



GÉANT Network Management as a Service

NMaaS update

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www.geant.org

MANAGED SERVICE

How you can use NMaaS?

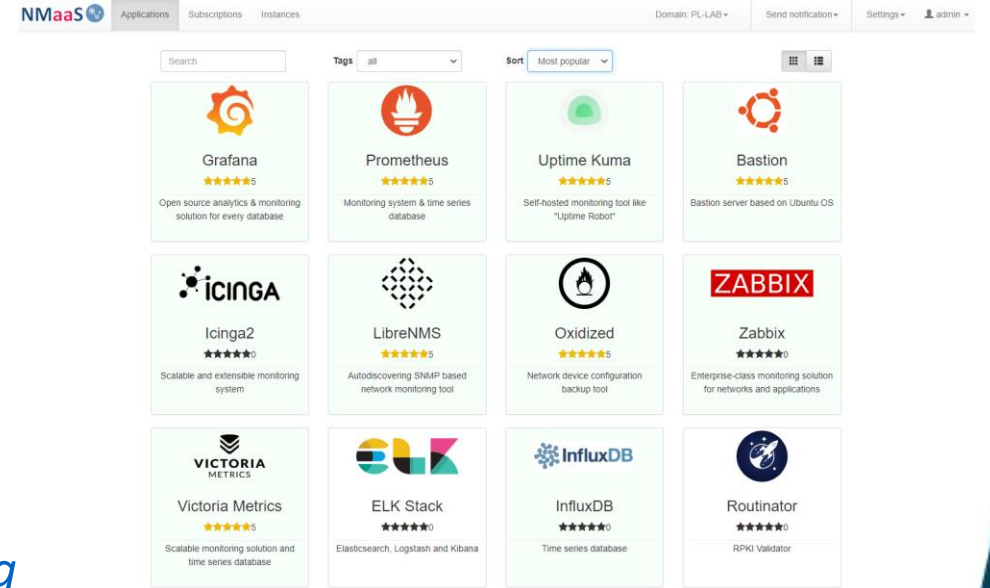
To set up your own NMS on the central GÉANT NMaaS use NMaaS **production** instance: <https://nmaas.eu> (secure, fully supported)

To try NMaaS out or test offered applications use NMaaS **sandbox** instance: <https://nmaas.geant.org> (no configuration overhead, demo applications already deployed)

SELF-HOSTED

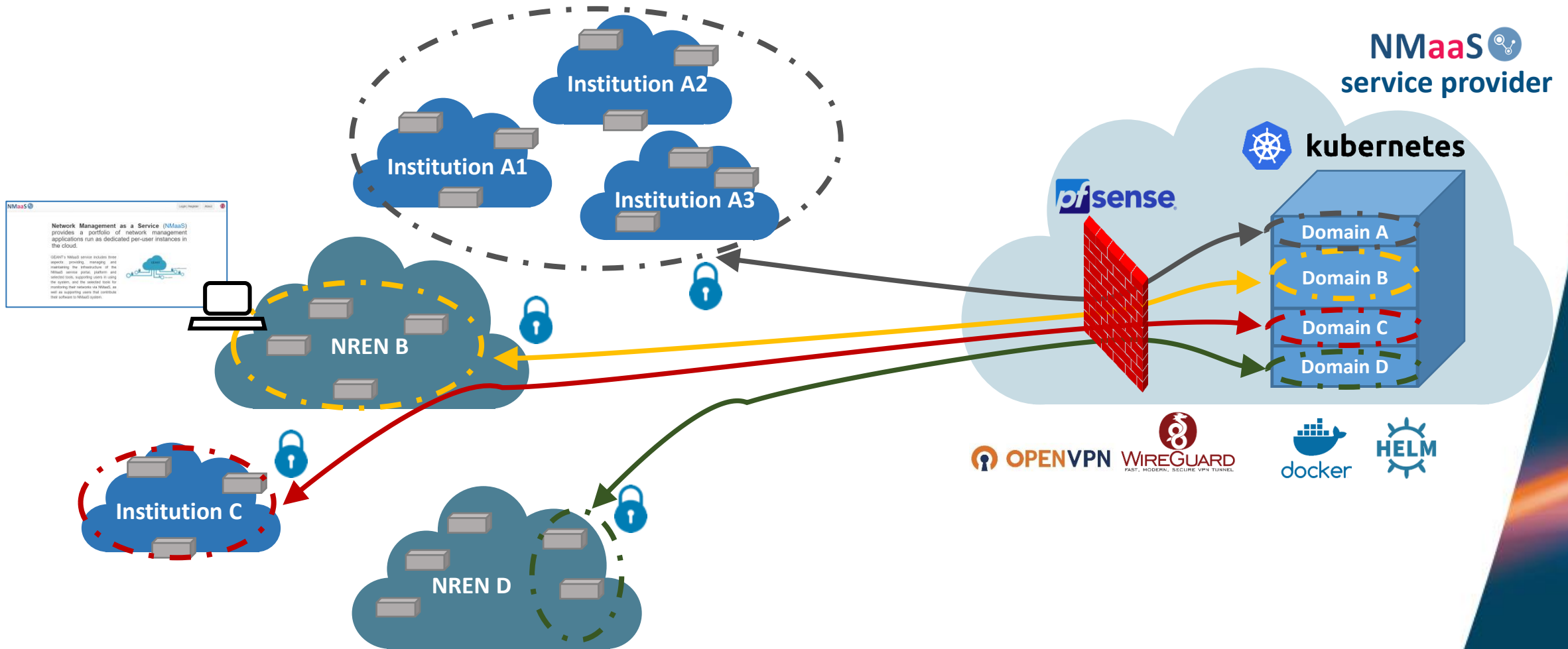
To run your own instance of NMaaS (Kubernetes cluster required) visit NMaaS **Installation Guide**: <https://docs.nmaas.eu/install-guide>

