

OIDC Federation for Infrastructures

*leveraging the IGTF global infrastructure trust
framework with OIDC technology*

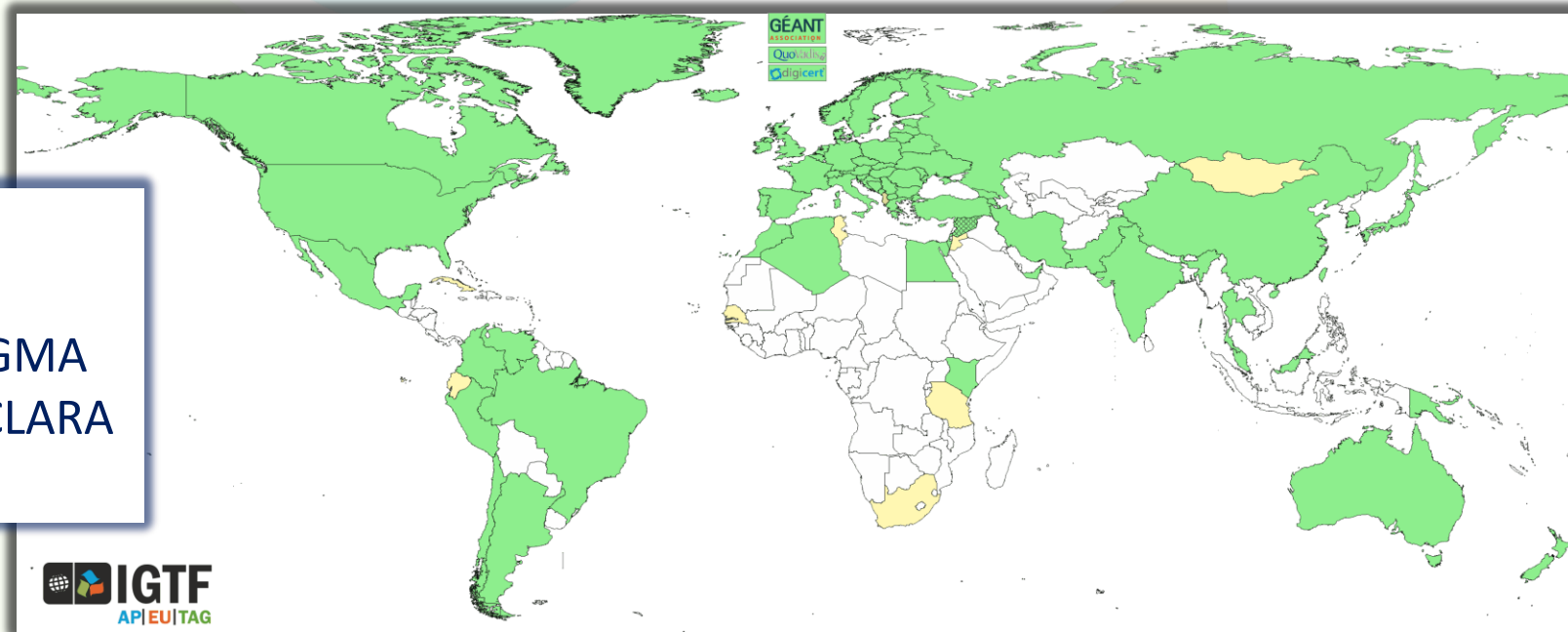
David Groep



Trust for global e-Science infrastructures

“establish common policies and guidelines that enable interoperable, global trust relations between providers of e-Infrastructures and cyber-infrastructures, identity providers, and relying parties”

EGI	OSG
PRACE	HPCI
GEANT	PRAGMA
WLCG	RedCLARA
XSEDE	...



Assurance and trust frameworks

Identity Assurance Profiles for R/E-Infra risk scenarios (<https://igtf.net/ap/loa/>)

- “BIRCH” - good quality (federated) identity,
“DOGWOOD” - identifier-only, but with traceability (*R&S+Sirtfi+a few bits*)
RFC 6711 Registry: <https://iana.org/assignments/loa-profiles>
- technology-specific ‘trust anchor’ distribution services

Policy framework for Relying Parties (‘SP-IdPs-Proxies’)

- Snctfi - Community Trust Framework in Federated Infras
<https://igtf.net/snctfi>

How can we help support RI and e-Infrastructure use cases?

