

## Authentication and Authorisation for Research and Collaboration

Things to do in **Policy and Best Practice Harmonisation** when you're in Orlando ... and thereafter

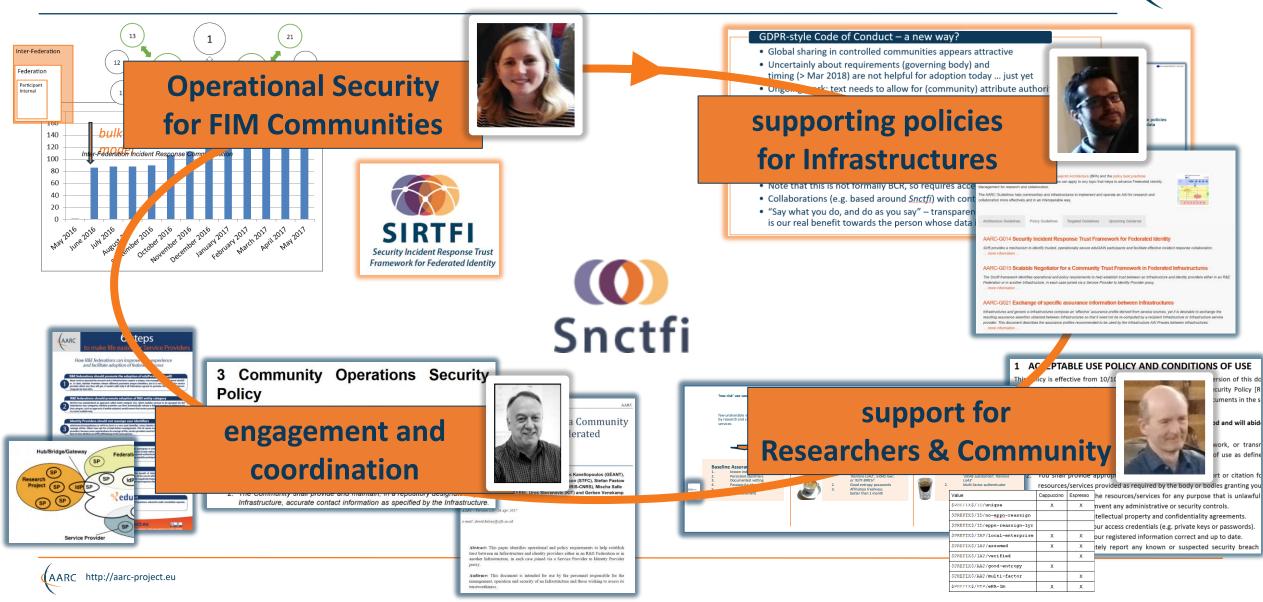
**David Groep** for the entire AARC Policy Team



I2TechEX18 meeting 17 October 2018 Orlando

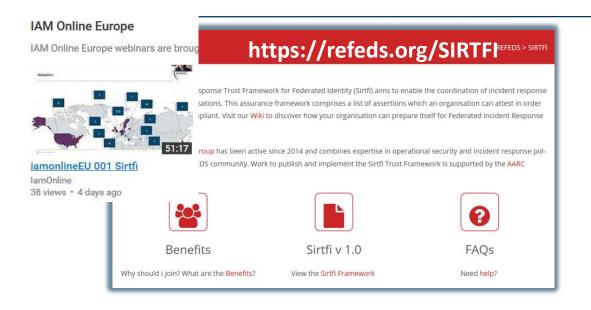
## How can policy help you ease collaboration? A holistic view





## Sirtfi – presentation, training, adoption in AARC2





Services increasingly demand and use Sirtfi

• CERN & LCG, CILogon (US), RCauth.eu, IGTF-to-eduGAIN bridge

and

Sirtfi is included verbatim in the (GN4)
DPCoCo version 2 to be submitted to EDPB

