tnc18 Trondheim, Norway 10 -14 June 2018
Intelligent networks, cool edges?

GÉANT

Developing the clouds

The next steps for the GÉANT cloud activity

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GÉANT cloud activity leader

TNC18, Trondheim, Norway
June 12, 2018

GÉANT

BRINGING THE CLOUD TO THE GROUND

Together, we make online services accessible:
easy and safe to use.

Through our pan-European collaboration and agreements,
we have established a European Digital Single Market
for cloud services.

Cloud: (to become) the default distribution and usage mechanism

20 IaaS offerings	**3** file storage products	**3** video conferencing offerings
		STUN/TURN infrastructure & WebRTC client

Service portfolio management operations
Community: more than 150 NREN service delivery staff and cloud specialists

License and contract management
Technical, workload migration
Cloud strategy, data and risk classification, cost benchmarking
Multi-cloud management platforms
Events, workshops, training
Technical connections with cloud providers: network peering IdM (single sign-on)
Gather and align community requirements and roadmaps
Broker agreements with commercial suppliers
Build community clouds. Scale up national clouds to a pan-European level

Cloud Competency Centers

Hybrid, multi-cloud approach

Commercial, community clouds
Build and buy

NRENs support institutions
with the full-service
delivery lifecycle

From cloud strategy and sourcing
decisions to service contracting,
implementation

and service management

IaaS tender outcome: Framework Agreements awarded, valid until end of 2020

Amazon Web Services

AWS Cloud for Higher Education Whether you need to facilitate teaching and learning, better manage your university's operations or access via resellers

ITSoft

ITSoft provides Croatian companies IaaS rental of CPU, RAM, DISK space, network and security devices in a self-service portal that

Dimension Data

Dimension Data provides hybrid cloud-enabled by data centres, networking, collaboration and security offering 99.999 % availability SLA, IPV6 support, cloud

Vancis

Vancis specializes in data centre services, IaaS / cloud services, managed services and value-added platform services. Vancis operates from its

Microsoft Azure

Microsoft Azure – the perfect choice for Education and Research Microsoft Azure is the perfect choice for research and education. via resellers

Cloud Sigma

CloudSigma is a leading European infrastructure-as-a-service (IaaS) provider with a focus on flexibility, performance and excellent customer support. Everything is

Lattelecom Cloud Services

Lattelecom | Cloud is a servi that provides companies with computing resources – Virtua Machines and Virtual Data Ce ters including

KPN

KPN offers institutions in the Netherlands Managed Hybrid Cloud Services, an application-centric service

Sparkle's cloud automation offer for Research & Education

Sparkle provides GÉANT wit cloud solutions to support t pan-European research and cation community. Cloud so tions will be offered by

Interoute

From the ground to the cloud Today people and customers across the globe rely on Interoute's cloud based services and

T-Systems Cloud Service

Scientific computing: cloud support for science Digitization provides fresh impetus and inspiration across all scientific fields. In particular, scalable, rapidly

Benefits of the pan-European GEANT framework agreements

Discounted prices for all institutions, large and small

Ready-to-use agreements, which comply with EU data protection law

Invoice billing, no credit card needed, accommodating capital expenditure through upfront commitments

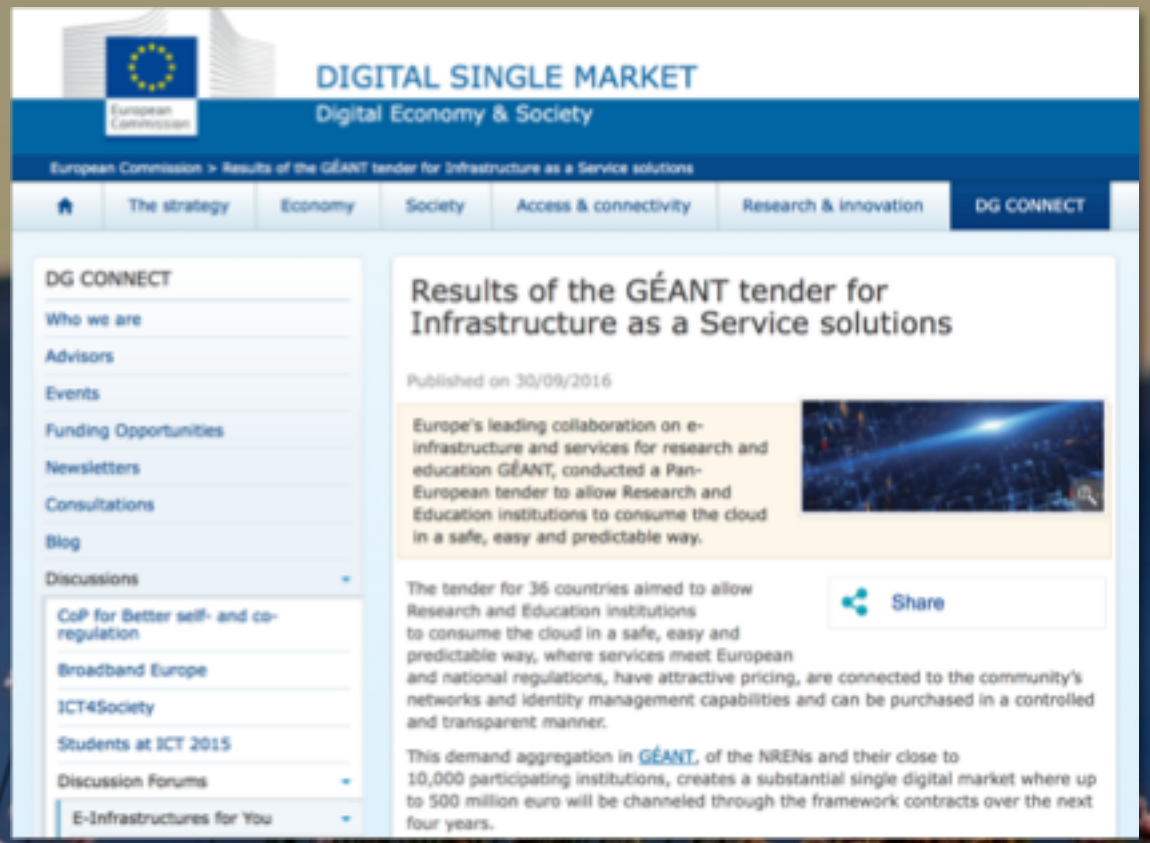
Transfer existing educational licenses to the cloud

