

IVOA Registry Ecosystem Health Reports

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Issue/Revision: 1.0

Reference: VO Managed Authority cleanup results

Status: Issued

ESA UNCLASSIFIED - Releasable to the Public

Background



On previous IVOA Interop at Trieste we agreed on:

1. Adding extra page in Euro-VO Registry web site with monthly updates on Registry Anomalies (pre-generated and public accessible reports).

2. Reorganize and split the anomalies as
 - a. anomalies and
 - b. warnings
 - c. (some of the anomalies are more important/critical than others, some were deleted, some were renamed to better describe their purpose...)
 - d. (many thanks to Markus Demleitner for his suggestions).

Registry Ecosystem health report (monthly reports)



The screenshot shows the landing page of the ESA EURO-VO Registry. The browser address bar displays 'registry.euro-vo.org/eurovo/#landing_page'. The page features a large header with the 'EURO VO' logo and a background image of Earth from space. A navigation sidebar on the left contains icons for Home, Search, Menu, Home, Back, Forward, Settings, User, and Help. The main content area includes a welcome message, a list of functionalities, and a section for the 'Registry Ecosystem health report' with links to various reports from 201701 to 201705. The footer indicates the release version is v1.1.170419.00 and is copyrighted by ESAC ESA.

ESA EURO-VO Registry

registry.euro-vo.org/eurovo/#landing_page

LogIn Join

Welcome to the new EURO-VO Full Harvestable VO Resource Registry.

The new Euro-VO Registry offers you the following main functionalities:

For astronomers and end users:

Search the VO resources through the Simple Search Panel, the Advanced Search or through the expert ADQL Search Panel (click on the icon).

For data publishers:

Host your resources with EuroVO, create and update your own VO Resources via a password-protected interface, check their compliance with the associated IVOA standards (click on the icon; requires an account: click [Join](#) to join).

For VO Applications developers and for other IVOA Registries:

Harvest the registry, retrieve individual resources, or search the registry through its programmatic [OAI-PMH](#), [RI1](#) and [RegTAP](#) interfaces (click on the icon to find more information).

If you have any question regarding the EURO-VO Registry, please send an email to:

esavo.registry@sciops.esa.int

Registry Ecosystem health report

201701 - [RegAnomalies](#), [Unused MA in full Harvests](#), [Wrong MA in Harvests](#)
201702 - [RegAnomalies](#), [Unused MA in full Harvests](#), [Wrong MA in Harvests](#)
201703 - [RegAnomalies](#), [Unused MA in full Harvests](#), [Wrong MA in Harvests](#)
201704 - [RegAnomalies](#), [Unused MA in full Harvests](#), [Wrong MA in Harvests](#)
201705 - [RegAnomalies](#), [Unused MA in full Harvests](#), [Wrong MA in Harvests](#)

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Registry Anomalies Report Categorization (scope categorization)



RoR registry resource anomalies

Anomalies discovered when examining solely the representation of registry resource records as made available by the RoR.

Harvested registry resource anomalies

Anomalies discovered when examining the registry resource records as harvested from their respective publishing registries (and not as made available by the RoR)

RoR - harvested registry records discrepancies

Discrepancies between the registry resource records as made available by the RoR and as harvested by their respective registries

Other anomalies

Anomalies not falling into one of the other categories

Registry Anomalies Report Categorization (importance categorization)



Anomaly

Indicates that some element of the Registry will probably fail for some subset of records.

Warning

Indicates that a Registry operator may have inadvertently expressed something that, while by itself perfectly legal, may not match what they have intended.

