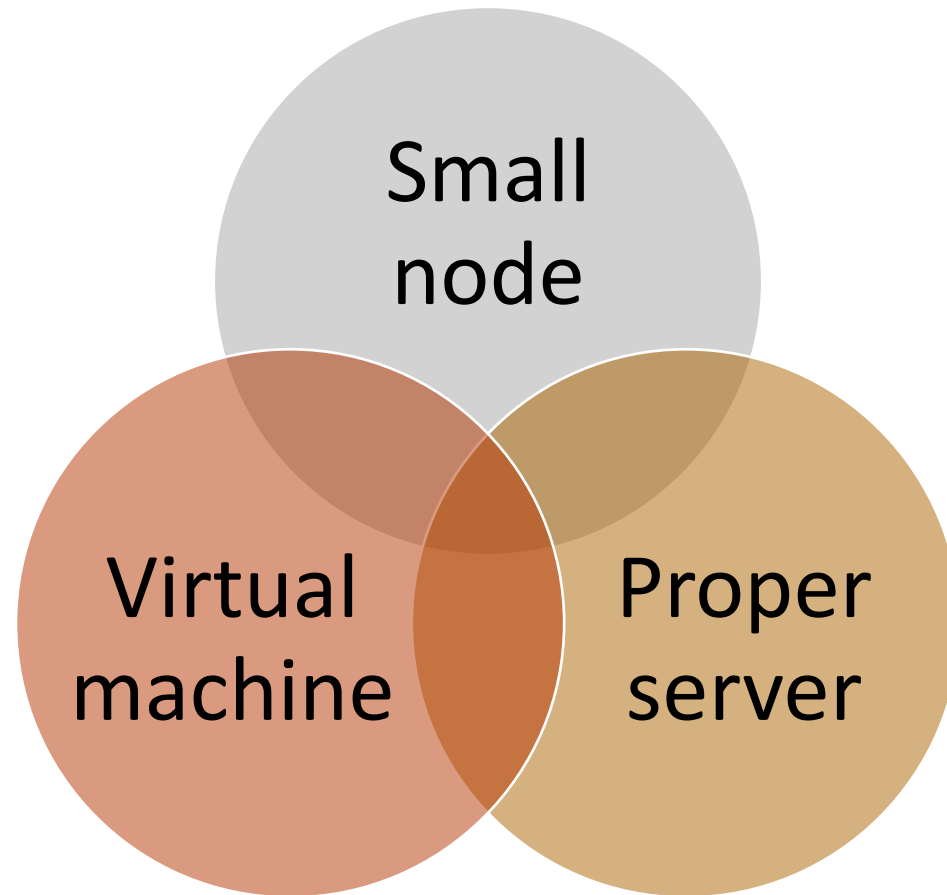
Hosts managed by local party and different people



Central parts

NOTE: Your host may be part of **multiple meshes**

PMP deployment models



Key factors

Worldwide integration

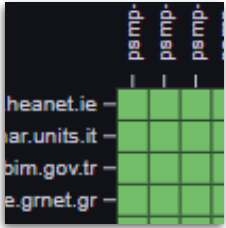
GÉANT service

PMP
Performance Measurement Platform

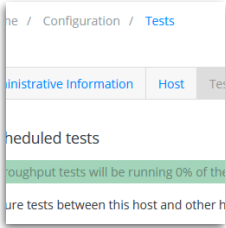
Easy to deploy

Locally operated, centrally managed

PMP added value

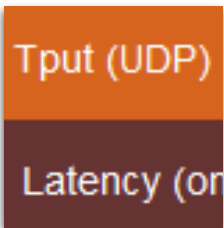


Regular testing between NRENs and GÉANT

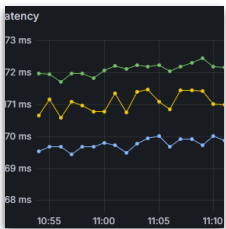
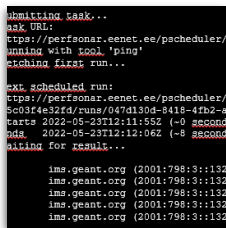


