



SIG-CISS at CS3

Slides v2.0

March 6, 2023

Mario Reale

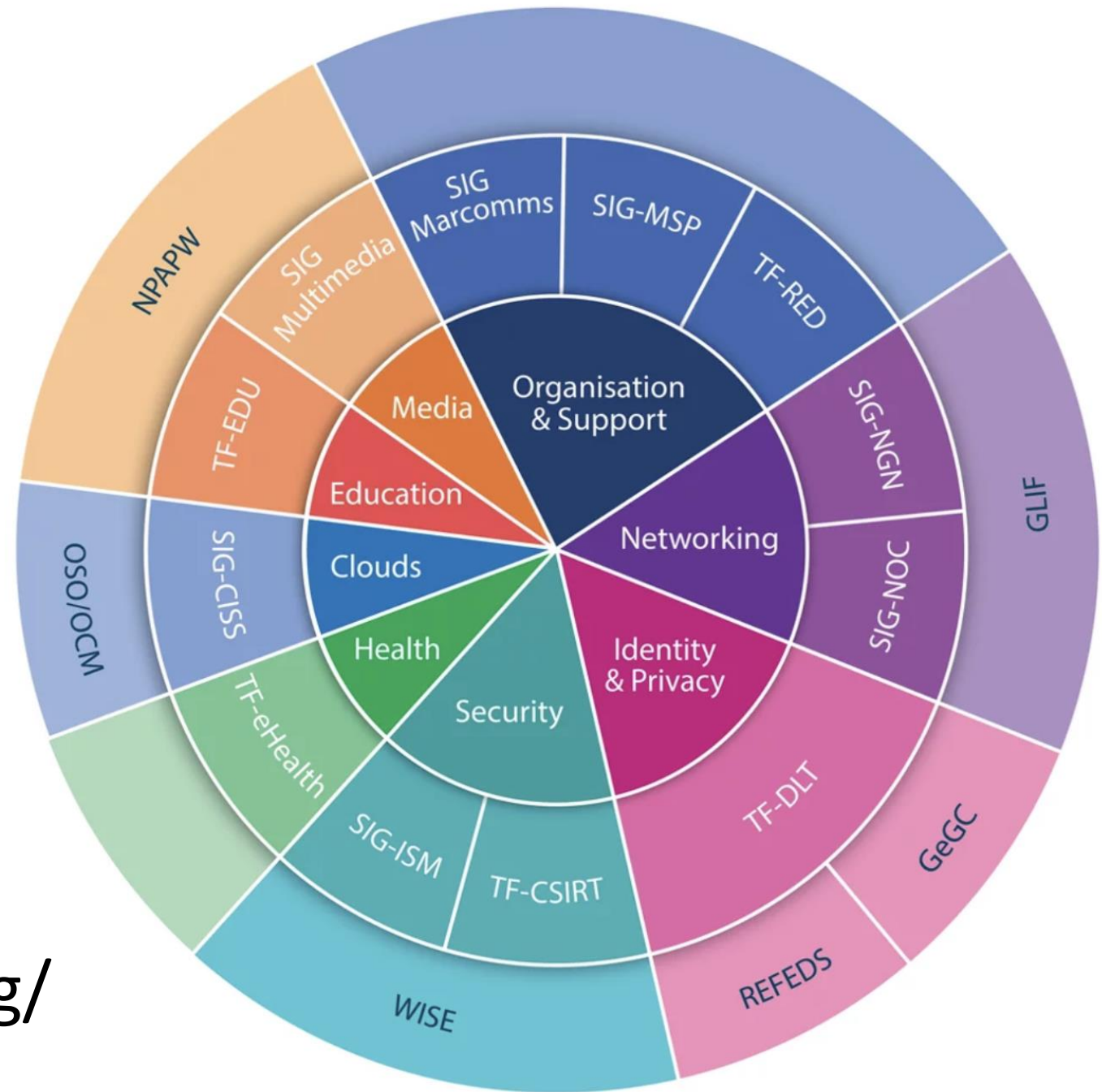
Senior Research Engagement Officer
GÉANT

www.geant.org

The GÉANT Community Programme

- **Brings the NRENs and Research and Education Community together** to tackle common challenges
- Main goal is to **exchange experiences, best practices, share hands-on expertise** in various domains involving the NRENs, their services and their connected community of users
- Implemented through **Special Interest Groups and Task Forces**

