

VO Service Validation/Compliance

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ESCAPE Tech Forum #2
Online

14 April 2021

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Outline

- Context: Service compliance and validation in the VO
- Hackathon Activities

Context

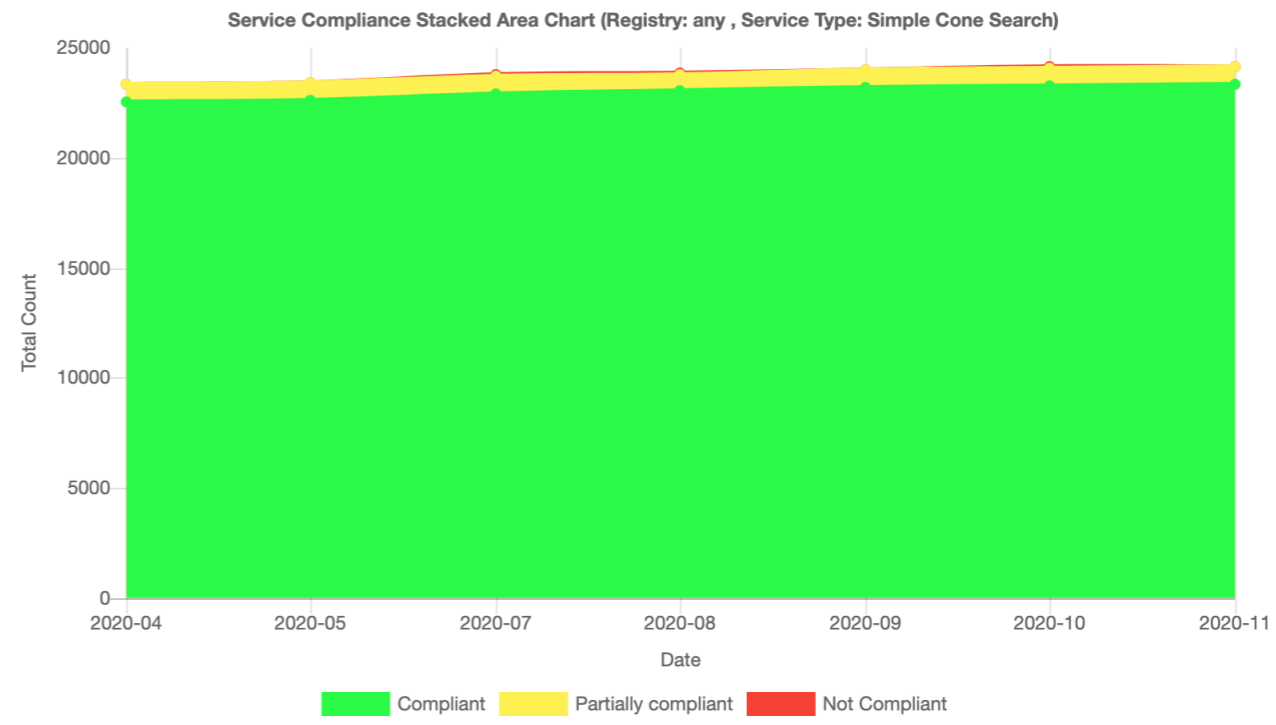
- Lots of services operating in the VO
 - SCS, SIA, SSA, TAP, ... and others
- Not all of them operate perfectly
 - Implementation bugs
 - Errors in input data
 - Out of date with respect to standards
 - Incomplete implementations (limited effort)
 - Poorly-written/unimplementable standards
 - ...
- Validation tools are available
 - Check that some/most/all aspects of service conform to specification
 - Validators are supposed to be available for all VO standards (required as part of standardisation process)
 - Validation aggregator sites: run validation on all registered services, record/report outcomes
 - ▷ Euro-VO
 - ▷ Paris-VO
 - ▷ HEASARC

IVOA Coordination

VO “Weather Reports” are presented at six-monthly IVOA Interop meetings

From *Euro-VO presentation IVOA Interop Nov 2020*
(Arviset, Vrioni, Gonzalez)

