

Euro-VO Registry new Portal

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ESAC Science Data Centre,*

IVOA interop, Observatoire de Paris, Paris, France, 16/05/2019

Issue/Revision: 1.0

Reference: Euro-VO Registry new Portal

Status: Issued

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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.

Current Portal



Main drivers for changes

1. Total new Euro-VO Registry GUI interface
 - a. re-using GUI layout and software from ESA Science Archives
 - b. Easier long term software maintenance
2. Better Euro-VO Registry functionalities
 - a. For end users searching for VO Resources
 - b. For VO Resources publisher
3. Updated VO compliance validation process
 - a. Parallel checks instead of sequential
 - b. Faster turn-around time for full VO Resources validation
4. Various updates also in Euro-VO Registry back-end systems
 - a. Improve search performance
5. New Euro-VO Registry GUI now in beta release
 - a. Will be release in production in May 2019

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Euro-VO Registry



HOME

WELCOME TO THE 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.
- **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.
- **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.



TOP FEATURES

 SEARCH Search through all data.	 ADQL SEARCH Search with ADQL query through all data.	 INFO Information related to EuroVO Registry Services.	 CONTACT For questions, suggestions or problem reports, contact our EuroVO Registry Support.
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New Portal!

Will be released next week

1. EuroVO Registry System Architecture

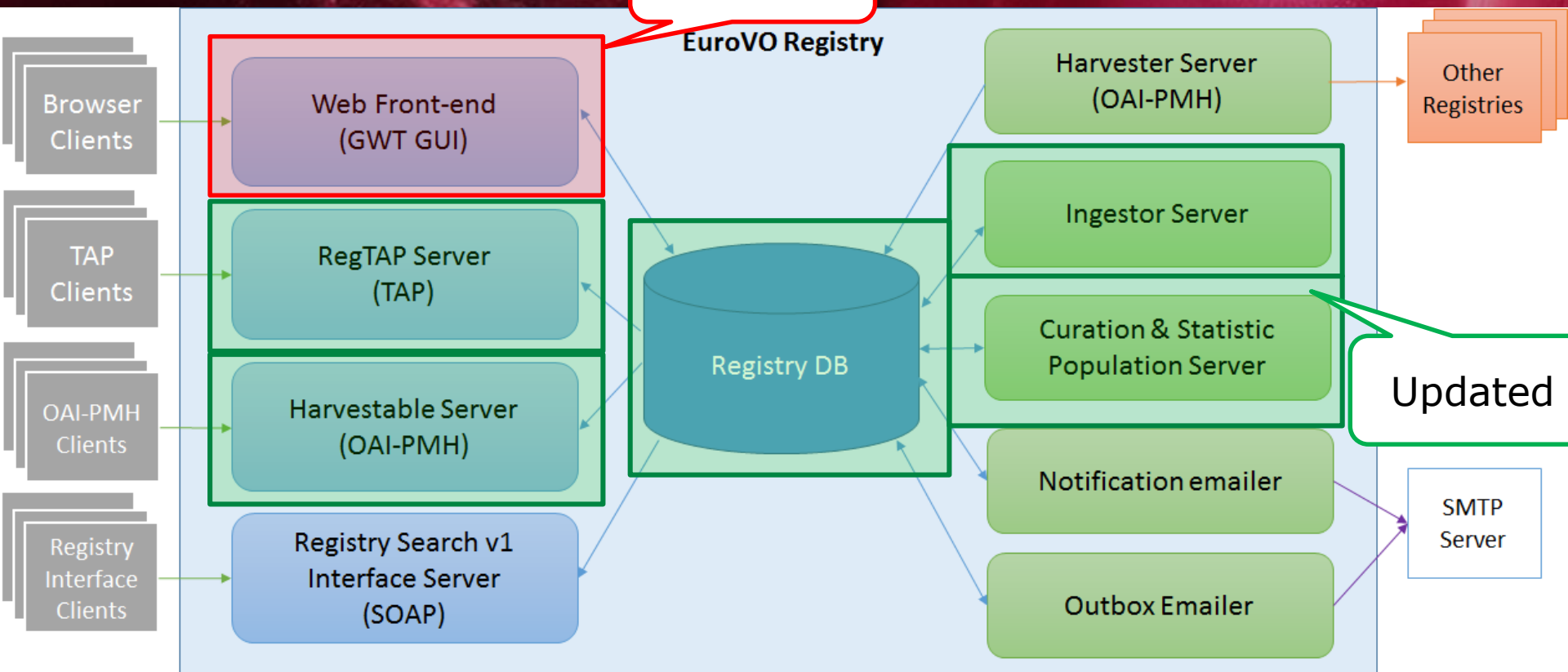
2. New Portal Functionalities

3. Short Demo

System Architecture



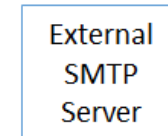
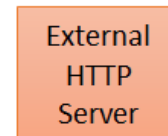
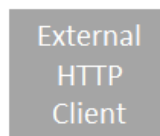
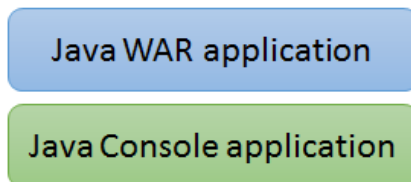
New!



Updated

Legend

- Server HTTP response
- ← Database Read or Store query
- ↔ Database CRUD query
- Client HTTP request
- Client SMTP request



Details on specs



Software	Version
Operating System	Red Hat Enterprise Linux Server 7.5 (Maipo)
Apache Tomcat	7+
JAVA JRE	1.8
PostgreSQL	10

Hardware	Value
Type	Virtual Machine
CPU Cores	8
RAM Total Size	16 GB
