

# Euro-VO Registry Ecosystem Health Report

*Costas Vrioni, Christophe Arviset, Juan Gonzalez  
ESAC Science Data Centre,*

*IVOA interop, Victoria, Canada, 30/05/2018*

Issue/Revision: 1.0

Reference: Euro-VO Registry Ecosystem

Status: Issued

ESA UNCLASSIFIED - Releasable to the Public

<http://registry.euro-vo.org/>




**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  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](mailto:esavo.registry@sciops.esa.int).



# Registry Anomalies Report



anomaly	Oct 2017	May 2018
HRV-04 :: Same (case-insensitive) registry title	1	0
ROR-HRV-01 :: A registry record was harvested that was not also found in the RoR	2	3
ROR-HRV-02 :: OAI-PMH / RoR registry info discrepancy	6	6
SG-01 :: OAIPMH protocol failure	4	5
	13	14

## 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 registry resource anomalies

Anomalies discovered when examining solely the representation of registry resource records 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



## ROR-HRV-01 :: A registry record was harvested that was not also found in the RoR

*A given registry IVOID is found in the local system database but not in the Registry of Registries*

Anomaly count: **3**

#	Description
1	ivo://purx/rr/q/create
2	ivo://org.gavo.dc/rr/q/create
3	ivo://chivo-lirae/__system__/services/registry

Action to be taken: Insert them to RofR?

# Registry Anomalies Report (ROR-HRV-02)



## ROR-HRV-02 :: OAI-PMH / RoR registry info discrepancy

*Discrepancy between the registry information reported for a particular registry resource by the Registry of Registries and the information obtained via the OAI-PMH protocol*

Anomaly count: **6**

#	Description
1	RoR: ivo://irsa.ipac/registry IRSA Publishing Registry IRSAReg irsa.ipac, irsa.ipac.caltech.edu --- Harvested: ivo://irsa.ipac/registry IRSA Publishing Registry IRSAReg irsa.ipac, irsa.ipac.caltech.edu
2	RoR: ivo://fu-berlin.planet.hrsc/__system__/services/registry Planetary web services @ FUB Registry PRSFUB Reg fu-berlin.planet.hrsc --- Harvested: ivo://fu-berlin.planet.hrsc/__system__/services/registry Planetary web services @ FUB Registry PRSFUB Reg fu-berlin.planet.hrsc
3	RoR: ivo://vopdc/registry VO-Paris Data Center Publishing Registry VOPDC Registry vopdc, vopdc.iap, vopdc.obspm --- Harvested: ivo://vopdc/registry VO-Paris Data Center Publishing Registry PADC Registry vopdc, vopdc.iap, vopdc.obspm
4	RoR: ivo://jvo/publishingregistry JVO Publishing Registry JVO_PREG  --- Harvested: ivo://jvo/publishingregistry JVO Publishing Registry JVO_PREG
5	RoR: ivo://archive.stsci.edu/nvregistry STScI Searchable Registry STScIReg BASS2000, graal.fr, ia2.inaf, obelix.lambrate.inaf.it, KeckObs, anusf.anu.au, archive.eso.org, archive.noao.edu, archive.stsci.edu, arecibo.cornell, badc.naoc.cn, cvo.naoc, fr.oamp.lam, fs.usno, gcp, gov.nasa.gsfc.nssdc, lca, mast.stsci, mast.stsci.edu, msc.koa, nao.ua, nasa.gsfc.nssdc, ned.ipac, nexsci.ipac, nrao, obs-hp.fr, obs-lyon.fr, opo.stsci, sdss.fnal, sdss.jhu, svo.iaa, svo.laeff --- Harvested: ivo://archive.stsci.edu/nvregistry STScI Searchable Registry STScIReg KeckObs, anusf.anu.au, archive.eso.org, archive.noao.edu, archive.stsci.edu, arecibo.cornell, badc.naoc.cn, cvo.naoc, fr.oamp.lam, fs.usno, gcp, gov.nasa.gsfc.nssdc, lca, mast.stsci, mast.stsci.edu, msc.koa, nao.ua, nasa.gsfc.nssdc, ned.ipac, nexsci.ipac, nrao, obs-hp.fr, obs-lyon.fr, opo.stsci, sdss.fnal, sdss.jhu, svo.iaa, svo.laeff
6	RoR: ivo://tohoku.univ.jp/__system__/services/registry Iitate Radio Data Server Registry Tohoku Reg tohoku.univ.jp --- Harvested: ivo://tohoku.univ.jp/__system__/services/registry Tohoku University VO Server Registry Tohoku Reg tohoku.univ.jp



# Registry Anomalies Report (ROR-HRV-02)



- ESAVO Registry updated manually
- **Action to be taken:**
- Is it possible to manually update the 6 registry resources on RofR?

