

# IVOA Registry Ecosystem Anomalies

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Reference: VO Managed Authority cleanup results

Status: Issued

ESA UNCLASSIFIED - Releasable to the Public

## First acknowledgement to Menelaus Perdikeas for all his work on the Euro-VO Registry !

The following presentation given by M. Demleitner in the Cape Town interop:

<http://wiki.ivoa.net/internal/IVOA/InterOpMay2016-Reg/managing.pdf>

. . . and in particular points 5 and 6:

- missing authority records
- authorities not managed by a registry

# Missing authority records



```
select auth from
(select distinct substring(ivoid, '(ivo://[^/]*\')') as auth
from rr.resource) as q
where
not exists (
select 1
from rr.resource as r
where auth=ivoid
and res_type='vg:authority')
```

- sent out and followed-up on 6 emails (one bounced back)
- two new authority records were created:
  - ivo://bsdc.icranet.org
  - ivo://svo.cab
- currently the query in our registry shows 6 missing authority records

# Is every authority managed by a registry?



```
SELECT ivoid
FROM rr.resource AS r
WHERE res_type='vg:authority'
AND NOT EXISTS (
SELECT 1 FROM rr.res_detail AS d
WHERE detail_xpath='/managedAuthority'
AND 'ivo://' || lower(detail_value)=r.void
)
```

- added three new authorities in the ivo://esavo/registry vg:Registry record
- we identified the "owners" by finding the registry from whose ivo managed set, the offending resources were harvested
- four emails sent out to registry owners asking them to extend their respective vg:Registry records
- currently the above query reveals 10 orphan authorities (. . . in our system)

# IVOA Registries Anomalies Report



anomaly	anomaly kind	counts
<a href="#">common managed authority prefix</a>	<a href="#">ROR</a>	1
<a href="#">a registry doesn't contain a 'shortName' field</a>	<a href="#">ROR</a>	7
<a href="#">XSD-invalid RoR registry resource</a>	<a href="#">ROR</a>	5
<a href="#">identifier in OAI-PMH namespace</a>	<a href="#">ROR</a>	5
<a href="#">title in OAI-PMH namespace</a>	<a href="#">ROR</a>	5
<a href="#">short name in OAI-PMH namespace</a>	<a href="#">ROR</a>	4
<a href="#">common managed authority prefix</a>	<a href="#">HRV</a>	1
<a href="#">a registry doesn't contain a 'shortName' field</a>	<a href="#">HRV</a>	7
<a href="#">a registry is not declared as a harvestable registry</a>	<a href="#">HRV</a>	1
<a href="#">registry in DB but not in RoR</a>	<a href="#">ROR-HRV</a>	1
<a href="#">OAI-PMH / RoR registry info discrepancy</a>	<a href="#">ROR-HRV</a>	7
<a href="#">OAIPMH protocol failure</a>	<a href="#">SUI</a>	4

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



# Harvests with wrong managed authorities



IVOID	Metadata	Operation	Idx	%
<a href="ivo://archive.stsci.edu/nvoregistry">ivo://archive.stsci.edu/nvoregistry</a>	ivo_vor	FH	7	22
<a href="ivo://CDS.VizieR/registry">ivo://CDS.VizieR/registry</a>	ivo_vor	FH	8	0
<a href="ivo://helio-vo.eu/org.astrogrid.registry.RegistryService">ivo://helio-vo.eu/org.astrogrid.registry.RegistryService</a>	ivo_vor	FH	8	3
<a href="ivo://helio-vo.eu/org.astrogrid.registry.RegistryService">ivo://helio-vo.eu/org.astrogrid.registry.RegistryService</a>	oai_dc	FH	8	3

1. Full detailed HTML report : Wrong managed authorities in harvests

# Full Harvests with unused Managed Authorities



IVOID	Metadata	Operation	Idx	# MAs total	# MAs unused
<a href="ivo://archive.stsci.edu/nvoregistry">ivo://archive.stsci.edu/nvoregistry</a>	ivo_vor	FH	7	60	25
<a href="ivo://archive.stsci.edu/nvoregistry">ivo://archive.stsci.edu/nvoregistry</a>	oai_dc	FH	33	60	60
<a href="ivo://irsa.ipac/registry">ivo://irsa.ipac/registry</a>	ivo_vor	FH	8	2	1
<a href="ivo://irsa.ipac/registry">ivo://irsa.ipac/registry</a>	oai_dc	FH	8	2	1
<a href="ivo://nasa.heasarc/registry">ivo://nasa.heasarc/registry</a>	ivo_vor	FH	26	2	1
<a href="ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService">ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService</a>	ivo_vor	FH	7	8	4
<a href="ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService">ivo://uk.ac.le.star/org.astrogrid.registry.RegistryService</a>	oai_dc	FH	7	8	4

1. Full detailed HTML report : Unused managed authorities in full harvests



# Next steps to tackle these anomalies



1. Aim to have all anomalies cleared by Shanghai interop in May 2017?
2. Key Registry persons to take specific actions
  - a. Markus, Teresa, Costas, Pierre LS
  - b. Others ?
3. Agree to add extra page in Euro-VO Registry web site with monthly updates on these anomalies