eduGAIN Core Operational and Support Services

1. The Why

eduGAIN has grown to become a core service delivery requirement for the research and education community. 48 out of 69 known federations across the globe participate in eduGAIN, with over 1750 unique Identity Providers and nearly 2000 Service Providers published within eduGAIN. The importance of building on this core infrastructure is also recognised in other developing initiatives, with eduGAIN compatibility built into projects such as EOSC-hub and eIDAS developments.

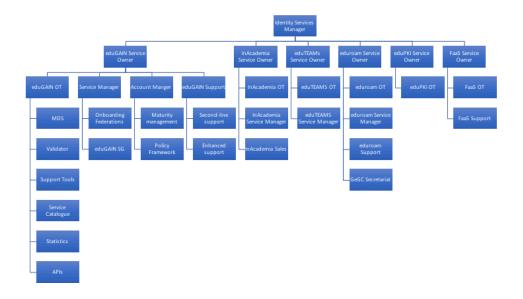
For eduGAIN to be able to offer this ubiquitous layer of interoperability, it is essential that the service continues to be funded for the GEANT partner NRENs and other federations across the globe. Barriers to both entry and maturity will impact on the ability of GEANT to successfully offer this infrastructure to an increasingly large number of participating organisations.

A key focus for eduGAIN within the 2019-2022 period will be to ensure ongoing service quality whilst moving its participating member NRENs, federations, IdPs and SPs to a higher level of maturity to support growing complex use cases and to reduce the technological/operational/expertise gap between established and new federations.

2. The What

Structure

The diagram below shows a simplified version of the core eduGAIN team structure, ignoring project and organisational boundaries and showing relationship with other T&I areas:



For the period of 2019-2022, eduGAIN should continue to offer the following services:

- 1. eduGAIN Core Infrastructure: MDS, eduGAIN validator, support for policy framework, eduGAIN technical website and eduGAIN wiki pages.
- 2. eduGAIN Supporting Services: Connectivity Check, Access Check, Release Check, isFederated Check, CoCo Monitor, eduGAIN Entities Database.
- 3. eduGAIN Enhanced Support: including day-to-day second line support for eduGAIN, enhanced support for complex use cases and central security support. This should include strengthening relationships with existing federation helpdesks.
- 4. eduGAIN Service Management: including onboarding new NRENS and supporting the eduGAIN Steering Group (SG) and regular eduGAIN Stakeholder Engagement events (e.g. Town Halls).

eduGAIN should introduce:

- An eduGAIN Account Manager, with responsibility for supporting federations reach maturity and in acting as contact liaison point for complex use cases identified by eduGAIN Enhanced Support.
- 2. APIs to enable federations and others to query the core eduGAIN databases.
- 3. Work to support provision of statistics for federated access, building on pilots in GN4-2.
- 4. Build on scoping and pilot work in GN4-2 to provide a centralised incident response model based on SIRTFI.
- 5. Support for maturity initiative, described separately.
- 6. Support for discovery initiative, described separately.

Suggested KPIs & Targets:

Service reviews and reporting will be done on a periodic basis as part of the PLM review processes and the management/stakeholders/projects service reports. KPIs are divided into:

- Operational: availability of the core service elements.
- Development: uptake by the federations and entities.

3. The How and When

Budget

Project	Start and	FTE per	CAPE	OPEX	Direct	Comments
Period	finish	period of	x		costs	
	periods	active			for the	
		development			duratio	
					n, sum	

Y1	January 2019 - December 2019	4.5 - approximately 450,000 using standard costings	in funda ment al inf	9,000 EUR 1st line suppor t HSM 33,000 travel 10,000 stakeh older engage ment events	512,000	eduGAIN is mostly running at steady state so there is no significant fluctuation expected across the project periods in terms of funding
Y2	January 2020 - December 2020	4.5 - approximately 450,000 using standard costings	in funda ment al inf	9,000 EUR 1st line suppor t HSM 33,000 travel 10,000 stakeh older engage ment events	512,000	
Y3	January 2021 - December 2021	4.5 - approximately 450,000 using standard costings	in funda ment al inf	9,000 EUR 1st line suppor t HSM 33,000 travel 10,000	512,000	

				stakeh older engage ment events		
Y4	January 2022 - December 2022	4.5 - approximately 450,000 using standard costings	in funda ment al inf	10,000 9,000 EUR 1st line suppor t HSM 33,000 travel 10,000 stakeh older engage ment events 10,000	512,000	

Risks

Risk	Probability	Impact	Mitigation
Reliance on key operational staff	High	High	ensure all service processes are well documented, work with key NREN staff providers to manage the risk, appoint back-up service managers
Dispersed infrastructure made unavailable	Medium	High	move infrastructure centrally where possible, ensure full documentation
Lack of clarity on how PLM/service roles and project roles will	High	High	Request preparation work to specify scope and the interaction of

interact in GN4-3 will affect how to staff this work			the roles of service owner, service manager, product manager, activity leader and task leaders in GN4-3 before manpower is assigned
Lack of support for eduGAIN taking a stronger central role for support and SIRTFI	Medium	Medium	Ensure that processes are introduced slowly with clear consultation, communicate benefits and successes clearly
Lack of support for maturity initiative	Medium	High	Work to promote and communicate, gain senior management buy-in at NRENs