Architecture	X86_64
HDD Total Size	300 GB

Software	Version	License
Ant	1.9+	Apache License Version 2.0
Ivy	2+	Apache License Version 2.0
GWT libraries	2.7+	Apache License, Version 2.0
DataTables	1.10.11	MIT
CHARTIST.JS	0.11	MIT
Jquery	1.12	MIT
Momentjs	2.22.2	MIT



New Portal Functionalities (Site Map)



➤ Search

- Simple Search
- Advanced Search
- ADQL Search

➤ My Resources *

- View (Summary or XML)
- Edit, Create & Publish
- Validate

➤ Reports *

➤ User Account *

➤ Standalone Validation

➤ Info Page

➤ Contact details

* Authentication needed



Simple Search: Free text search



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Euro-VO Registry

SEARCH

SIMPLE SEARCH

galaxy All Terms

Managed Authority

All SIAP All SSAP All TAP All Cone Search

All Registries All Catalogues All Authorities

ADVANCED SEARCH

Search Clear

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Free text



Advanced Search: Parametrized/filtering search



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Euro-VO Registry

SEARCH

SIMPLE SEARCH

ADVANCED SEARCH

Satisfies from the below criteria: All

Ivoid	esavo	All	Short Name		All
Title		All	Publisher		All
Description		All	Managed Authority		Select
Resource Types		Select	Capabilities	1 selected	Select
Simplified Compliance Category	All				

Filtering ivoid

Filtering capabilities

Search Clear

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Simple & Advanced Search Results



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Euro-VO Registry

RESULTS #1 x

Search Results (7)

	Short Name	Publisher	Title	Capabilities	Compliance
Q	3XMM-DR7-stacked	European Space Agency	The 3XMM-DR7s Stacked Catalogue at ESA	cs:conesearch	Compliant(A++)
Q	3XMM-DR8	European Space Agency	XMM-Newton EPIC Source Catalogue at ESA	cs:conesearch	Compliant(A++)
Q	GAIA DR1	European Space Agency	Gaia DR1 at ESA	cs:conesearch	Compliant(A++)
Q	GAIA DR1 TGAS	European Space Agency	Gaia DR1 TGAS at ESA	cs:conesearch	Compliant(A++)
Q	GAIA DR2	European Space Agency	Gaia DR2 at ESA	cs:conesearch	Compliant(A++)
Q	OM SUSS4	European Space Agency	XMM-Newton OM Source Catalogue at ESA (SUSS4)	cs:conesearch	Partially Compliant(C)
Q	XMMSL2	European Space Agency	The XMM-Newton Slew Survey Source Catalogue at ESA	cs:conesearch	Compliant(A++)

