

VO Service Validation/Compliance

Mark Taylor (Operations IG Chair)

m.b.taylor@bristol.ac.uk

DAL Running Meeting #10
Online

14 April 2021

`$Id: running10.tex,v 1.6 2021/04/28 19:18:32 mbt Exp $`

Outline

- Context: Service compliance and validation in the VO
- Review current + recent activities
 - (more info for reference on etherpad)
- Discussion
 - Points from Alberto
- Interop planning

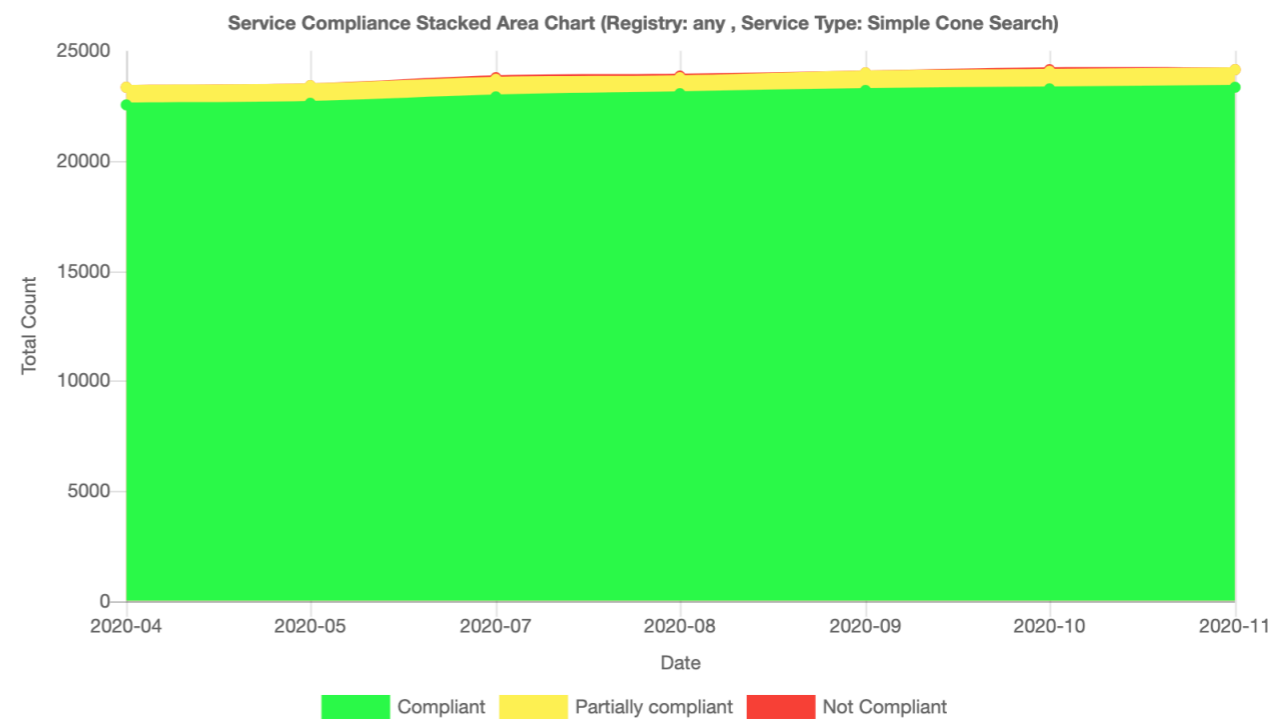
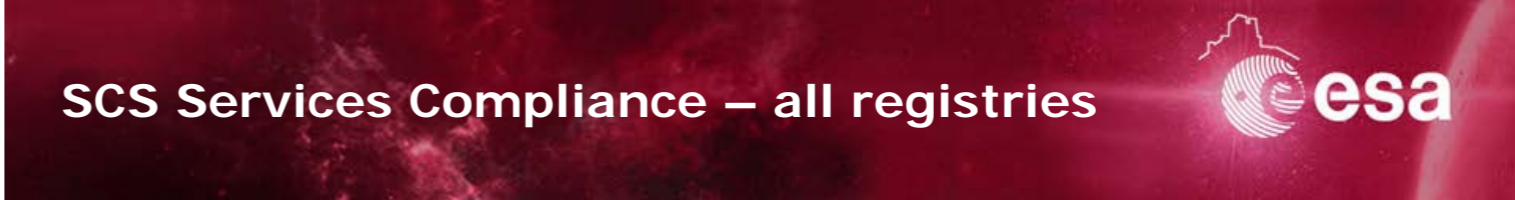
Context

