



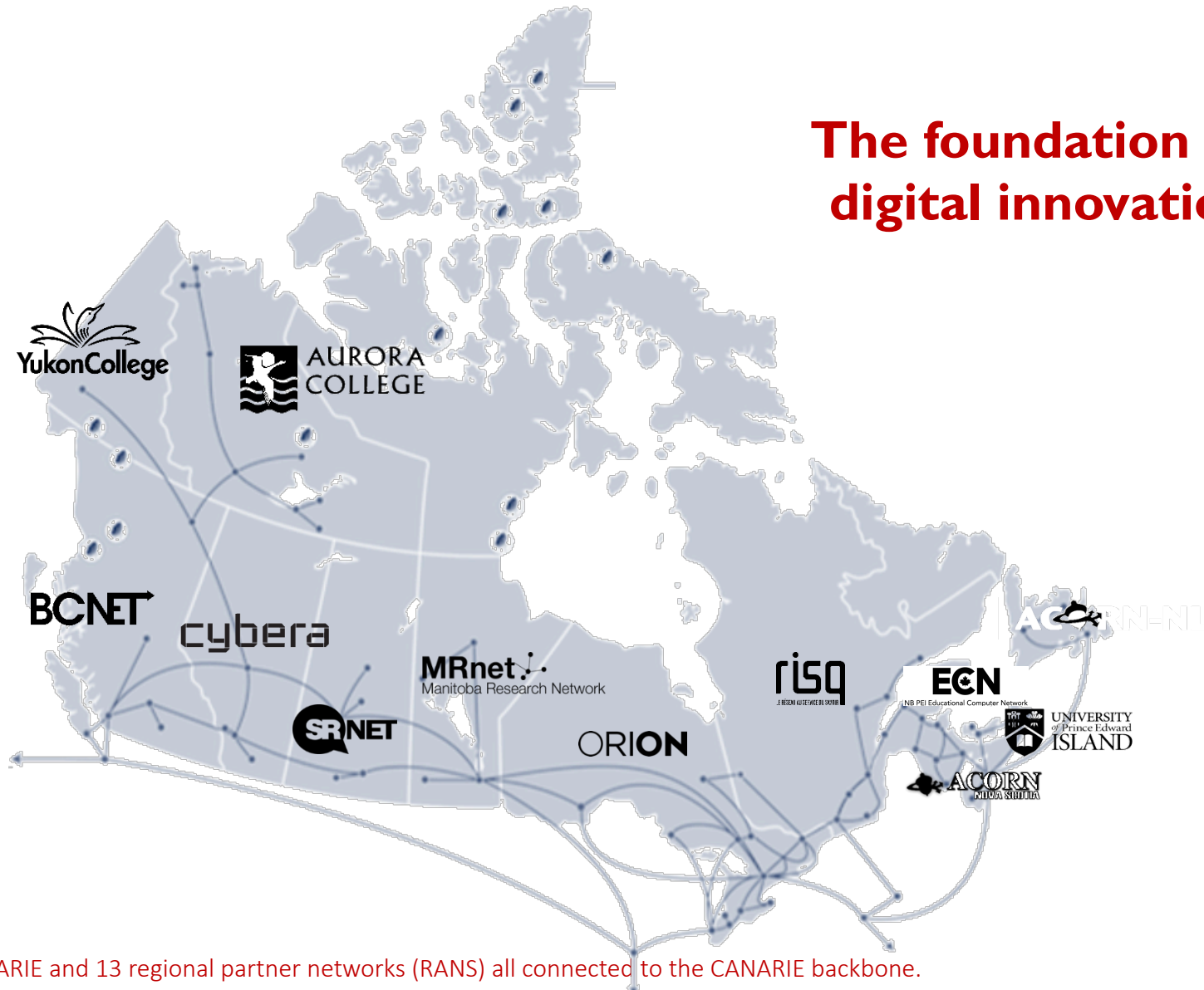
FIM4R: CAF Update & Canadian Perspectives