Manage usage and spending

Sign your contract under local law

Reduced traffic costs, through suppliers' connections to the GÉANT and NRENs networks

Identity management, single sign-on support (SAML2)



EU institutions can buy the offerings directly
There is no need to run your own tender
Contracts are GDPR compliant

Google Cloud Platform: dedicated offer for the European research and education community through GEANT

Ready to use agreements for institutions
Consume up to national tender threshold

Compliant with EU data protection regulation (GDPR)

Single sign-on support (SAML2)

Special discounted prices

Significantly reduced network costs: Google connections to the GÉANT and NREN networks.

DROPBOX

Tailor-made offer for the European research and education community through GEANT

Ready to use agreements for institutions
Consume up to national tender threshold

Storage in Europe

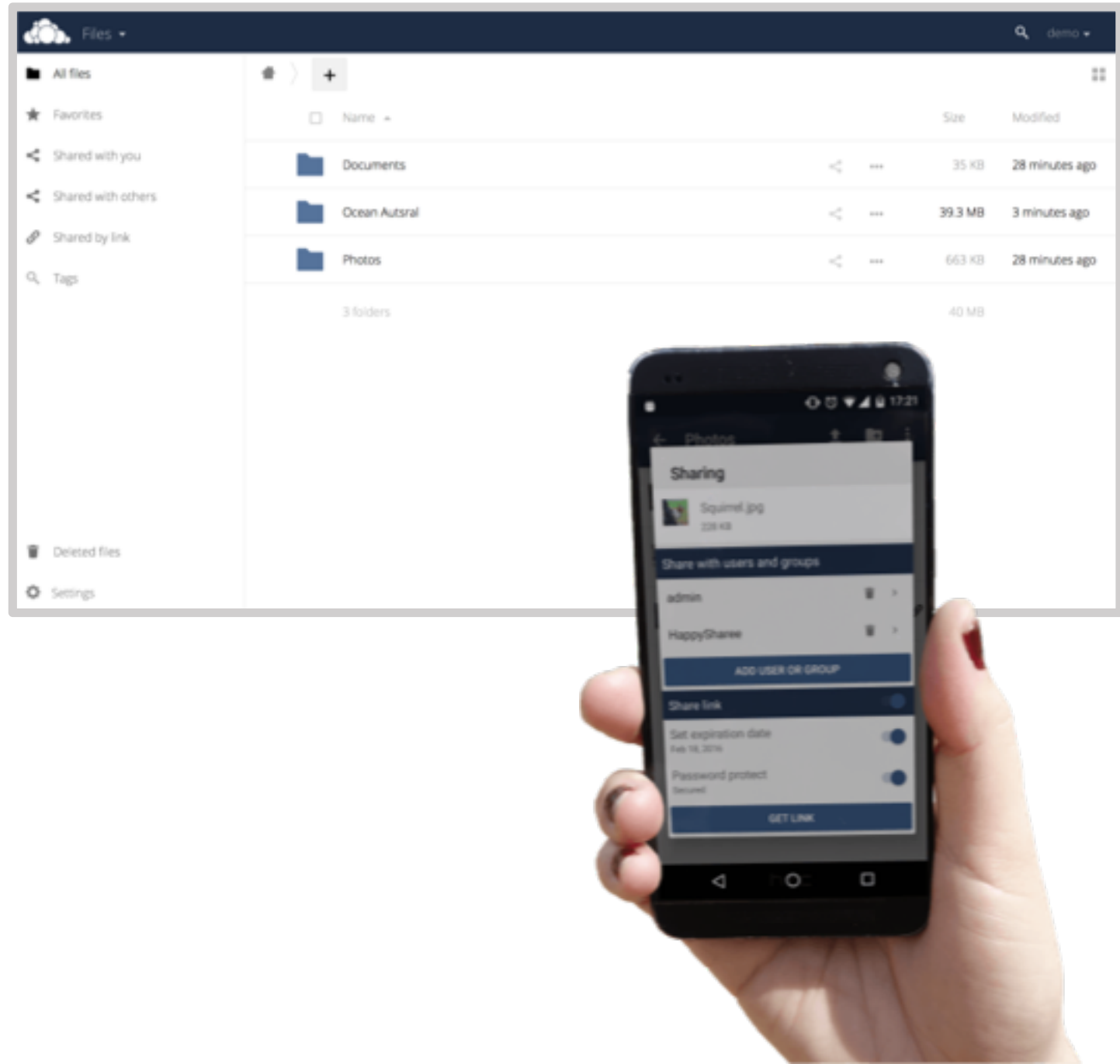
Compliant with EU data
protection regulation (GDPR)