# Registry Anomalies Report (SG-01)



## SG-01 :: OAIPMH protocol failure

*Network failure in the OAI-PMH protocol or failure to parse response according to expected OAI-PMH type when trying to access a particular registry during the production of this report*

Anomaly count: **5**

#	Description
1	ivo://au.csiro/org.astrogrid.registry.RegistryService   https://data.csiro.au:443/astrogrid-registry/OAIHandlerv1_0?   _int.esa.esavo.common.PersistentHTTPConnectivityException
2	ivo://mssl.ucl.ac.uk/org.astrogrid.registry.RegistryService   http://msslkk.mssl.ucl.ac.uk/mssl-registry/OAIHandlerv1_0   org.xml.sax.SAXParseException
3	ivo://fu-berlin.planet.hrsc/___system___/services/registry   http://vespa-redirect.obspm.fr/fu_berlin/oai.xml   _int.esa.esavo.common.Http5xxServerError
4	ivo://chivo-lirae/___system___/services/registry   http://endpoint.chivo.cl/oai.xml   org.xml.sax.SAXParseException
5	ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService   http://msslkk.mssl.ucl.ac.uk/registry_leicester/OAIHandlerv1_0   org.xml.sax.SAXParseException

# Registry Anomalies Report (SG-01)



We are working on it.

#	Description	
1	ivo://au.csiro/org.astrogrid.registry.RegistryService   https://data.csiro.au:443/astrogrid-registry/OAIHandlerv1_0?   _int.esa.esavo.common.PersistentHTTPConnectivityException	<b>SSL error</b>
2	ivo://mssl.ucl.ac.uk/org.astrogrid.registry.RegistryService   http://msslkk.mssl.ucl.ac.uk/mssl-registry/OAIHandlerv1_0   org.xml.sax.SAXParseException	404 Not Found
3	ivo://ar.nova/__system__/services/registry   http://nova.iafe.uba.ar/oai.xml   _int.esa.esavo.common.Http5xxServerError	503 Service Unavailable
4	ivo://fu-berlin.planet.hrsc/__system__/services/registry   http://ve redirect.obspm.fr/fu_berlin/oai.xml   _int.esa.esavo.common.Http5xxServerError	503 Service Unavailable
5	ivo://chivo-lirae/__system__/services/registry   http://endpoint.chivo.cl/oai.xml   org.xml.sax.SAXParseException	<b>401 Unauthorized</b>
6	ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService   http://msslkk.mssl.ucl.ac.uk/registry_leicester/OAIHandlerv1_0   org.xml.sax.SAXParseException	404 Not Found

Authentication?



# Registry Anomalies Report (SG-01)



## Server Down History (HTTP status codes: 404 or 503)

Report Date	http://msslkk.mssl.ucl.ac.uk/mssl-registry/OAIHandler1_0	http://nova.iafe.uba.ar/oai.xml	http://vespa-redirect.obspm.fr/fu_berlin/oai.xml	http://msslkk.mssl.ucl.ac.uk/registry_leicester/OAIHandler1_0
October-17	ON	ON	ON	ON
November-17	ON	ON	ON	ON
December-17	ON	OFF	OFF	ON
January-18	ON	ON	OFF	ON
February-18	OFF	OFF	OFF	OFF
March-18	OFF	OFF	OFF	OFF
April-18	OFF	OFF	OFF	OFF
May-18	OFF	ON	OFF	OFF

### Action to be taken:

Some of the Services have not been responding for more than 4 months continuously...

Should we remove them?

