## Increasing cloud usage in European Research and Education via GÉANT: 300 institutions, #13 million

Over 300 research and education institutions in 18 European countries are now using the GÉANT Infrastructure as a Service (laaS) framework agreements to safely and easily access market-leading commercial cloud service providers.

The GÉANT laaS has undergone a rigorous EU-compliant tender process so that adopting institutions do not need to run their own tender procedure but can simply benefit from reduced costs and tailor-made service offerings through ready-to-use agreements under their local laws. As a result, R&E institutions have now collectively consumed commercial cloud services through the laaS for a value of over €13 million.

## Reducing Barriers to Service Use

Using the cloud services in the GÉANT framework offers several additional advantages to institutions. It reduces their capital expenditure and provides them with increased flexibility through access to a wealth of online services. Moreover, they no longer have to worry about over-provisioning in-house services or having to expensively upgrade services that turn out not to be needed or to be less popular than anticipated, and the services provided are always up to date, helping institutions to future-proof their offering.

However, many organisations are concerned about the perceived lack of control that using commercial providers may imply. GÉANT has drawn up agreements with the service providers in the framework to ensure that institutions are guaranteed the level of technical and financial control that they need. GÉANT and the service providers also organise cloud workshops and training to help institutions grow their skills in deploying and using cloud solutions with confidence.

## **Next step: OCRE**

The success of the GÉANT laaS framework shows that by working collaboratively the European research and education community can establish the right conditions of use for commercial cloud services. GÉANT will apply the lessons learned from this process in its next project for the delivery of commercial digital services: Open Clouds for Research Environments (OCRE).

OCRE promotes the usage of commercial cloud offerings as part of the European Open Science Cloud. It will aggregate the requirements and demand for cloud services of the European research and education community into a public procurement (tender) to establish agreements with capable cloud providers as well as Earth Observation service providers. The tender is planned to be published in October 2019, with service agreements signed and available in March 2020.

OCRE will facilitate the uptake of these services and, in addition to institutions buying resources, the research community will be able to benefit from an EC cloud adoption fund of €9.5 million.

GÉANT coordinates the OCRE consortium, alongside CERN (https://home.cern/), RHEA (https://www.rheagroup.com/) and Trust-IT (http://www.trust-itservices.com/).

## More information

https://clouds.geant.org https://www.ocre-project.eu "After moving 98% of our infrastructure in Azure, we don't have to worry about the physical hardware and administrative and contract costs are much lower."

Dr. Ray O'Neill, Head of ICT and Procurement, Quality & Qualifications Ireland

"My first experience in working with a cloud service was very positive. All in all, the cloud service, in my opinion, offers many advantages in teaching scenarios on ICT topics."

Teacher of the Lycée des Arts et Metiers (LAM), Luxemburg

"We're collaborating with the universities of Bergen and Oslo to demonstrate how we can create a common market place, a sort of AppStore, where the universities can act as both consumers and suppliers. In this work we have utilised both container technology and Kubernetes."

Hildegunn Vada, UNINETT