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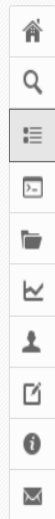
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Results and VO Resource details



Euro-VO Registry



RESULTS #1 x

Search Results (78)

Short Name	Publisher	Title	Capabilities	Compliance	
3XMM-DR7-TAP	Observatory of Strasbourg	TAP interface of the 3XMM-dr6 XMM-Newton Catalogue	tr:tableaccess, undefined, undefined, undefined	Partially Compliant(C--), not applicable, not applicable, not applicable	ivo://xc
3XMM-DR7-TAP	Observatory of Strasbourg	TAP interface of the 3XMM-dr7 XMM-Newton Catalogue	tr:tableaccess, undefined, undefined, undefined	Partially Compliant(C--), not applicable, not applicable, not applicable	ivo://xc
AIASCR TAP	Stellar Department of Astronomical Institute of the Academy of Sciences of the Czech Republic	AIASCR VO Services TAP service	undefined, undefined, undefined, tr:tableaccess	not applicable, not applicable, not applicable, Partially Compliant(C--)	ivo://as
AIP GAVO TAP	GAVO at Leibniz-Institute for Astrophysics Potsdam	AIP DaCHS TAP service	undefined, undefined, undefined, tr:tableaccess	not applicable, not applicable, not applicable, Partially Compliant(C--)	ivo://aip
AMDA	CDPP	Planetary and heliophysics plasma data at CDPP/AMDA	tr:tableaccess	Partially Compliant(C)	ivo://cd
APIS	Paris Astronomical Data Centre - LESIA	Auroral Planetary Imaging and Spectroscopy	tr:tableaccess	Partially Compliant(C-)	ivo://vc
ARI-Gaia	Astronomisches Rechen-Institut	ARI's Gaia TAP Service	undefined, undefined, undefined, undefined	not applicable, not applicable, not applicable, not applicable	ivo://ar

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3XMM-DR7-TAP

Summary XML Validation

Title: TAP interface of the 3XMM-dr6 XMM-Newton Catalogue
Type: vs:CatalogService
Short name: 3XMM-DR7-TAP
Identifier: ivo://xcatdb/3x
AltIdentifier:
Status: active

Curation

Publisher: Observatory of Strasbourg
Creator(s): SSC XMM-Newton
Contributor(s):

1 Contacts declared:

- Contact 1 of 1:
 - name:** Laurent Michel
 - address:** 11 Rue de l'Universite67000 StrasbourgFrance
 - email:** Laurent.michel@astro.unistra.fr
 - telephone:** (33-0) 368 852 437

Content

Subject(s): 3XMM Catalogue
Description: The new version of the XMM-Newton EPIC Serendipitous Source Catalogue, 3XMM-DR6, includes more than two years of data with respect to 3XMM-DR5, with 678680 detections which relate to 468440 unique sources from 9160 observations that were public by the 31st January 2016. 3XMM-DR6 covers a total sky area, with at least 1 ks exposure, of ~982 square degrees if overlaps are taken into account, where some regions of the sky have been pointed as many as 50 times. This represents an increase of approximately 18% in terms of unique sources compared with 3XMM-DR5, that was released in April 2015.