- technology bridges: TCS, RCauth.eu, IGTF-eduGAIN bridge, ...
- behind the Infrastructure Proxies for research & collaboration, OIDC gains prominence

Snctfi: aiding Infrastructures achieve policy coherency

- ✓ allow SP/IdP Proxies to assert 'qualities', categories, based on assessable trust
- ✓ Develop recommendations for an Infrastructure's coherent policy set

Snctfi v1.0

AARC

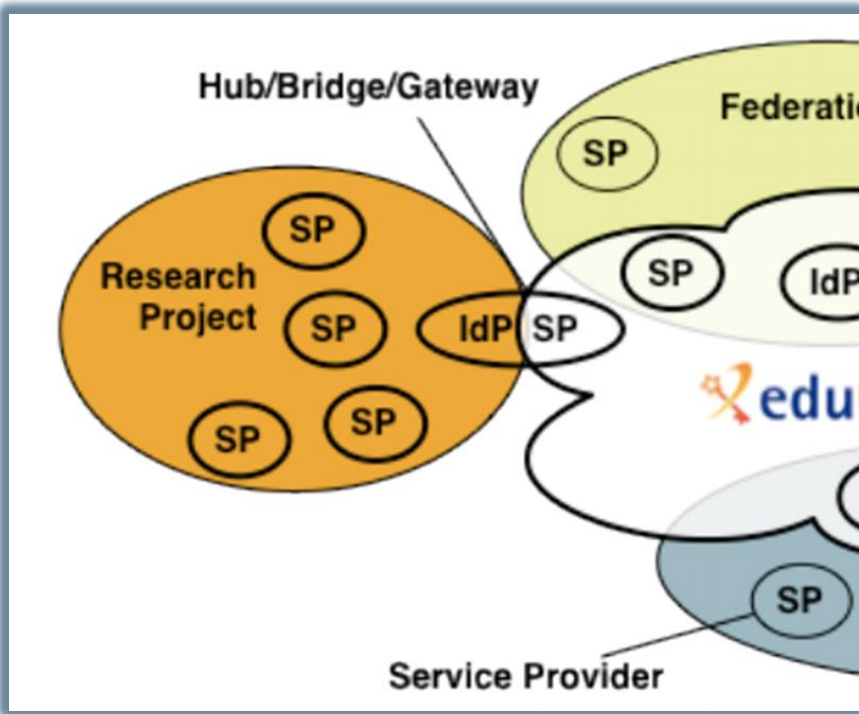
Scalable Negotiator for a Community Trust Framework in Federated Infrastructures (Snctfi)

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Abstract: This paper identifies operational and policy requirements to help establish trust between an Infrastructure and identity providers either in an R&E Federation or in another Infrastructure, in each case joined via a Service Provider to Identity Provider proxy.

Audience: This document is intended for use by the personnel responsible for the management, operation and security of an Infrastructure and those wishing to assess its trustworthiness.



Snctfi

Scalable Negotiator for a Community Trust Framework in Federated Infrastructures

- Derived from SCI, the framework on *Security for Collaboration among Infrastructures*
- Complements Sirtfi with requirements on internal consistent policy sets for Infrastructures
- Aids Infrastructures to assert *existing* categories to IdPs REFEDS R&S, Sirtfi, DPCoCo, ...



OIDC Fed use cases for research and e-Infrastructures

- EOSC-HUB registration of clients
goal for EGI and EUDAT is a scalable and *trusted* form of OIDC usage.
Today $< O(50)$ clients; next year maybe $O(100-1000)$?
cloud-based services (containers, microservices) could push that to millions
 - CILogon (and XSEDE) use cases see need for a set of policies and practices that support a 'trust anchor distribution'-like service targeting OIDC OPs and RPs and where RPs that are 'in the community' can be identified as such
 - ELIXIR (and the Life Sciences) AAI expect growth in # OIDC RPs as AAI extends beyond just ELIXIR and into other biomedical RIs – potentially dynamically created
- All of these need a policy framework, on both the (infrastructure) OPs and on the RPs
This is the community that traditionally also relied on the IGTF trust anchor distribution

<https://www.eugridpma.org/meetings/2018-01/summary-eugridpma-2018-01-prague.txt>