Promotional activities successful

- REFEDS, Internet2 TechX, ISGC Taipei, TNC, TF-CSIRT, FIM4R, Kantara webinars, ...
- Now 427 entities (but inly in 25 federations)
- Ready to move to the next phase:

Incident Response Test Model for
Organisations
Deliverable MNA3.3

Contractual Date: 01-02-2018
Actual Date: 31-01-2018
Grant Agreement 730941
No.:
Work Package: NA3
Task Item: TNA3.1
Lead Partner: CERN
Document Code:

Authors: H. Short (CERN), I. Neilson (STFC), D. Groep (Nikhef)
Contributions from: R. Vinot (CIRCL)

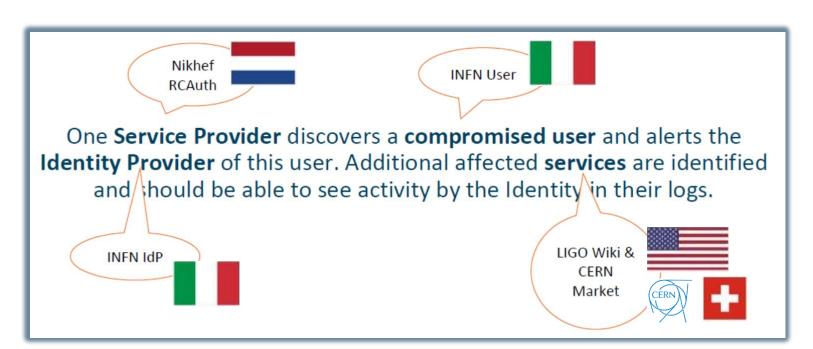
'I Need Sirtfi Right Now™'

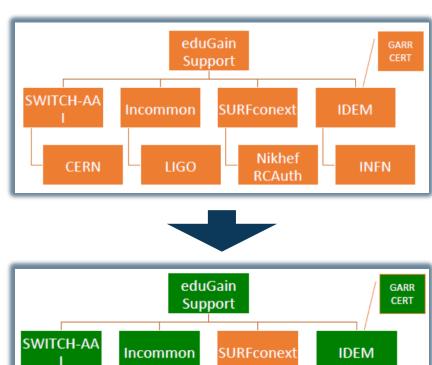
AARC http://aarc-project.eu

## Test model for incident response – a continuing process from now on ...



- Defines the model actors
- include eduGAIN Support Desk
- Exercise the model attack scenario ... ©





parties involved in response challenge

LIGO

CERN

Nikhef

**RCAuth** 

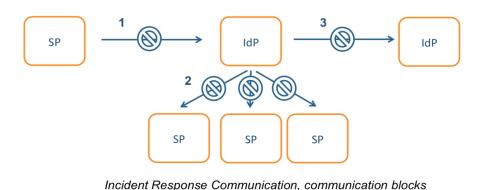
Report-out see https://wiki.geant.org/display/AARC/Incident+Response+Test+Model+for+Organizations



INFN

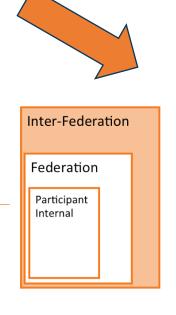
## Incident response process evolution in federations – beyond Sirtfi

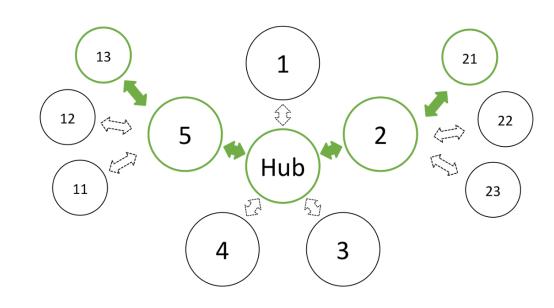




### **Challenges**

- IdP fails to inform other affected SPs, for fear of leaking data, of reputation, or just lack of interest and knowledge
- No established channels of communication, esp. not to federations themselves!