Summary
XML
Validation

ADQL Search: ADQL Query

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Euro-VO Registry

ADQL Search

Tree view

- rr.capability
- rr.interface
 - ivoid
 - cap_index
 - intf_index
 - intf_type
 - intf_role
 - std_version
 - query_type
 - result_type
 - wsdl_url
 - url_use
 - access_url
- rr.intf_param
- rr.relationship
- rr.res_date
- rr.res_detail
- rr.res_role

Predefined query

2]SIA services that might have spiral galaxies

```
1 SELECT b.ivoird, c.access_url
2 FROM rr.capability a
3     NATURAL JOIN rr.resource b
4     NATURAL JOIN rr.interface c
5     NATURAL JOIN rr.res_subject d
6 WHERE a.standard_id='Ivo://ivoa.net/std/sia'
7     AND c.intf_type='vs:paramhttp'
8     AND (1=ivo_nocasematch(d.res_subject, 'spiral')
9         OR 1=ivo_hasword(b.res_description, 'spiral')
10        OR 1=ivo_hasword(b.res_title, 'spiral'))
```

Query Editor

Search Clear Ctrl+Space for query autocompletion

ADQL Result0 ADQL Result1

Results Grid

ivoird	access_url
ivo://mast.stsci.siap/hst.sgal	http://archive.stsci.edu/siap/search.php?id=sgal&
ivo://irsa.ipac.caltech.edu/cgi-bin/Atlas/nph-atlas?mission=LGA&hdr_location=%5CLGADataPath%5C&SIA	https://irsa.ipac.caltech.edu/cgi-bin/Atlas/nph-atlas?mission=LGA&hdr_location=%5CLGADataPath%5C&SIA
ivo://irsa.ipac.caltech.edu/cgi-bin/Atlas/nph-atlas?mission=BOLOCAM_GPS&hdr_location=%5CBOLOCAM_GP	https://irsa.ipac.caltech.edu/cgi-bin/Atlas/nph-atlas?mission=BOLOCAM_GPS&hdr_location=%5CBOLOCAM_GP

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DEMO...

My Resources: Summary



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MY RESOURCES

Results (35)

Resources grid

	Short Name	IVOID	Status
🔍		ivo://esavo/gaia/conesearch	is deleted
👁	🔍	ivo://esavo/hst/-ssap	is deleted
🔍		ivo://esavo/isda/siap	is deleted
🔍		ivo://esavo/testscs	active
👁	🔍	ivo://esavo/xsa/cs/XMMSL2	is deleted
🔍	3XMM-DR7-stacked	ivo://esavo/xsa/cs/3xmmdr7	active
🔍	3XMM-DR8	ivo://esavo/xsa/cs/3xmm	active
🔍	EHST/HLA/SIAP	ivo://esavo/hla/siap	active
🔍	EHST/HLA/SSA	ivo://esavo/hla/ssap	inactive
🔍	EHST/HST/SIAP	ivo://esavo/hst/siap	active
🔍	EHST/HST/SSAP	ivo://esavo/hst/ssap	active

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3XMM-DR8

Summary Edit Resource Validation

Title: XMM-Newton EPIC Source Catalogue at ESA
Type: vs:CatalogService
Short name: 3XMM-DR8
Identifier: ivo://esavo/xsa/cs/3xmm
AltIdentifier:
Status: active

CURATION

Publisher: European Space Agency
Creator(s):
Contributor(s):

1 Contacts declared:

- Contact 1 of 1:
 - name: Bruno Merin
 - address:
 - email:
 - telephone:

CONTENT

Subject(s): esdc_leads@sciops.esac.esa.int

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Summary View



My Resources: Edit Resource



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MY RESOURCES

Results (35)

	Short Name	IVOID
🔍		ivo://esavo/gaia/conesea...
👁	🔍	ivo://esavo/hst-ssap
🔍		ivo://esavo/isda/siap
🔍		ivo://esavo/testcs
👁	🔍	ivo://esavo/xsa/cs/XMMSL2
🔍	3XMM-DR7-stacked	ivo://esavo/xsa/cs/3xmmdr7
🔍	3XMM-DR8	ivo://esavo/xsa/cs/3xmm
🔍	EHST/HLA/SIAP	ivo://esavo/hla/siap
🔍	EHST/HLA/SSA	ivo://esavo/hla/ssap
🔍	EHST/HST/SIAP	ivo://esavo/hst/siap
🔍	EHST/HST/SSAP	ivo://esavo/hst/ssap

