



# Ubuntunet Identity Federation Training

eduGAIN Tools

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[www.geant.org](http://www.geant.org)

In order to ease service implementation, use and maintain, eduGAIN offers various online tools, which can be found on [technical.edugain.org](http://technical.edugain.org)

The provided tools are useful in many areas like:

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

and others.

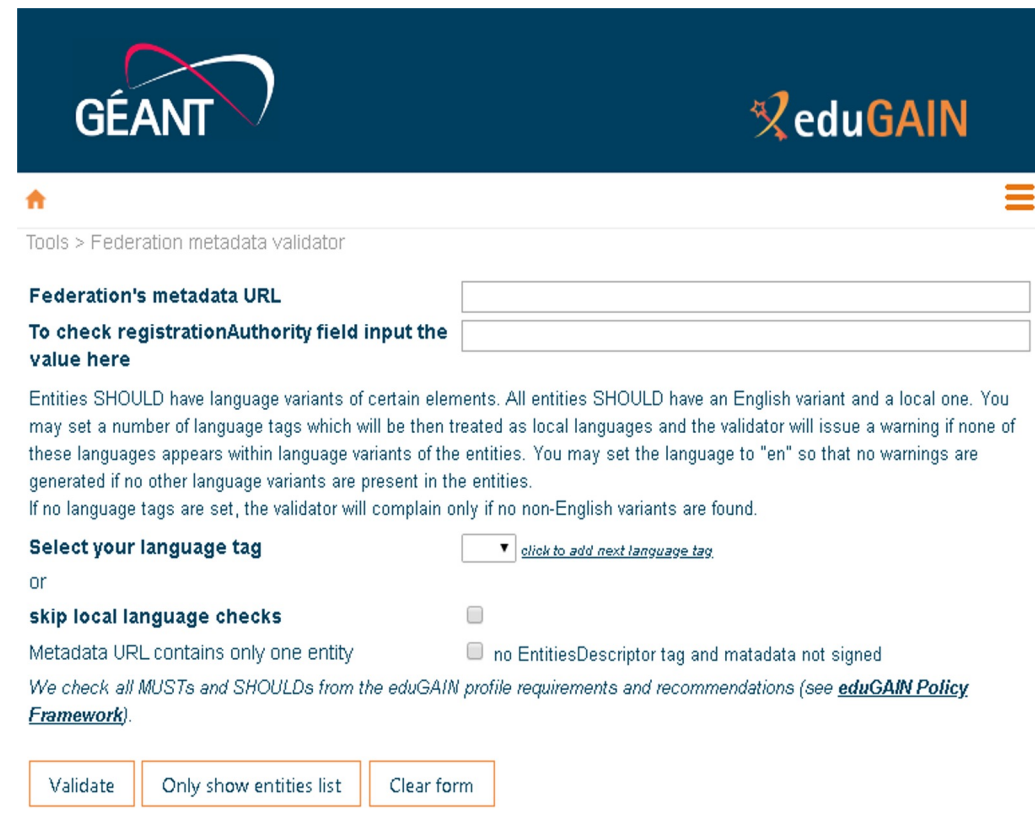
# Metadata validator

<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 contains the following elements:

- Federation's metadata URL**: A text input field.
- To check registrationAuthority field input the value here**: A text input field.
- Entities SHOULD have language variants of certain elements. All entities SHOULD have an English variant and a local one. You may set a number of language tags which will be then treated as local languages and the validator will issue a warning if none of these languages appears within language variants of the entities. You may set the language to "en" so that no warnings are generated if no other language variants are present in the entities. If no language tags are set, the validator will complain only if no non-English variants are found.**
- 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.
- We check all MUSTs and SHOULDs from the eduGAIN profile requirements and recommendations (see [eduGAIN Policy Framework](#)).**
- 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
			<b>IdP's entities</b>		<b>SP's entities</b>	
1			Academy of Economic Studies of Moldova AESM <a href="https://idp.vle.ase.md/saml/saml2/idp/metadata.php">https://idp.vle.ase.md/saml/saml2/idp/metadata.php</a> Registration Authority: <a href="http://federations.renam.md/">http://federations.renam.md/</a>			Federation Management Board RENAM <a href="https://manage.federations.renam.md">https://manage.federations.renam.md</a> Registration Authority: <a href="http://federations.renam.md/">http://federations.renam.md/</a>
2			GIDP-RENAM RENAM <a href="https://gidp.federations.renam.md">https://gidp.federations.renam.md</a> Registration Authority: <a href="http://federations.renam.md/">http://federations.renam.md/</a>			RENAM Filesender RENAM <a href="https://filesender.renam.md">https://filesender.renam.md</a> Registration Authority: <a href="http://federations.renam.md/">http://federations.renam.md/</a>
3						Campus-IdP-test-SP GEANT <a href="https://campus-idp-test.geant.org">https://campus-idp-test.geant.org</a> Registration Authority: <a href="http://federations.renam.md/">http://federations.renam.md/</a>