Play and learn

Use multiple network metrics



Run CLI tests from/to nodes

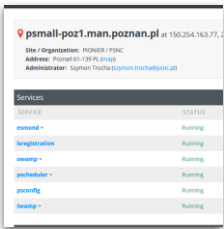


Access historical measurement results



Extend with more nodes

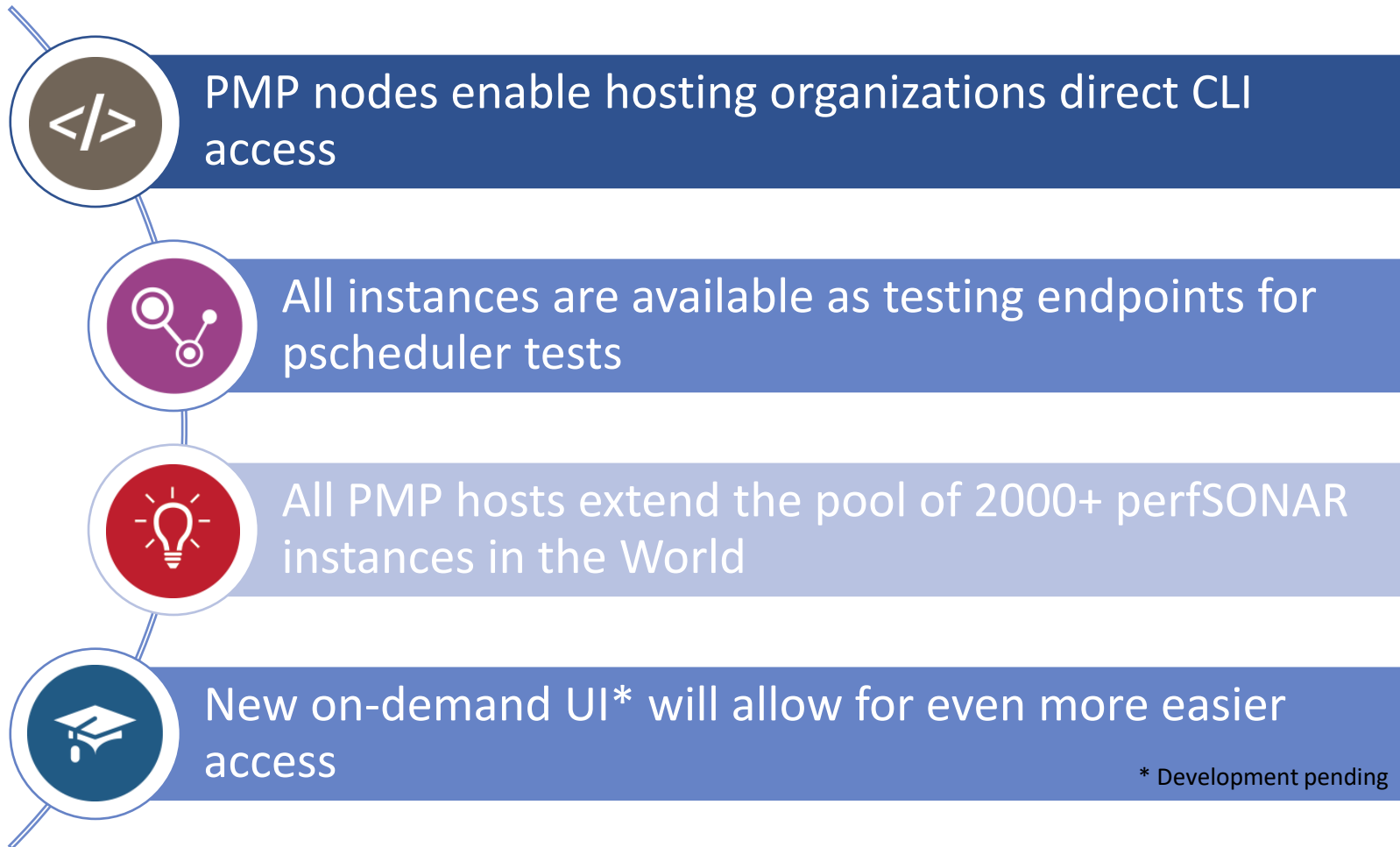
Configure your own local tests in GUI



Implement your ideas



