ETF and INSPIRE Reference Validator

JRC INSPIRE Team

76th MIG-T meeting – November 30, 2023

INSPIRE Reference Validator – Releases

Annual releases

As mentioned above, several releases of the INSPIRE Reference Validator are scheduled each year with the main goal of concentrating breaking changes in the first half of the year in order to produce the major release used for the end-of-year Monitoring process already in June. The scheduled annual releases are described in detail in the next sub-sections. In addition to the different infrastructure and deployment environments, the different releases are managed using different branches of the *ets-repository* repository.

For simplicity, the descriptions make explicit reference to releases in the years 2023/2024, but the same release schedule will be applied consistently over the following years:

- **v2023.1 - 15/03/2023**: it includes both breaking and non-breaking changes.
- **v2023.2 - 15/06/2023**: it includes both breaking and non-breaking changes.
- **v2024.b - 15/06/2023**: it includes both breaking and non-breaking changes which are planned to become effective (for Monitoring purposes) in the following year.

latest release – version used for Monitoring and Reporting 2023

- **v2023.3 - 15/09/2023**: it only includes non-breaking changes, so that any INSPIRE resource passing the test in the previous release automatically passes the same test in this release. This release is the one used for the end-of-year Monitoring process.
- **v2024.0 - 05/02/2024**: it includes both breaking and non-breaking changes, including those available in the beta instance of the previous year.

https://github.com/INSPIRE-MIF/helpdesk-validator/tree/master/release%20strategy

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INSPIRE Reference Validator – v.2023.3

v2023.3 - 18/09/2023 (Latest)

The version published at this time contains non-breaking changes related to the INSPIRE Refere

🐛 Bugfixes

- #823 SNI Error validating services
- #642 Problem with the test case "OpenSearch Description Query examples for each dataset" of predefined-ATOM - #815

🚀 Validator UI

- #47 Remove beta instance entry from the menu

Deployment instructions

The section containing the deployment process using Docker image and troubleshooting section. You can also find these in the training material

```
docker login docker.pkg.github.com
#Provide Github credentials
docker run --name inspire-validator -d -p 8090:8090 -v ~/etf:/etf docker.pkg.github.com/inspire-mif/helpdesk-valida
#Launches a container with the image, exposing the UI in port 8090 through the same port in the host machine, and u
```

https://github.com/INSPIRE-MIF/helpdesk-validator/releases/tag/v2023.3

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INSPIRE Reference Validator – News

- New ATS/ETS to implement the Good Practice on simplification of data-service linking (developed under Action 2.3)

- Part A (Section 8): "Data-Service Linking Simplification. Requirements classes", which includes requirements/recommendations to be added/updated in the relevant TGs, and in particular:
  - Section 8.1: INSPIRE Data Set Metadata Resource Locator, which requires:
    - Change in the MD TG (Issue #108)
    - New ATS/ETS: "Conformance Class 8: INSPIRE data sets and data set series linked service metadata" ← **new conformance class**
  - Section 8.2: INSPIRE Network Service Metadata Coupled Resource, which requires:
    - Change in the MD TG (Issue #108)
    - Change in the Service TGs (Issues #105, #110 and #112)
- Part B (Section 9): Use of INSPIRE conformant standard capabilities documents, which requires:
  - Update of the ATS/ETS for View Service
  - Update of the ATS/ETS for Download Service ← **updated conformance classes**
  - Update of the ATS/ETS for ATOM Service

https://github.com/INSPIRE-MIF/helpdesk-validator/discussions/1009

INSPIRE Reference Validator – News

- New ATS/ETS to implement the Good Practice on simplification of data-service linking (developed under Action 2.3):

  - new ATS/ETS for the new conformance class on dataset metadata – feedback welcome!

Data set Metadata Resource Locator

Purpose: Test that at least two Resource Locator elements are present in the data set metadata pointing to the URLs where the related network services can be contacted. Additionally, test the presence of gmd:protocol and gmd:applicationProfile elements, paired with the defined codelist values from the INSPIRE Registry.