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3XMM-DR8

Summary Edit Resource Validation

Last edit was November 30, 2018 Resource Active

```
http://www.ivoa.net/xml/SLA/v0.2 http://esavo.es
http://www.ivoa.net/xml/TSA/v0.2 http://esavo.es
http://www.ivoa.net/xml/CEA/base/v1.0rc1 http://software
http://www.ivoa.net/xml/CEA/v1.0rc1 http://
types/CEAService/v1.0rc1/CEAService.xsd"
xsi:type="vs:CatalogService">
27 <title>XMM-Newton EPIC Source Catalogue at ESA</title>
28 <shortName>3XMM-DR8</shortName>
29 <identifier>ivo://esavo/xsa/cs/3xmm</identifier>
30 <curiation>
31 <publisher>European Space Agency</publisher>
32 <contact>
33 <name>Bruno Merin</name>
34 </contact>
35 </curiation>
36 <content>
37 <subject>esdc_leads@sciops.esac.esa.int</subject>
38 <description>Latest version of the XMM-Newton
39 Serendipitous Source Catalogue at ESAC</description>
40 <referenceURL>http://nxsa.esac.esa.int/nxsa-web/#home</ref
41 </content>
42 <capability standardID="ivo://ivoa.net/std/ConeSearch" xsi:ty
43 <interface role="std" xsi:type="vs:ParamHTTP">
44 <accessURL use="full">http://nxsa.esac.esa.int/tap-serv
45 TABLE=public.v_epic_source_cat&amp;IDCOL=srcid&amp;RACOL=ra&amp;
```

Edit in XML Editor

My Resources: Validate



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Euro-VO Registry

MY RESOURCES

3XMM-DR8

Validation view

Summary Edit Resource Validation

Service Access URLs

Service Type	Standard Version	Compliance	Access URL
SCS	1.03	<i>Compliant (A++)</i>	http://nxs.esac.esa...=ra&DECCOL=dec

Validation

Val Code	Val Type	Val Result	Description
2.2a-i	REQUIREMENT	Pass	Validation URL
2.2a-ii	REQUIREMENT	Pass	
2.2b-i	REQUIREMENT	Pass	
2.2b-ii	REQUIREMENT	Pass	
2.2c-i	REQUIREMENT	Pass	
2.2c-ii	REQUIREMENT	Pass	
2.2c-iii	REQUIREMENT	Pass	
2.3b-i	REQUIREMENT	Pass	

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My Resources: Create new Resource



Create new with form or from XML file (Demo..)

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MY RESOURCES

Results (35)

	Short Name	IVOID	Status
🔍		ivo://esavo/gaia/conesearch	is deleted
👁	🔍	ivo://esavo/hst/-ssap	is deleted
🔍		ivo://esavo/isda/siap	is deleted
🔍		ivo://esavo/testscs	active
👁	🔍	ivo://esavo/xsa/cs/XMMSL2	is deleted
🔍	3XMM-DR7-stacked	ivo://esavo/xsa/cs/3xmmdr7	active
🔍	3XMM-DR8	ivo://esavo/xsa/cs/3xmm	active
🔍	EHST/HLA/SIAP	ivo://esavo/hla/siap	active
🔍	EHST/HLA/SSA	ivo://esavo/hla/ssap	inactive
🔍	EHST/HST/SIAP	ivo://esavo/hst/siap	active
🔍	EHST/HST/SSAP	ivo://esavo/hst/ssap	active

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3XMM-DR8

Summary Edit Resource Validation

Title: XMM-Newton EPIC Source Catalogue at ESA
Type: vs:CatalogService
Short name: 3XMM-DR8
Identifier: ivo://esavo/xsa/cs/3xmm
AltIdentifier:
Status: active

CURATION
Publisher: European Space Agency
Creator(s):
Contributor(s):

1 Contacts declared:
• Contact 1 of 1:
◦ **name:** Bruno Merin
◦ **address:**
◦ **email:**
◦ **telephone:**

CONTENT
Subject(s): esdc_leads@sciops.esac.esa.int

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DEMO...