To run Kubernetes cluster and NMaaS on local machine visit **local NMaaS Testing Environment** Installation Guide: <https://docs.nmaas.eu/local-vm>



NMaaS Portal

NMaaS service deployment



NMaas tool deployment workflow

The screenshot shows the Uptime Kuma dashboard for the NMaas Production Portal. The browser address bar shows the URL `ukdemo.pllab.nmaas.eu/dashboard/2`. The dashboard includes a search bar, a monitor card for 'NMaas Production Por' with a 100% status, and a table of performance metrics.

Response	Avg. Response	Uptime	Uptime	Cert Exp.
(Current)	(24-hour)	(24-hour)	(30-day)	(2022-12-19)
<u>23 ms</u>	N/A	100%	100%	<u>61 days</u>

NMaaS tools

28 applications available in the portfolio

Oxidized

NAV

Prometheus

Grafana

Booked

Bastion

Debian repo

Routinator

NetBox

SPA & Inventory



perfSONAR

Central Management

WiFiMon

InfluxDB

ELK Stack

Jenkins

Zabbix

Uptime Kuma

Icinga2

Victoria Metrics

Synapse

LibreNMS

CodiMD

WebDAV Server

Healthchecks



NMaaS tools

Addition of new Tools



- **Possible** based on user request or by users themselves
- Requirements
 - Docker image(s)
 - Helm chart
 - Metadata and information about the application



NMaaS Service offered by the GÉANT Project

- **Offered free of charge**
- Service operated by a dedicated team within the GÉANT Project
- **Current funding assured till end of 2024** (part of GÉANT 5-1)
- **Statistics**
 - Registered users: **150**
 - Domains: **27**
 - Offered applications: **28**
 - Deployed applications: **116**

Current activities

- Recent releases of NMaaS core components v1.5.0 and NMaaS v1.5.1
 - Advanced application version management and running application upgrades
 - Bugfixes and upgrade of dependencies
- Ongoing user support activities
 -  UFES (feasibility tests and virtual infrastructure monitoring)
 -  RENATER demo for Regional Networks (potentially monitoring production network)
- **Publishing NMaaS software as open source**

Next steps

- Migrating production service to IPv6-compatible Kubernetes cluster
- Building a community around NMaaS tools
 - Share experience and best practices
 - Keep application version update to date
- Plan activities for upcoming GN5-1

Thank you

Any questions?

More information: <https://docs.nmaas.eu>

Contact us: nmaas@lists.geant.org

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