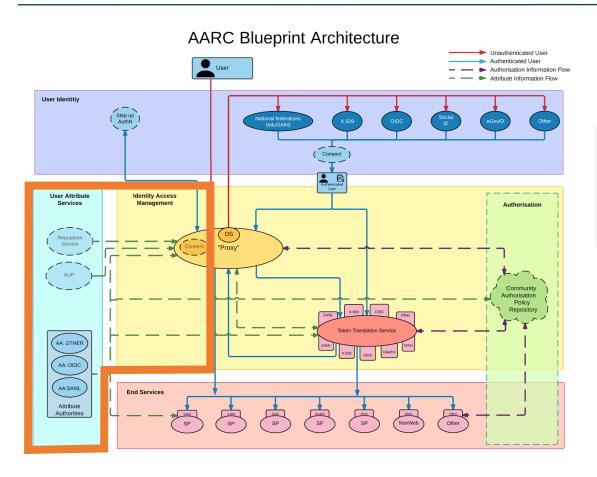
Inter-Federation Incident Response Communication

Can we evolve operational security in our federated academic environment? Expand Sirtfi in places where there is no federation support (Sirtfi+ Registry) And extend the concept of trust groups and facilitate exchanging incident information?



## Beyond just identity providers, services, and Federations: AA security





**BPA Proxy and connected sources of trusted attributes critical to infrastructure security** 



## **Snctfi**

Scalable Negotiator for a Community Trust Framework in Federated Infrastructures

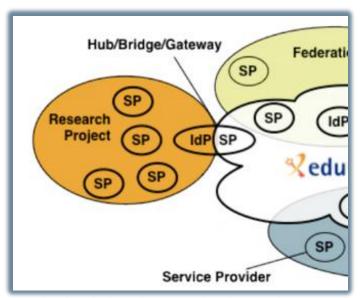
- Help AA operators with operational security
- requisite processes and traceability support
- secure operation and deployment
- protected transport
- for different attribute distribution models

## A policy framework for service providers groups and proxies in the BPA



## Snctfi

Scalable Negotiator for a Community Trust Framework in Federated Infrastructures



igtf.net/snctfi



graphic IdP-SP bridge: Lukas Hammerle and Ann Harding, SWITCH

Derived from **SCI**, the framework on *Security for Collaboration in Infrastructures*WISE Information **S**ecurity for **E**-infrastructures got global endorsement SCI in June 2017

## **Guidance for research AAIs in the Infrastructure ecosystem**



## **Authentication Assurance – a truly joint exercise**

• using both REFEDS RAF components 🗑 🥔 as well as cross Infrastructure profiles 🅍







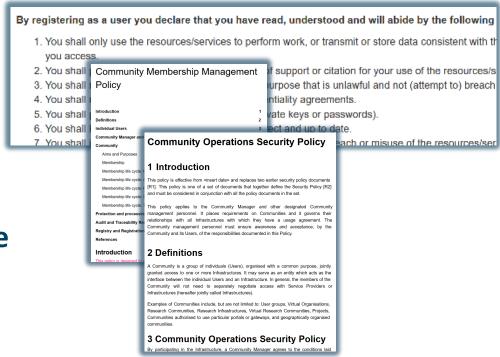


considering social-ID authenticator assurance, complementing account linking in BPA

**Protecting personal data** from infrastructure use

Exploit commonality between acceptable use policies to ease cross-infrastructure resource use

Support community management and a policy suite using *Snctfi* to ease use of generic e-Infrastructures and interoperability with the **Policy Development Kit** 



## Protection of Personal Data and PII for Infrastructure AAIs

## there is both FUD but also legitimate concerns



### Large discrepancy between practice, perception, and actual risk:

- communities themselves don't see need to protect *infrastructure* AAI (accounting) data and don't even consider existing AARC guidance ⊗
- misunderstanding issue, over-stating risk, falling victim to FUD law firms
- even 'simplified' documents like the GEANT Data Protection Code of Conduct – considered too complex to be understood