Registry Anomalies Report



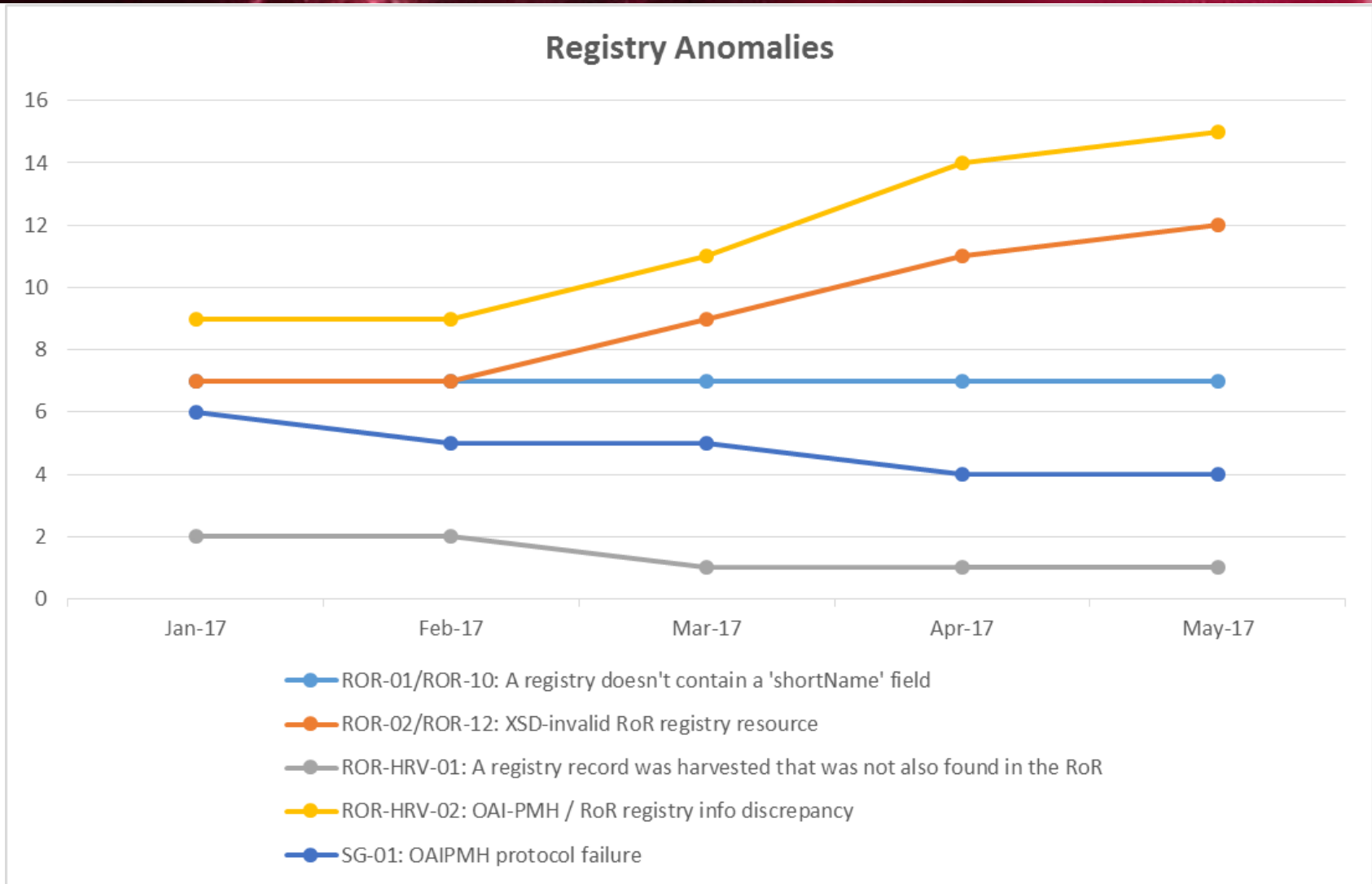
Anomaly

Indicates that some element of the Registry will probably fail for some subset of records.

anomaly	anomaly kind	counts
a registry doesn't contain a 'shortName' field	ROR	7
XSD-invalid RoR registry resource	ROR	12
a registry record was harvested that was not also found in the RoR	ROR-HRV	1
OAI-PMH / RoR registry info discrepancy	ROR-HRV	15
OAIPMH protocol failure	SUI	4

[Full detailed HTML Report : Registry Anomalies Report](#)