Standalone Validation



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Euro-VO Registry

STANDALONE VALIDATION

Service Type: Access URL: **1**

Service Access URLs

Service Type	Standard Version	Compliance	Access URL	Validated on	Duration in ms	Validate Now	Remove Job
TAP	1.0	<i>Compliant (B)</i>	http://registry.euro-vo.org/regtap/tap	22:53:22 12/05/2019	13768	<input type="button" value="Run"/> 2	<input type="button" value="Remove"/>

Validation

Val Code	Val Type	Val Result	Description
E_A2XI	REQUIREMENT	Pass	Validation URL Details
E_ADQX	REQUIREMENT	Pass	
E_BAPH	REQUIREMENT	Pass	
E_BMIM	REQUIREMENT	Pass	
E_CERR	REQUIREMENT	Pass	
E_CINT	REQUIREMENT	Pass	
E_CLDR	REQUIREMENT	Pass	

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Reports e.g. Registry ecosystem (1/2)



Euro-VO Registry



REPORTS

- Registry Ecosystem health report
- Population Evolution
- Resource Population Snapshot
- Service Compliance
- Registry Anomalies**
- Wrong MAs In Harvests
- Hosted Records

Produce now!
Open in new tab

Registry Anomalies Report

Anomalies discovered in the IVOA registry ecosystem.

Report run time: 2019-05-01T00-06-10.

anomaly	anomaly kind	counts
common managed authority	ROR	2
common managed authority	HRV	2
a registry record was harvested that was not also found in the RoR	ROR-HRV	2
OAI-PMH / RoR registry info discrepancy	ROR-HRV	8
OAIPMH protocol failure	SUI	1



Reports Resource Compliances (2/2)



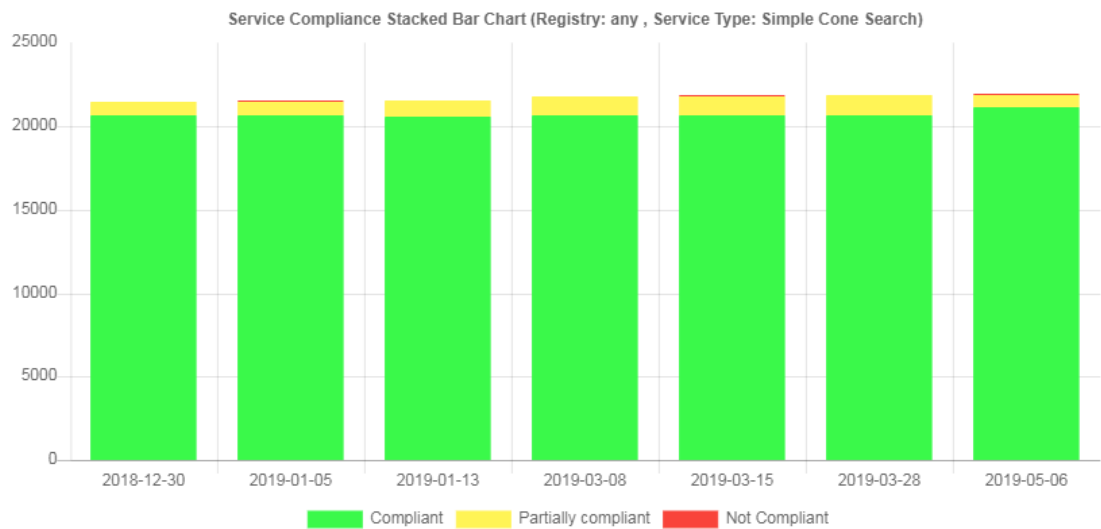
Euro-VO Registry



REPORTS

- Registry Ecosystem health report
- Population Evolution
- Resource Population Snapshot
- Service Compliance**
- Registry Anomalies
- Wrong MAs In Harvests
- Hosted Records

Registry: any
Service Type: Simple Cone Search
Date From: 2019 January 1
Date To: 2019 May 12
Granularity: Daily
Chart Type: Stacked Bar
Simplified:
Produce Report



DEMO...

THANK YOU

BACKUP SLIDES