Chris Phillips | Sept 18, 2017 | FIM4R Montreal



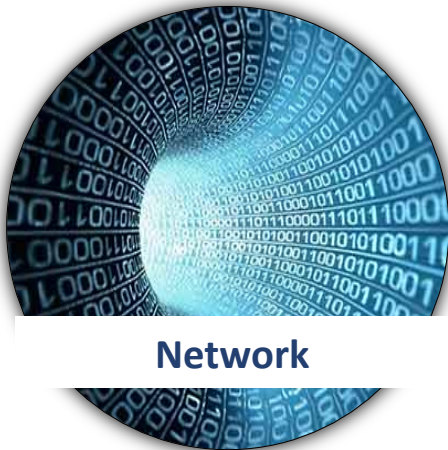
Canada's National Research and Education Network - NREN

**The foundation for
digital innovation**



Composed of CANARIE and 13 regional partner networks (RANS) all connected to the CANARIE backbone.
1 RAN in each province and in 2 territories & 1 in Ottawa for federal government labs.

CANARIE's programs support Canadian excellence in research and innovation



canarie.ca/network



canarie.ca/identity



canarie.ca/cloud



canarie.ca/software

Research Software Program

CANARIE funds & supports the development of software for research:

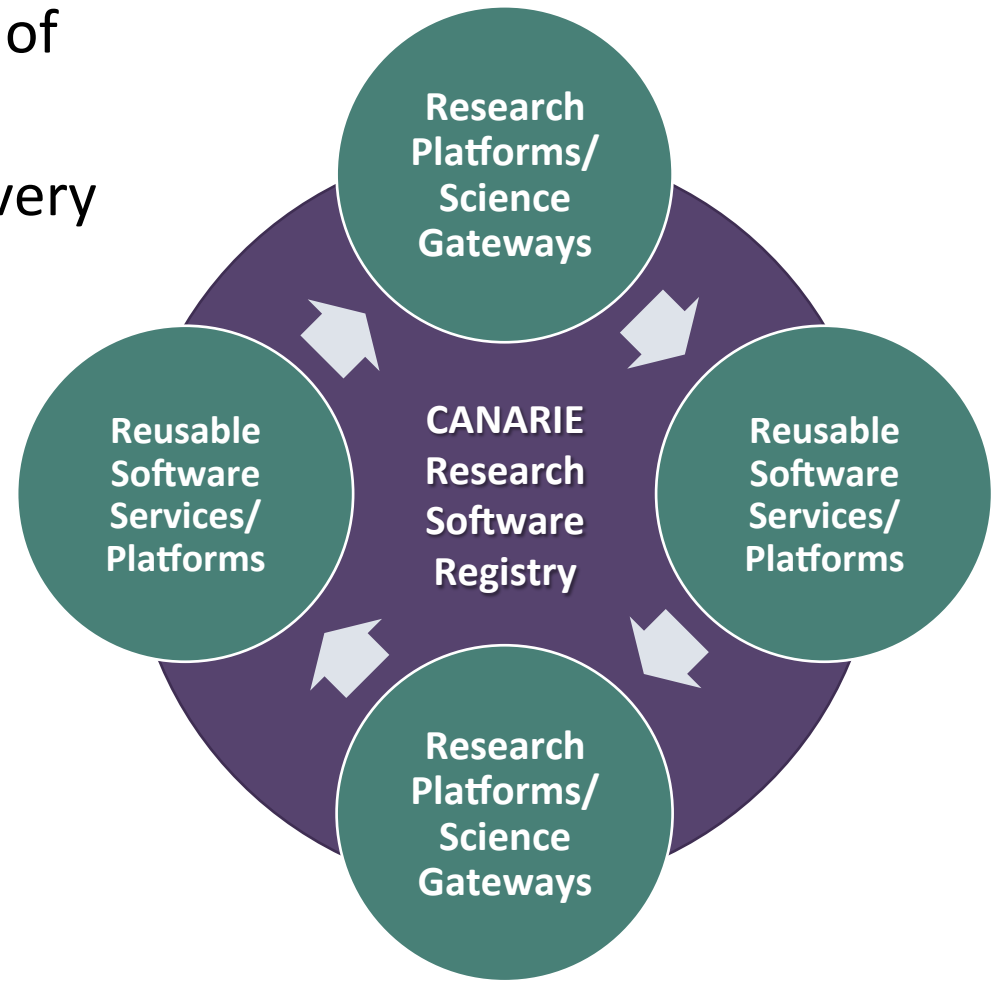
- 1. Research Software Platforms / Science Gateways** - a software system that supports most or all of the functionality a researcher uses in their research workflow
- 2. Software Services** - a software component that contributes one piece of functionality to a research platform.