- 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 - Out of date with respect to standards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 (ESA)
 - ▷ VO-Paris
 - ▷ HEASARC

Weather Reports

VO “Weather Reports” are presented Interop meetings IVOA Interop meetings

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



Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

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



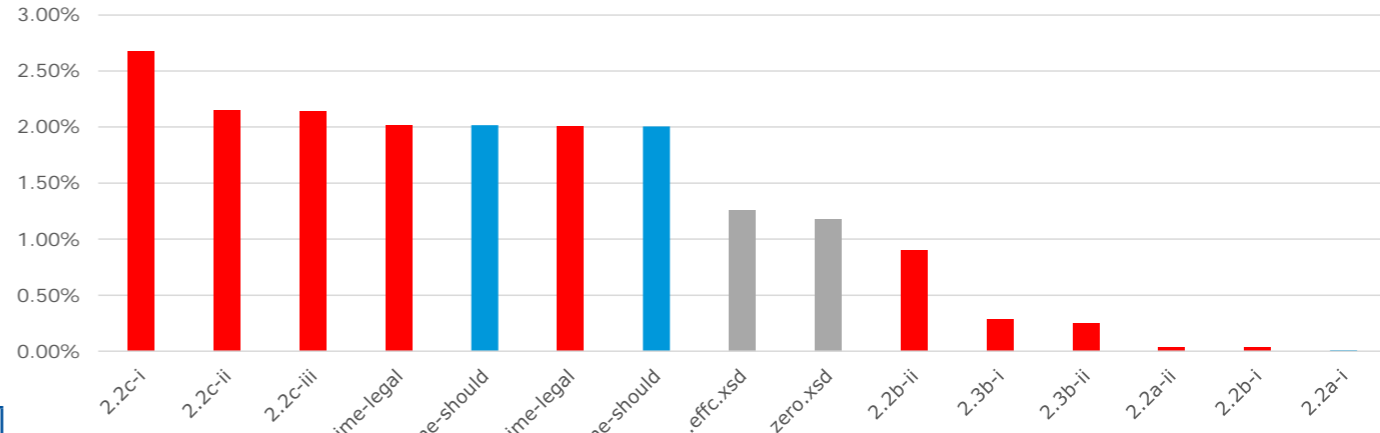
Weather Reports

VO “Weather Reports” are presented Interop meetings IVOA Interop meetings



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

Validation criteria failed for SCS Services



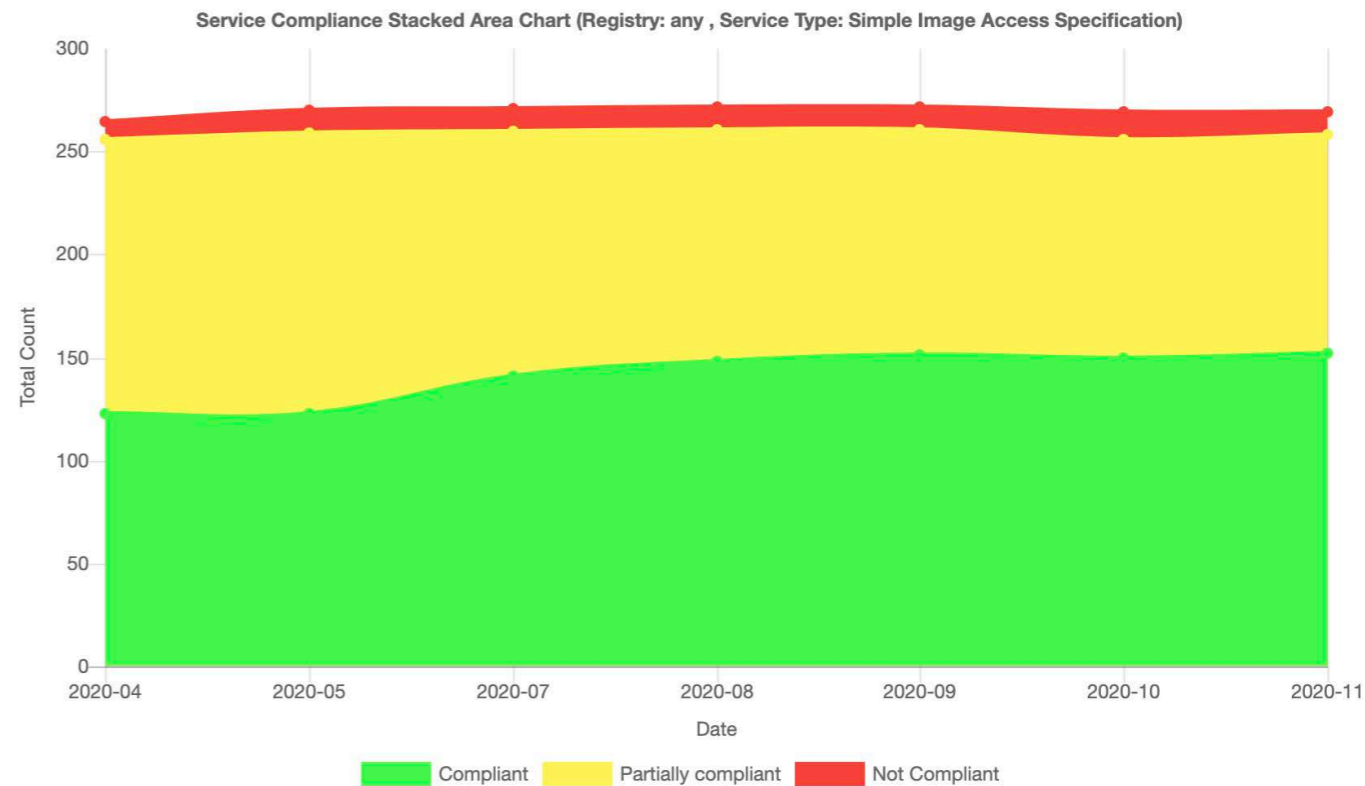
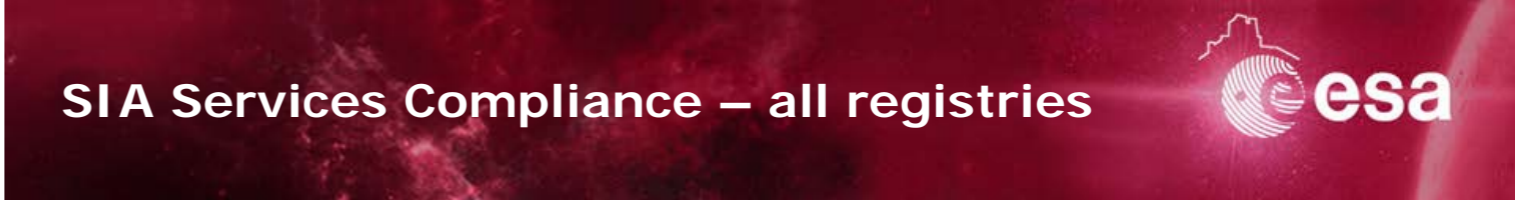
Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