We are trying to improve these statistics



Most of the services are compliant...
No particular action needed



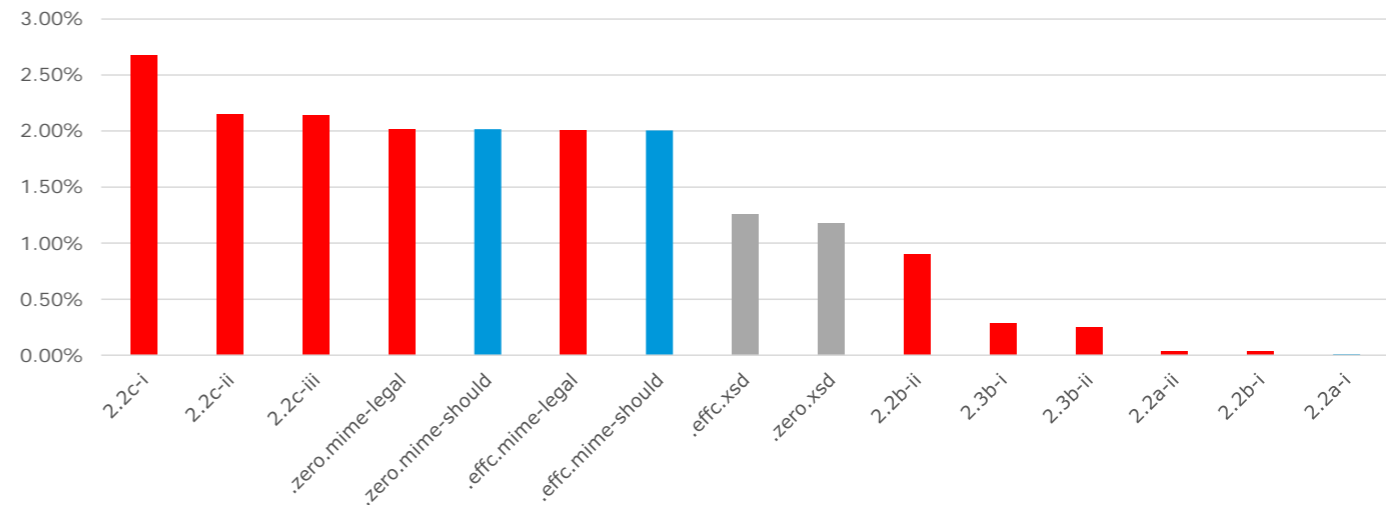
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*From Euro-VO presentation
IVOA Interop Nov 2020
(Arviset, Vrioni, Gonzalez)*

Validation criteria failed for SCS Services



We are trying to improve these statistics

Criterion Type	
name	description
■ REQUIREMENT	Tests drawn from 'MUST' statements in the respective standard
■ WARNING	Tests drawn from strongly encouraged 'SHOULD' statements in the respective standard
■ RECOMMENDATION	Tests drawn from 'SHOULD' statements in the respective standard
■ EXTRA	Criteria not defined in the IVOA 'Service Validation' wiki

Christophe Arviset, Costas Vrioni, Juan Gonzalez | VO Service Compliance Statistics | 18/11/2020 | Slide 7