Available to all researchers at:
science.canarie.ca



An innovative cycle of software reuse

- > Enables more effective use of research funding
- > Accelerates scientific discovery



Research Data Program

Contributing to the development of key elements of Canada's research data management ecosystem



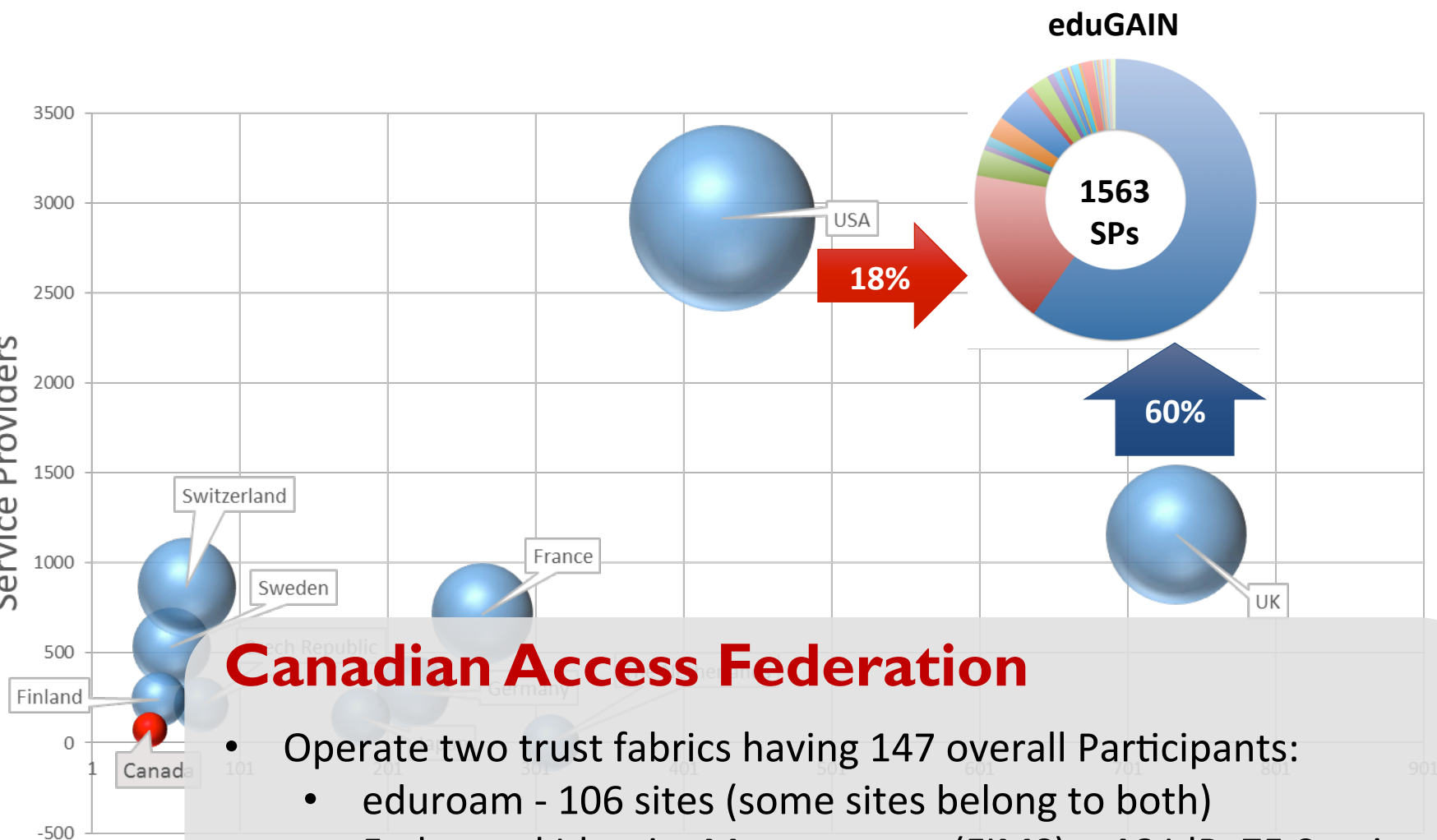
**Recommendations that
support data management
policies**