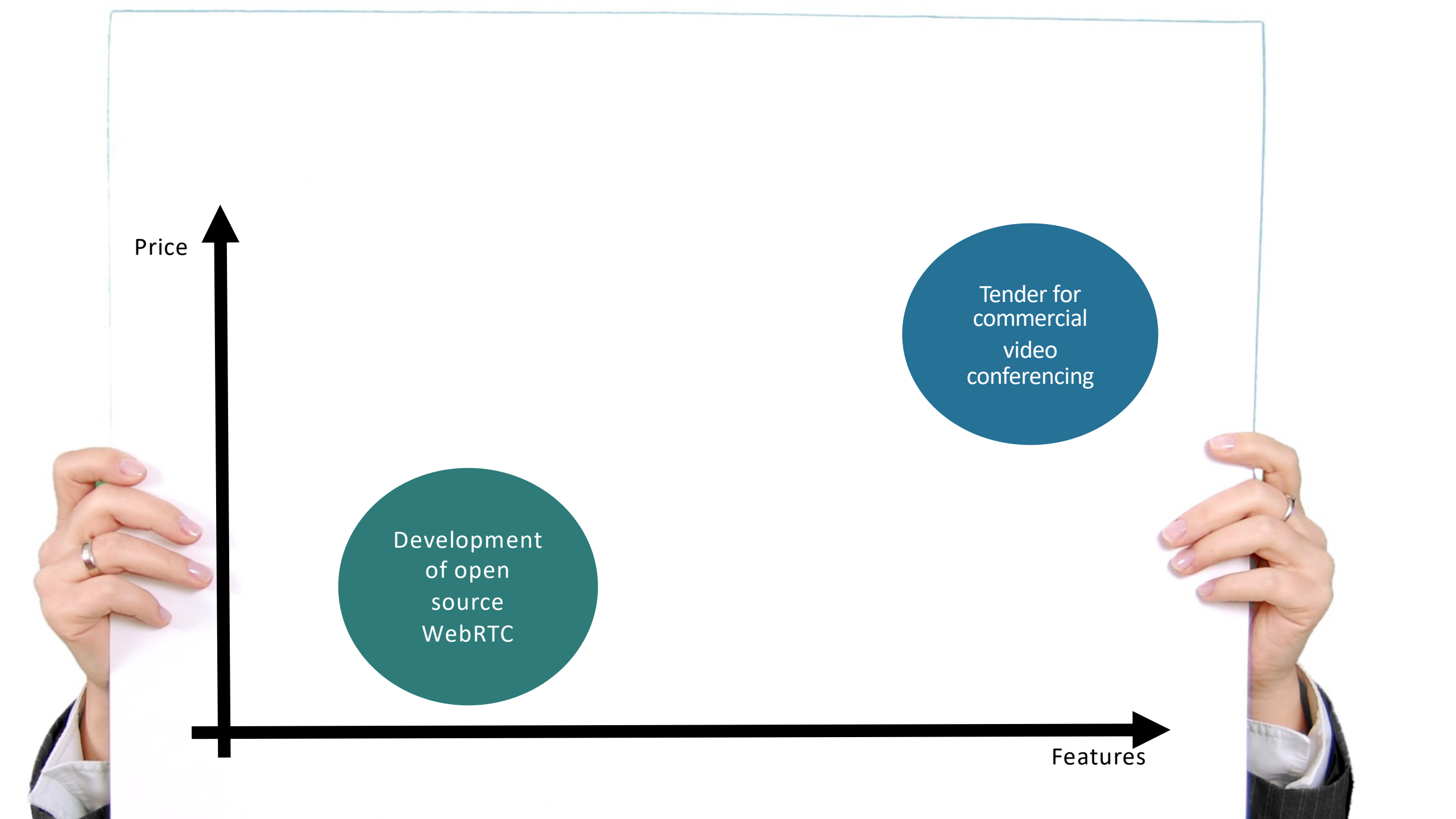
Single sign-on support
(SAML2 and Shibboleth)