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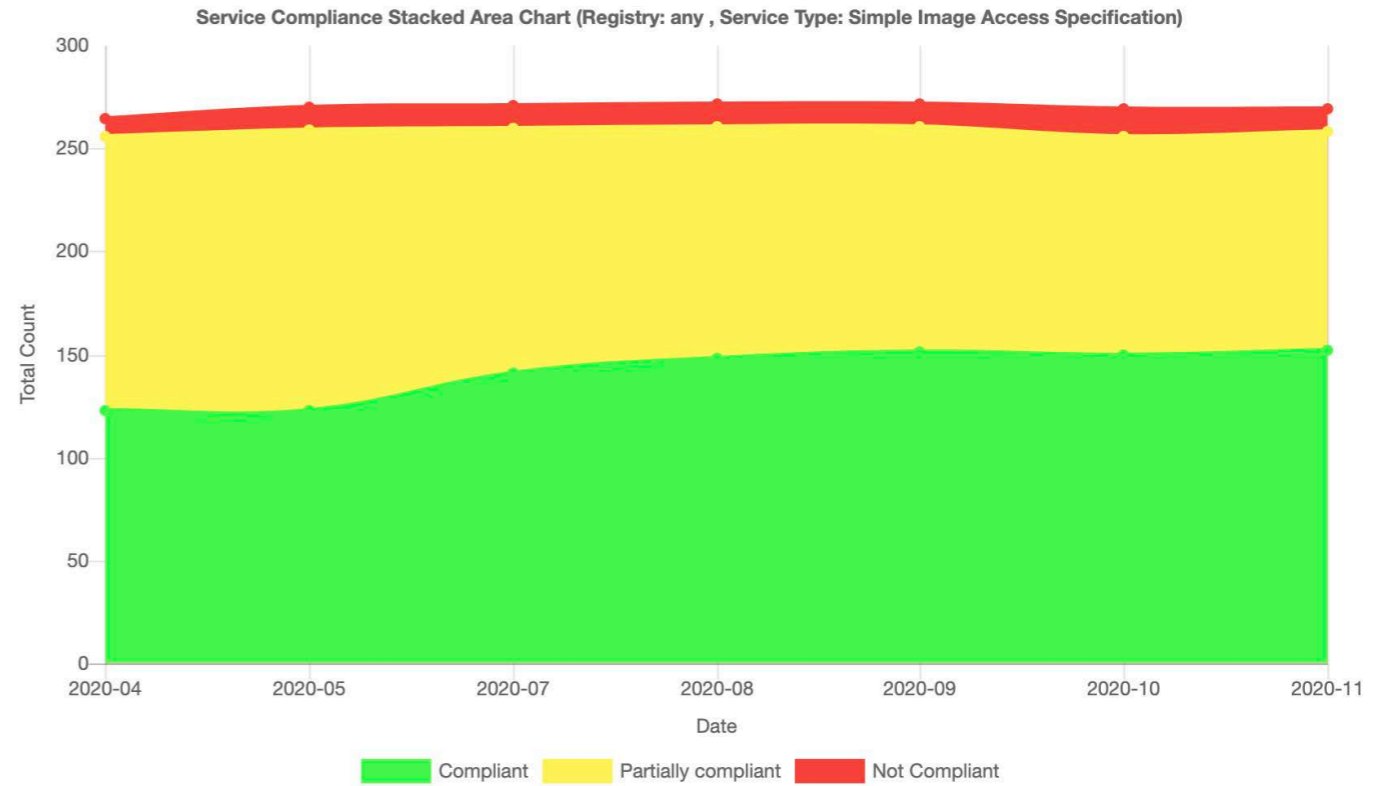


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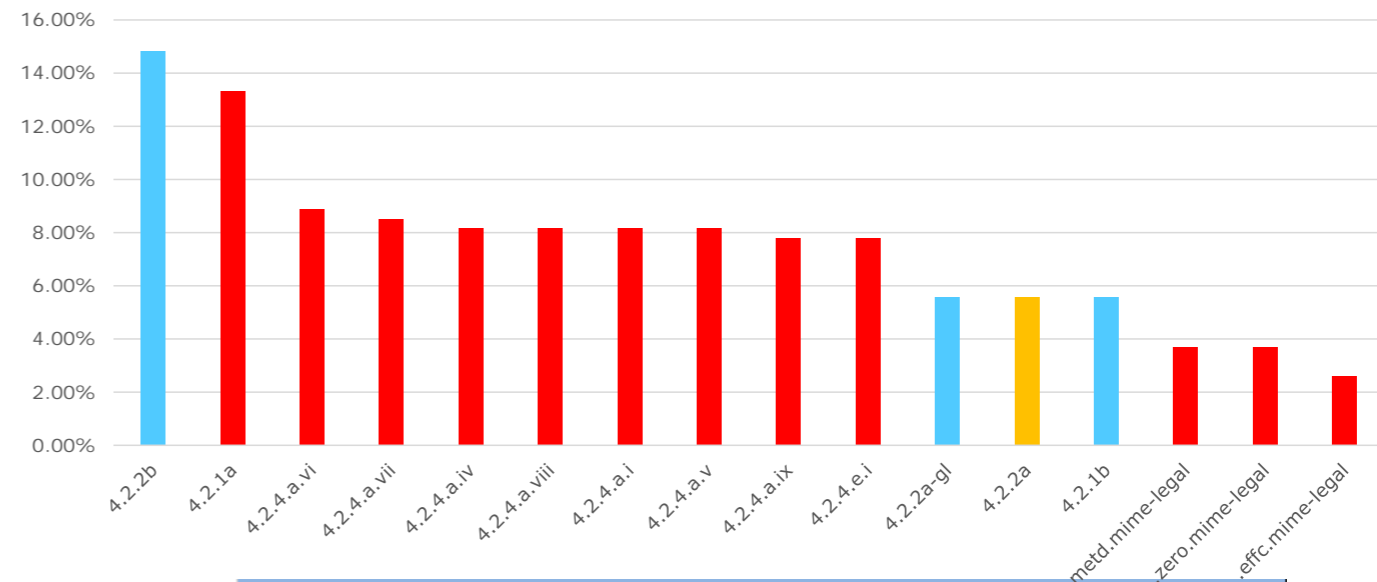
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Validation criteria failed for SIA Services



