

The Hunt For Red IdPs

Lukas Hämmerle

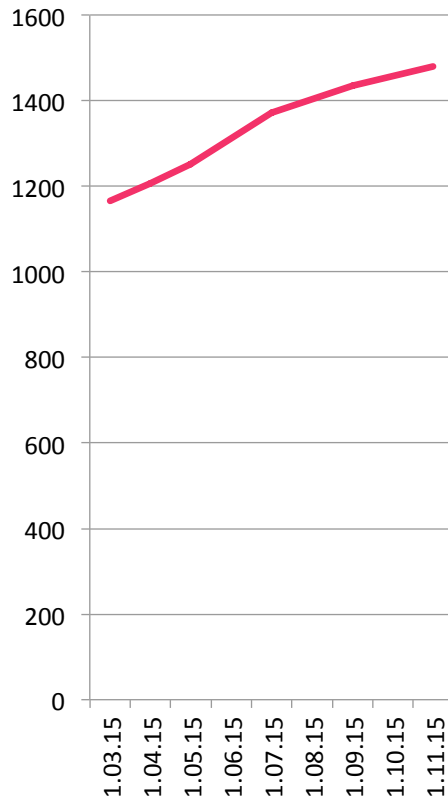
Task Leader "Enabling Users"

GÉANT/SWITCH

eduGAIN Town Hall Meeting, Vienna

1. December 2015

Number of IdPs



- **Nice increase of eduGAIN IdPs**
 - Also thanks to move from opt-in to opt-out 😊
- **But many eduGAIN IdPs don't "work" 😞**
 - Test when users select IdP to authenticate at an eduGAIN service
 - Poor perceived "service quality" of "eduGAIN" for users or SP admins
- **That is what triggered**



DEVELOPMENT BY
MARCO MALVOLI
AND ANDREA BIANICINI
OPERATION BY EDUGAIN OT

THE
HUNT
FOR
~~RED WIDERS~~



19:45

LOCATION

SOURCE

COI

The Mission Objectives

1. Locate malconfigured eduGAIN IdPs
2. Provide a public listing of these IdPs
3. Inform federation operator about the issues

LATITUDE

143412431
143412431
587856875

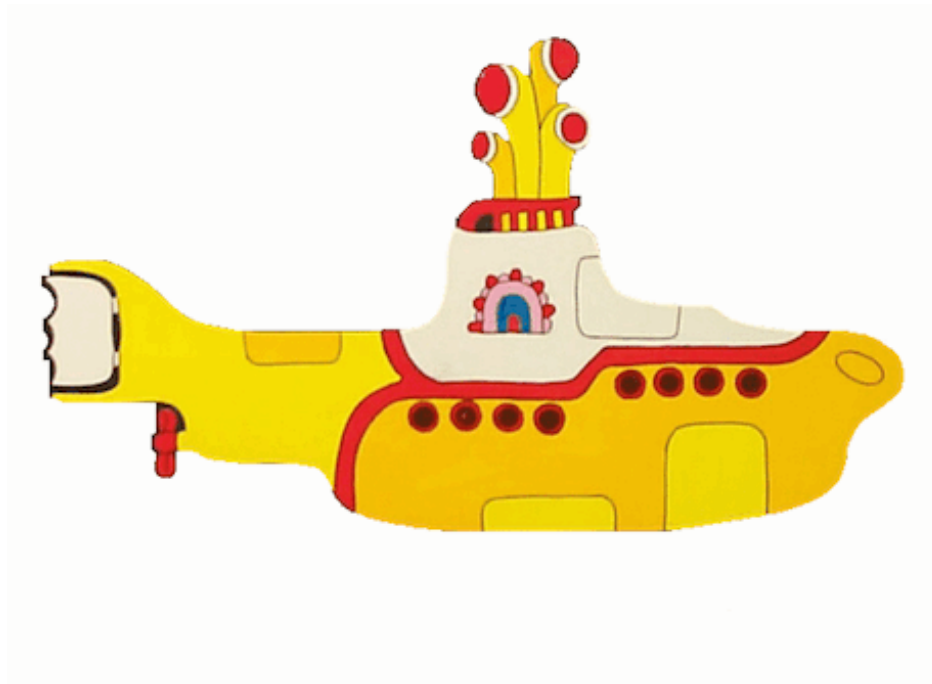
50

- Public web service similar like the CoCo monitor:

eduGAIN Connectivity Check Service (ECCS)

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

- For each eduGAIN IdP do the following check:
 - Initiate a login process from two eduGAIN SPs (except for disabled IdPs)
 - Check if a reasonable login page is returned
 - Classify error messages (Error = Red, Warning = Yellow)
 - Display results on a public web page
- The check seems easy but there are false positives:
 - The hub of Hub&Spoke federations often don't react like expected
 - HTTP Basic Auth, redirects with JavaScripts, strange TLS configurations, ...
 - There is an option to exclude IdPs or whole federations from checks



- **Yellow IdPs = IdPs in category "Warning"**
 - are probably working but they don't seem to consume eduGAIN metadata, i.e. they issue an error message that the test SPs are unknown
- **Probably a configuration problem** (e.g. no automatic metadata download)
 - False positive: Hub&Spoke federations where each IdP has to enable eduGAIN SP