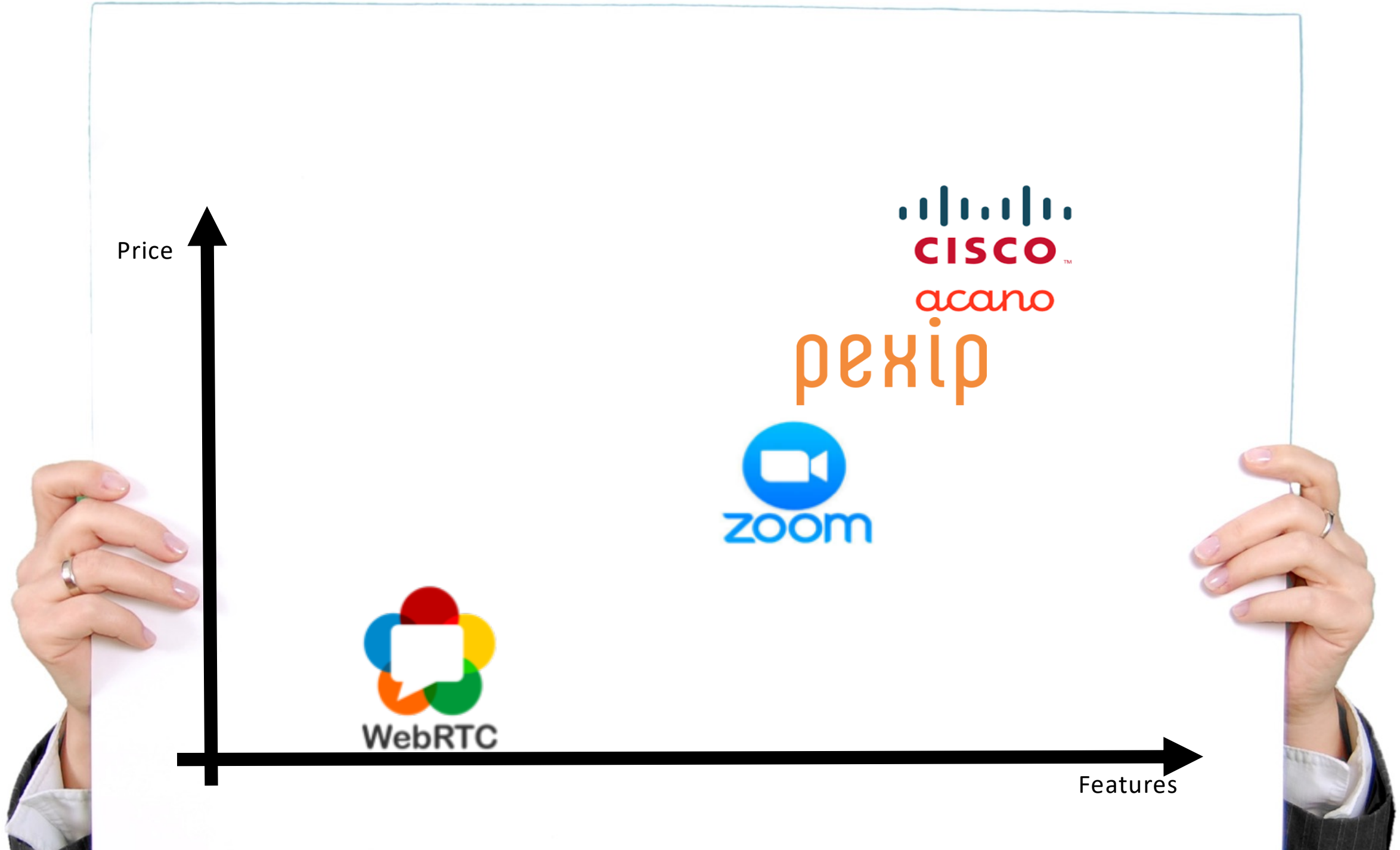
Special prices for the community

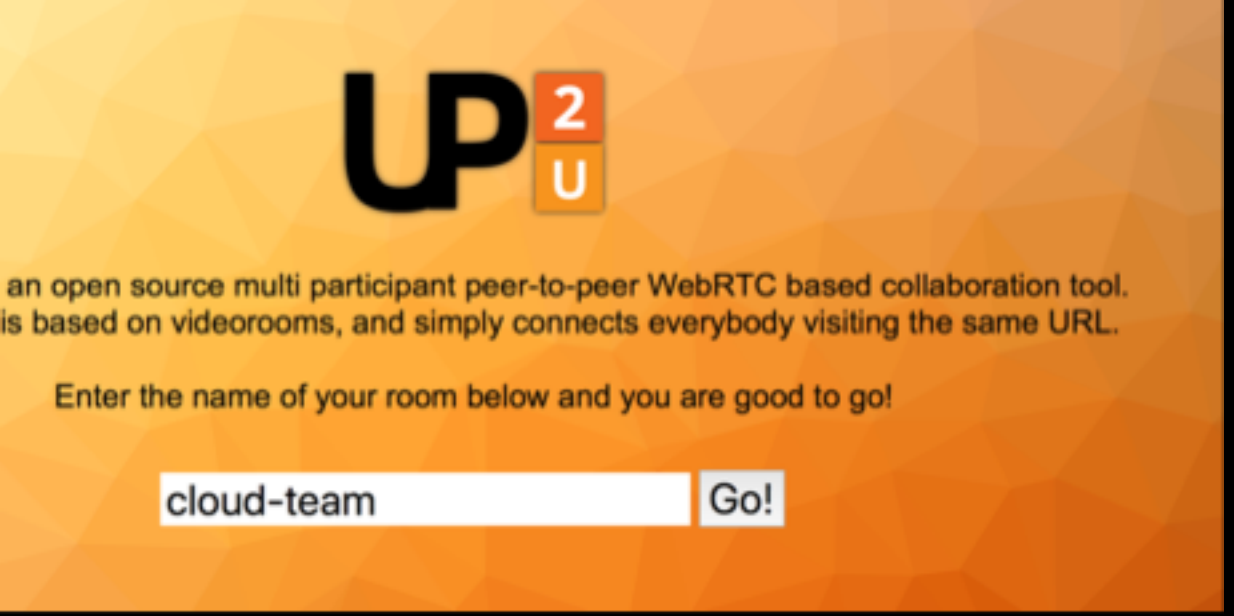
ownCloud

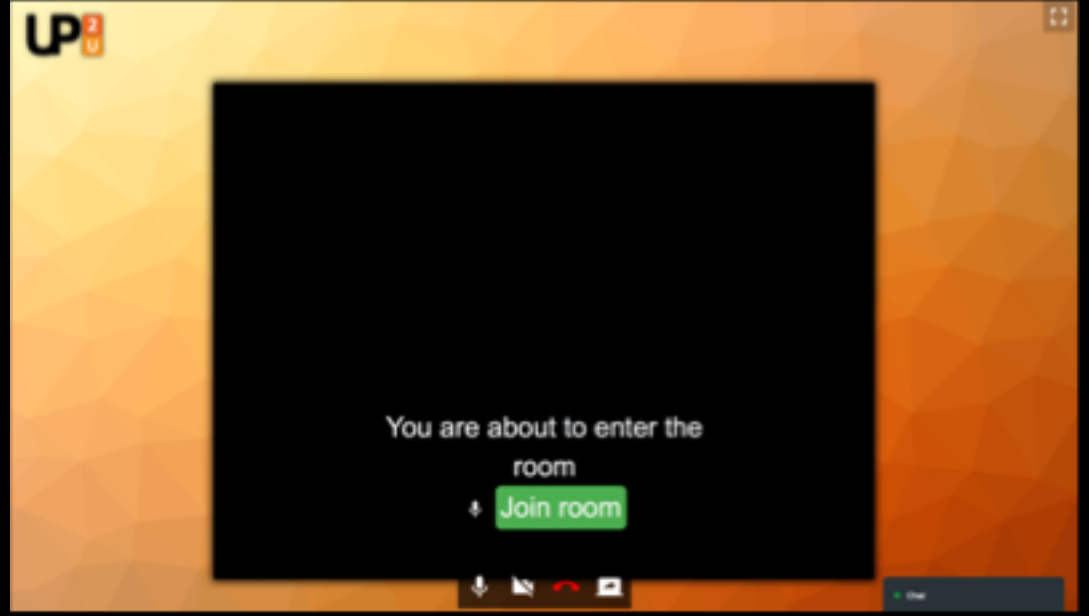
Nextcloud

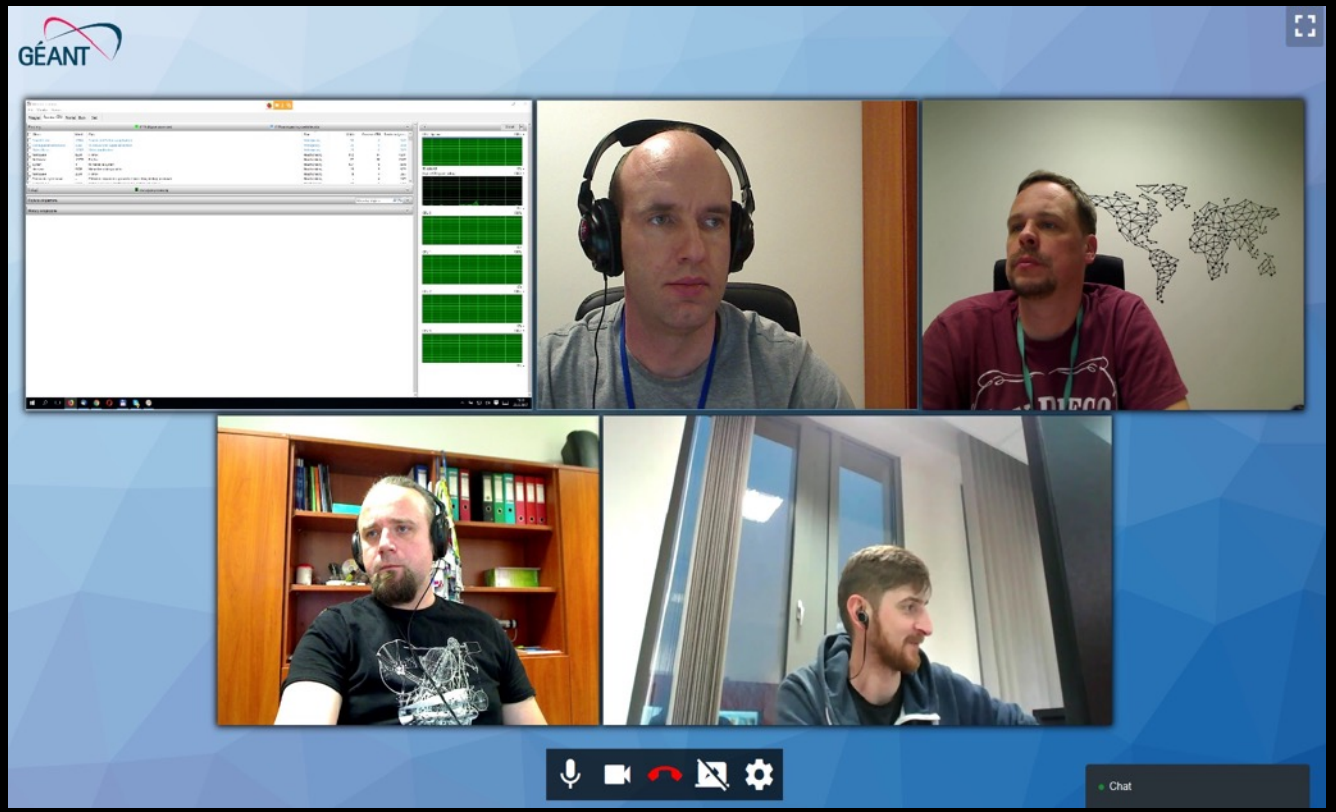



Price
Tender for commercial video conferencing
Development of open source WebRTC
Features


Price
Features
CISCO
acano
pexip
zoom
WebRTC


an open source multi participant peer-to-peer WebRTC based collaboration tool.
is based on videorooms, and simply connects everybody visiting the same URL.
Enter the name of your room below and you are good to go!
cloud-team
Go!