**Accessible, interoperable &
appropriately preserved
data sources**

Standards & best practices

**National plan for data
management**

Service Providers

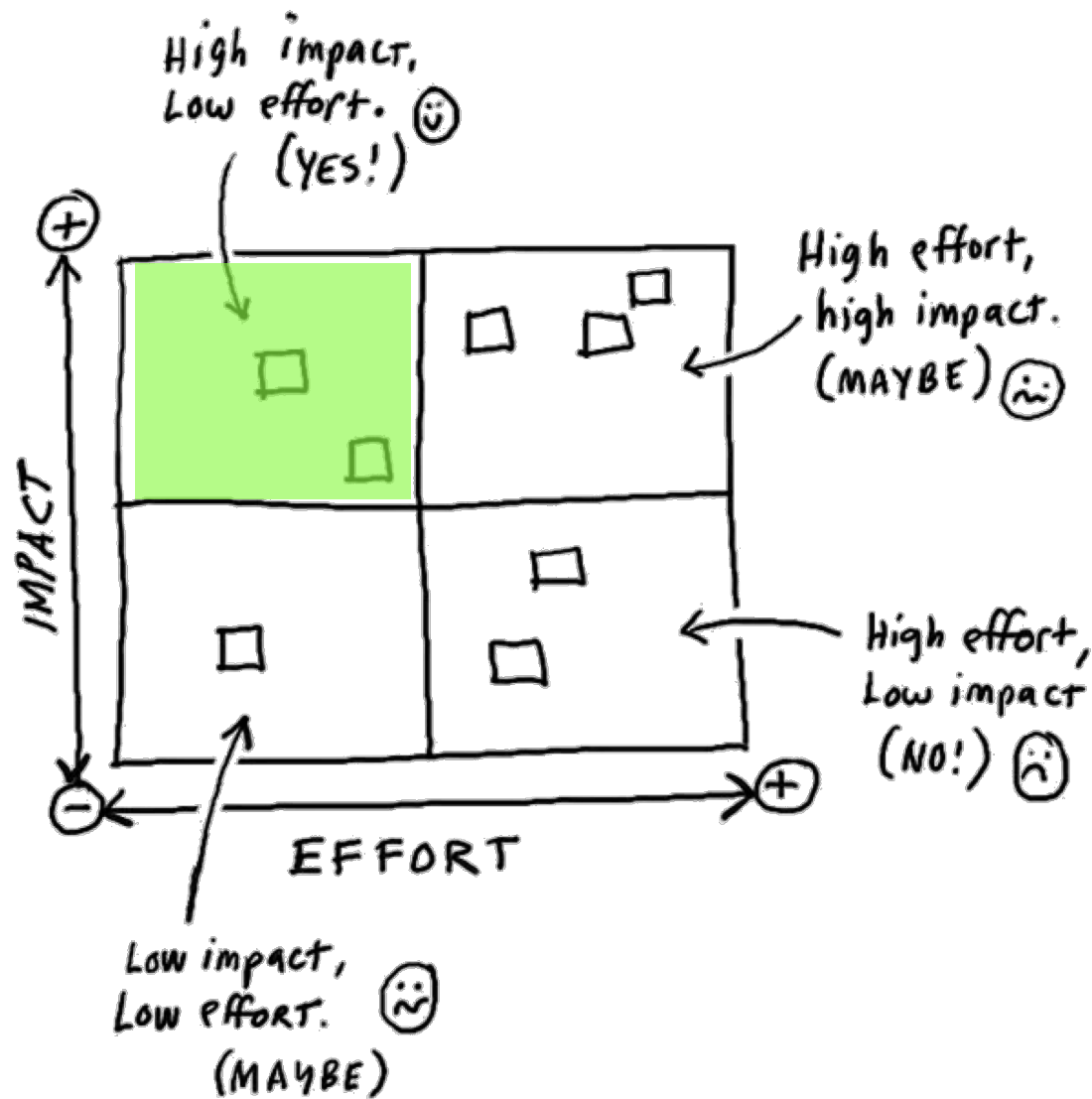


Canadian Access Federation

- Operate two trust fabrics having 147 overall Participants:
 - eduroam - 106 sites (some sites belong to both)
 - Federated Identity Management (FIMS) – 46 IdP, 75 Services
- Engage in close partnerships with InCommon and JISC
- Strong eduGAIN advocate leveraging external services