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

Weather Reports

VO “Weather Reports” are presented Interop meetings IVOA Interop meetings

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



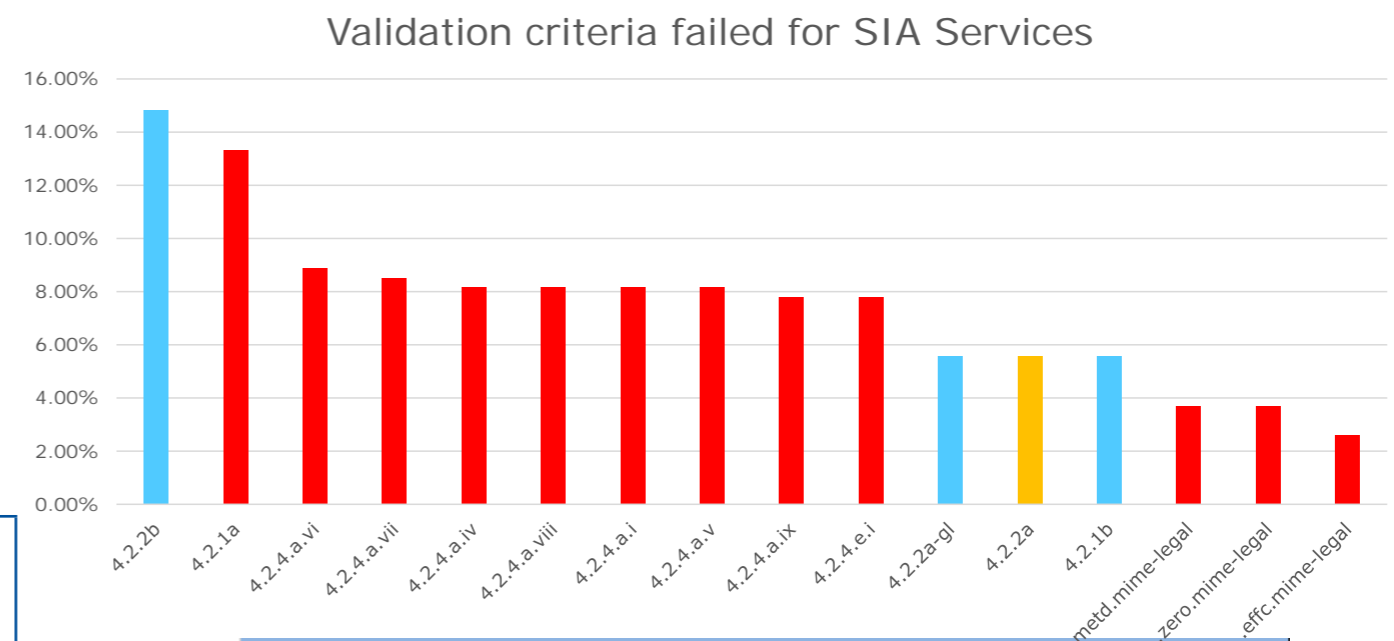
Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