You are about to enter the
room
Join room


GÉANT
Chat

GÉANT clouds Website

GÉANT clouds website, supports NRENs, institutions and suppliers to deliver and adopt cloud services

Newsfeed & cloud events

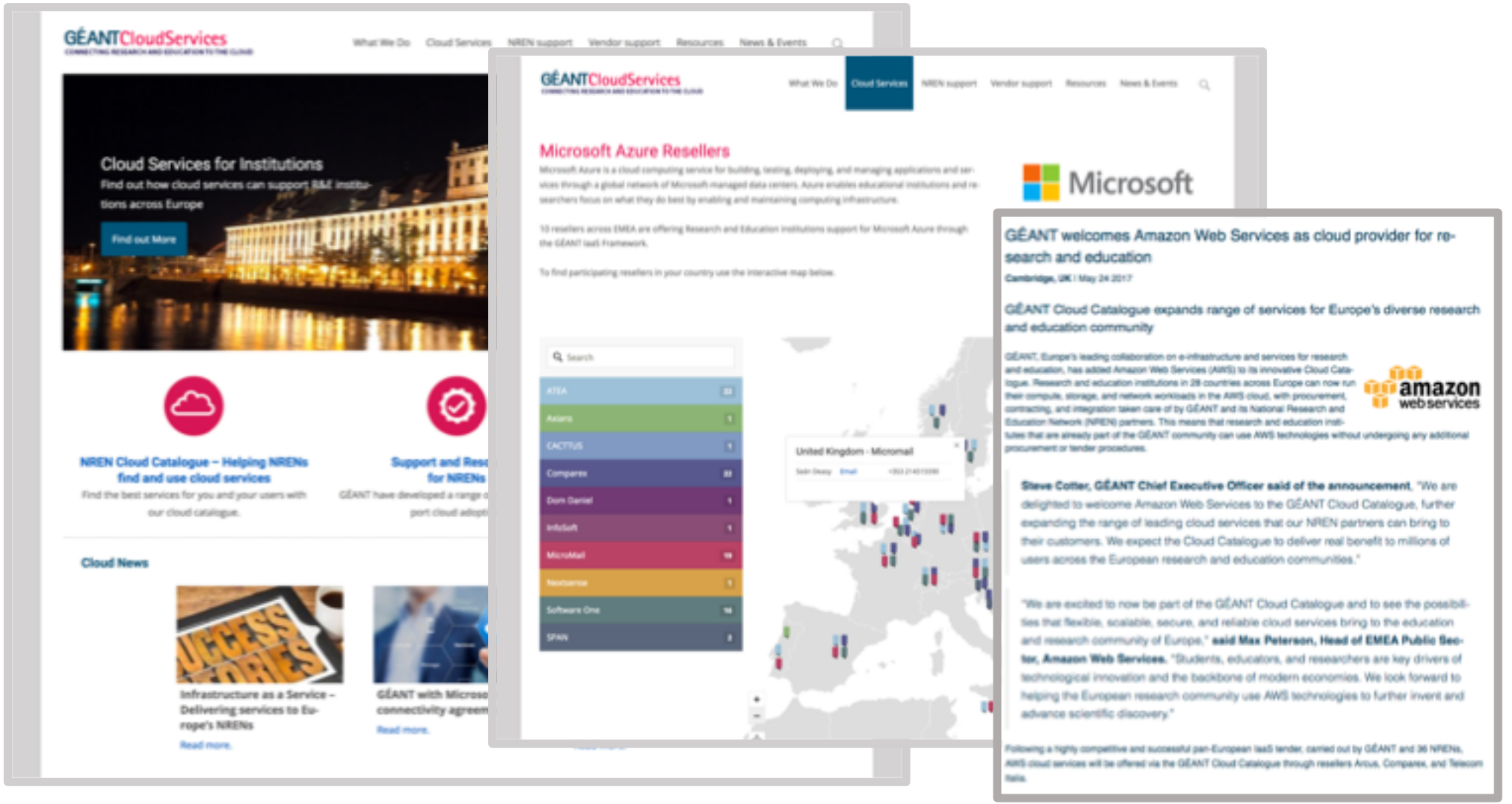
Cloud catalogue & IaaS Service Matrix

User stories

Maps for contacts

Guidelines

Contract Repository



https://clouds.geant.org

GÉANT clouds Website

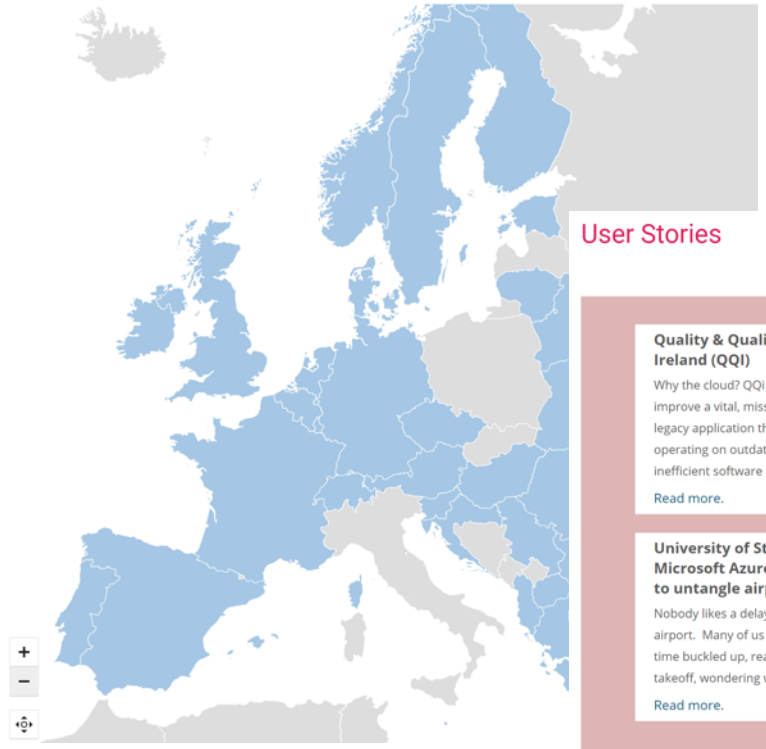
https://clouds.geant.org/support-for-institutions/

NREN Cloud Contacts

To find out how to use the cloud service frameworks within your region select your country below to find your local cloud service management team.

Search

- Albania (RASH)
- Armenia (ASNET-AM)
- Austria (ACOnet)
- Belarus (BASNET)
- Belgium (Belnet)
- Bulgaria (BREN)
- Croatia (CARNet)
- Cyprus (CYNET)
- Czech Republic (CESNET)
- Denmark (DeiC)
- Estonia (EENET)
- Finland (CSC)
- France (RENATER)



Support for Institutions

Thanks to a unique pan-European collaboration, GÉANT and 36 NRENs around Europe can offer you a range of attractive Infrastructure as a Service (IaAS) cloud computing solutions, tailor-made, and priced, for academia.

Which services are available?

Leading global cloud vendors like Amazon Web Services (AWS), Microsoft Azure and a range of other infrastructure providers.

Why should you use the cloud framework?

Quite simply to save money and time. There are discounted prices available, which apply to all institutions, large and small. Institutions already using cloud services have achieved cost savings of up to 30%, after moving to the framework contracts. The ready-to-use agreements comply with EU data protection law and were established using the EC 2014/24/EU procurement directive, which allows you to use the services directly, without running your own tender / call-for-competition.