<https://community.geant.org/>



The Special Interest Group on Cloud Interoperable Software Stacks

SIG-CISS: mission and goals

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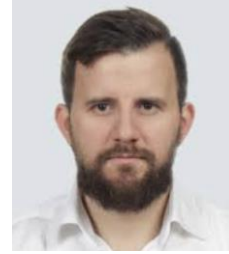
- To provide a **forum for gathering and exchanging experiences and knowledge** on the **development, deployment, testing and standardisation of cloud infrastructure software stacks**, platforms and workflows
- To **share deployment and operations best practices** about all the pillars of the cloud infrastructure
Leverage CS3 (CERN) and OSO (SWITCH)
- To **stimulate joint efforts in solving everyday operational issues**, developing software components as needed, building and maintaining infrastructure and platforms
 - i. including shared / transnational deployments
 - ii. conducting PoCs
 - iii. defining functional and quantitative tests
- To **improve awareness of software and hardware solutions** available on the market and infrastructures, platforms and services provided by NRENs

- To help **identify current and future requirements** and workflows of the scientific/academic community
- To **provide an interface among operators and owners of the cloud computing and storage infrastructure (IT experts) and the actual users** (institutions, communities and collaborations)
- To define, stabilise and promulgate **mutually agreed upon APIs** as exported by NREN cloud stacks, preferably globally recognised APIs
- To **engage with RDA, TF-RED, EUDAT, PRACE, EGI and other related groups.**
Aim for a common cloud platform for execution, plugging in workflows from researchers (interoperability)

SIG-CISS : roadmap from the Steering Committee (about 1 year ago)



Guido Aben, Nordunet



Maciej Brezniak PSNC



Jan Meijer SIKT

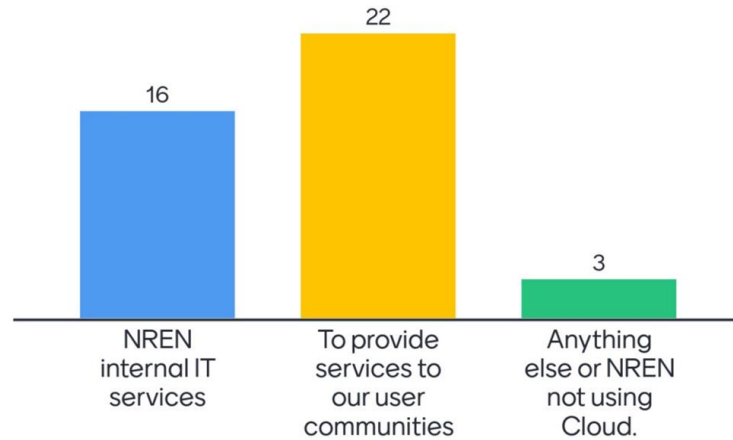


Claudio Pisa GARR

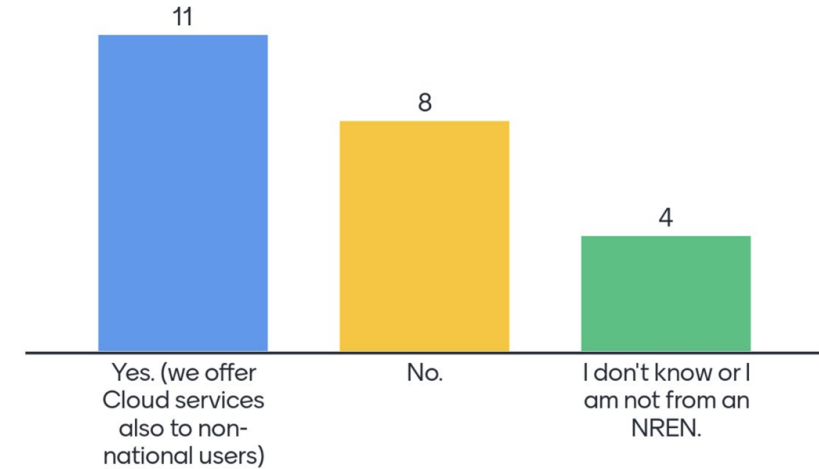
- **Rebuild the community:**
sharing experiences about operating and using the Cloud
- Focus on the topics where synergies among the NRENs can deliver:
 - **Operating and Using the Cloud** (rather than just splitting the community in Builders and Buyers)
- Contributing upstream to key open source projects when possible/required
- Evaluate the possibility to jointly work on **specific PoCs of interest**

