

# The EMI AAI Strategy.

John White (for the EMI Security Area)

EMI INFSO-RI-261611

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# Introduction

- ▶ **Background**
- ▶ **User Requirements.**
- ▶ **EMI current services.**
- ▶ **Required services.**
- ▶ **Rough timetable.**

# Background

AAI workshop held at EGI TF, September 14<sup>th</sup> 2010.

<https://www.egi.eu/indico/sessionDisplay.py?sessionId=11&confId=48#20100914>

## Google “egi technical forum aai”

- ▶ 3 User communities:
  - ▶ Biomed, Earth Sciences, HEP
- ▶ 5 ESFRI projects
  - ▶ CLARIN, Lifewatch, ELIXIR, EuroFEL, ILL
- ▶ 2 NGIs.
  - ▶ Italy, UK.

## Background

For projects crossing national boundaries:

1. How are users currently authenticated?
  - 1.1 Which credential(s) is/are used?
  - 1.2 How is the user vetting done?
2. Is there a link to national identities? If so, how are different national identities leveraged?
3. Which types of resources are in use and how are users authorized?
  - 3.1 Resources accessed through Grid technology: computing resources, storage, etc.
  - 3.2 Resources accessed without Grid technology: computing resources, storage, etc.
  - 3.3 Web-based resources.
4. Where does the project want to be in 5 years with regards to authentication and authorization?
5. Are your users and resource owners happy with the current AAI scheme that you use?

# Background

For NGIs:

1. How are users currently authenticated?
  - 1.1 Is there a national AAI infrastructure in place or in the process of being set up?
  - 1.2 Which credential(s) is/are used?
  - 1.3 Which policies do you have with respect to credentials? Do you support long-lived and/or short-lived credentials? Are there any preferences?
  - 1.4 How is the user vetting done?
2. Is anonymous and/or pseudonymous access to resources supported?
3. Does the NGI support virtual organizations - if so, how?
4. Where does the NGI want to be in  $\approx 5$  years with regards to authentication and authorization?

## General User Results

- ▶ Grid users do not want to handle credentials themselves.
- ▶ Grid users would like to obtain X.509 credentials and VOMS attributes from other credentials and vice-versa.
- ▶ Projects would like to use federated identities.
- ▶ Projects recognize that both national and international identity federations will become more important.
- ▶ User identities and actions on a Grid should be protected, anonymized.
- ▶ Projects realize that access to the majority of Grid infrastructures requires and will require in the future, X.509 credentials.

More complete report available at:

<https://twiki.cern.ch/twiki/pub/EMI/EmiJra1T4Security/>

## “Reactions”

- ▶ **Grid users do not want to handle credentials themselves.**
- ▶ **Projects would like to use federated identities.**
- ▶ **Projects recognize that both national and international identity federations will become more important.**
  - ▶ Projects are encouraged to use whatever federated/national identity systems.
  - ▶ EMI will interface to or provide a means to obtain credentials transparently.
  - ▶ Already SLCS, TCS, (EMI STS in the future) can provide X.509

# “Reactions”

- ▶ **Grid users would like to obtain X.509 credentials and VOMS attribute from other credentials and vice-versa.**
  - ▶ Security Token Service (STS), pluggable credential service.
  - ▶ Web Service interface. SAML → X.509.
  - ▶ Others later.

## “Reactions”

- ▶ **Projects realize that access to the majority of Grid infrastructures requires and will require in the future, X.509 credentials.**
  - ▶ X.509 + VOMS ACs for the future.
  - ▶ Need to get federated (SAML?) attributes for use on infrastructures.
  - ▶ VOMS Attributes from Shibboleth (VASH).
  - ▶ Service between the IDP and VOMS.
  - ▶ Integration to VOMS?.

## General User Results

- ▶ **User identities and actions on a Grid should be protected, anonymized.**
  - ▶ Service exists. Pseudonymity.
  - ▶ One-time identities in conjunction with VOMS-Admin.
  - ▶ Needs integration.

# Timetable Estimate

- ▶ **Short-lived Credential Service**
  - ▶ In production. Integration to EMI-1 if needed.
- ▶ **Security Token Service**
  - ▶ Under design. Later than EMI-1.
- ▶ **VASH**
  - ▶ Integration into release. EMI-1.
  - ▶ Integration into VOMS. Under study. Later than EMI-1.
- ▶ **Pseudonymity**
  - ▶ Integration into release. EMI-1.