eduGAIN

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Ann Harding
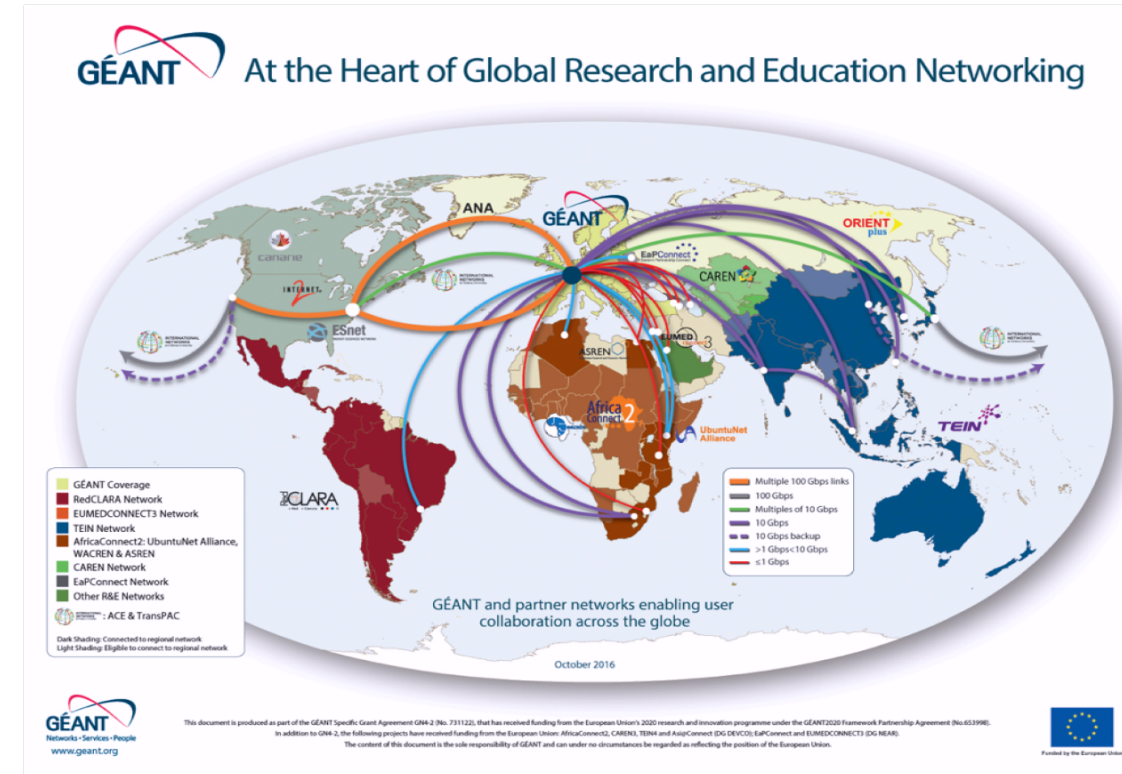ann.harding@switch.ch

EOSCPilot WP5 AAI call

July 2017

o The way researchers collaborate within scientific communities can vary significantly from community to community

o The ability to access and share resources is crucial for the success of any collaboration