Outcomes of community poll - <https://bit.ly/menti-6th-sig-ciss>

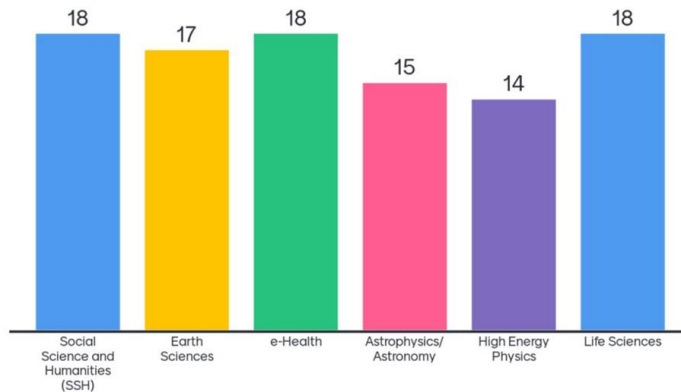
4) What do you use the Cloud for ?



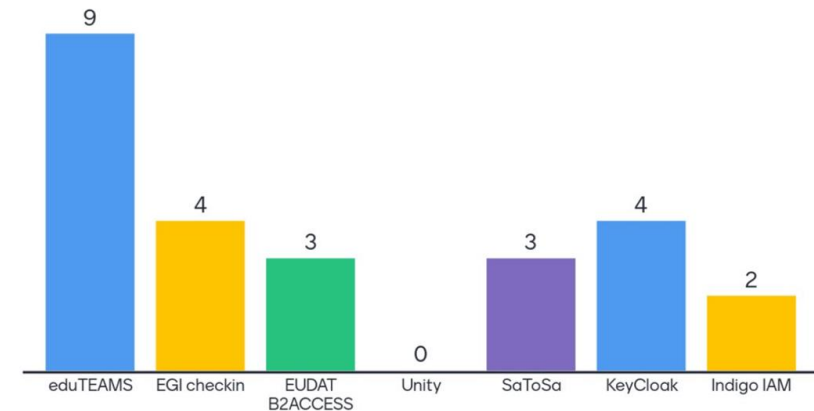
9) Is your NREN providing Cloud services to the GÉANT Community across national borders ?



5) Do you (or do you plan to) provide services to the following user communities ?

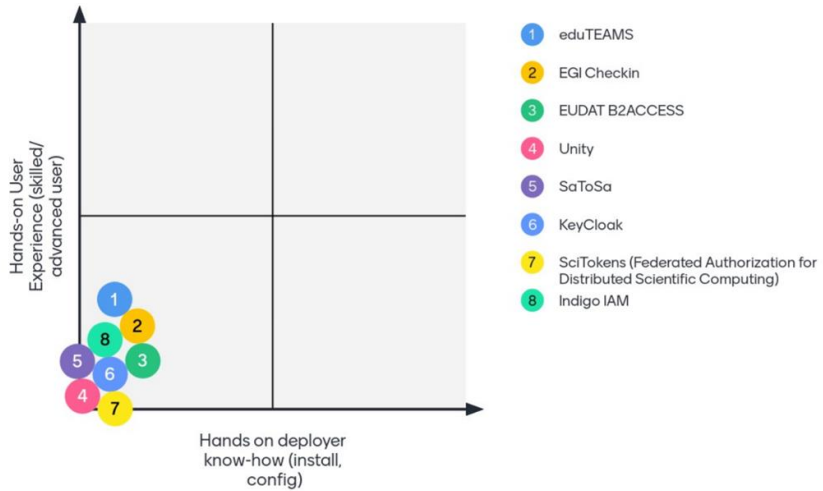


11) Which of the following AAI platforms you consider relevant to your plans for the Cloud to integrate Services and Identity Providers (Users) ?

