

GÉANT Clouds

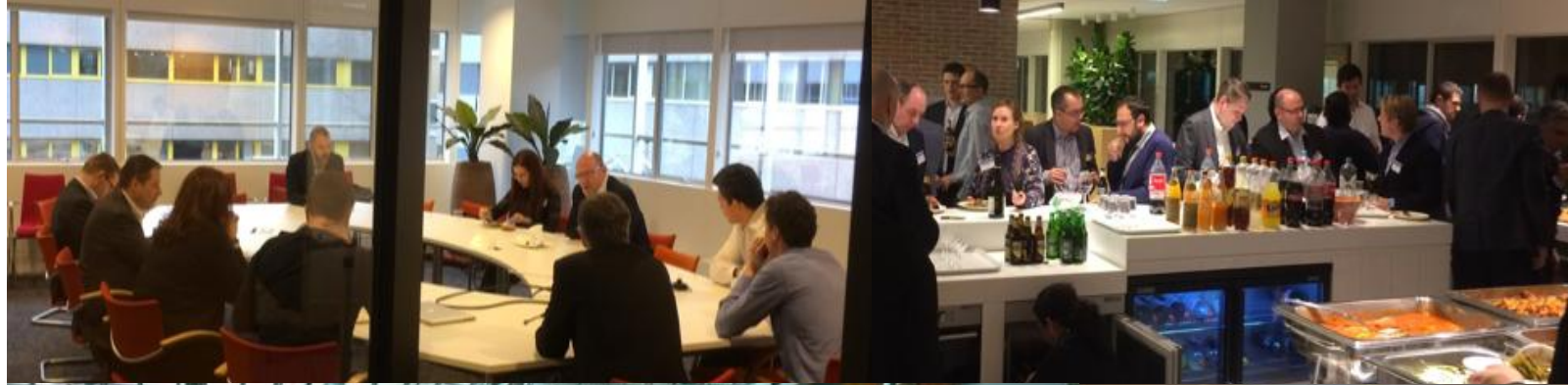
Collaboration, Services and Feedback from the Community

Maria Ristkok
GÉANT Cloud Team, Work Package Leader

GÉANT-EUNIS joint workshop, 29 October 2021

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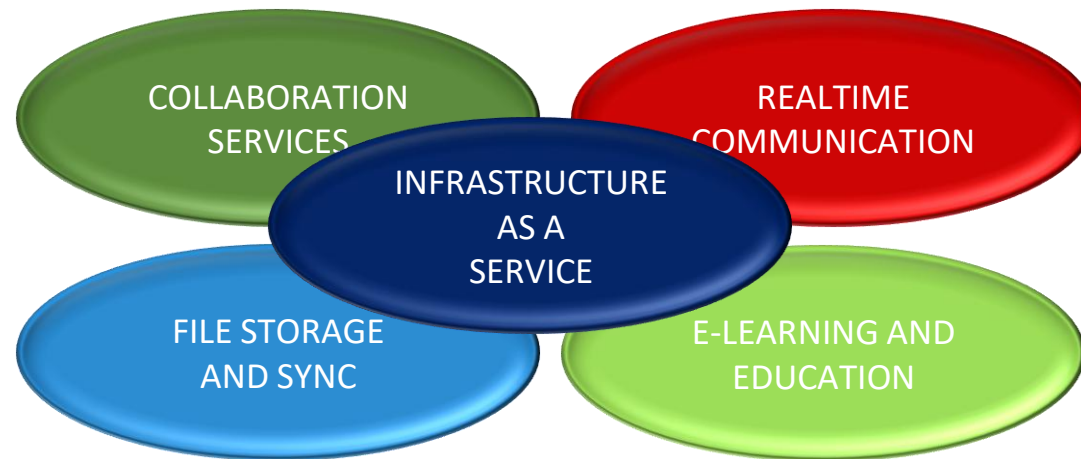
GÉANT Cloud Collaboration



GÉANT Cloud Collaboration

GÉANT Association supports and represents over 40 NRENs across Europe.

Together they support over 10,000 institutions and 50 million academic users.