Weather Reports

VO “Weather Reports” are presented Interop meetings IVOA Interop meetings



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



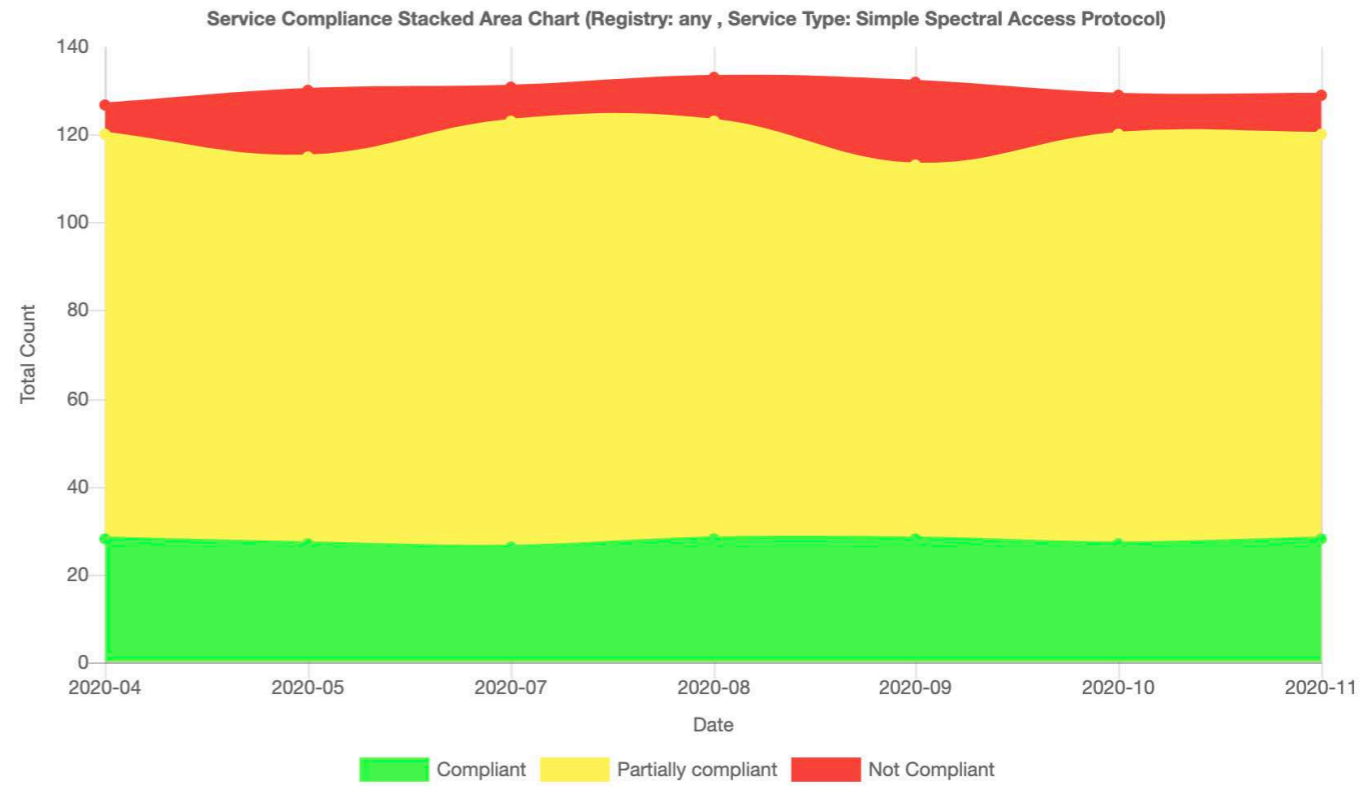
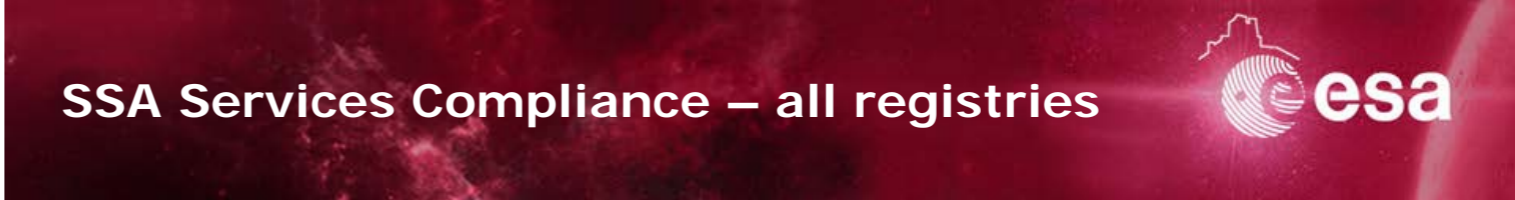
Criterion Type	
name	description
REQUIREMENT	Tests drawn from 'MUST' statements in the respective standard
WARNING	Tests drawn from strongly encouraged 'SHOULD' statements in the respective standard
RECOMMENDATION	Tests drawn from 'SHOULD' statements in the respective standard
EXTRA	Criteria not defined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

Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

Weather Reports

VO “Weather Reports” are presented Interop meetings IVOA Interop meetings

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



Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

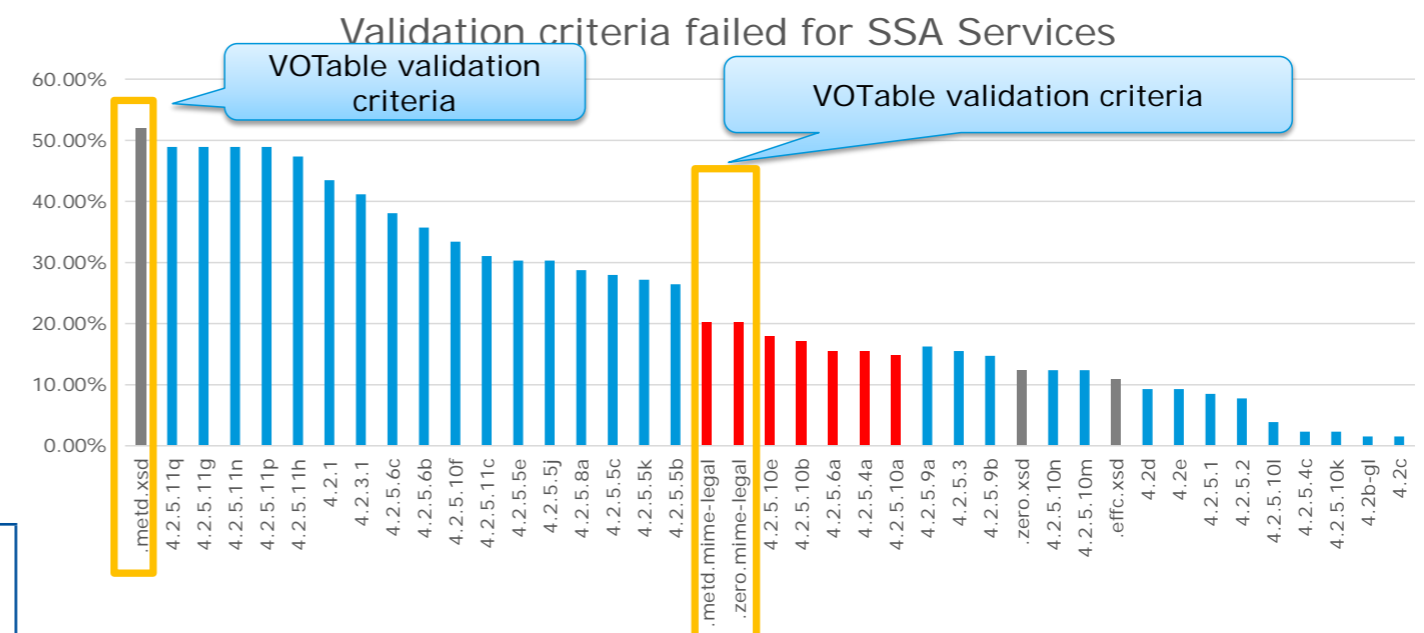


Weather Reports

VO "Weather Reports" are presented Interop meetings IVOA Interop meetings



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

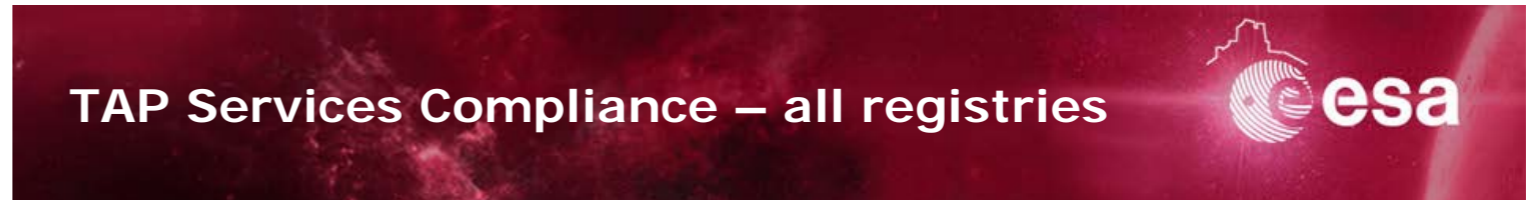


Criterion Type	
name	description
REQUIREMENT	Tests drawn from 'MUST' statements in the respective standard
WARNING	Tests drawn from strongly encouraged 'SHOULD' statements in the respective standard
RECOMMENDATION	Tests drawn from 'SHOULD' statements in the respective standard
EXTRA	Criteria not defined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