On-demand testing capabilities

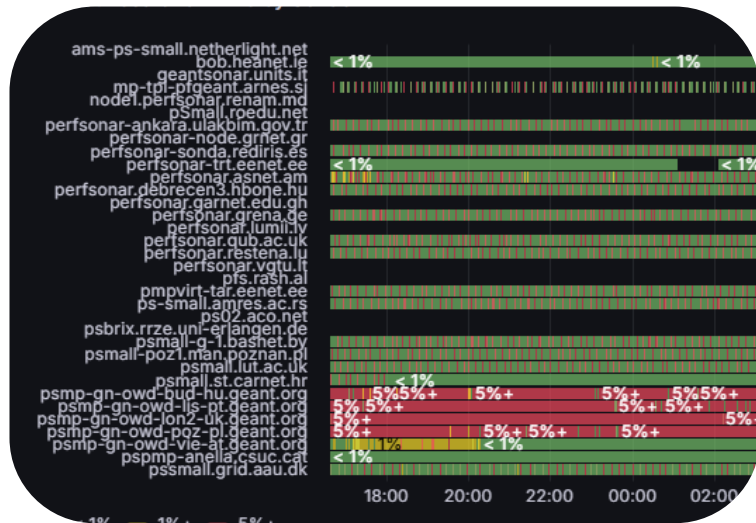


Evolution of PMP service

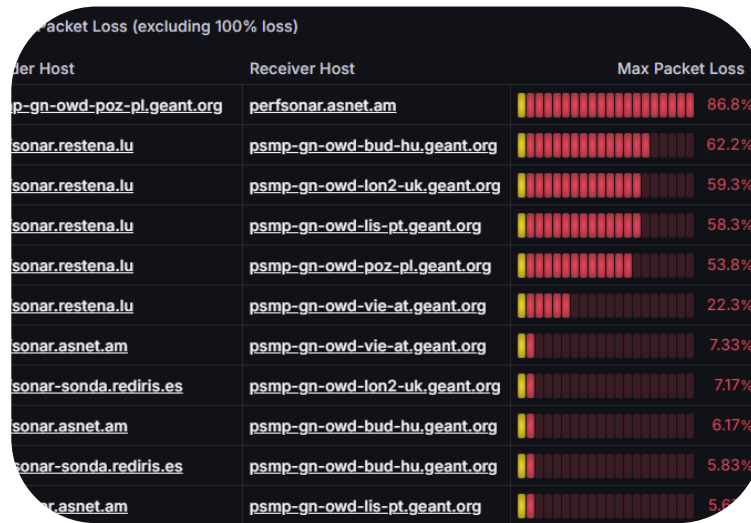
- 5.1 migration
- New central instance
- Opensearch replaces old Esmond MA
- Grafana replaces old Maddash
- Migration to the new server
- Ansible scripts migration