History of Registry Anomalies for 2017



Registry Warnings Report



Warning: Indicates that a Registry operator may have inadvertently expressed something that, while by itself perfectly legal, may not match what they have intended.

warning	warning kind	counts
identifier in OAI-PMH namespace	RORW	12
common managed authority prefix	HRVW	1
a registry doesn't contain a 'shortName' field	HRVW	8
a registry is not declared as a harvestable registry	HRVW	2

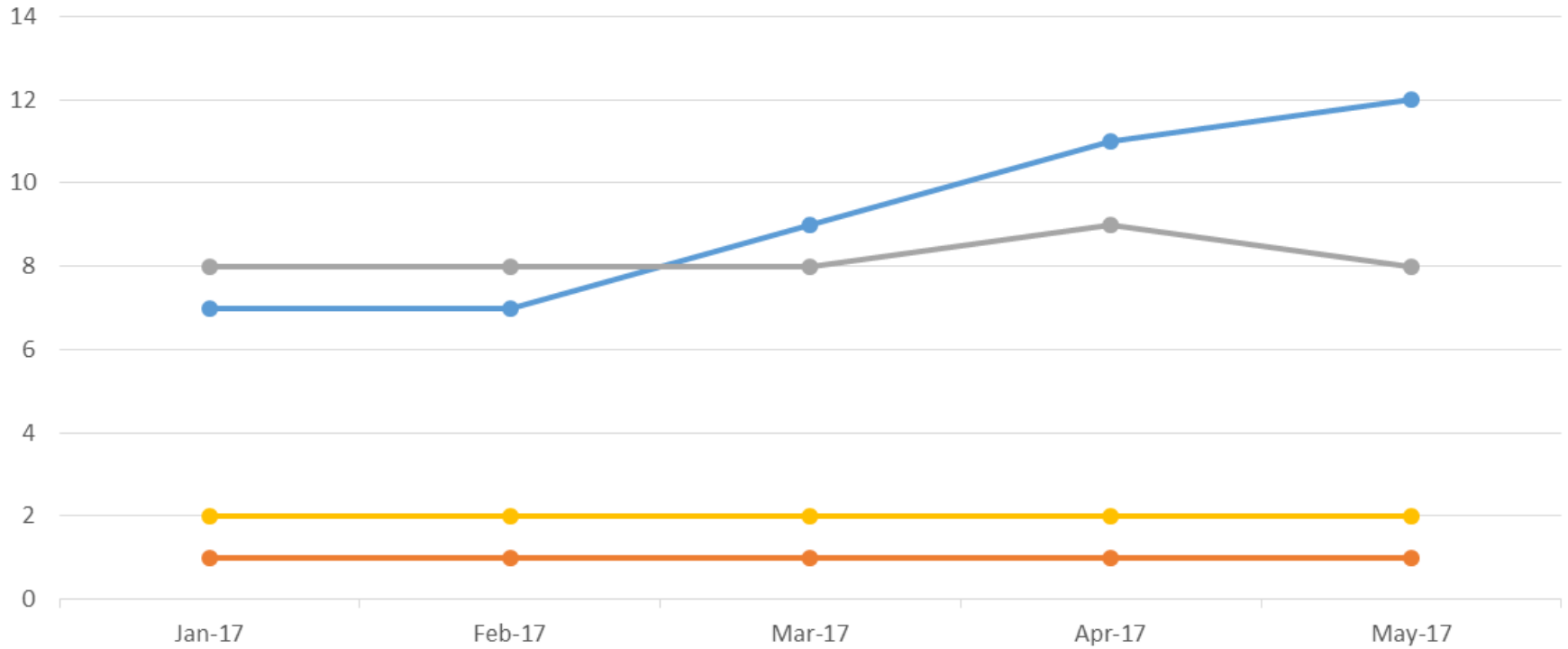
[Full detailed HTML Report : Registry Warnings Report](#)