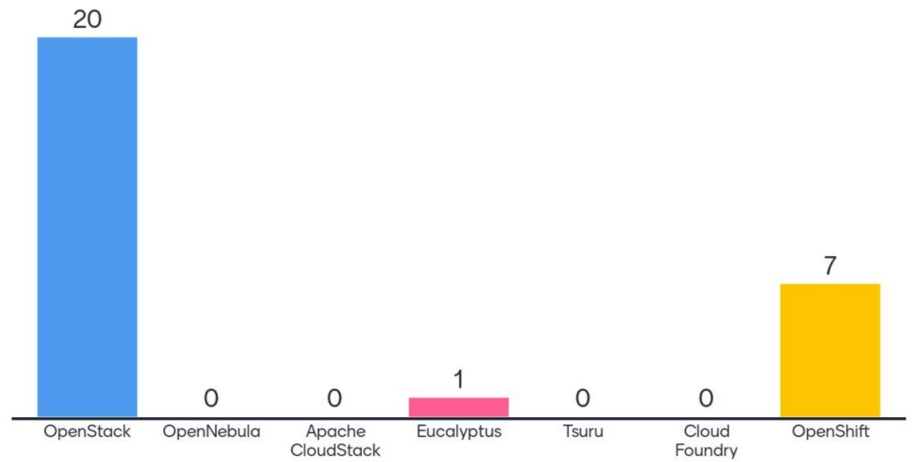


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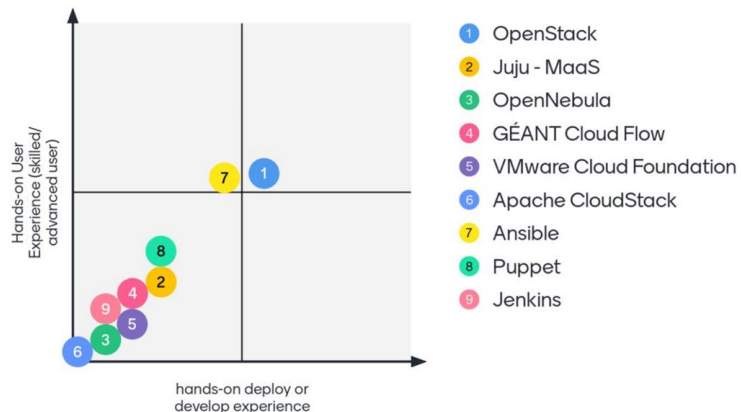
12) Rate (1-10) your direct experience as deployer (when it applies) and as user on specific AAI solutions (for AuthN, AuthZ or both)



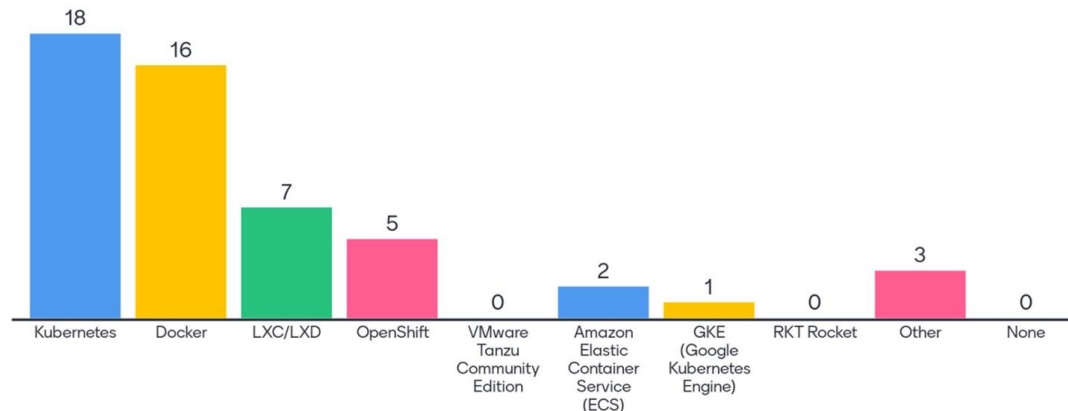
13) Which of the following Cloud platforms is or will be relevant for the provisioning of your NREN cloud services?



14) Rate (1-10) your direct experience as deployer (only if and where it applies) and as user/tester of specific Platforms/Tools