<https://pmp-archive.geant.org/>

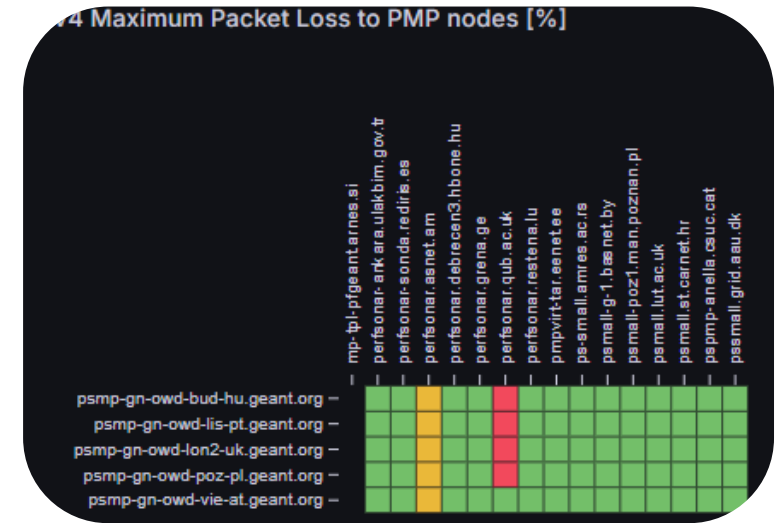
The power of new visualization (test results)



History

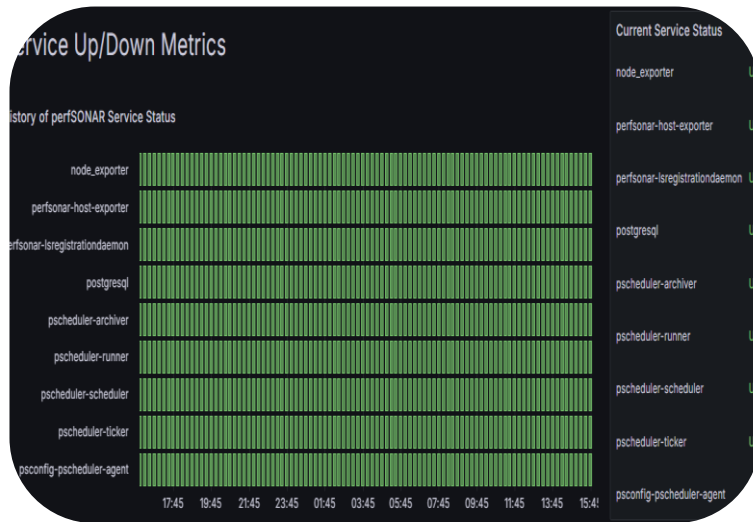


Top N



Matrix

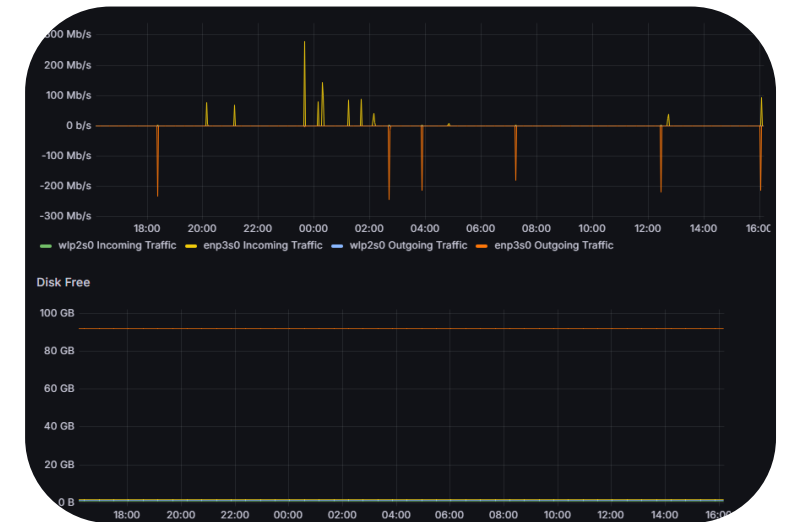
The power of new visualization (host metrics)