Prerequisites: TG Requirement 1.8 of INSPIRE MD TG expresses the obligation to provide online access, if available, to the described data set or data set series. Furthermore, the INSPIRE legal framework requires that data sets are made available through View and Download services, which in turn implies that at least two locators need to be expressed in the data set metadata: one for a View Service and one for a Download Service.

Test method:

Check that at least the following two Resource Locator elements are provided:

https://github.com/inspire-eu-validation/metadata/tree/tg-issue108/ds-linked-service

https://github.com/inspire-eu-validation/metadata/blob/tg-issue108/ds-linked-service/ds-md-resource-locator.md

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  - the new conformance class is available in the UI (staging instance) at the bottom of the list

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- Plan to complete the tests on data-service linking simplification:

  - updated ATS for network services: by mid-December

  - updated ETS for network services: available in staging as soon as ready, and in production in the first release after publication of the TGs (31 January 2024)
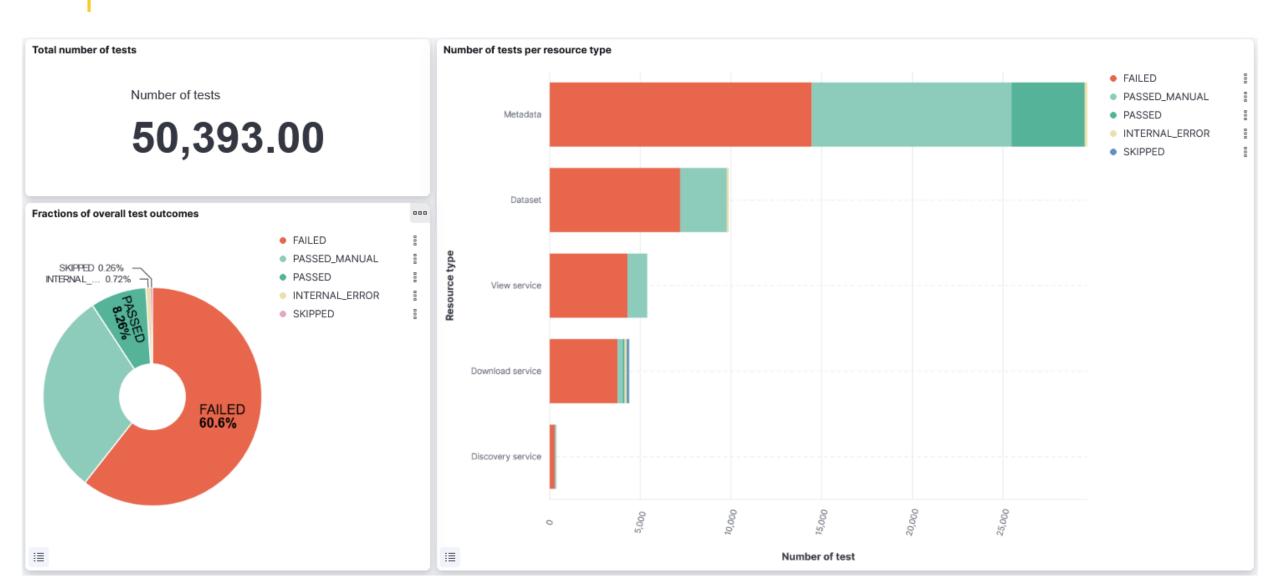
INSPIRE Reference Validator – API Gateway

- API Gateway to manage API requests to the Validator introduced in 2021

  - constraints: max 200 validations per week (reset on Sunday), max 1 validation per second

  - an API key is needed – instructions on how to request it: https://github.com/INSPIRE-MIF/helpdesk-validator/issues/594

- New API call to check the remaining available quota:

  - documentation: https://github.com/INSPIRE-MIF/helpdesk-validator/discussions/977

  - call: https://yzyiqfakm4.execute-api.eu-west-1.amazonaws.com/validator/v2/Usages/{API-Key}/

    - for each of the last 10 days, it returns the usage and the remaining quota

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INSPIRE Reference Validator – Dashboard

INSPIRE Reference Validator – Dashboard

- Outcomes and types of resources for metadata validation

  - February-December 2022 (top) vs. January-November 2023 (bottom)