Criterion Type	
name	description
REQUIREMENT	Tests drawn from 'MUST' statements in the respective standard
WARNING	Tests drawn from strongly encouraged 'SHOULD' statements in the respective standard
RECOMMENDATION	Tests drawn from 'SHOULD' statements in the respective standard
EXTRA	Criteria not defined in the IVOA 'Service Validation' wiki

We are trying to improve these statistics

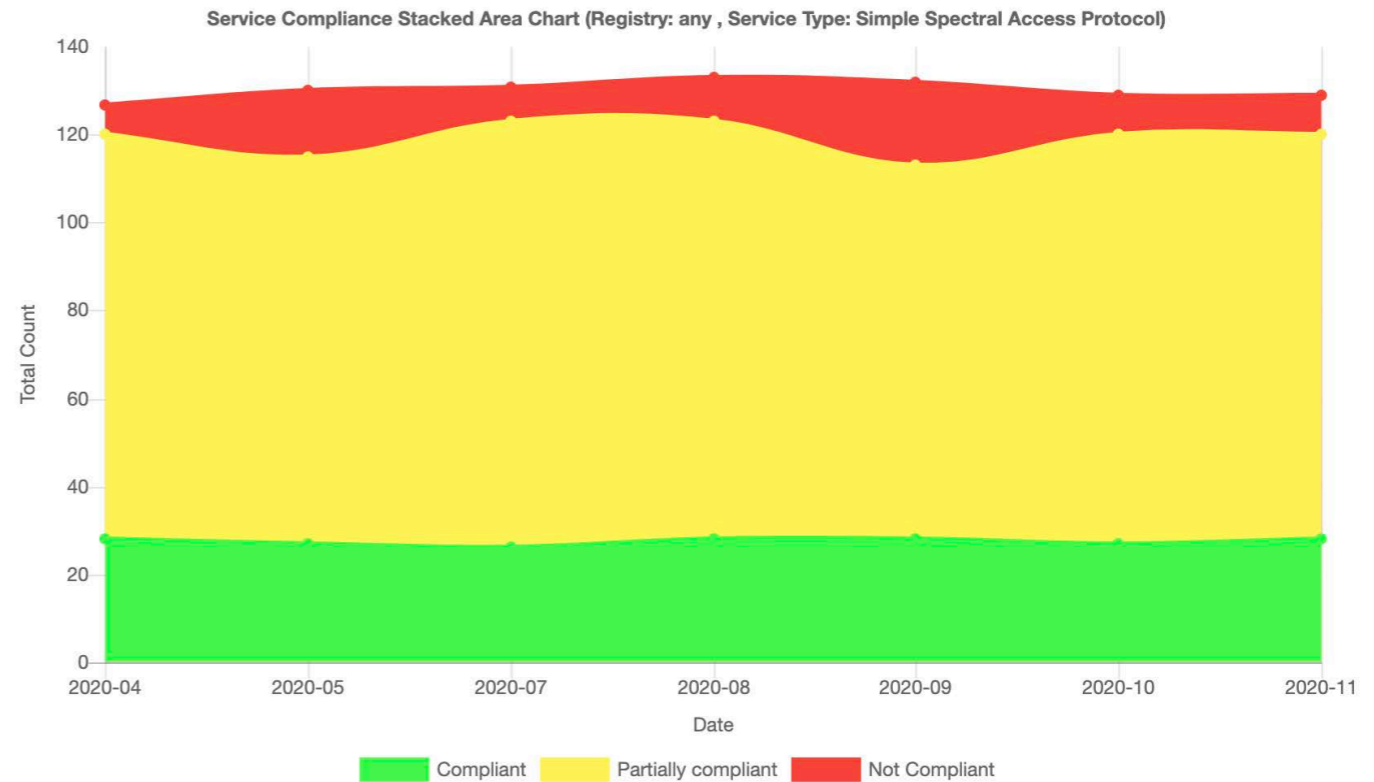