Pan-European Frameworks

Preferential Quotations for R&E

NREN community based offerings

Aggregated discounts, interoperability-based around standards (in identity management, peerings, security), strengthening national cloud capabilities by **joining forces and expertise**, which increases **value for money**

GÉANT cloud service portfolio

Commercial offers

- 2020 IaaS+ Framework by OCRE (valid 2020-2024)
- Preferential Quotations for R&E (IaaS, file storage & sync, collaboration, real-time comms)

Community clouds

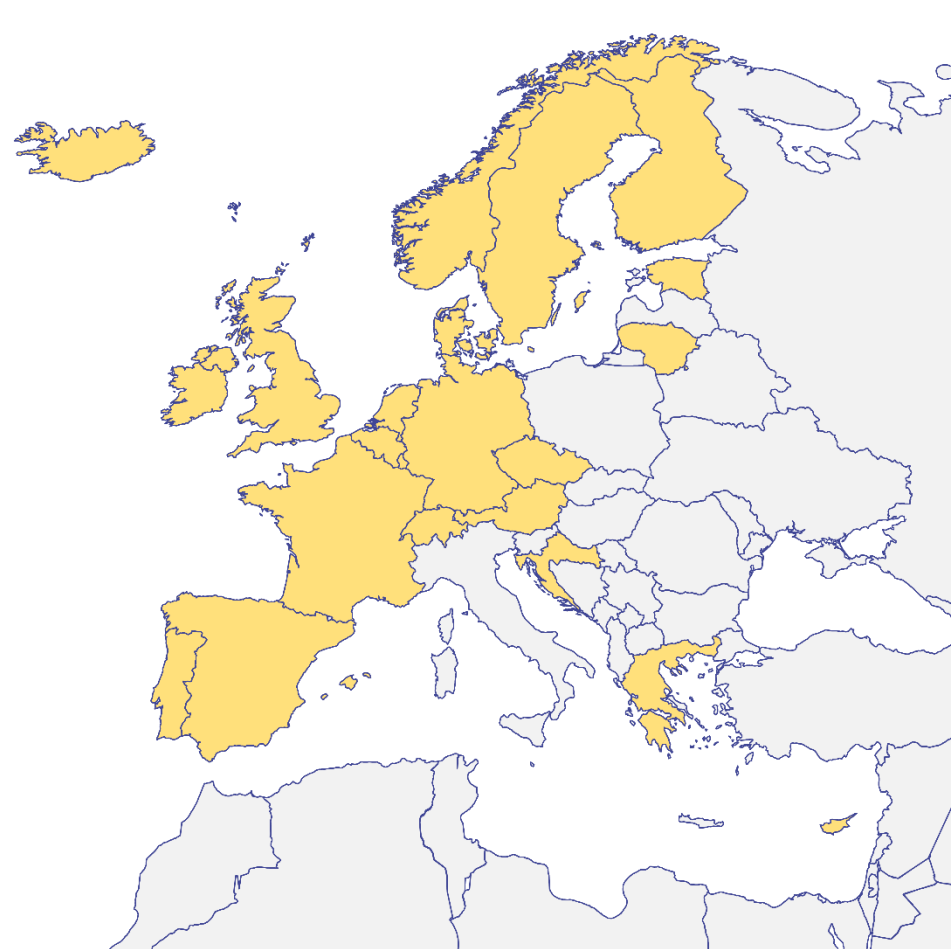
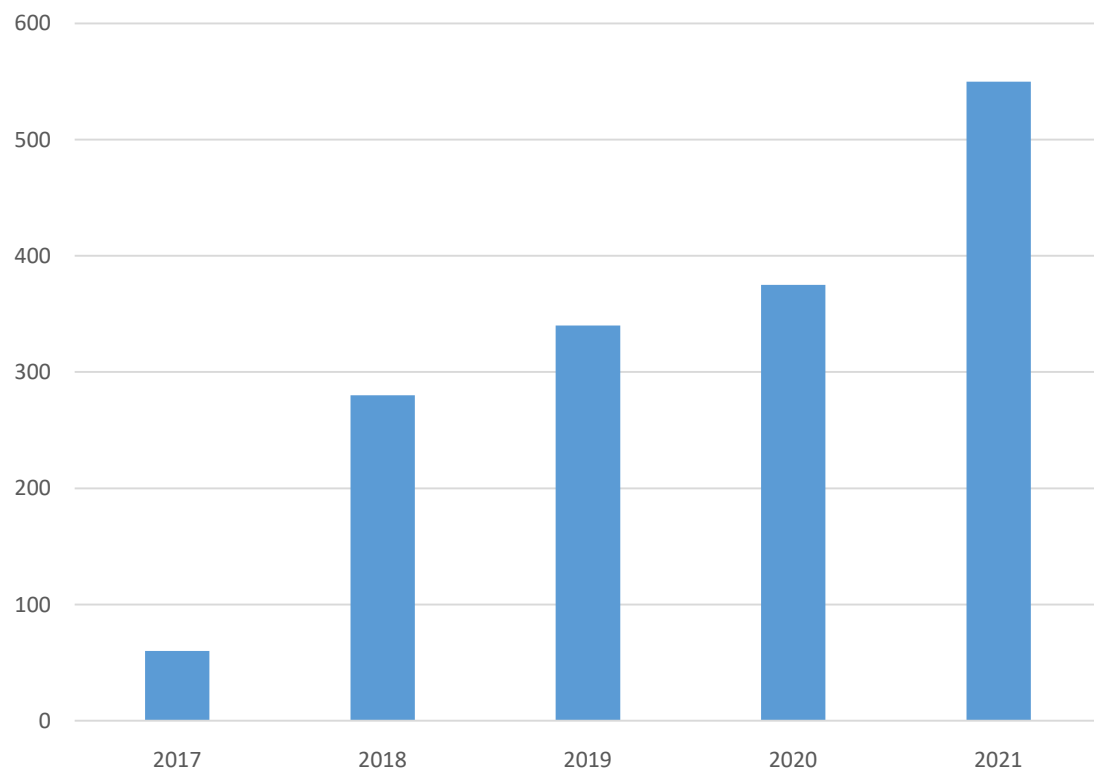
- GÉANT Cloud Flow software as Pilot since November 2020