o Advanced Research and Education (R&E) needs advanced IT services
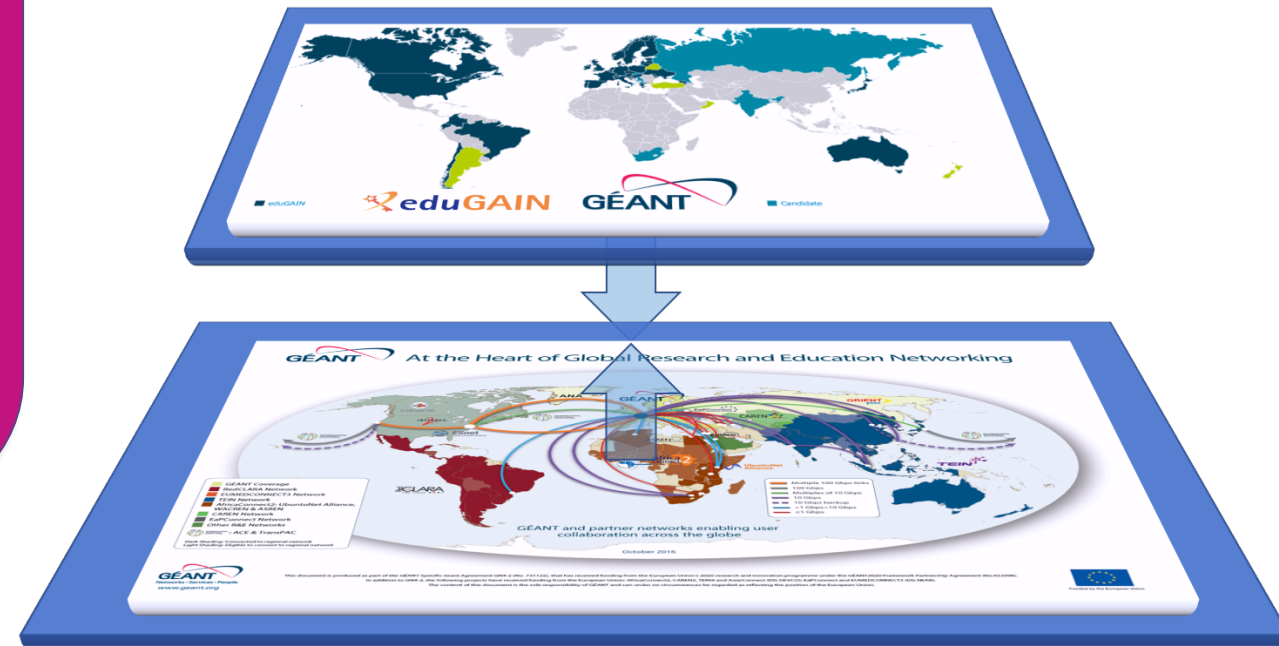
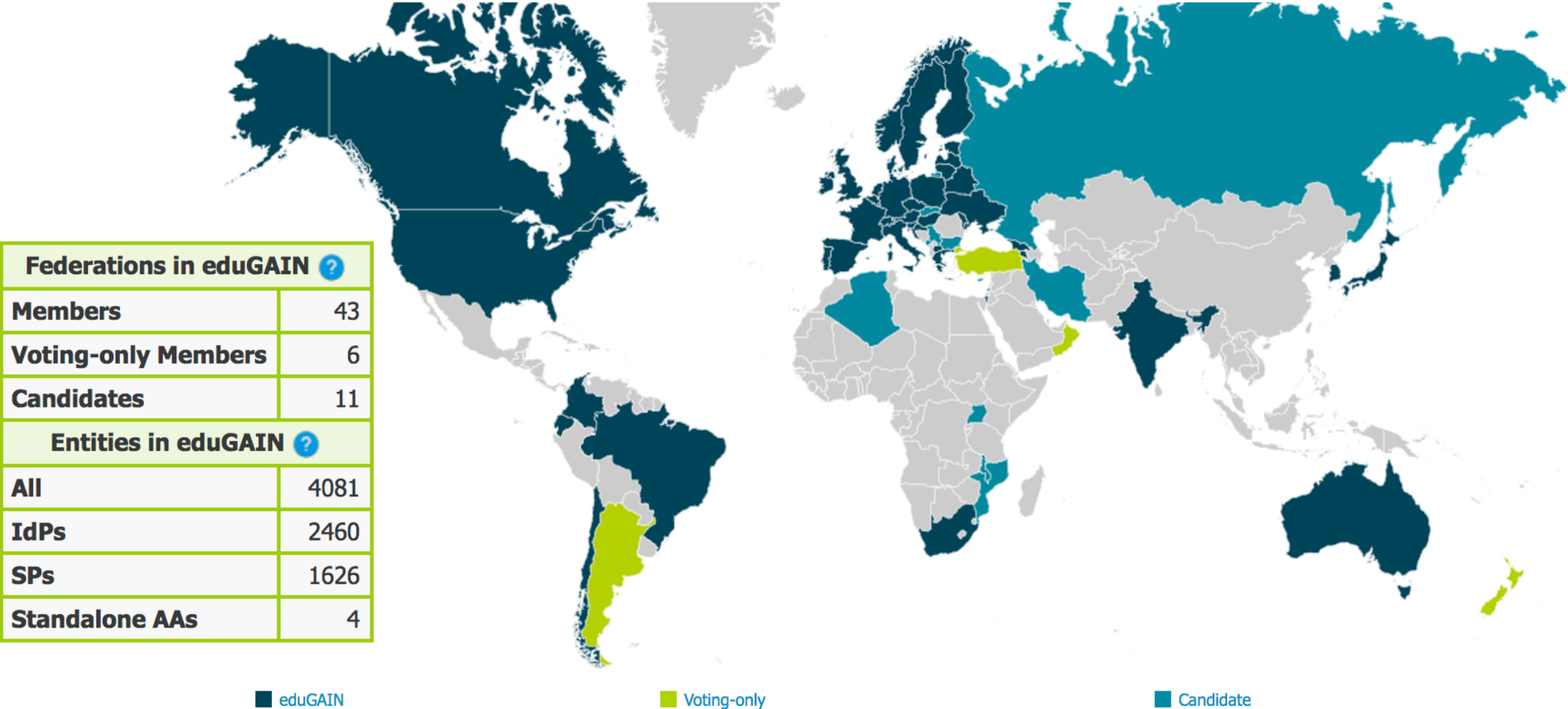# GÉANT Network – A global infrastructure enabling collaboration on a global scale