Billing and purchasing models were designed to match financial structures in research and education institutions so that you can manage usage and control spending. In addition there are a range of additional benefits;

User Stories

Quality & Qualifications Ireland (QQI)
Why the cloud? QQi needed to improve a vital, mission-critical legacy application that was operating on outdated hardware, inefficient software
Read more.

App Store for scientists
Together with the University of Bergen and the University of Oslo, UNINETTs HE Cloud initiative (UH-sky) is working to demonstrate
Read more.

Educational clouds in Norway – Edulab
The UNINETT HE cloud initiative, UH-sky, together with the Norwegian University of Science and Technology (NTNU), is looking into how
Read more.

IT-Lab: Is it possible to move the university data centre to the cloud?
Why the cloud? In a collaboration with the University of Agder, UNINETTs HE Cloud initiative (UH-sky) is exploring the possibility
Read more.

University of Stirling and Microsoft Azure helping to untangle airports
Nobody likes a delay at the airport. Many of us have spent time buckled up, ready for takeoff, wondering why
Read more.

Coventry University Hits £1 Million Savings Goal with Virtualised Network
When the Coventry University IT team was asked to cut £1 million from its budget, it turned to virtualisation technologies.
Read more.

University Gains Cost-Effective Disaster Recovery Solution
Marquette University didn't have an effective disaster recovery process in place because of the high cost and IT time required
Read more.

Norway: Box for all students
Why the cloud? Students at AHO had access to a personal storage space of 4 Gigabyte on school servers. With
Read more.

Find out More

How the Iaas Procurement Tender Works

Watch the video

Need help?

Find your in-country NREN representative

What services are available?

GÉANT Cloud Catalogue

GEANT Cloud Data Classification Tool

What can I do with cloud services?