History of Registry Warnings for 2017



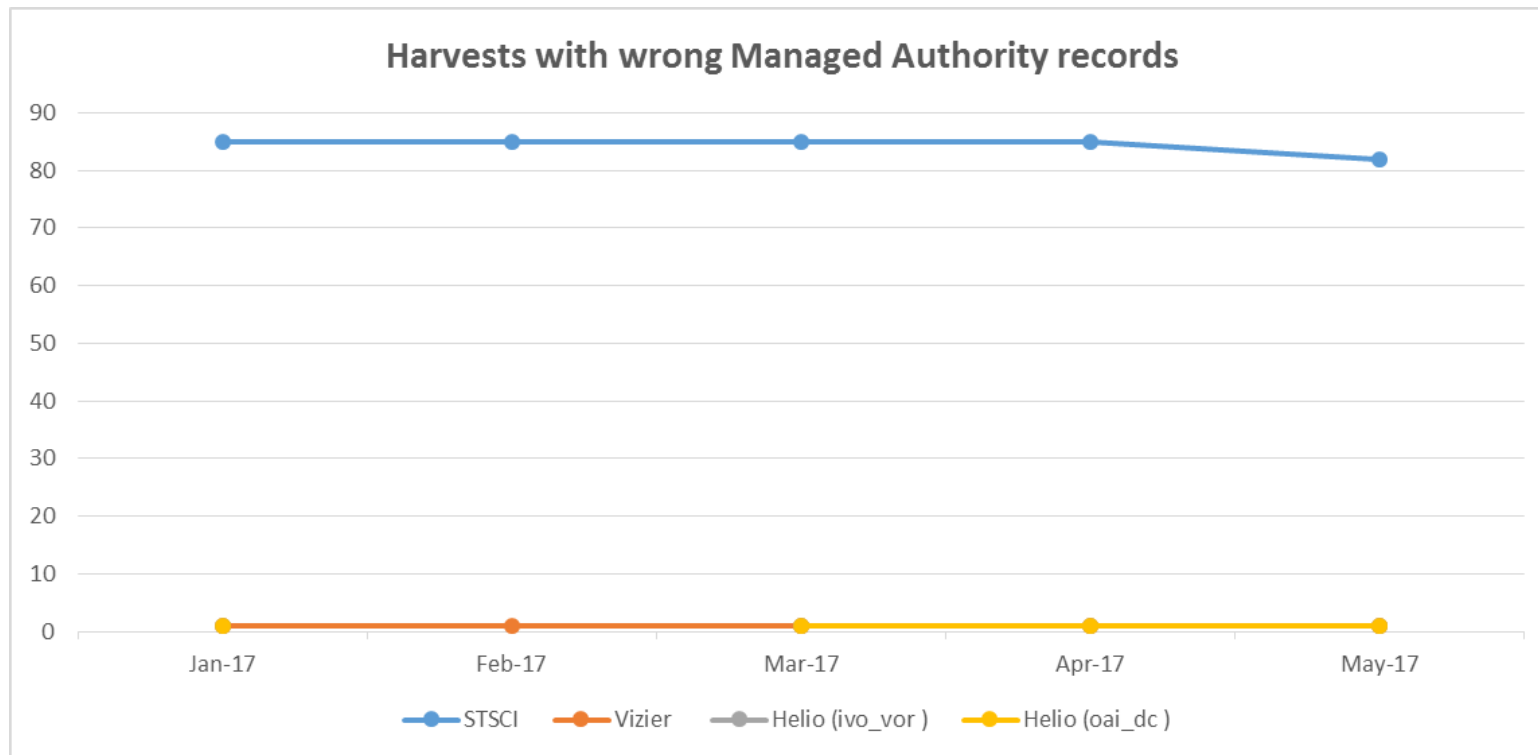
Registry Warnings



- RORW-11(ROR-13): Identifier in OAI-PMH namespace
- HRVW-01(HRV-02) :Common managed authority prefix
- HRVW-02(HRV-10): A registry doesn't contain a 'shortName' field
- HRVW-03(HRV-11): A registry is not declared as a harvestable registry



Harvests with wrong Managed Authority (History for 2017)