o GÉANT and the NRENs connect over 50 million users at 10,000 institutions across Europe

o Interconnecting with all world regions, reaching to over 100 countries.

o A global infrastructure enabling European researchers to collaborate on a global scale

GÉANT | At the Heart of Global Research and Education Networking

GÉANT and partner networks enabling user collaboration across the globe

October 2016

eduGAIN – A global network of academic identities

o Interconnects identity federations around the world, simplifying access to content, services and resources

o Researchers can use a single digital identity provided by the home organization

eduGAIN – A global network of academic identities

Federations in eduGAIN	
Members	43
Voting-only Members	6
Candidates	11
Entities in eduGAIN	
All	4081
IdPs	2460
SPs	1626
Standalone AAs	4

Legend: ■ eduGAIN ■ Voting-only ■ Candidate

Example flow using Federated Identity Management

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Federated Identity Management for Research

o Access services using **identities from their Home Organizations** when available.

o Secure integration of **guest identity solutions** and **support for stronger authentication** mechanisms when needed.

o **Access** to the various services should be granted **based on the role(s)** the users have in the collaboration.

o Users should have **one persistent identity** across all community services when needed.

o **Ease of use for users and service providers**. The complexity of multiple IdPs/Federations/Attribute Authorities/ - technologies should be hidden.