Real-time communications

- eduMEET as a production grade software since November 2020

GÉANT Service Delivery: *Cumulative growth in usage of the GÉANT IaaS Frameworks portfolio*

Institutions using the IaaS Frameworks

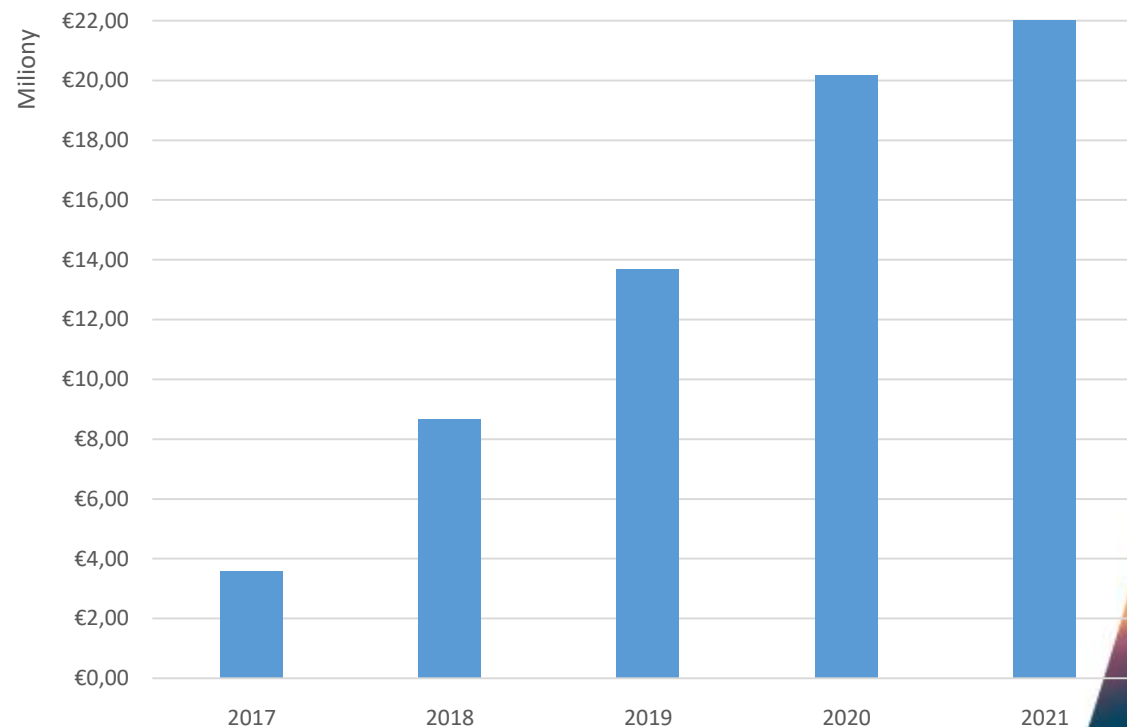


Continuing growth in usage of the GÉANT cloud portfolio

GÉANT Service Delivery: *Cumulative growth in usage of the GÉANT IaaS Frameworks portfolio*