	STSCI (ivo_vor)	Vizier (ivo_vor)	Helio (ivo_vor)	Helio (oai_dc)
Jan-17	85	1	1	1
Feb-17	85	1	0	0
Mar-17	85	1	1	1
Apr-17	85	1	1	1
May-17	82	1	1	1

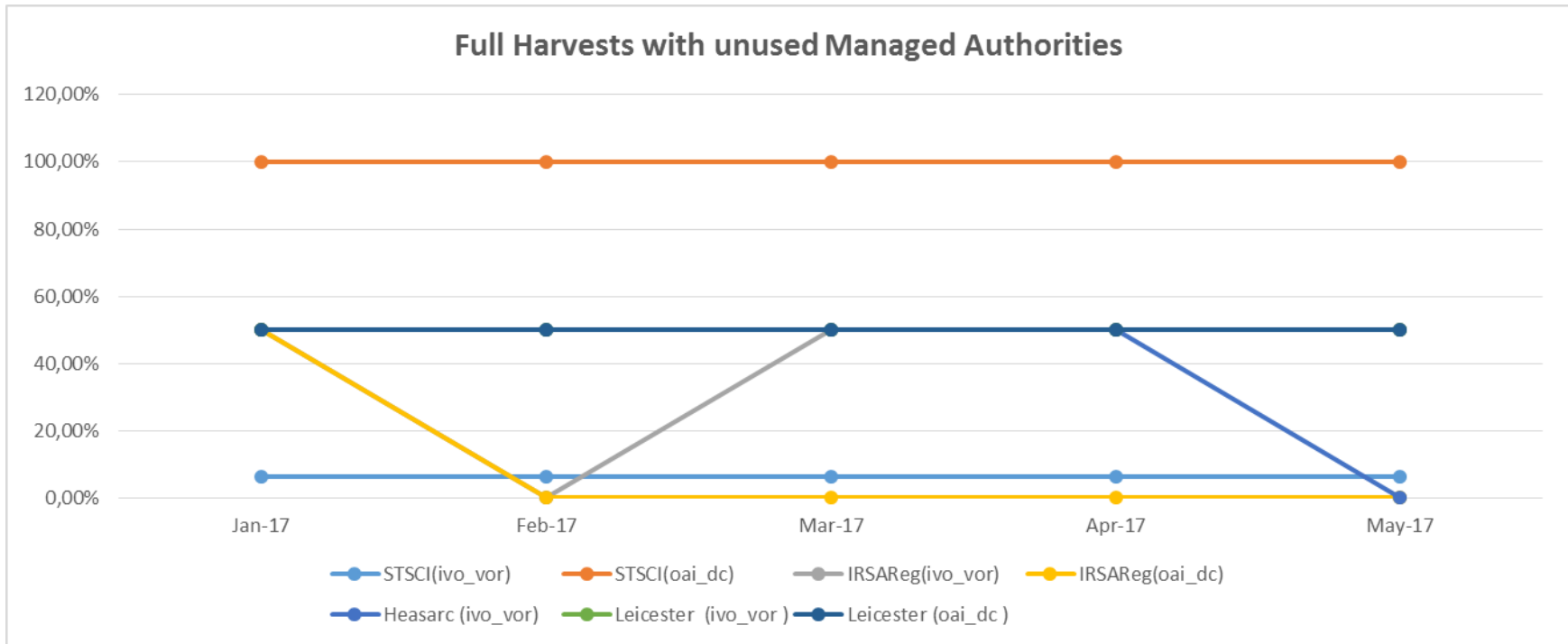
Harvests with wrong Managed Authority (Current Status)



IVOID	Metadata	Operation	Idx	%
ivo://archive.stsci.edu/nvoregistry	ivo_vor	FH	14	25
ivo://CDS.VizieR/registry	ivo_vor	FH	20	0
ivo://helio-vo.eu/org.astrogrid.registry.RegistryService	ivo_vor	FH	17	3
ivo://helio-vo.eu/org.astrogrid.registry.RegistryService	oai_dc	FH	17	3