o A Blueprint Architecture for authentication and authorization

- o A set of architectural and policy building blocks on top of eduGAIN

o eduGAIN and the Identity Federations

- o A solid foundation for federated access in Research and Education

Benefits and compelling reasons to use Federated Identity Management
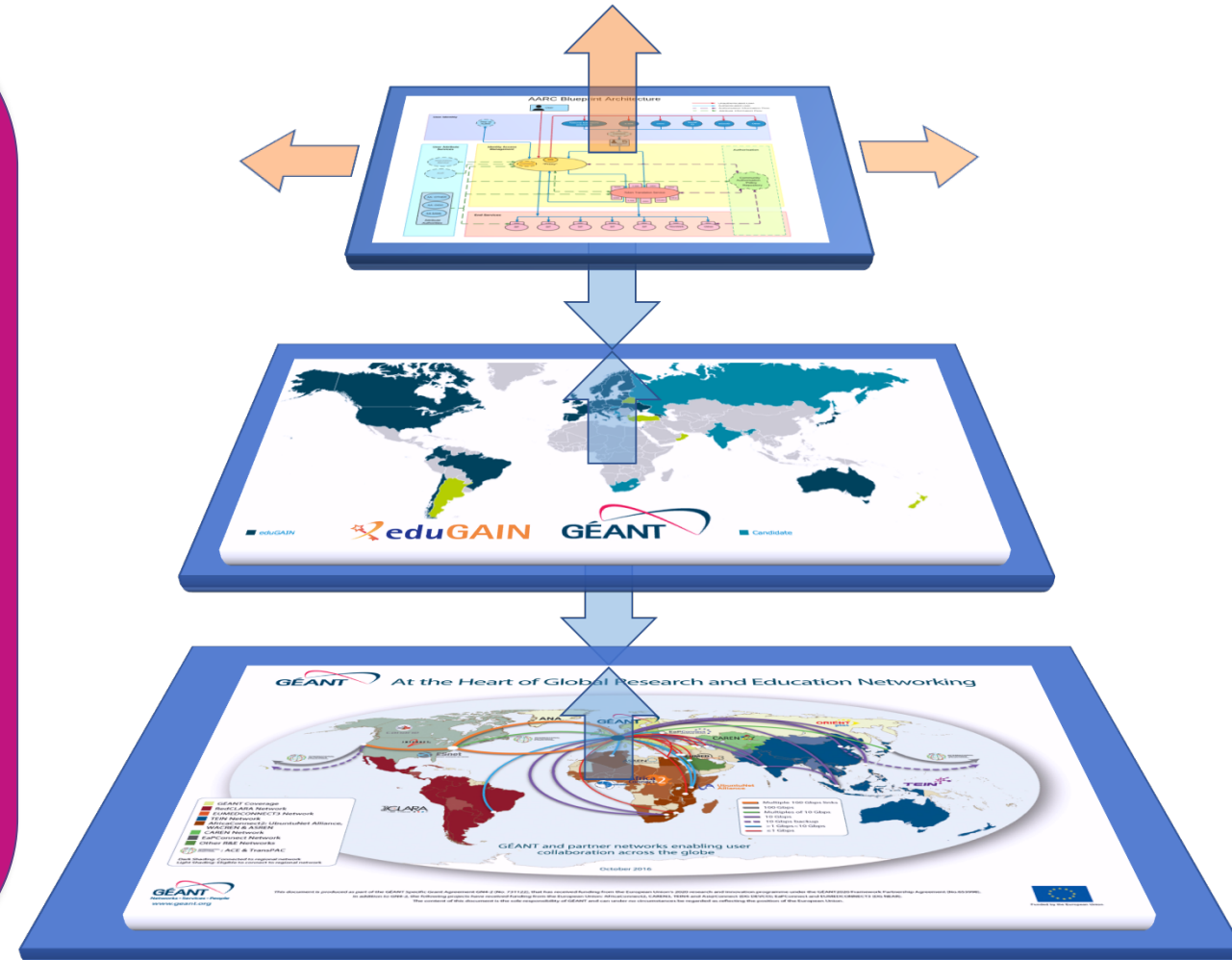
Reduces work

- Authentication-related calls to Penn State University's helpdesk dropped by 85% after they introduced federated access

Provides current data

- Studies of applications that maintain user data show that the majority of data is out of date. Are you "protecting" your app with stale data?

Insulation from service compromises

- In FIM data is pushed to services as needed. If those services are compromised the attacker can't get everyone's data.

Minimize attack surface area

- Only the IdP needs to be able to contact user data stores. All effort can be focused on securing this one connection instead of one or more connections per service.

Thank you

Any questions?