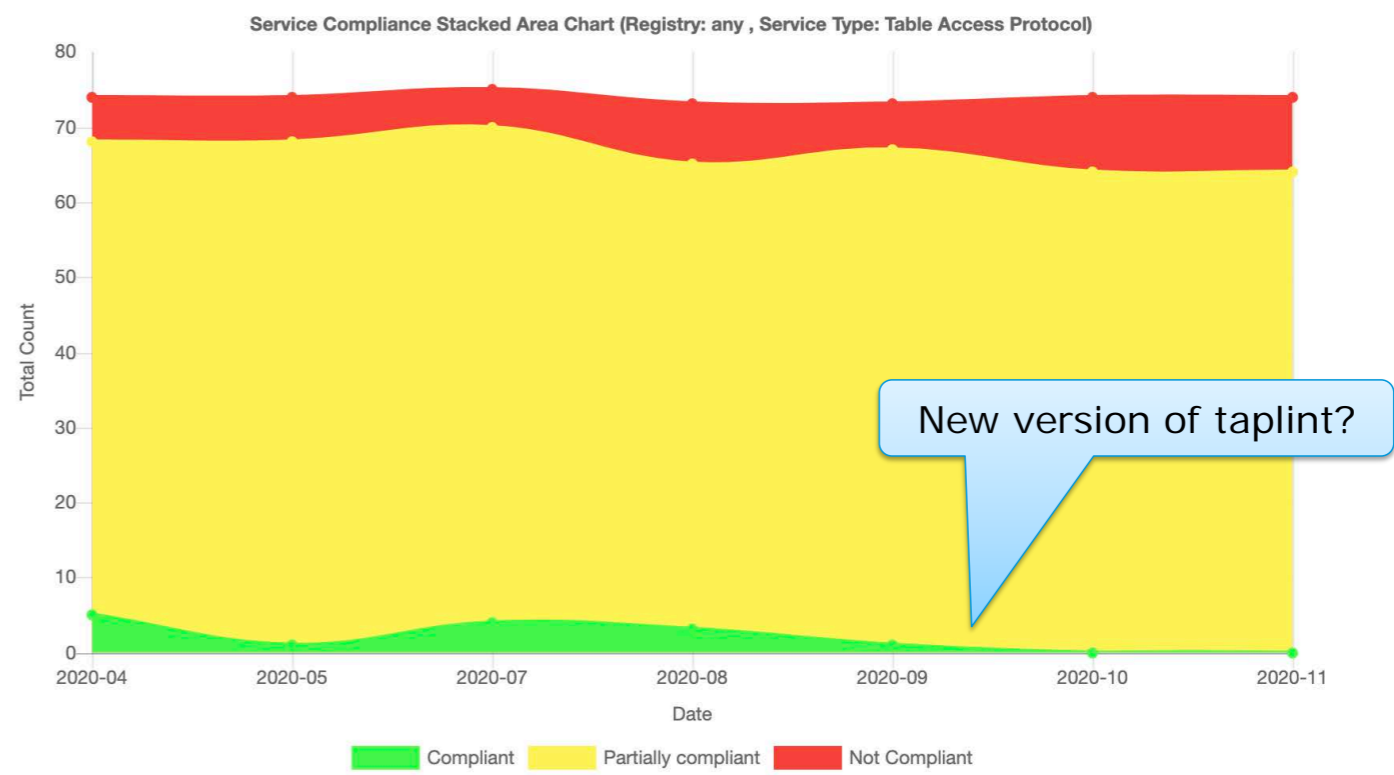
Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