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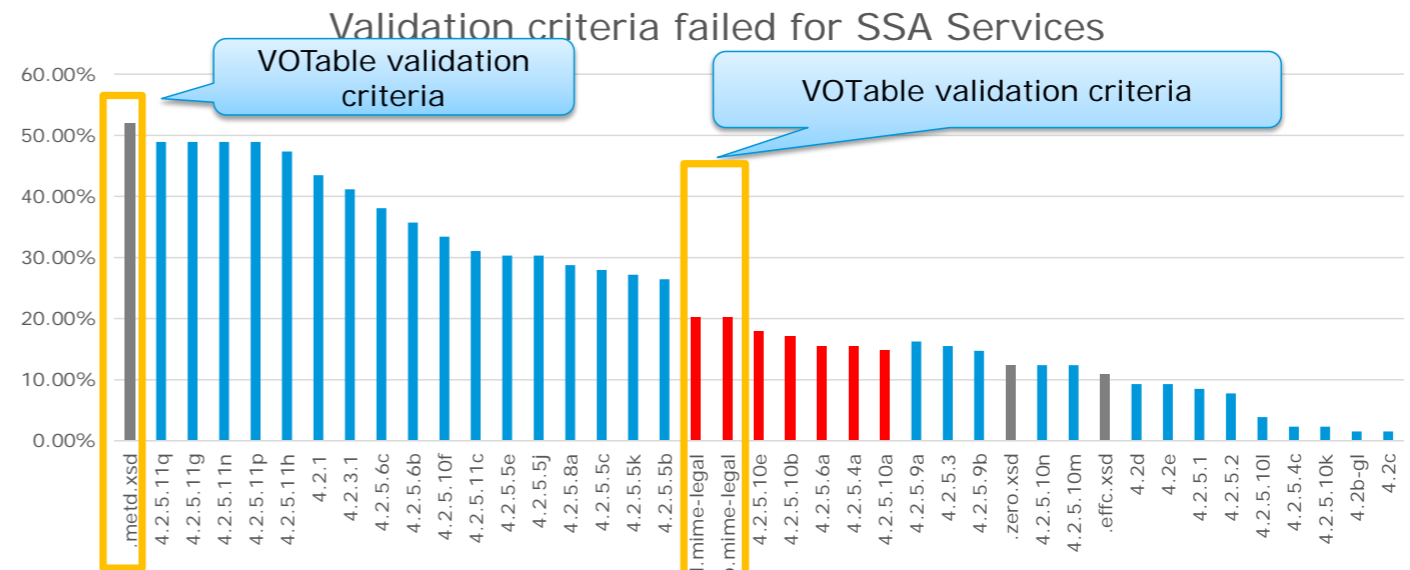
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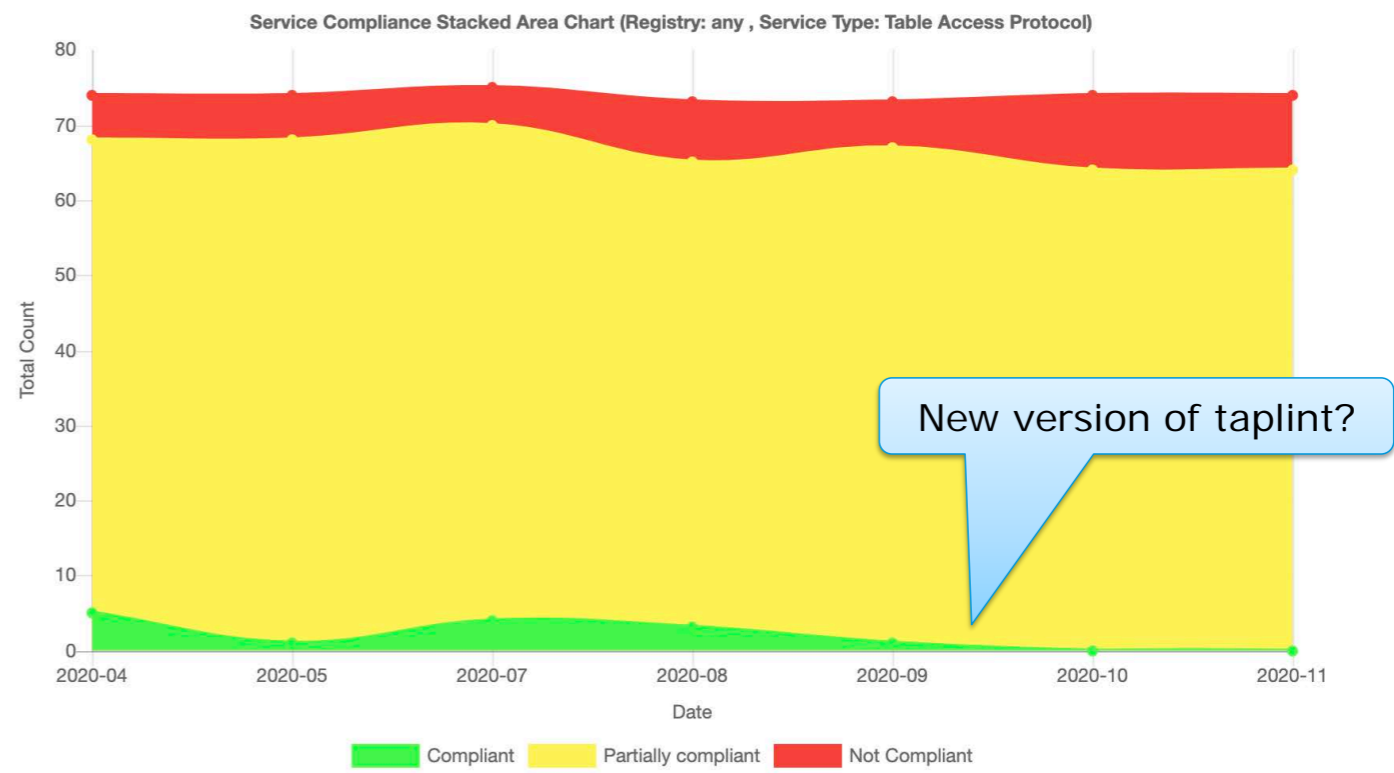
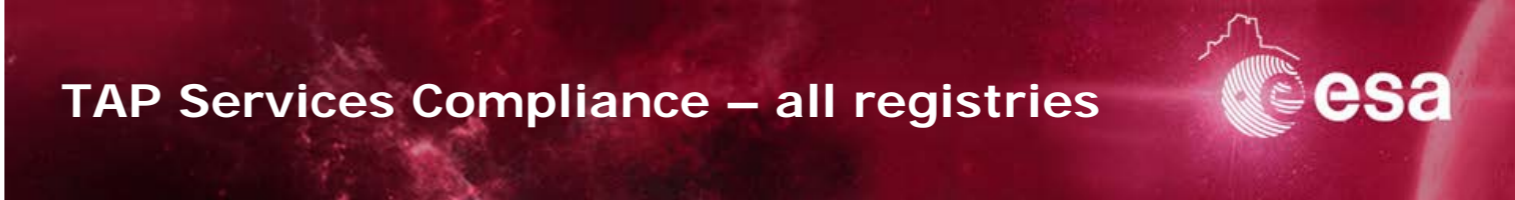


