

Version 2021. February 04, Mihály Héder

The **eduGAIN** Reporting service provides a platform to inform administrators of Federations, NREN personnel and others to assess the quality of a Federation's metadata, presented in a clean and intelligible way.

A deployed version is available at: https://edugain-reporting-beta.incubator.geant.org

The source code is available at: https://gitlab.geant.org/TI Incubator/edugain-reporting-web

Feature overview

eduGAIN Reporting currently incorporates all measurements that are performed the **eduGAIN Technical Database**: validity checks, entity attributes, ECCS. Among the entity attributes, special attention is given to SIRTFI and CoCo compliance/pledge. All other entity attributes are visible, for instance the notable R&S or hide-from-discovery. Also, all Federation-specific attributes can be browsed, like degree-of-reliance, assurance levels and different kinds of categorizations.

Besides the eduGAIN Technical Database measurements, we also have one local gauge, the **software platform guess**, which presents the best-guess of the SAML stack used by examining the binding URLs.

The **eduGAIN Attribute Release Check (EARC)** results are currently not part of the data intake and re-presentation.

The service refreshes once a day, in the morning (Central European Time).

Overall, aggregated information is available for all visitors on the landing page. Federation and entity-level information is available for people associated with the given Federation. These pages require login (through the GÉANT SP Proxy) and a subscription to the Federation (with a token sent to the official Federation email address).

Conformance Score

The tool contains a matrix to measure the overall conformance of an entity or federation. The score is automatically calculated for all members of the eduGAIN inter-Federation. Access to the data is restricted and can only be viewed by operators of each Federation

You can see the stats of your federation here, in comparison with eduGAIN as a whole.



51.1333

Figure: the daily score of a federation

Format

The result of the measurement is shown as ranking from A-F.

A++	A+	Α	В	С	D	E	F
>70	70-61	60-51	50-41	40-31	30-21	20-11	<11

This score is calculated for every entity. The Federation score is the average of all contained entities. The eduGAIN score is the median of all Federation scores.

Entity operators will only see their own entity score and their Federation score.

Federation operators will see their own Federation's score, all entity scores and the eduGAIN score.

eduGAIN operators will see all scores.

Score	Calculation	Visibility
Entity	Requirements measurement	EntityOp only their own score FedOp all Federation members eduGAIN Op all
Federation	∑ Entity Score / number of entities	EntityOp/FedOp only their own score eduGAIN Op all

Calculation

The entity score is calculated by assigning points to technical requirements. Requirements are split into issues and bonuses. Issues are negative and subtract from the score. Bonuses are positive and grant additional points.

General rules:

- Every entity starts with 50 points.
- Issues that fundamentally break operational capability give a penalty of 10 points
- Trust related errors give a penalty of 5 points
- Display and related issues give a penalty of 1 point

A detailed description of the calculation and technical requirements is available at https://docs.google.com/document/d/1dvkY09FuychsT9s1GmlDbUDgr5dqhV3RM8zjT3LpvQ0

Issue type	Requirement	Points
Major	Missing signing or encryption certificate	-10
Minor	Registration attributes missing or wrong	-5
	CoCo declared but attributes are missing	
	SIRTFI declared but attributes are missing	
Improvement	Missing display or organisational data	-1
	No English language support	
	Wrongly configured server or certificates	
Bonus	Claiming of CoCo	+50
	Claiming of SIRTFI	
	Claiming of R&S	

The data about these requirements are provided by the eduGAIN technical database. The data is updated at least once a day. The website shows a history of previous days based on the imported data. Incorrect or outdated data must be updated in the source database.

Email notification

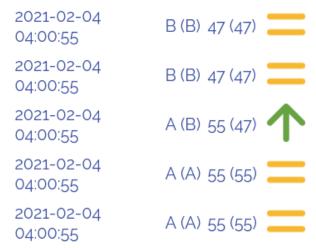


Figure: daily change indicator in a list of entity scores

The tool offers a possibility to inform its users via email about the current status of their entity/Federation. The provided data is similar to the data presented on the website. The notification functionality is an opt-in feature.

The data is delivered via an unencrypted mail to the email address named during the subscription.

There are three options for email notification:

- no emails,
- daily emails,
- daily emails (but ECCS change alone won't trigger a change)

This can be changed at the bottom of your profile page, at **email notifications**.

Figure: the location of the email notification setting.

Edit Attribute Value Your Local Identifier is Email notifications No email notifications Daily email notifications Daily (ECCS does not trigger)

Figure: how to change the email notification setting.