



Network Management as a Service (NMaaS)

Introduction

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GÉANT Network Management as a Service (NMaaS)
Infoshare

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www.geant.org



GEANT Infoshares are intended to create space to engage, improve knowledge sharing and discussion about services and strategic topics, and to build a human network across the Research and Education community.



Co-organised by WP6 and GÉANT Partner Relations Team, within the Community Programme



Public Infoshares are on Wednesdays and are recorded
Other Infoshares will be 'invitation only' events on other weekdays



Go to the main Infoshares Wiki page to suggest future topics



Recordings are available in the e-Academy, GLAD website and on Wiki pages after the event



Questions: partner-relations@geant.org

Why NMaaS?



Lack of
resources

You don't have sufficient **resources** (servers, virtual machines) for network management apps

You have customers who don't have sufficient resources to manage their infrastructure



Lack of
staff

You don't have enough **staff** who can install/manage the required infrastructure (servers/VMs/containers)

You have customers who want their network and server infrastructure to be managed by you



Lack of
time

You want to install or **quickly** try (in few minutes) a new network management app

You want to focus solely on managing your services











NMaaS – a flexible platform

What?

“App store” offering Network Management ... in the cloud

For whom?

NREN End Institutions, GÉANT Project teams, and NRENs

 <p>ELK Stack ★★★★★0 Elasticsearch, Logstash and Kibana</p>	 <p>WiFiMon ★★★★★0 Wireless Crowdsourced Performance Monitoring and...</p>	 <p>Statping ★★★★★0 Status Page & Monitoring Server</p>	 <p>Booked ★★★★★5 Web-based calendar and schedule</p>	 <p>InfluxDB ★★★★★0 Time series database</p>	 <p>Jenkins ★★★★★0 Leading open-source automation server</p>
 <p>pSConfig Web Admin ★★★★★0 Web-based UI for perfSONAR administrators</p>	 <p>esmond ★★★★★0 Central Measurement Archive</p>	 <p>MaDDash ★★★★★0 Monitoring and Debugging Dashboard</p>	 <p>Central Management ★★★★★0 perfSONAR Central Management</p>		

NMaaS Key Benefits and Features



PLUG AND
PLAY

Cloud based platform **reduces start-up costs** and **management overhead**



PRIVATE

Each management instance is **separated** within the platform **by design** to maintain isolation

Allows institutions and projects to manage separate infrastructure



SECURE

Uses VPN technology to incorporate management platform instance into the network instance

How can NMaaS be used?

Option 1: Organisation implementation

Each participating organisation offers a platform for their participating institutions

GÉANT Project co-ordinates development, standards and provides 2nd level support for the software usage



Option 2: GÉANT Project implementation

GÉANT Project offers a centralised platform for participating NRENs and/or their institutions (“white labelled”)

GÉANT Project co-ordinates development, standards and provides the 1st and the 2nd level support for NMaaS use

NMaaS contact and further information

Contact us at nmaas@lists.geant.org if you'd like to:

- **monitor** your equipment with tools offered by NMaaS
- **share** your own custom tools with the community via the NMaaS marketplace
- **test** NMaaS capabilities

Check out the latest NMaaS posts: <https://wiki.geant.org/x/i5nTC>

NMaaS information: <https://wiki.geant.org/display/NMAAS>

NMaaS production instance: <https://nmaas.eu>

NMaaS sandbox instance: <https://nmaas.geant.org>

NMaaS Infoshare – Agenda

- 13:00 – Introduction
- 13:10 – NMaaS concept, architecture and deployment
- 13:20 – NMaaS application portfolio
- 13:30 – NMaaS GÉANT production service
- 13:35 – NMaaS infrastructure requirements
- 13:45 – Demonstration
 - NMaaS for RARE
 - Application deployment process
- 14:05 – Q&A

Thank you

Any questions?

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