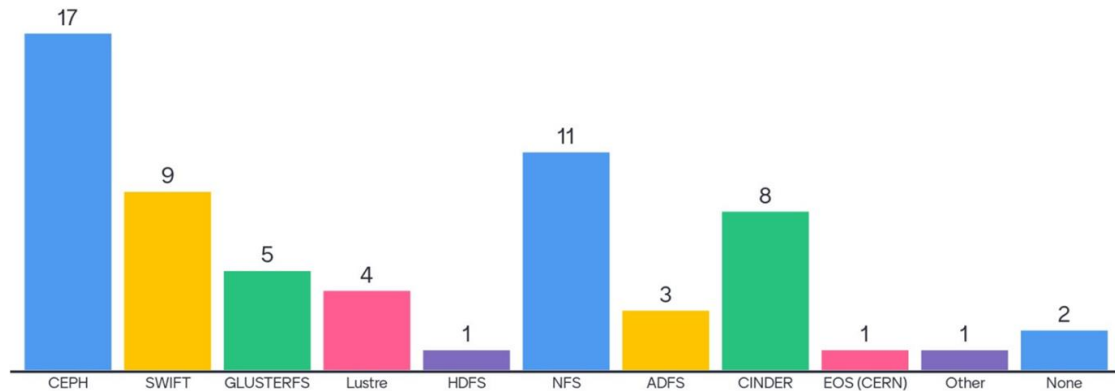


15) Which container platform is of relevance for your NREN Cloud services (already adopted or planning to adopt it)



Outcomes of community poll - <https://bit.ly/menti-6th-sig-ciss>

16) Storage: which of the following platforms or distributed filesystems is relevant for your NREN (currently in use or already planned)



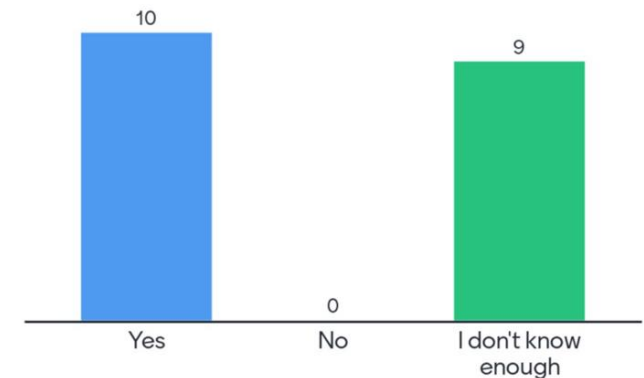
25 countries

Participation from 2018



28) Would you favour our SIG liaising and contributing more to the CS3 Community (Cloud Storage Sync&Share)

<https://www.cs3community.org>



How can GÉANT and the SIG-CISS be useful to CS3 ?

- Involve **NRENs and the CS3 community in PoCs** on selected, specific cloud platforms components of common interest
 - Testing and benchmarking Storage Performances over the WAN
 - Leveraging GÉANT DTN network
- Monitoring the landscape on the evolution of key aspects related to Cloud platforms
 - e.g. **AAI components** - **File Systems** - **Storage platforms** - **Hybrid and Private Cloud**
- ASK vendors in providing updates on latest hardware solutions and storage platforms
- Building a **Community Knowledge DB** on Storage platforms
- [...] Any other idea ? **reach out** to **SIG-CISS** !



Wednesday's SIG-CISS: 15:15 to 17:50 - Agenda - You are **ALL WELCOME**

Time	Talk	Speaker	Duration	Topic	Notes
15:15-15:20 CET	Opening	Mario Reale GÉANT	5 min	opening agenda	On Site, in person Presentation
15:20-15:40 CET	Overview of the Cloud activity in the GÉANT GN5-1 Project	Maria Ristkok EENET Jakob Tendel DFN	20 min		Remote Presentation
15:40-17:25 CET	SOLUTIONS AND TECHNOLOGY SHARING FROM THE COMMUNITY SESSION		1h 30 min + 15 min break		
15:40-16:00 CET	ABEBox: end-to-end encryption for Cloud-based file sharing services	Emanuele Raso Seconda Universita' di Roma -Tor Veragta	20 min		Remote Presentation
16:00-16:25 CET	OpenShift and Kubernetes at CERN	Jack Henschel CERN	25 min		Remote Presentation
16:25-16:50 CET	PBSPPro-Kubernetes Connector for Seamless HPC Submission	Viktoria Spisakova Institute of Computer Science Masaryk University	25 min		Remote Presentation
16:50-17:05 CET	Coffee Break		15 min	Coffee Break	
17:05-17:25 CET	TripleO for the under and upper Cloud	Andrea Dell'Amico Franca Debole CNR-ISTI Pisa	20 min		On Site in person Presentation
17:25-17:45 CET	NRENs BUILDING CLOUDS REPORTS SESSION		20 min		
17:25-17:45 CET	HEANet reporting	Glenn Wearen HEANet	20min		Remote Presentation
17:45-17:50 CET	Next Steps and meeting closure	Mario Reale, All	5 min		

Thank you !

<https://wiki.geant.org/display/CISS/SIG-CISS+Home>

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