

Identity Federation Training

eduGAIN Tools

GN4-3-WP5-eduGAIN:

Anass Chabli (RENATER)

Mario Reale (GÉANT)

Valentin Pocotilenco (RENAM)

In order to ease service implementation, use and maintain, eduGAIN offers various online tools, which can be found on technical.edugain.org

The provided tools are useful in many areas like:

- eduGAIN profiles compliance check
- Metadata validation
- Entities state check

and others.

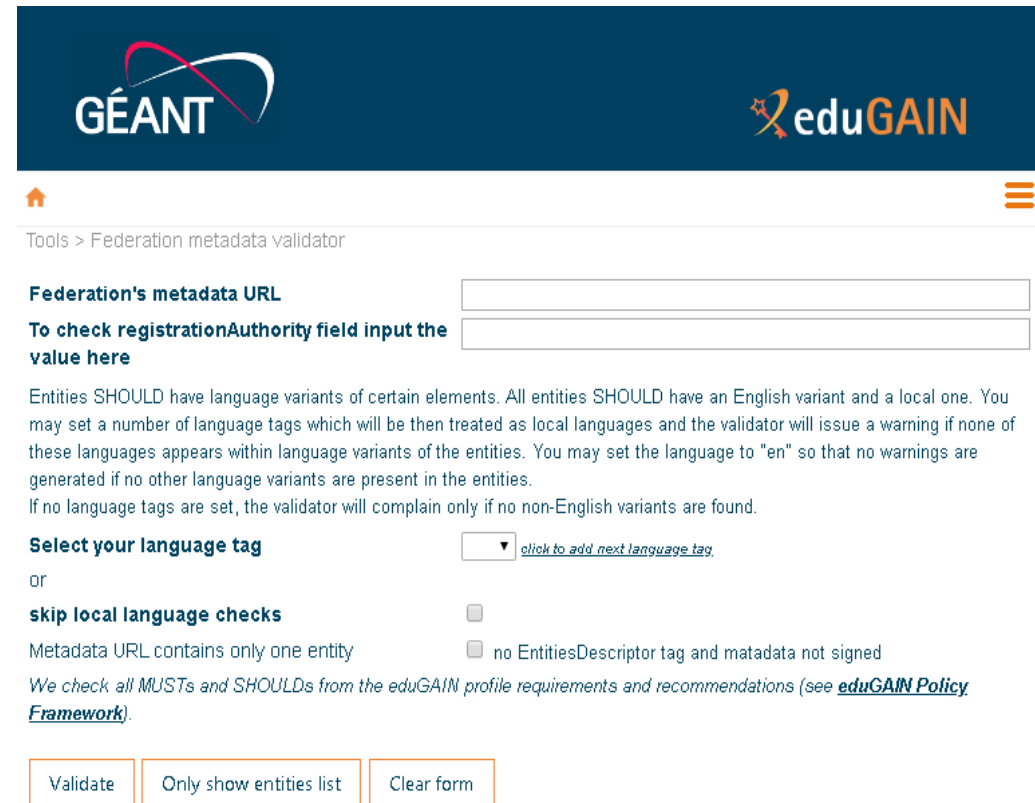
Metadata validator

<https://technical.edugain.org/validator2>

This tool tests metadata and each entity from provided URL.

Tests cover all *MUSTs* and *SHOULDs* from the eduGAIN Metadata profile requirements and recommendations, thus offering possibility to easily debug metadata errors and warnings.

This tool is most useful to understand if entities are able to join into eduGAIN, thus reducing malformed ones in metadata.



The screenshot shows the web interface of the GEANT eduGAIN Metadata Validator. The header features the GEANT logo on the left and the eduGAIN logo on the right. Below the header, there is a breadcrumb trail: "Tools > Federation metadata validator". The main form area contains several input fields and checkboxes:

- Federation's metadata URL**: A text input field.
- To check registrationAuthority field input the value here**: A text input field.
- Select your language tag**: A dropdown menu with a link "click to add next language tag".
- or**: A separator.
- skip local language checks**: A checkbox.
- Metadata URL contains only one entity**: A checkbox.
- no EntitiesDescriptor tag and metadata not signed**: A checkbox.

Below the form, there is a note: "We check all *MUSTs* and *SHOULDs* from the eduGAIN profile requirements and recommendations (see [eduGAIN Policy Framework](#))."

At the bottom of the form, there are three buttons: "Validate", "Only show entities list", and "Clear form".

Metadata validator

As test result, this tool offers various information about entities or attributes contained in metadata fetched from the provided URL.