In 17 countries, institutions consume IaaS through the GEANT framework

IN DEVELOPMENT

Tools to enable NRENs, make it easier for institutions to use the contracts

AI chat bot to ask questions about using the cloud offerings

Cost benchmarking, to get insights in spending and costs

Service procurement vehicle: more services, more automated, more flexible

Software as a Service

Virtual Learning Environments

File sync and share

Collaboration services

Cloud Orchestration

Cloud Management Platforms

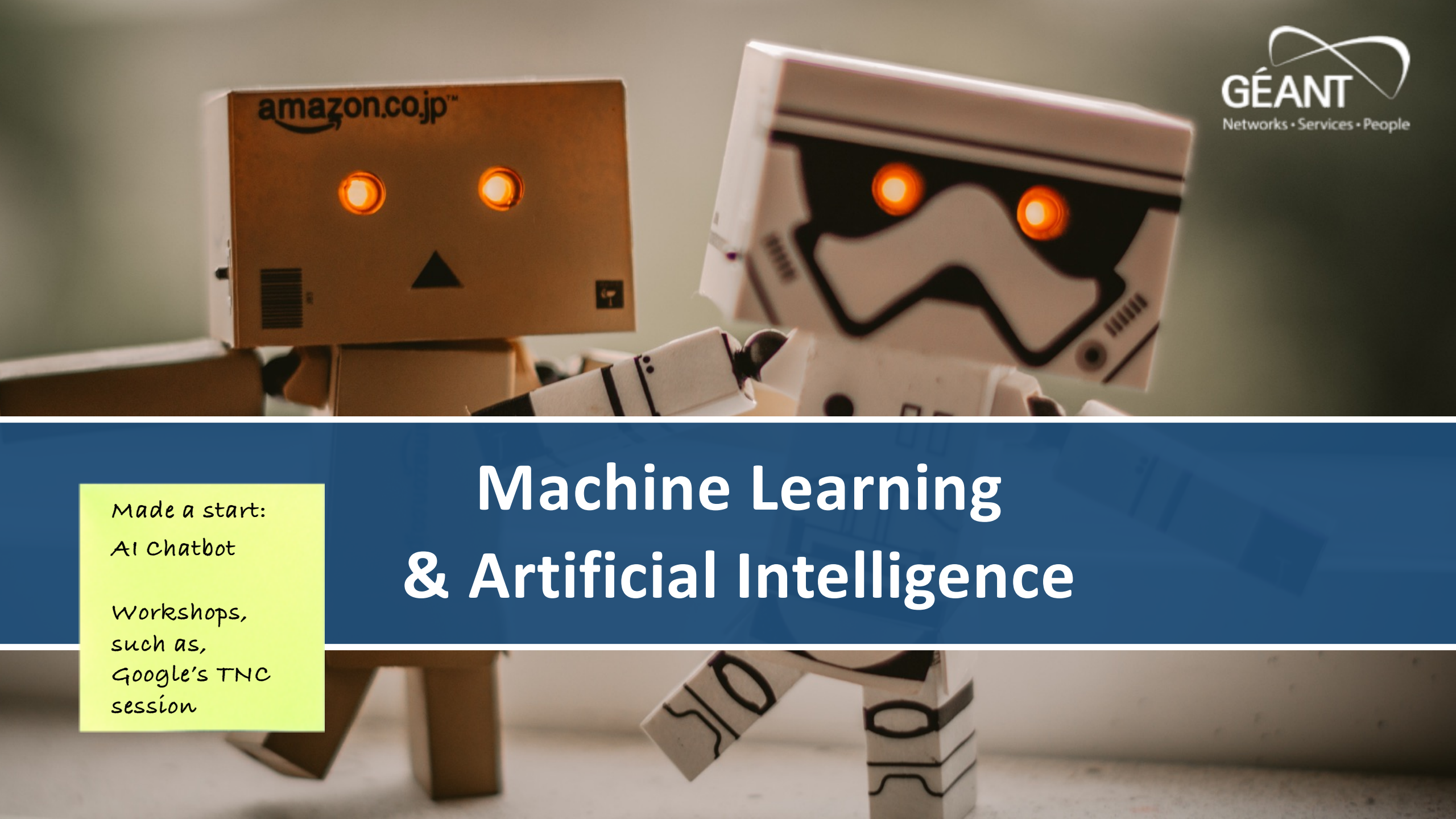
The ability to control and move virtual machine workloads across different suppliers.

Centralised metering, alerts, billing, usage caps, reporting and workload optimisation.

GÉANT
Networks · Services · People

Cloud security services

Including cloud security advice for institutions



GÉANT
Networks • Services • People

Machine Learning & Artificial Intelligence

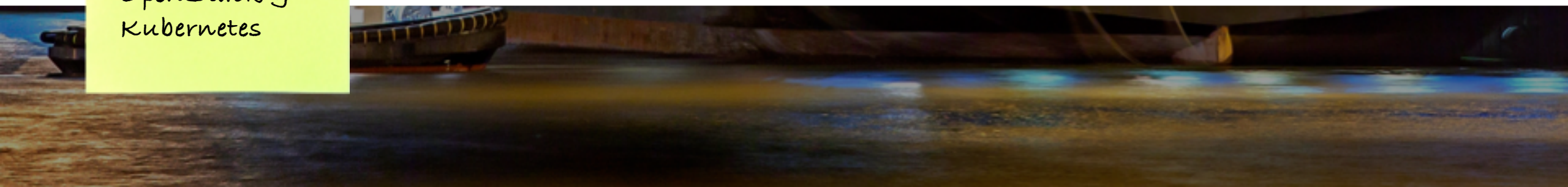
Made a start:
AI Chatbot

Workshops, such as, Google's TNC session

GÉANT
Networks • Services • People

Container based virtualisation

Seamless authentication path between OpenStack & Kubernetes



Broker agreements for hardware, devices and content

License and contract management
Technical, workload migration
Cloud strategy, data and risk classification, cost benchmarking
Multi-cloud management platforms
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hybrid multi-cloud approach: community and commercial clouds

DEVELOPING THE CLOUDS

https://clouds.geant.org
clouds@geant.org

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Thank you
Any Questions?

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© GÉANT Association on behalf of the GN4-2 project. The research leading to these results has received funding from the European Union's Horizon 2020research and innovation programme under Grant Agreement No. 731122 (GN4-2).