Full detailed HTML report : Wrong managed authorities in harvests

Full Harvests with unused Managed Authorities



	STSCI(ivo_vor)	STSCI(oai_dc)	IRSAReg(ivo_vor)	IRSAReg(oai_dc)	Heasarc(ivo_vor)	Leicester(ivo_vor)	Leicester(oai_dc)
Jan-17	6,25%	100,00%	50,00%	50,00%	50,00%	50,00%	50,00%
Feb-17	6,25%	100,00%	0,00%	0,00%	50,00%	50,00%	50,00%
Mar-17	6,25%	100,00%	50,00%	0,00%	50,00%	50,00%	50,00%
Apr-17	6,25%	100,00%	50,00%	0,00%	50,00%	50,00%	50,00%
May-17	6,25%	100,00%	50,00%	0,00%	0,00%	50,00%	50,00%



Full Harvests with unused Managed Authorities



IVOID	Metadata	Operation	Idx	# MAs total	# MAs unused
ivo://archive.stsci.edu/nvoregistry	ivo_vor	FH	14	32	2
ivo://archive.stsci.edu/nvoregistry	oai_dc	FH	40	32	32
ivo://irsa.ipac/registry	ivo_vor	FH	17	2	1
ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService	ivo_vor	FH	14	8	4
ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService	oai_dc	FH	14	8	4

Full detailed HTML report : Unused managed authorities in full harvests

Next Steps!



1. Inform the RoFR regarding the two anomalies in order to update the resources:
 - a. ROR-01 :: A registry doesn't contain a 'shortName' field
 - 7 instances
 - Relatively easy to fix (add short name)
 - b. ROR-02 :: XSD-invalid RoR registry resource
 - 12 instances
 - Needs some effort
 - c. ROR-HRV-01 :: A registry record was harvested that was not also found in the RoR
 - 1 instance
 - Update at ROR?
2. Inform the other resources managed authorities and registries.

Backup slides



RoR registry resource anomalies

- ROR-01 :: A registry doesn't contain a 'shortName' field
- ROR-02 :: XSD-invalid RoR registry resource
- ROR-03 :: Duplicate managed authority in RoR

RoR registry resource warnings

- RORW-01 :: Common managed authority
- RORW-02 :: Common managed authority prefix
- RORW-03 :: Identical critical registry info
- RORW-04 :: Same (case-insensitive) registry IVOA identifier
- RORW-05 :: Same (case-insensitive) registry title
- RORW-06 :: Same (case-insensitive) registry short name
- RORW-07 :: Malformed OAI-PMH access URL
- RORW-08 :: Same (case-insensitive) registry access URL
- RORW-09 :: Same (URI-based check) registry access URL
- RORW-10 :: A registry is not declared as a harvestable registry
- RORW-11 :: Identifier in OAI-PMH namespace

Harvested registry resource anomalies

- HRV-01 :: Common managed authority
- HRV-02 :: Identical critical registry info
- HRV-03 :: Same (case-insensitive) registry IVOA identifier
- HRV-04 :: Same (case-insensitive) registry title
- HRV-05 :: Same (case-insensitive) registry short name
- HRV-06 :: Malformed OAI-PMH access URL
- HRV-07 :: Same (case-insensitive) registry access URL
- HRV-08 :: Same (URI-based check) registry access URL

Harvested registry resource warnings

- HRVW-01 :: Common managed authority prefix
- HRVW-02 :: A registry doesn't contain a 'shortName' field
- HRVW-03 :: A registry is not declared as a harvestable registry

RoR - Harvested Registry Records Discrepancies



RoR - harvested registry records discrepancies

- ROR-HRV-01 :: A registry record was harvested that was not also found in the RoR
- ROR-HRV-02 :: OAI-PMH / RoR registry info discrepancy

Other Anomalies



Sui generis anomalies

- SG-01 :: OAIPMH protocol failure
- SG-02 :: OAIPMH duplicate set
- SG-03 :: OAIPMH no ivo_managed set
- SG-04 :: OAIPMH no data in ivo_managed / ivo_vor combo