Weather Reports

VO “Weather Reports” are presented Interop meetings IVOA Interop meetings



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



Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

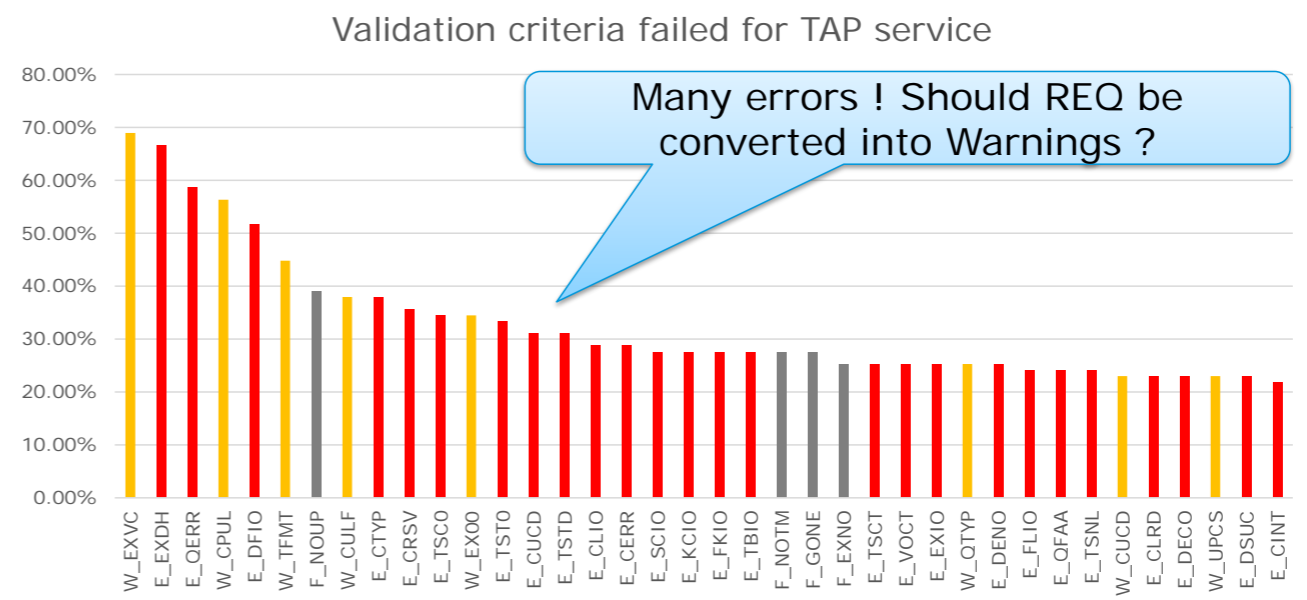


Weather Reports

VO "Weather Reports" are presented Interop meetings IVOA Interop meetings



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



Ops/DAL Action from Nov 2020:
Try to improve these statistics
(initial focus on SCS, SIA, SSA, TAP)

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

Compliance Improvement

VO “*Weather reports*” presented at Interop Ops sessions

- Bulk validation of registered services
- Gathered by VO-Paris, ESA-VO, HEASARC
- Lots of useful information on compliance of registered services (esp. SCS, SIA, SSA, TAP)
- Results ... mixed

Ops/DAL Action from Nov 2020 Interop:

Try to improve compliance statistics

- Initial focus on SCS, SIA, SSA, TAP

Why is compliance important?

- Improve user experience for VO service users
- Make life easier for VO client developers
- Metrics/reporting? — not so much

Ops/DAL Activity

Actions to improve compliance:

- Make sure validators are available, thorough, correct, well-supported
- Make validation available to service operators/developers
 - ▷ Encourage service operator engagement with validation results
- Identify issues (especially common/persistent ones):
 - ▷ Examine aggregated validation reports
 - ▷ Work with individual service operators/developers
- Take issue-specific action where appropriate:
 - ▷ Fix bugs in service
 - ▷ Identify + correct bugs in commonly-used infrastructure
 - ▷ Feed back problematic requirements to standards authors
 - ▷ Correct/clarify/modify standards?
 - ▷ Provide better diagnostics
 - ▷ Correct errors in validators
 - ▷ Modify error reporting, e.g. downgrade non-critical reports

More detail: see [Etherpad](#)

Discussion

- Questions to weather reporters, validator authors:
 - What are current activities?
 - How much user support is offered? How much is taken up?
 - Are standards generally validator/compliance-friendly? Is there advice for standards authoring?
- Questions to toolkit/service developers/operators:
 - Are validation tools being used? Are they adequate?
 - What other approaches to compliance are in use?
- Questions to standard authors:
 - Are adequate update/erratum/feedback/issue-tracking mechanisms in place?
- Questions to service users and client authors:
 - What are the most annoying compliance issues? Are there some that don't matter?
- Questions to all:
 - Are weather reports a good tool? Are they asking the right questions?
 - Are the right validators available? Do they do the right things?
 - What else would help?

Interop Planning

Schedule:

- There is 1 Ops/DAL session on Validation + Compliance, plus 1 additional Ops session
- Expect a relatively wide audience

What should the focus be:

- Discuss known/common issues?
- Advertise/encourage validator use?
- Wider discussion on approach to compliance?

Possible content:

- Weather reports (VO-Paris, ESA-VO)?
- Short presentations from validator maintainers (VO-Paris, ESA-VO, taplint, ...)?
 - ▶ What's on offer, how to use it, what level of user support is available
- Repeat/expand discussion from this Running Meeting?
- Discuss known DAL standard issues?
- Validation hackathon/clinic/demo?
- ...?