Host status

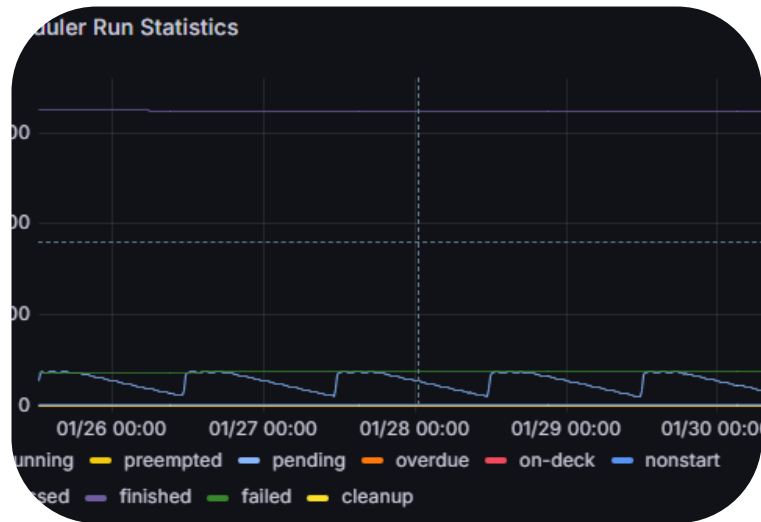


Memory, CPU

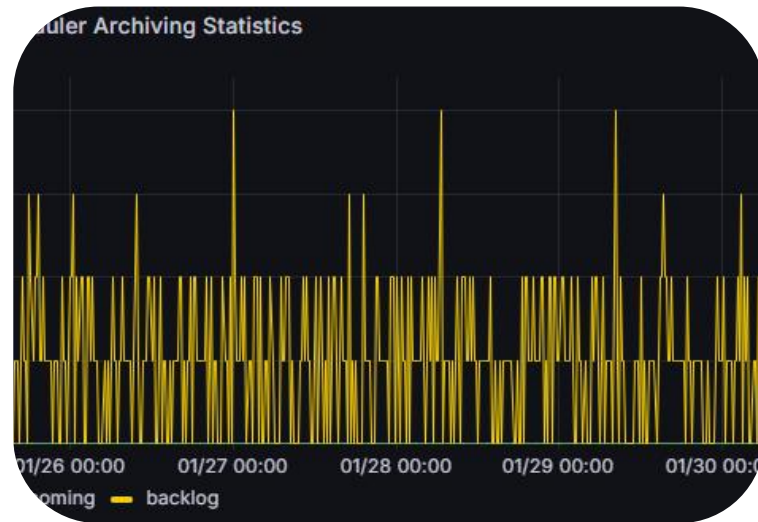


Disk space,
traffic

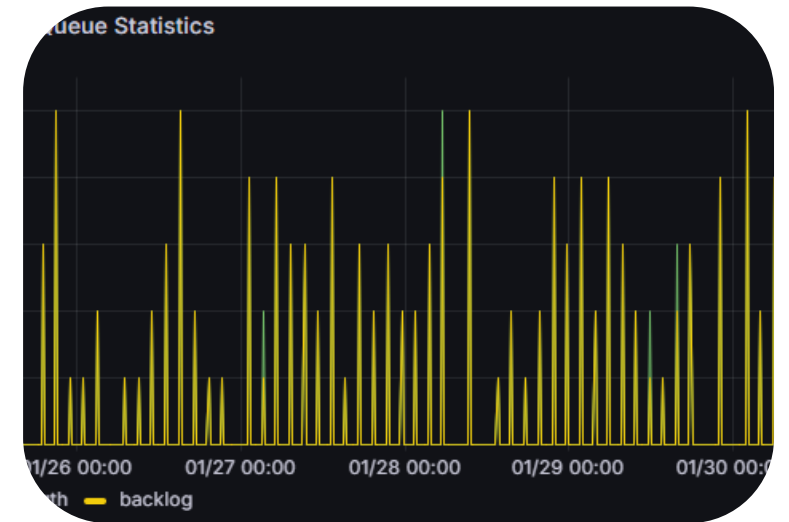
The power of new visualization (pscheduler metrics)