*Bubble area represents total size of federation

Prioritizing our Work



Ensuring All IdPs are globally visible in eduGAIN

> Milestone:

- 100% of CAF IdPs are in eduGAIN as of August 15, 2017

> Full IdP coverage means easier access to services

> Export of new services will be default going forward.

> Participating in eduGAIN's review of profile to improve quality of metadata

Number of entities in eduGAIN

All: 49

IdPs: 46

SPs: 3

Support For R&S Entity Category

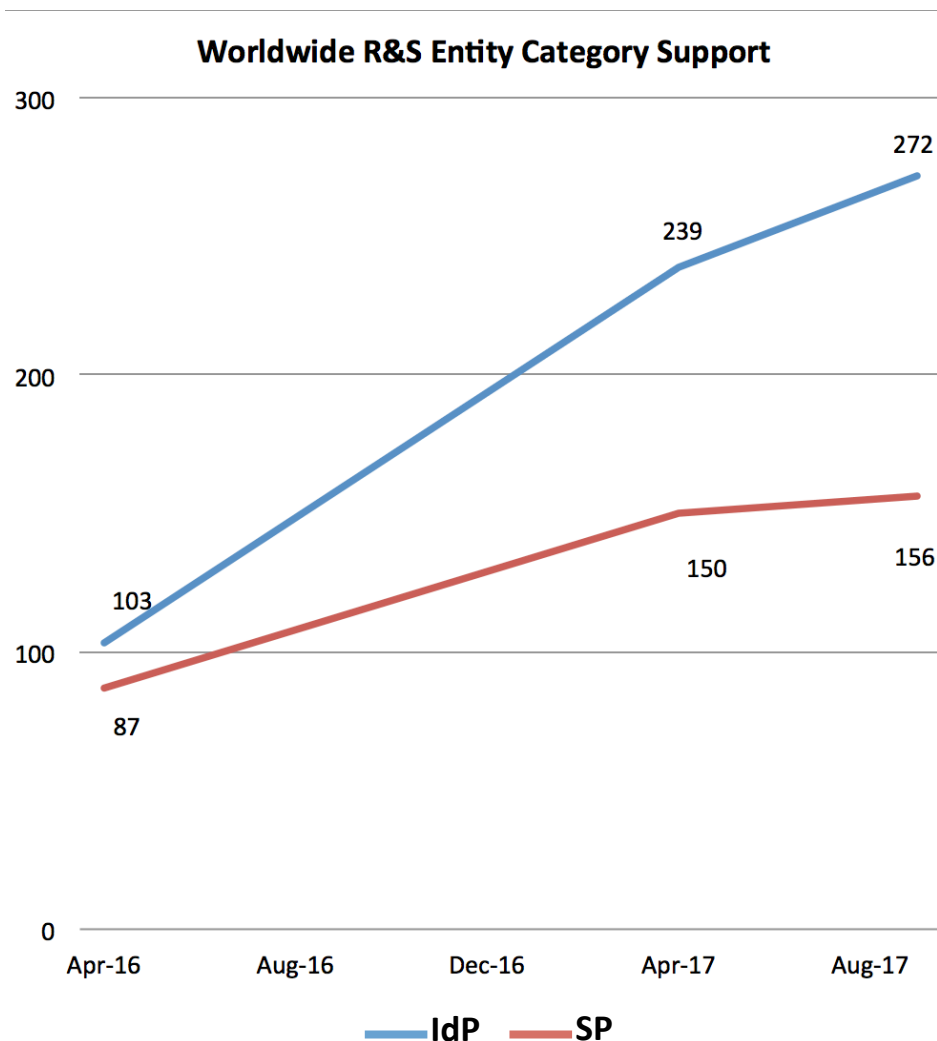
> Milestone:

- CAF offers R&S entity category support, as of August 31st, 2017

> Easier access to services

> Engaged with all Higher Ed CIOs for top-down broad adoption

> Working with key services driving adoption



[Jump to R&S Explained](#)

Simplifying Installation & Improving Software Guidance

> Milestone:

- Updated software capability assessment & recommendations for Fall 2017

> CAF Automation tools

- ease installation
- raise the bar for base configuration

> Simplifies complex technology choices

> Highlights features important to community

IdP Platform	Support for Recommended Technical Basics for IdPs (inc. ability to consume metadata)	Support for Attribute Release	Support for Entity Categories (R&S)	Support for Multiple AuthN Contexts	Supports MFA and Assurance?	Supports ECP for non-web sso?	Supports User Consent?	Can Consume Metadata Aggregate?	Expertise Required
Shibboleth IdP 3.3.1	Yes	Yes	Yes	Yes	Yes	Yes	yes		Operational knowledge of Java-based services, XML. General knowledge of federation.
ADFSv4 IdP (Server 2016)	yes, with limitations*	Yes	No	Yes, may rely on Azure Cloud services	No	No	yes, with limitations*		PowerShell and Python scripting, vocabulary knowledge translating Federation to ADFS speak
SimpleSAMLphp IdP 1.14	Yes	Yes	Yes, in development build	Yes, in modules	Yes	Yes	Yes		PHP, knowledge of directory services middleware (AD, LDAP) and of federation

Future Areas of Interest and Activity

> Improving attribute release

- R&S support reach

> Improving reach

- Bring in late adopters more quickly

> Improving holistic view of federated ID

- Focus on sustainable non-web SSO approaches

> Improving user experience (UX)

- Discovery v.Next → involved in RA21.org

> Improving security

- Help keeping current to be low effort → automation, containerization
- SIRTFI
- Gathering requirements/interest for authorization scenarios to identify common needs.

Identifying and showing a solution is
only a part of the story.

We are not a singular technology,
but a blend of principles, process, and
delivery models.

We help aggregate need and interests to
execute at scale.