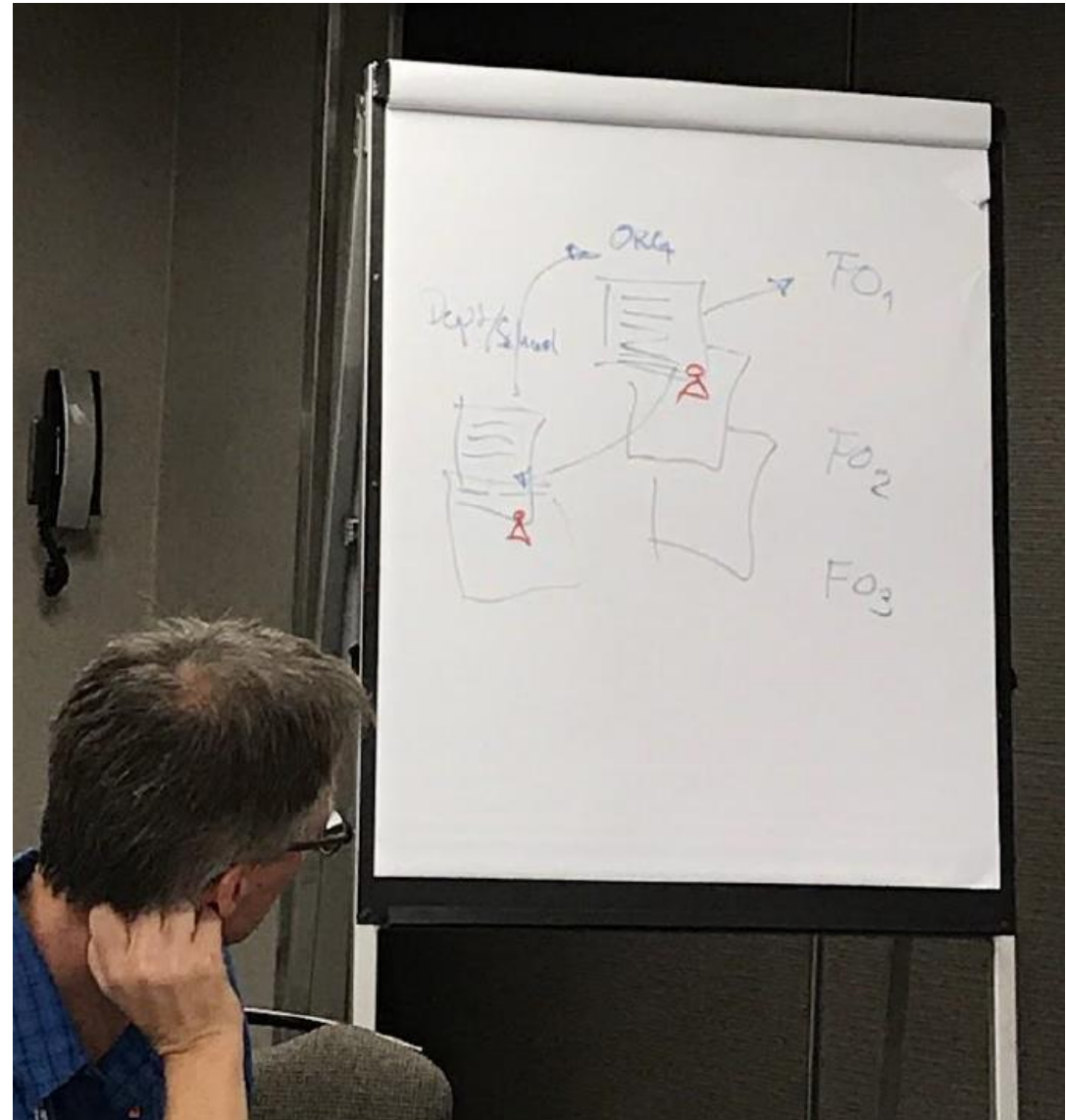
IGTF OIDC Federation Task Force

The IGTF task force for OIDC Federation will

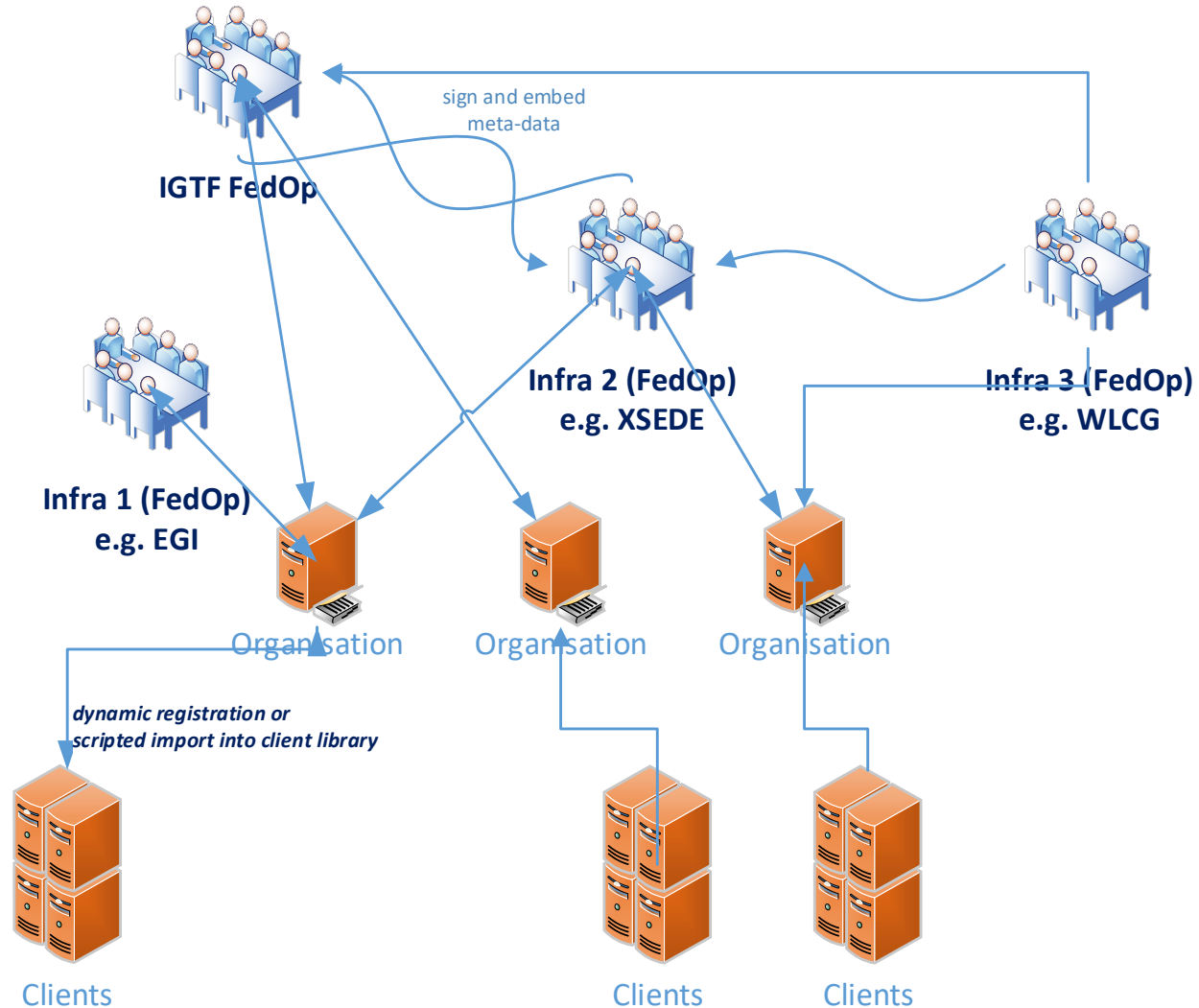
- identify specific objectives – *I2 TechEx*
- scope needs and requirements for R/E infrastructure OIDC Fed – *Prague EUGridPMA 42*
- verify compatibility of IGTF Assurance Profile framework for ‘technology-agnosticity’ with OpenID Providers (proxies) and RPs
- **test an OIDCFed scenario**
e.g. starting with use cases: WLCG, RCauth.eu, ELIXIR/LS, EGI CheckIn, ...
- assess structure and needed meta-data in a ‘trust anchor service’,
 - how to address RPDNC
 - links it with (dynamic) client registration
- liaise with OIDC Fed efforts in AARC and GN*-* , and Roland Hedberg

OIDC Fed pilots

- Based on the spec by Roland Hedberg
- scoped to the RP + Proxy case is not very complex, actually Infrastructures can use trusty shortcuts that would be too costly at the general R&E scale
- leverage *existing policy and trust* framework
- 'pilot' RPs and proxies will be using scripting and glue to get integration with existing services, based on assessed trust framework
- we *can* leverage existing trust



Can we do without a single one to rule them all?



- today the RIs and EIs trust the IGTF trust anchors and *may (but do rarely)* add their own
- Can the 'federation' be the community and import a commonly trusted set?
- Can the IGTF allow devolved registration *provided* that the trusted organisations implement the same policy controls *Snctfi* and the proper *Assurance Profiles*?

For the benefit of Research Infras ...

- IGTF membership process and *Snctfi* jointly give you the trust of Infra SPs (RPs)
- use peer-reviewed (self-)assessment as foundation of the ‘scientific process’ of trust
- technical details on how the IGTF FedOp will sign and distribute meta-data statements – subject to discussion at TIIME, AARC, and IGTF meetings
- new communities and (proxy) operators can join IGTF any time
 - there is no fee or something like that
 - but we request participation in the peer-review and assessment process ...

Information sharing

Keeping in touch

- <http://wiki.eugridpma.org/Main/OIDCFed>
- oidcfed@igtf.net
(<https://igtf.net/mailman/oidcfed>)

but don't forget everyone else!

- oidcre@lists.refeds.org (REFEDS)
- TIIME, TNC, TechEx, ...



Questions?

BUILDING A GLOBAL TRUST FABRIC