Run

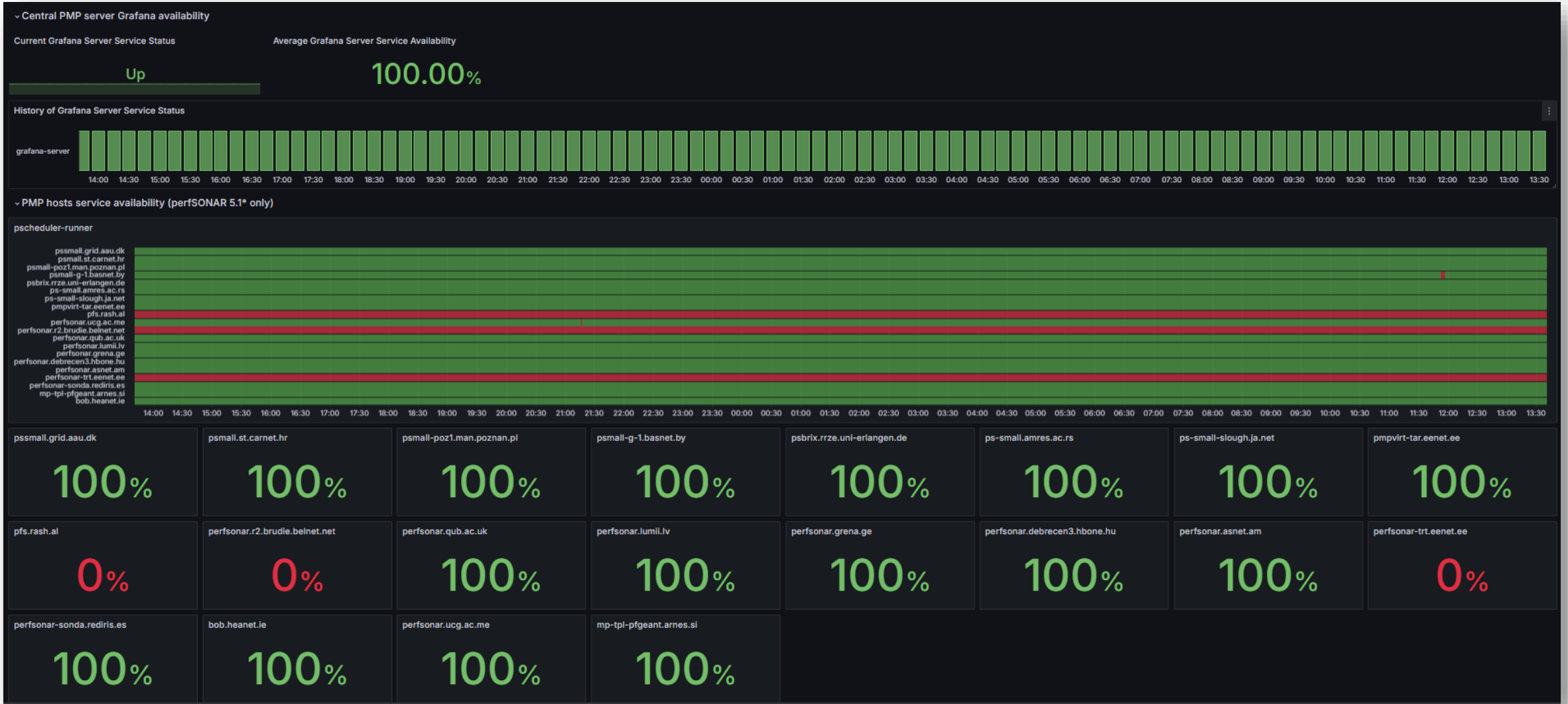


Archiving



HTTP queue

PMP service monitoring





Thank You

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the European Union



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