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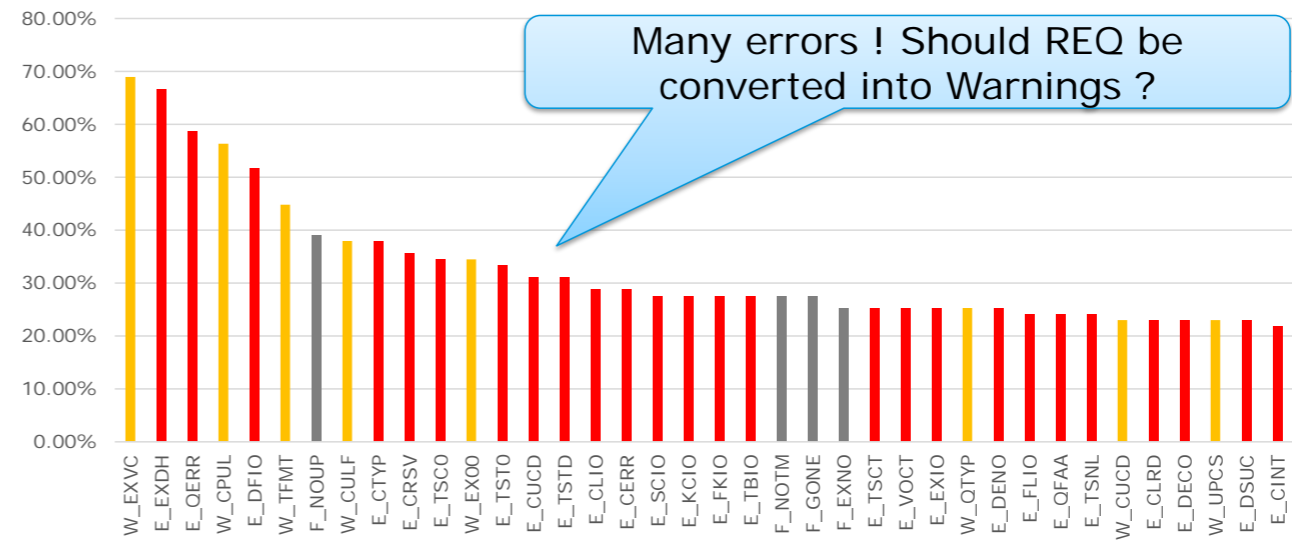
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Validation criteria failed for TAP service



Many errors ! Should REQ be converted into Warnings ?

We are trying to improve these statistics

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■ WARNING	Tests drawn from strongly encouraged 'SHOULD' statements in the respective standard
■ RECOMMENDATION	Tests drawn from 'SHOULD' statements in the respective standard
■ EXTRA	Criteria not defined in the IVOA 'Service Validation' wiki

IVOA Activity

Operations Interest Group / Data Access Layer Working Group activity

- Try to improve service compliance statistics — why?
 - ▷ Improve user experience for VO service users
 - ▷ Make life easier for VO client developers
 - ▷ Improve future standards development
 - ▷ Metrics/reporting? — not so much
- Actions:
 - ▷ Make sure validators are available, thorough, correct
 - ▷ Make validation results available to service operators/developers
 - ▷ Identify issues (especially common/persistent ones):
 - Examine aggregated validation reports
 - Work with individual service operators/developers
 - ▷ Take action where appropriate:
 - Feed back problematic requirements to standards authors
 - Correct/clarify/modify standards?
 - Identify + correct bugs in commonly-used infrastructure
 - Provide better diagnostics
 - Correct errors in validators
 - Modify error reporting, e.g. downgrade non-critical reports

Validation/Compliance Hackathon (Today 15:00 CEST)

Look at specific services:

- Run validators/query validation DBs
- Examine validation output
- Work out what needs to be fixed
- Fix it in hackathon or mark for later attention

Participation:

- Bring service IVOIDs/URLs for running services to check
- Ideally: send them to me before the session (m.b.taylor@bristol.ac.uk)
- I don't know how well this will work over zoom ... we'll see
- Or: contact me after the meeting, I'm happy to help offline

Discuss ways to improve validation statistics:

- Update/fix/improve service implementations
- Update/fix/improve validators
- Amend standards
- Redefine errors??
 - Feed into IVOA Ops/DAL activity

*Do you operate a VO service
(TAP, SCS, SIA, SSA, other)
that is, or might be,
not fully standards-compliant?
Come and hack it better!*