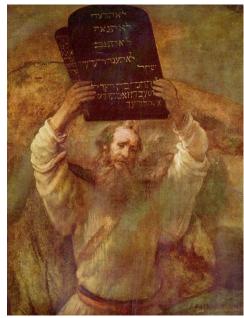
help determine risk and impact of FIM on research infrastructure



## Difference to commonality in the Baseline AUP – sign once, use everywhere



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## **Scaling Acceptable Use Policy and data release**

impractical to present user 'click-through' screens on each individual service

Community specific terms & conditions

Community specific

Community conditions

RI Cluster-specific terms & conditions

terms & conditions

Look ahead to an ACAMP session on a global baseline AUP Common baseline AUP

for e-Infrastructures and Research Communities

(current draft Baseline AUP –

leveraging comparison study and joint e-Infrastructure work)

The LS AAI shall present an Acceptable Use Policy also on behalf of its connected services and infrastructures.

The LS AAI operators shall present as the AUP:

the community-specific additions

 the common aims and purposes, i.e. the research or scholarship goals of the Life Sciences Research Infrastructures (in a few high-level sentences) This text must be supplied by the Life Sciences community.

rvs a layered approach to the construction of the AUP, where the AUP presented to the end-user (on enrolment or later) comprises both the generic JSPG-evolved version plus.

- the list of 11 (eleven) items from the Evolved JSPG AUP [JSPGAUP2]
- a notice that enrolment into specific groups or subdivisions may require the user to sign supplementary terms and conditions, and
- that in specific circumstance also specific services may ask the user to sign additional conditions of use.

If the Life Sciences community agrees to any joint clauses ('do not attempt to reverse

privacy-enhancing technologies', for instance), these should be included in the LS AAI

## Implementing Snctfi: Community Membership Management and Security



## Relevant to communities and e-Infrastructures both

- what are the requisite policy elements and processes you need to define to manage a structured community?
- which of these are required to access general-purpose e-Infrastructures?
- which roles and responsibilities lie with the community 'management' to that the BPA proxy model will scale out?

joint work with EGI-ENGAGE and EOSC-Hub projects and the EGI, PRACE, HBP, EUDAT communities



## Community Membership Management Policy



Introduction

Definitions

Individual Users

Community Manager and other roles

Community

Aims and Purposes

Membership

Membership life cycle: Registration

Membership life cycle: Assignment of attributes

Membership life cycle: Renewal

Membership life cycle: Suspension

Membership life cycle: Termination

Protection and processing of Personal Data

**Audit and Traceability Requirements** 

Registry and Registration Data

References

#### Introduction

This policy is designed to support the expansion of open science

#### **Community Operations Security Policy**

#### 1 Introduction

This policy is effective from <insert date> and replaces two earlier security policy documents [R1]. This policy is one of a set of documents that together define the Security Policy [R2] and must be considered in conjunction with all the policy documents in the set.

This policy applies to the Community Manager and other designated Community management personnel. It places requirements on Communities and it governs their relationships with all Infrastructures with which they have a usage agreement. The Community management personnel must ensure awareness and acceptance, by the Community and its Users, of the responsibilities documented in this Policy.

#### 2 Definitions

A Community is a group of individuals (Users), organised with a common purpose, jointly granted access to one or more Infrastructures. It may serve as an entity which acts as the interface between the individual Users and an Infrastructure. In general, the members of the Community will not need to separately negotiate access with Service Providers or Infrastructures (hereafter jointly called Infrastructures).

Examples of Communities include, but are not limited to: User groups, Virtual Organisations, Research Communities, Research Infrastructures, Virtual Research Communities, Projects, Communities authorised to use particular portals or gateways, and geographically organised communities.