See [eduGAIN Policy Framework](#)

General info	Errors	Warnings	Detailed info	Signing info	Entities logos list	Entities list
			IdP's entities		SP's entities	
1			Academy of Economic Studies of Moldova AESM https://idp.vle.ase.md/saml/saml2/idp/metadata.php Registration Authority: http://federations.renam.md/			Federation Management Board RENAM https://manage.federations.renam.md Registration Authority: http://federations.renam.md/
2			GIDP-RENAM RENAM https://gidp.federations.renam.md Registration Authority: http://federations.renam.md/			RENAM Filesender RENAM https://filesender.renam.md Registration Authority: http://federations.renam.md/
3						Campus-IdP-test-SP GEANT https://campus-idp-test.geant.org Registration Authority: http://federations.renam.md/

Entities database

Tool results offer reach set of information about entities from selected federation like entity state, details, warning/errors, information about compliance with eduGAIN profiles, etc..

SAML 2.0 support ?
 ECCS IdP test status ?
 Entity clashes ?
 Validator warnings ?
 CoCo status ?
 SIRTFI status ?

Appeared in eduGAIN: ?

Any time
 This month
 Last 7 days
 Selected date:

?

Listing of all entities (8), 1 federation			
1	IdP: Agency ARNIEC RoEduNet IdP	ECCS	Entity details
	Entity ID: https://idp.roedu.net/idp/shibboleth		
	Entity categories: REFEDS Research and Scholarship		
	SIRTFI: asserted		
	Registrar: RoEduNetID		
	Org: Agency ARNIEC - RoEduNet		
	IdP: Lucian Blaga University of Sibiu IdP	ECCS	

[Prev](#)
[Next](#)

Entity details

Entity information

Entity ID:	https://idp.roedu.net/idp/shibboleth
Entity categories:	REFEDS Research and Scholarship
SIRTFI:	asserted
Registrar:	RoEduNetID
First seen:	2019-10-28
Language: en	
Display Name:	Agency ARNIEC - RoEduNet
Name:	Agency ARNIEC - RoEduNet
URL:	https://www.roedu.net/

Language: ro

Display Name:	Agenția ARNIEC - RoEduNet
Name:	Agenția ARNIEC - RoEduNet
URL:	https://www.roedu.net/

Contact details

technical	mail: edugain@roedu.net
support	mail: edugain@roedu.net
REFEDS security	Security Response Team (RoCSIRT); mail: abuse@roedu.net

Identity Provider information

Language: en	
Display Name:	Agency ARNIEC RoEduNet IdP
Description:	This Identity Provider (IdP) serves Agency ARNIEC staff
Language: ro	
Display Name:	IdP Agenția ARNIEC RoEduNet
Description:	Acest IdP deservește angajații Agenției ARNIEC - RoEduNet

Protocols

urn:mace:shibboleth:1.0; urn:oasis:names:tc:SAML:1.1:protocol; urn:oasis:names:tc:SAML:2.0:protocol

Entities database

<https://technical.edugain.org/entities>

Entities Database Explorer, used to list eduGAIN metadata entities, having rich set of filters for fast entity search, offers possibility to visualize shared information about any participating federation and entity.

Entity Type

All Identity Providers Service Providers Attribute Authorities (standalone)

Entity category filter

No filter

Federation filter (you may select multiple)

All federations
AAF (Australia)
AAI@EduHr (Croatia)
AAIEduMk (North Macedonia)
ACOnet Identity Federation (Austria)
AFIRE (Armenia)
ARNaai (Algeria)
ArnesAAI Slovenska izobraževalno raziskovalna federacija (Slovenia)

Entity filter

EntityID substring search
Enter string for a for substring matching. Only EntityID is searched.

EntityId search
 Whole entity multiword search
 Reverse whole entity multiword search

SAML 2.0 support

No filter

ECCS IdP test status

No filter

Entity clashes

No info

Validator warnings

No info

CoCo status

No filter

SIRTFI status

No filter

Appeared in eduGAIN:

Any time This month Last 7 days Selected date:

Show Download CSV Clear form

Federations in eduGAIN	
Participants	68
Voting-only Members	2
Candidates	9
Entities in eduGAIN	
All entities	6464
IdPs	3569
SPs	2893
Standalone AAs	4

isFederated Check

<https://technical.edugain.org/isFederatedCheck/>

Using available data in eduGAIN metadata, this tool checks provided email or domain name for membership to federated entity.

In case entity isn't federated and there are no tool limitations caused by provided data, using top domain name, national federation page and contact email are offered to take further actions.

eduGAIN isFederated Check

Do you want to know if an organisation is federated already and part eduGAIN? Do you want to list all organisations whose users are in eduGAIN? Do you want to see how many Identity Providers of a federation are part of eduGAIN? Then the isFederated Check is what you are looking for.