# Registry Warnings Report



warning	Oct 2017	May 2018
RORW-01 :: Common managed authority	0	1
RORW-02 :: Common managed authority prefix	0	1
RORW-11 :: Identifier in OAI-PMH namespace	7	0
RORW-12 :: A registry doesn't contain a 'shortName' field	7	4
HRVW-01 :: Common managed authority prefix	1	1
HRVW-02 :: A registry doesn't contain a 'shortName' field	9	6
HRVW-03 :: A registry is not declared as a harvestable registry	3	3
	27	16

**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 Warnings Report (RORW-01 & RORW-02)

## RORW-01 :: Common managed authority

*Two different registry records as retrieved from the RoR contain a common managed authority*

Anomaly count: **1**

#	Description
1	Registries 'ivo://archive.stsci.edu/nvoregistry' and 'ivo://esavo/registry' contain 3 common managed authorities: <a href="#">ia2.inaf</a> , <a href="#">obelix.lambrate.inaf.it</a> , <a href="#">graal.fr</a>

## RORW-02 :: Common managed authority prefix

*Two different registry records as retrieved from the RoR share a common managed authority prefix*

Anomaly count: **1**

#	Description
1	Registries 'ivo://archive.stsci.edu/nvoregistry' and 'ivo://esavo/registry' share a common managed authority prefix in 2 families: <a href="#">ia2.inaf~ia2.inaf.it</a> , <a href="#">graal.fr~graal</a>

The esavo was updated on RofR therefore the stsci has to be sync...

**Action to be taken:**  
update of STSCI registry resource on RofR.

# Registry Warnings Report (HRVW-01)



## HRVW-01 :: Common managed authority prefix

*Two different registry records (as harvested) share a common managed authority prefix*

Anomaly count: **1**

#	Description
1	Registries 'ivo://chivo/__system__/services/registry' and 'ivo://chivo-lirae/__system__/services/registry' 1 common managed authority prefix in 1 family: <a href="#">chivo~chivo-lirae</a>

### **Actions to be taken:**

- Update the resources
- Then update also the registry resources on RofR.

# Registry Warnings Report (RORW-12 & HRVW-02)



## HRVW-02 :: A registry doesn't contain a 'shortName' field

A registry record was harvested whose 'shortName' field (xpath: /shortName)

Anomaly count: 6

Updates needed from their respective publishing registries.

#	Description
1	ivo://purx/rr/q/create
2	ivo://org.gavo.dc/rr/q/create
3	ivo://sao.ru/org.astrogrid.registry.RegistryService
4	ivo://mssl.ucl.ac.uk/org.astrogrid.registry.RegistryService
5	ivo://wfau.roe.ac.uk/org.astrogrid.registry.RegistryService
6	ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService

The services are down, these are old data.

## RORW-12 :: A registry doesn't contain a 'shortName' field

The RoR contains a registry record whose 'shortName' field (xpath: /shortName) is empty

Anomaly count: 4

Then... update the resources on RofR

#	Description
1	ivo://mssl.ucl.ac.uk/org.astrogrid.registry.RegistryService
2	ivo://wfau.roe.ac.uk/org.astrogrid.registry.RegistryService
3	ivo://sao.ru/org.astrogrid.registry.RegistryService
4	ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService

## HRVW-03 :: A registry is not declared as a harvestable registry

*A registry record was harvested that doesn't define an HTTP-based OAI-PMH interface for harvesting*

Anomaly count: **3**

#	Description
1	ivo://purx/rr/q/create
2	ivo://org.gavo.dc/rr/q/create
3	ivo://jvo/publishingregistry

### Actions to be taken:

- Update the resources
- Then update also the registry resources on RofR.

# Overall status and next steps 1/2



Still some work to do:

- Continue cleaning up all the anomalies
  - Remaining updates on Registries: not needed
  - Modifications done in the Registries resources should also be updated in the RofR.
    - 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
- Continue cleaning up all the warnings
  - Remaining updates on Registries
    - 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
  - Then Update the resources on RofR

# Overall status and next steps 2/2



- Remove the registries which are not responding (or try to contact them?)
  - `ivo://fu-berlin.planet.hrsc/__system__/services/registry`  
[http://vespa-redirect.obspm.fr/fu\\_berlin/oai.xml](http://vespa-redirect.obspm.fr/fu_berlin/oai.xml)
  - `ivo://mssl.ucl.ac.uk/org.astrogrid.registry.RegistryService`  
[http://msslkk.mssl.ucl.ac.uk/mssl-registry/OAIHandlerv1\\_0](http://msslkk.mssl.ucl.ac.uk/mssl-registry/OAIHandlerv1_0)
  - `ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService`  
[http://msslkk.mssl.ucl.ac.uk/registry\\_leicester/OAIHandlerv1\\_0](http://msslkk.mssl.ucl.ac.uk/registry_leicester/OAIHandlerv1_0)