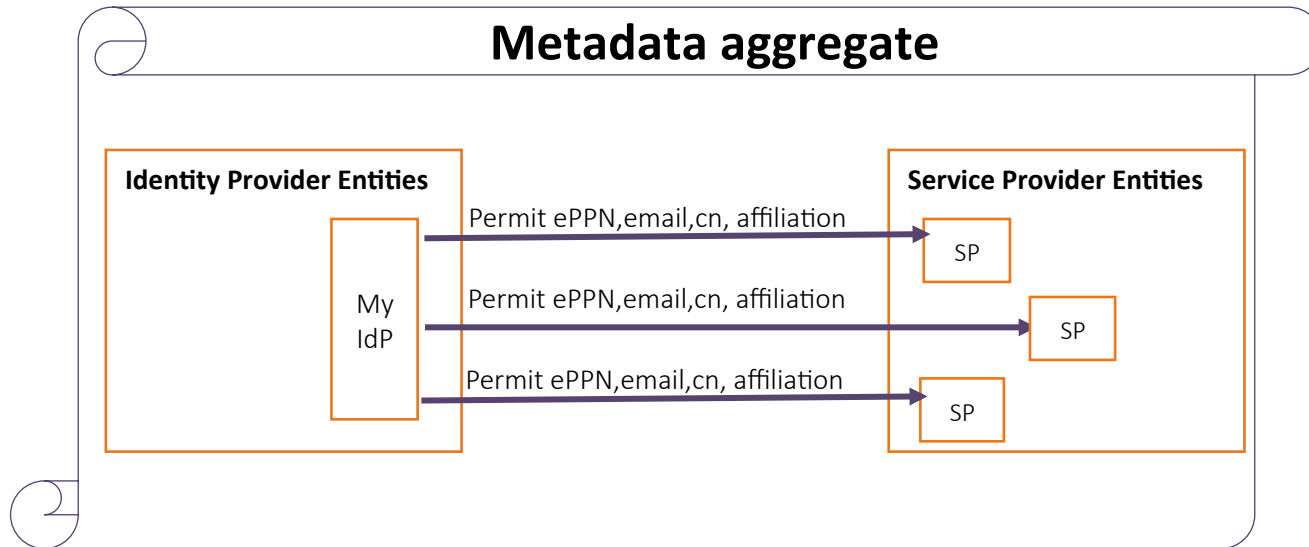




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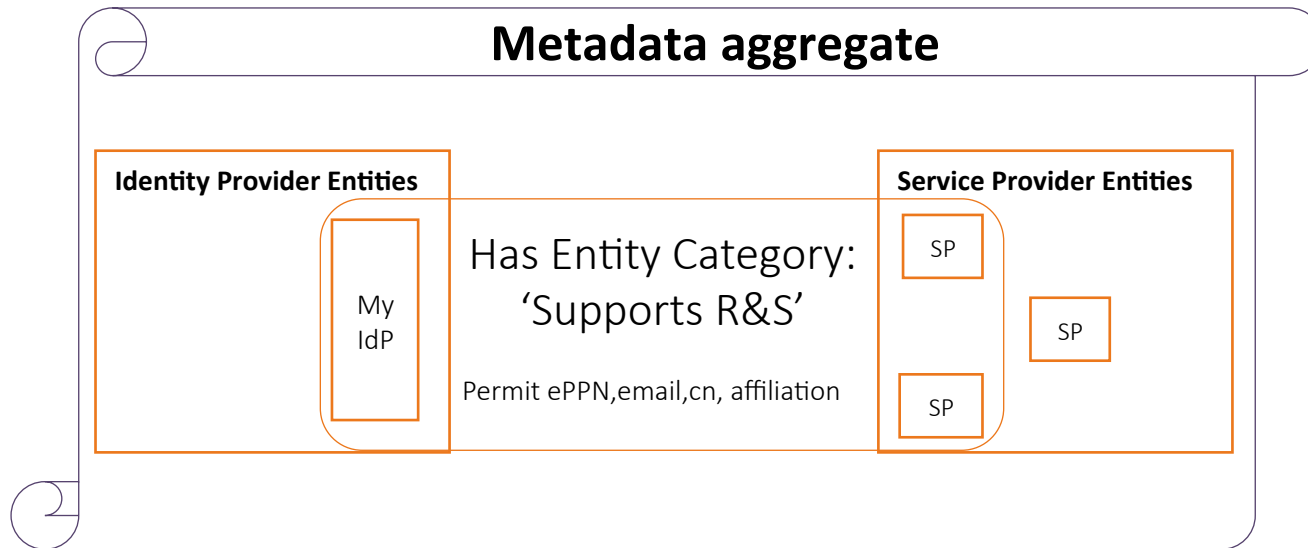
Attribute Release in Practice



> Classic service by service release style

- Create policy for each service you want to trust
 - 1:N entities
 - Fine grained, one time, but higher effort

Scaling Attribute Release with Entity Categories



- > Leverage entity categories style
- > Create policy for each category you want to trust
 - 1 category = many entities
- > Policy is to the category criteria, NOT the entity identifier
 - Equally thorough, less effort to maintain
- > NO effort to enable new services who receive category; they just start working

[Jump back to R&S](#)