# 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 <sup>?</sup>
 ECCS IdP test status <sup>?</sup>
 Entity clashes <sup>?</sup>
 Validator warnings <sup>?</sup>
 CoCo status <sup>?</sup>
 SIRTFI status <sup>?</sup>

Appeared in eduGAIN: <sup>?</sup>

Any time
  This month
  Last 7 days
  Selected date:

<sup>?</sup>

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

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

## Entity details

### Entity information

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

### Language: ro

Display Name:	Agenția ARNIEC - RoEduNet
Name:	Agenția ARNIEC - RoEduNet
URL:	<a href="https://www.roedu.net/">https://www.roedu.net/</a>

### Contact details

technical	mail: <a href="mailto:edugain@roedu.net">edugain@roedu.net</a>
support	mail: <a href="mailto:edugain@roedu.net">edugain@roedu.net</a>
REFEDS security	Security Response Team (RoCSIRT); mail: <a href="mailto:abuse@roedu.net">abuse@roedu.net</a>

### 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

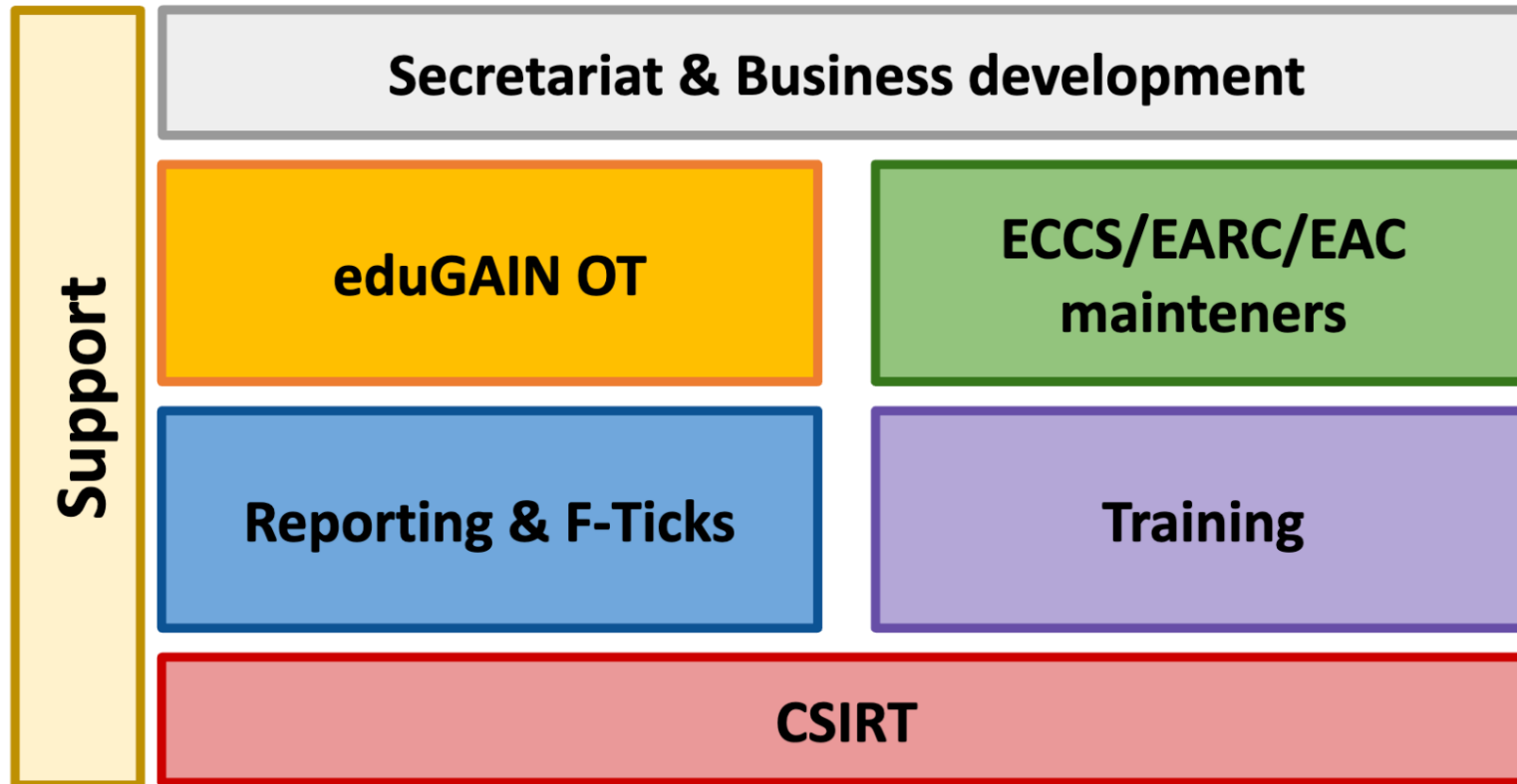
Clear form

Federations in eduGAIN	
Participants	68
Voting-only Members	2
Candidates	9

Entities in eduGAIN	
All entities	6464
IdPs	3569
SPs	2893
Standalone AAs	4

# eduGAIN operation and related services



# ECCS: the eduGAIN 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		All	<input type="button" value="Search"/>
IdP data				Last test results		
Icahn School of Medicine at Mount Sinai	<a href="https://sso.mssm.edu/idp">https://sso.mssm.edu/idp</a>	<a href="https://incommon.org">https://incommon.org</a>	T: <a href="mailto:support@entity.com">support@entity.com</a>	2020-05-12 03:37:06	OK	<a href="#">View</a>
Henan University of Technology	<a href="https://idp.haut.edu.cn/idp/shibboleth">https://idp.haut.edu.cn/idp/shibboleth</a>	<a href="https://www.carsi.edu.cn">https://www.carsi.edu.cn</a>	T: <a href="mailto:support@entity2.cn">support@entity2.cn</a>	2020-05-12 03:37:04	OK	<a href="#">View</a>