Consumption of the IaaS Framework (2016) and IaaS+ (2020) has increased from 340 (2019) to 550 R&I institutions, consuming together €71.2 M by August 2021.

Marketplace Service Delivery and Adoption System launched by June 2021.



Learning Management Systems tender bundle

For institutions to make their own national LMS tender when needed

Tender purchase volumes as of NREN estimations in October 2019 were not enough for a European wide tender.

Instead the team made a tender document bundle centrally available for NRENs on 31 March 2020

- For saving time and expertise needed for this work

Cloud Adoption Support for Institutions

Cloud contract repository

Toolkits:

- 2020 IaaS+ Framework Cookbook & chatbot
- Cloud Strategy Guide for institutions
- Data Classification Tool for risk assessment

Communication material

- Factsheets, articles, bi-annual Cloud Newsletter
- Case studies, cloud security & architecture blog posts, good practices and instructions

Skills development: meetings, workshops, webinars

Combined with support from suppliers:

- Events: technical workshops, trainings and webinars
- Whitepapers

GÉANT Cloud Survey 2021

Conclusions

112 respondents, both NRENs and R&E institutions.

All the GÉANT services have been used one way or another

Almost all the institutions were very satisfied or satisfied with the FW Agreement, Suppliers or the support provided by their NREN.

- None were dissatisfied.

All the institutions use VC solutions.

- More than half are interested in hearing more about eduMEET

Most efficient ways to reach institutions have been direct communication or emails

Institutions are interested in all kinds of trainings, mostly as in-country events.

- Most appealing topics are security, cost control & legal aspects.

NREN Cloud Consultations 2021

Topics

Usage of the NREN and GÉANT cloud portfolios

- Key cloud services brokered/operated by NRENs
- Awareness and usage of the GÉANT community based offerings

Future needs of NRENs and their connected institutions

- Services that need to be supported for users requirements
- Interest in providing services to other NREN communities, and vice versa
- Community cloud services of most interest
- Estimation for the need for 3rd party vconf licenses

NREN environment and challenges

- Changes in NRENs and their impact on cloud services
- Challenges that need to be solved, incl providing/supporting clouds
- Clouds evolving / developing in NRENs
- Interest in jointly developing common solutions to these challenges

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Conclusions: usage of services, future needs

Service delivery:

- Growing interest in compute services: IaaS, SaaS.
- Still legal obstacles for brokering in some countries.
- Most popular services brokered/operated: IaaS, PaaS, SaaS, collaboration services (incl videoconferencing).
- GÉANT portfolio:
 - Mainly IaaS FWs used.
 - PQs important for small countries.

Community cloud services of most interest:

- IaaS, open-source videoconferencing solutions.

Increased need for security, consultations, trainings.

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Needs of NRENs: Community Cloud services of most interest

Research oriented IaaS services (OpenStack; specialised processors, like GPUs)

GÉANT Cloud Flow, Research Cloud for CWL

File sync & share interoperability, FileSender

Cold store storage

Vconf (eduMEET, Rendez-vous)

Access to libraries

Platform for lecture hall management in campuses

Automate mitigation

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Conclusions: Changes in NREN environments & challenges

Covid influence, digital transformation in organisations, business models

Cloud usage will move from commodity IaaS to **higher value compute & storage** (IaaS, PaaS, CaaS) granting trust, privacy, **security**, open access. **Multi-cloud platforms** as a norm.

Challenges: cloud competence, co-creation & NREN resources, one solution does not fit to all NRENs, sustainability of offers, data protection

GÉANT Cloud Strategy Roundtables 2019: SWOT Analysis, NREN Opportunities.

NRENs as community (including global clouds)

Community cloud (for research community)

Build up capabilities

Thank you

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