Description and Features

- Show [further information about features, limitations, API](#) and how the service works
- List [all known production academic identity federations](#) including their eduGAIN coverage and metadata freshness
- List and search [all Organisations in eduGAIN](#)

Check if an Organisation or User is in eduGAIN

Provide a space or line separated list of (institution) email addresses (e.g. john.doe@switch.ch or just @switch.ch if you don't [trust this service](#)), URLs (<https://www.mit.edu/some/page>), domain name (cam.ac.uk) or a URN (urn:mace:incommon:mit.edu). If a domain is mentioned several times, the result will also show how many times it was mentioned. When entering e.g. all email addresses (or at least the FQDNs of the email addresses) of a community, the result will show a histogram of members per organisations, ordered by organisation.

Connectivity Check Service

<https://technical.edugain.org/eccs/>

The purpose of the eduGAIN Connectivity Check is to identify eduGAIN Identity Providers (IdP) that are not properly configured thus increasing the overall service quality and user experience of the eduGAIN interfederation service by making federation and Identity Provider operators aware of configuration problems.

[Identity Providers](#) | [All IdP Test Results](#) | [Instructions](#) | [Contacts](#)

Show IdPs with status: [Error](#) | [Warning](#) | [OK](#) | [Disabled](#) | [Show all](#)

Display Name	entityID	Registration Authority	Contacts	Last Test	Current Result	Tests
<input type="text"/>	<input type="text"/>	<input type="text"/>	T: Technical, S: Support	<input type="text"/>	All	<input type="button" value="Search"/>
IdP data				Last test results		
Icahn School of Medicine at Mount Sinai	https://sso.mssm.edu/idp	https://incommon.org	T: support@entity.com	2020-05-12 03:37:06	OK	View
Henan University of Technology	https://idp.haut.edu.cn/idp/shibboleth	https://www.carsi.edu.cn	T: support@entity2.cn	2020-05-12 03:37:04	OK	View
UNL - Faculty of Sciences and Technology	https://idp.fct.unl.pt/idp/shibboleth	https://www.fccn.pt	T: support@another.pt S: support2@another.pt	2020-05-12 03:37:03	OK	View

The check is performed once per day by sending a SAML authentication request to each eduGAIN IdP. The expected result is a login form that allows users to authenticate or an HTTP or login form error message.

Release check

<https://release-check.edugain.org>

The eduGAIN Attribute Release Check (EARC) service allows testing whether the Identity Provider of an organisation participating in eduGAIN properly releases user attributes to eduGAIN services.

eduGAIN Attribute Release Check

To get a better understanding of attribute release in general, how it affects services in eduGAIN and what to consider to properly implement it, we strongly recommend to have a look at the [GÉANT online course on "Successful Attribute Release"](#).

The eduGAIN Attribute Release Check (EARC) service allows testing whether the Identity Provider of an organisation participating in eduGAIN properly releases user attributes to eduGAIN services.

The service will test if the Identity Provider supports attribute release based on the [REFEDS Research & Scholarship \(R&S\)](#) and the [GÉANT Data Protection Code of Conduct \(CoCo\)](#) entity categories. A third test will analyze which attributes an Identity Provider is able to release in general and how many eduGAIN services a user can access based on these attributes.

To perform the test, click on "Start" and then choose your Identity Provider. After successful login, you will automatically access all three tests and see the test result at the end.

Start the test

REFEDS R&S Test

entityID: <https://rns-ng.release-check.edugain.org/shibboleth>

Include this SP to the test:

Details:

GEANT Data Protection Code of Conduct Test

entityID: <https://coco.release-check.edugain.org/shibboleth>

Include this SP to the test:

Details:

No Entity Category Test

entityID: <https://noec.release-check.edugain.org/shibboleth>

Include this SP to the test:

Details:

Release check

As a result, tool offers graduated, explained results grouped by categories.

REFEDS R&S Test **Tested**

EntityID:
<https://ms-ng.release-check.edugain.org/shibboleth>

Verdict: **D**

IdP sends superfluous personal information in eduPersonEntitlement attribute
More details on verdict

Hints about R&S IdP configuration

Details:

Attributes Received

- eduPersonPrincipalName **OK**
- mail **OK**
- displayName **OK**
- eduPersonScopedAffiliation **OK**
- eduPersonTargetedID **OK**
- sn **OK**
- eduPersonEntitlement **Not requested**

Attributes Missing

GEANT Data Protection Code of Conduct Test **Tested**

EntityID:
<https://coco.release-check.edugain.org/shibboleth>

Verdict: **D**

IdP sends superfluous personal information in displayName attribute
More details on verdict

Hints about CoCo IdP configuration

Details:

Attributes Received

- mail **OK**
- eduPersonPrincipalName **OK**
- eduPersonScopedAffiliation **OK**
- displayName **Not requested**
- eduPersonEntitlement **Not requested**
- eduPersonTargetedID **Not requested**
- sn **Not requested**