#### **3 Community Operations Security Policy**

By participating in the Infrastructure, a Community Manager agrees to the conditions laid

## The SCI Trust Framework – globally comparable structure in Security Policy



## Endorsement of SCI Version 2 at TNC17 (Linz)



- 1<sup>51</sup> June 2017
- Infrastructures endorse the governing principles and approach of SCI, as produced by WISE, as a medium of building trust between infrastructures, to facilitate the exchange of security information in the event of a cross-infrastructure incident, and the collaboration of e-Infrastructures to support the process. These Infrastructures welcome the development of an information security community for the Infrastructures, and underline that the present activities by the research and e-Infrastructures should be continued and reinforced



- Endorsements have been received from the following infrastructures: EGI, EUDAT, GEANT, GridPP, MYREN, PRACE, SURF, WLCG, XSEDE, HBP
- https://www.geant.org/News\_and\_Events/Pages/supporting-security-for-collaborating-

Kelsey/SCI Trust Framework

24 Sep 2018

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## SCIv2 – beyond its endorsement to self-assessment and review









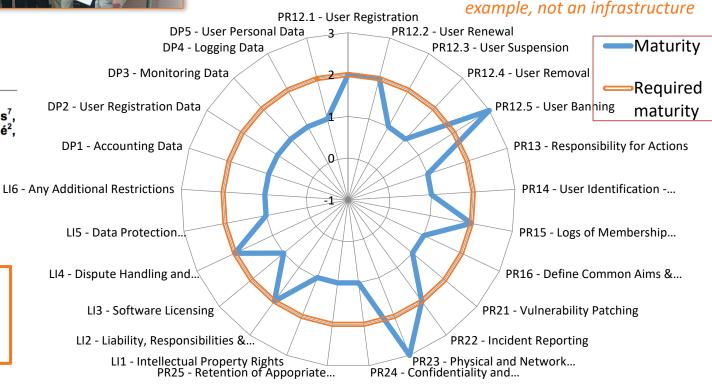
## A Trust Framework for Security Collaboration among Infrastructures

SCI version 2.0, 31 May 2017

L Florio<sup>1</sup>, S Gabriel<sup>2</sup>, F Gagadis<sup>3</sup>, D Groep<sup>2</sup>, W de Jong<sup>4</sup>, U Kaila<sup>5</sup>, D Kelsey<sup>6</sup>, A Moens<sup>7</sup>, I Neilson<sup>6</sup>, R Niederberger<sup>8</sup>, R Quick<sup>9</sup>, W Raquel<sup>10</sup>, V Ribaillier<sup>11</sup>, M Sallé<sup>2</sup>, A Scicchitano<sup>12</sup>, H Short<sup>13</sup>, A Slagell<sup>10</sup>, U Stevanovic<sup>14</sup>, G Venekamp<sup>4</sup> and R Wartel<sup>13</sup>

The WISE SCIv2 Working Group - e-mail: david.kelsey@stfc.ac.uk, sci@lists.wise-community.org

AARC may help by supporting evolving the peer review self-assessment model for SCI and how that compares to e.g. ISO-based audits

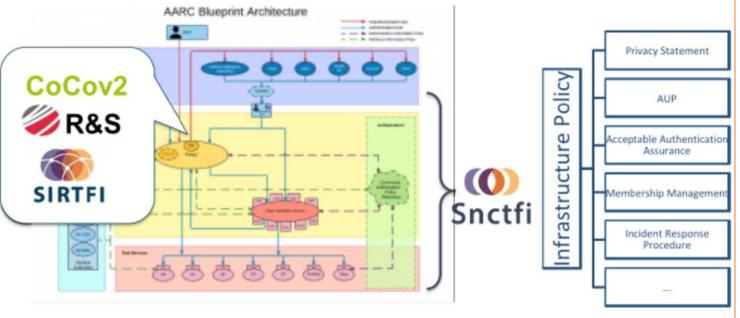




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## Policy Development Engagement and the 'Kit'