Yellow Identity Providers in Warning Category



[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		
University of Northampton (IDP)	http://idp.northampton.ac.uk/oala/metadata	http://ukfederation.org.uk	T: mike.aynsworth@northampton.ac.uk S: mike.aynsworth@northampton.ac.uk	2015-11-25 20:47:10	No-eduGAIN-Metadata	View
University of Sunderland	http://sso.sunderland.ac.uk/auth/metadata	http://ukfederation.org.uk	T: scott.sweeting@sunderland.ac.uk T: dean.hale@sunderland.ac.uk T: adil.khan@sunderland.ac.uk T: daniel.dixon@sunderland.ac.uk S: ian.frost@sunderland.ac.uk S: ian.lundell@sunderland.ac.uk S: rachel.webb@sunderland.ac.uk S: laura.wilkinson@sunderland.ac.uk S: ian.frost@sunderland.ac.uk	2015-11-25 20:47:11	No-eduGAIN-Metadata	View
FAMERP - Faculdade de Medicina de Rio Preto	https://1010SE17FAM-V03.famerp.br/idp/shibboleth	http://cafe.rnp.br	T: joaomarclo@famerp.br	2015-11-25 20:49:32	No-eduGAIN-Metadata	View
Wigan & Leigh College	https://access.wigan-leigh.ac.uk/oala/metadata	http://ukfederation.org.uk	T: i.parr@wigan-leigh.ac.uk S: a.unsworth@wigan-leigh.ac.uk	2015-11-25 20:47:30	No-eduGAIN-Metadata	View
UFABC - Universidade Federal do ABC	https://acesso.ufabc.edu.br/idp/shibboleth	http://cafe.rnp.br	T: contato.cafe@ufabc.edu.br	2015-11-25 20:49:27	No-eduGAIN-Metadata	View
UEPB - Universidade Estadual da Paraíba	https://apu.uepb.edu.br/idp/shibboleth	http://cafe.rnp.br	T: gerencia@uepb.edu.br	2015-11-25 20:50:53	No-eduGAIN-Metadata	View
UECE - Universidade Estadual do Ceara	https://araripe.uece.br/idp/shibboleth	http://cafe.rnp.br	T: di.infra@uece.br	2015-11-25 20:50:46	No-eduGAIN-Metadata	View

201 (13.6%) yellow IdPs of 1481 (30.11.2015)



- **Have a more serious configuration problem or are not reachable**
- False positive: E.g. host temporarily not down or not reachable (behind firewall)

Red Identity Providers in Error Category



[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
IdP data				Last test results		
Hogeschool de Kempel	http://adfs01.kempel.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	2015-11-25 20:49:05	All FORM-Invalid No-eduGAIN-Metadata HTTP-Error CURL-Error	View
University College South Denmark	http://birk.wayf.dk/birk.php/fg.ucsyd.dk/adfs/services/trust	https://www.wayf.dk	T: drift@wayf.dk	2015-11-25 20:48:29		View
Design School Kolding	http://birk.wayf.dk/birk.php/fs.dskd.dk/adfs/services/trust	https://www.wayf.dk	T: drift@wayf.dk	2015-11-25 20:45:11	HTTP-Error	View
NHTV Breda University of Applied Sciences	http://fed.nhtv.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	2015-11-25 20:48:17	HTTP-Error	View
Antoni van Leeuwenhoek – Netherlands Cancer Institute	http://login.nki.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	2015-11-25 20:48:34	HTTP-Error	View
Nuclear Research and Consultancy Group	http://login.nrg.eu/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	2015-11-25 20:45:25	HTTP-Error	View
INSA Strasbourg	https://antimoine.insa-strasbourg.fr/idp/shibboleth	https://federation.renater.fr/	T: simon.scherrer@insa-strasbourg.fr T: lahsen.bouzid@insa-strasbourg.fr	2015-11-25 21:03:21	CURL-Error	View
Nelson and Colne College	https://athenslart.nelson.ac.uk/oala/metadata	http://ukfederation.org.uk	T: a.mills@nelson.ac.uk S: a.rhodes@nelson.ac.uk	2015-11-25 20:47:56	CURL-Error	View

102 (6.9%) redIdPs of 1481 (30.11.2015)

303 (20.5%) Red and Yellow IdPs ☹️ (30.11.2015) vs 864 (58.3%) Green IdPs

Excluded Identity Providers in Disabled Category



[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		
AMOLF	http://adfs.amolf.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	Federation excluded from check		SP SWITCH SP GARR
ArtEZ Institute of the Arts	http://adfs.artez.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	Federation excluded from check		SP SWITCH SP GARR
Driestar Educatief	http://adfs.driestar-educatief.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	Federation excluded from check		SP SWITCH SP GARR
FOM-bureau	http://adfs.fom.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	Federation excluded from check		SP SWITCH SP GARR
Grafisch Lyceum Utrecht	http://adfs.glu.nl/adfs/services/trust	http://www.surfconext.nl/	T: support@surfconext.nl S: help@surfconext.nl	Federation excluded from check		SP SWITCH SP GARR

- IdPs can be disabled by sending an email to edugain@geant.org
- No checks will be done anymore
- **316 (21.3%) Gray IdPs that are excluded from checks (30.11.2015)**

- **Way too many IdPs that are not configured properly**
 - Or ECCS's checks are wrong/too strict
- **Check is not perfect! There are still false positives!**
 - We went through the hole list at one point to identify and exclude IdPs that generate false positives but new IdPs were added in the mean time
- **Have a look at the results on <https://technical.edugain.org/eccs/>**
- In particular check the IdPs of your federation
- **eduGAIN Steering Group Delegates/Deputies will be notified soon**
 - In case there are red and yellow IdPs

- **Inspiration:**
CLARIN, eduGAIN CoCo Monitor
- **Concept:**
Many people from eduGAIN Steering Committee
- **Development:**
Marco Malavolti and Andrea Biancini from GARR
- **Operation:**
eduGAIN Operations Team (Maja Wolniewicz, Tomasz Wolniewicz)



Thank you

lukas.haemmerle@switch.ch



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