UNL - Faculty of Sciences and Technology	<a href="https://idp.fct.unl.pt/idp/shibboleth">https://idp.fct.unl.pt/idp/shibboleth</a>	<a href="https://www.fccn.pt">https://www.fccn.pt</a>	T: <a href="mailto:support@another.pt">support@another.pt</a> S: <a href="mailto:support2@another.pt">support2@another.pt</a>	2020-05-12 03:37:03	OK	<a href="#">View</a>

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://rms-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.

The image displays three screenshots of the release check tool interface, each showing the results of a test for a specific entity. The results are categorized into 'Attributes Received' and 'Attributes Missing'.

**REFEDS R&S Test** **Tested**  
EntityID: <https://rms-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://noec.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**

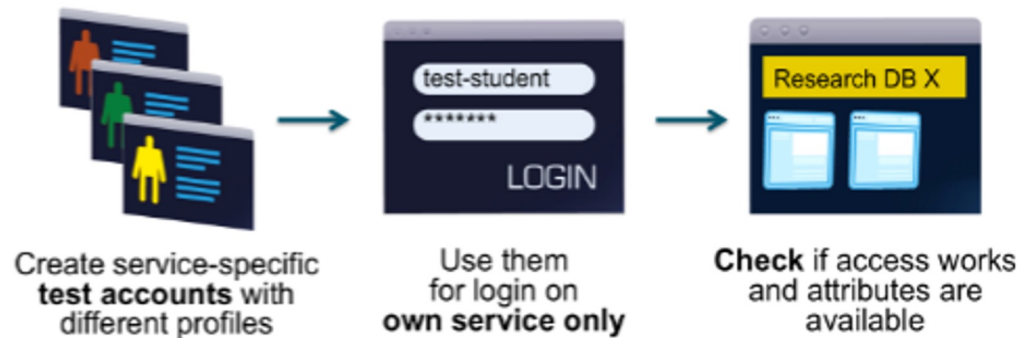
**Attributes Missing**

# 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

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

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:

9u68uoszpirq8eitgrta

Previous

Next

**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

**user name:** user496

**password:** i#Z&MBx:2N

**comment:**

A person with all eduGAIN user attributes plus givenName and surname.

show details

### Account profile: limitedset1

**user name:** user497

**password:** 7nHf\$DX=tR

**comment:**

A person with only an eduPersonTargetedID attribute.

show details

### Account profile: generic1

**user name:** user498

**password:** NEv5WlQuMF

**comment:**

A person with a limited set of attributes (eduPersonPrincipalName, mail and displayName).

show details

# 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](http://www.geant.org)