- Bring together a consistent suite of policies & guidance
- based on e-Infrastructure best practices from advanced operational infrastructures today



(AARC http://aarc-project.eu

## AARC Policy Development Kit

Task Plan & Notes: https://wiki.geant.org/display/AARC/Policy+Development+Kit Author list: U. Stevanovic, H. Short, D. Groep, I. Neilson, I. Mikhailava

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https://wiki.geant.org/display/AARC/Policy+Development+Kit

## Helping you towards SCI and Snctfi: templates in the PD Kit



#### **Policies**

Top Level

Infrastructure Policy

**Data Protection** 

**Privacy Statement** 

Risk Assessment

Membership Management

Community Membership Management Policy

Acceptable Use Policy

Acceptable Authentication Assurance

Operational Security

Incident Response Procedure

#### **Policy Templates**

Top Level Infrastructure Policy Template

Membership Management Policy Template

Acceptable Authentication Assurance Policy Template

Acceptable Use Policy Template

Privacy Policy Template

Risk Assessment

Incident Response Procedure

#### Membership Management Policy Template

- Which information do you need to collect on your users? Name, contact information, nationality?
- How long is membership valid?
- How often do your users need to sign an AUP?

The following is based on the EGI Community Membership Management policy.

This policy

INTRODU This policy Infrastructi

https://doc Acceptable Authentication Assurance Policy Template

- Which identity providers are acceptable for your infrastructure? SAML Identity Federation IdPs? Social providers such as Google, Facebook etc?
- How much certainty does your community require of the identity? How will you validate this for each identity provider?
- How can you ensure that each user is covered by a security incident response
- Do yo
- Top Level Infrastructure Policy Template
  - Who are the actors in your Infrastructure environment? How will you tie additional policies together for the infrastructure?
  - Which bodies should approve policy wording?

Taken from letter ex //al e ex use a

The following template is based on work by EGI.eu, licensed under a Creative Commons Attribution 4.0

https://documents.egi.eu/public/RetrieveFile?docid=3015&version=3&filename=EGI-SPG-SecurityPolicy

#### INTRODUCTION AND DEFINITIONS

To fulfil its mission, it is necessary for the Infrastructure to protect its assets. This document presents the nolicy regulating those activities of participants related to the security of the

## Things to do in AARC's last year and beyond when you're still alive by now ...



OpSec	Attribute authority operations practice also for Infra proxies								
	Trust groups and the exchange of (account) compromise information: beyond Sirtfi								
Infra- centric	traceability and accounting data-collection policy framework based on SCI, providing a self-assessment methodology and comparison matrix for infrastructure services								
	Evolution of data protection guidance for services								
Resear cher- centric	Baseline AUP with major Infrastructures (EGI, EUDAT, PRACE, XSEDE) and communities								
	Deployment of assurance guidelines and move to high-assurance use cases								

Engage ment

Evolve **Policy Development Kit** with a community risk assessment method to guide adoption of appropriate policy

Support communities and use cases in policy interpretation through Guidelines

AARC http://aarc-project.eu

## If we don't: there is also commercial GDPR guidance for research and collaboration





## Fancy an £80 voucher when protecting your information?

With just 8 DAYS TO GO, see why there has never been a better time to buy a shredder to help meet your

GDPR obligations. Stocks are limited, and we have ensuring your sensitive documents are secure.

# Ruffles Direct Large Office High Capacity Micro-cut GDPR Shredder with

# High Capacity Micro-cut GDPR Shredder with

Thanks to the AARC2 policy collaborators: David Kelsey, Hannah Short, Ian Neilson, Uros Stevanovic, Mikael Linden, Ralph Niederberger, Petr Holub, Wolfgang Pempe, Stefan Paetow, and many contributions from across the AARC project, REFEDS, IGTF, and WISE!

# Thank you Any Questions?

davidg@nikhef.nl



http://aarc-project.eu/