Attributes Missing

No Entity Category Test **Tested**

EntityID:
<https://moec.release-check.edugain.org/shibboleth>

IdP sends superfluous personal information in displayName attribute
More details on verdict

Details:

Attributes Received

- mail **OK**
- eduPersonPrincipalName **OK**
- eduPersonScopedAffiliation **OK**
- displayName **Not requested**
- eduPersonEntitlement **Not requested**
- eduPersonTargetedID **Not requested**
- sn **Not requested**

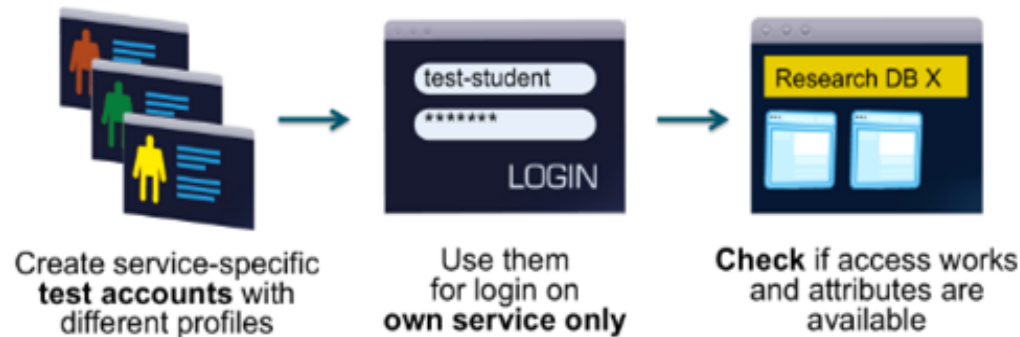
Attributes Missing

eduGAIN Access Check

<https://access-check.edugain.org>

eduGAIN Access Check is a service based on the same named software, allowing administrators of service providers registered in eduGAIN interederation to safely test their service behavior.

Functionning



Get started

To start testing your own services, start by selecting one your are administrator for.

Get started

eduGAIN Access Check benefits

eduGAIN Access Check tool allows SP administrators to ensure proper functioning of their services within eduGAIN. It is especially useful for services not hosted by an R&E institution, because they can't use their own IdP to login and test their production eduGAIN-enabled service. Tool makes the SP operators aware that:

- different eduGAIN IdPs will release varying set of attributes
- the vocabulary and semantics of some attributes (i.e. eduPersonAffiliation) differ from federation to federation

eduGAIN Access Check releases a reasonable set of attributes to SPs, depending on the entity categories (GéANT Data Protection Code of Conduct, REFEDS Research & Scholarship) they belong to. This should encourage SP administrators to follow the eduGAIN guidelines and facilitate the use of entity categories.

eduGAIN Access Check usage

1. Select your service provider

2. Select your email address

3. Complete email challenge

Complete email challenge

An email challenge including a validation token has been emailed to you at leaf@renam.md. Please copy and paste the validation token in the form below to prove that you are administrator of this service. Please provide the validation token here:

Previous

Next

After simple SP control confirmation procedure, a set of accounts, available for next 7 days, will be created on *eduGAIN Access Check* IdP.

Success: your identity as administrator of the Service Provider <https://manage.federations.renam.md> has been validated!

Test accounts created

You can now use these test accounts to access your [service provider](#), using **eduGAIN Access Check** as identity provider.

This page won't be accessible again, you should either keep it open in your web browser, or [download accounts in CSV format](#).

Account profile: fullset1	Account profile: limitedset1	Account profile: generic1
user name: user496	user name: user497	user name: user498
password: i#Z&MBx:2N	password: 7nHf\$DX=tR	password: NEv5WlQuMF
comment: A person with all eduGAIN user attributes plus givenName and surname.	comment: A person with only an eduPersonTargetedID attribute.	comment: A person with a limited set of attributes (eduPersonPrincipalName, mail and displayName).
show details	show details	show details

eduGAIN profiles compliance

<https://monitor.edugain.org/coco/>

This tool performs checks on elements asserting compliance to the *Data protection Code of Conduct*, checks *Privacy Policy* referenced by *PrivacyStatementURL*, located inside entity's metadata, which resolves to a page referencing to the *Data Protection Code of Conduct*, accumulate data used for SP audit.

https://technical.edugain.org/compliance_audit

This tool presents audit results of eduGAIN member federations compliance with [eduGAIN SAML Profile](#). The audit is performed every hour as a part of the eduGAIN aggregation process.

eduGAIN APIs

<https://technical.edugain.org/monitoring>

This API offers metadata validation and monitoring functionality. Monitoring tool offers metadata state and offers explanation in case of feed errors.

<https://technical.edugain.org/api>

This API offers a lot of methods used to retrieve various information about federations and entities, useful for fine grained monitoring and statistic information collection.

Thank you

Any questions?

www.geant.org