Top 5 values of status.keywc ∨	Number of tests ∨
FAILED	7,483
INTERNAL_ERROR	91
PASSED	2,005
PASSED_MANUAL	5,629

Sub category	∨	Unique count of id_testrun.keyword ∨
Metadata - Version 2.0		14,870
Dataset Metadata - Version 2.0		9,768
Service Metadata - Version 2.0		3,048
Network Service Metadata - Version 2.0		2,251
Spatial Data Service Metadata - Version 2.0		575
Metadata - Version 1.3		282

Top 5 values of status.keywc ∨	Number of tests ∨
FAILED	7,162
INTERNAL_ERROR	49
PASSED	2,050
PASSED_MANUAL	5,365

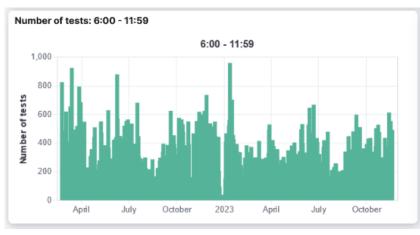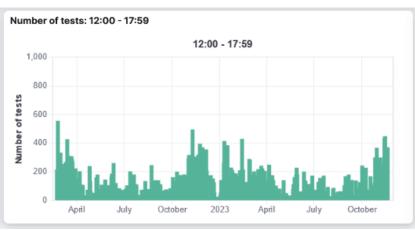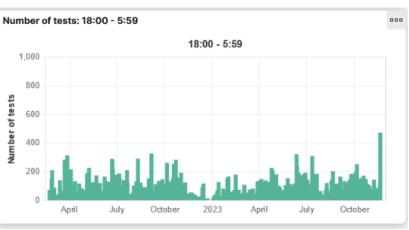| Sub category	∨	Unique count of id_testrun.keyword ∨
Metadata - Version 2.0		14,616
Dataset Metadata - Version 2.0		10,497
Service Metadata - Version 2.0		2,688
Network Service Metadata - Version 2.0		2,095
Spatial Data Service Metadata - Version 2.0		500
Metadata - Version 1.3		236

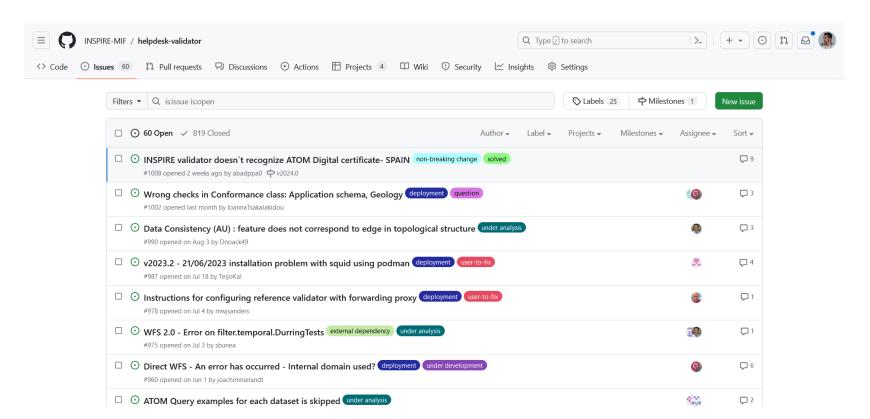# INSPIRE Reference Validator – Dashboard

INSPIRE Reference Validator – Plan for v.2024.0

- Still based on ETF v.2.0

- New OS & upgraded libraries/components, increasing security (thanks DE)

  - Docker base image: jetty10.0.16-jre11-alpine-eclipse-temurin

  - OS: Alpine Linux v3.18

  - Several ETF libraries upgraded

  - OpenJDK Runtime Environment Temurin-11.0.20.1+1

  - Jetty 10.0.6

  - Squid 5.9

  - Nginx 1.24.0

  - Apache 2.4.58-r0

- Pull requests to solve security vulnerabilities are welcome!

INSPIRE Reference Validator – Helpdesk

- **> 1000 issues** (in the last 4-5 years)
- Shift from bug reports to deployment
- Little activity in the last months

Thank you!

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Keep in touch

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