Action 2017.4 on validation and conformity testing (completed)

Overview

The aims of the action are to

- coordinate the maintenance of the existing framework, ATS and ETS and the development of the missing ATS and ETS, including coordination of funding and release planning and clear communication of changes between releases,
- discuss how the maturity level concept can be reflected in the common validator,
- coordinate the funding of the maintenance and further developments,
- promote the usage of the validator in the MS,
- advise the EC on different scenarios for the long-term sustainability of the test framework

The following workflow is used for collecting, discussion and resolving issues and suggestions related to the common INSPIRE validator and the INSPIRE Abstract and Executable Test Suites (ATS and ETS):

1. You can use the issue tracker of the Github community space to
    - report a problem with the INSPIRE validator or test results,
    - propose a new feature or an improvement to the existing functionality of the INSPIRE validator, or
    - start a discussion or raise a question on the INSPIRE validator
2. An initial assessment and classification (triage) will be carried out by the JRC (with support from their contractors).
3. Resolution
    - Minor issues/bugs will be fixed directly.
    - Notable issues will be discussed in a MIG sub-group on validation and either fixed directly or submitted to the MIG for decision /endorsement.
    - Issues or improvement proposals related to ETF software will be discussed in the ETF Steering Group (you can track the status of the current Improvement Proposals on the project board).

See the full action mandate for further details.

Results

During the two years covered by the Action, the INSPIRE Reference Validator has become a central and mature tool used on a daily basis by an increasing number of implementers and data providers. The Validator was also used to measure the conformity of MS metadata and compute the related indicators for the 2019 Monitoring process. A number of improvements have been made to the software and the overall validation framework. The most significant include:

- **development of new ATS and ETS** for: Metadata v2.0, View Services (WMS & WMTS), Download Services (SOS & WCS), Discovery Services (CSW); ATS and ETS still to be developed are those for Annex II/III Data Specifications;
- **performance improvements**: the Validator runs on the cloud to improve efficiency and scalability; a number of other improvements have been made, for example the caching of schemas to speed up metadata/data validation;
- operation and maintenance of **two Validator instances**: in addition to a production instance which provides the consolidated tests (already approved by the community), a staging instance including the latest developments and used for testing purposes by the community;
- a release planning strategy for the Validator and a detailed changelog for each release, also including instructions for deployment using Docker;
- helpdesk support for the community, with a number of artifacts to further assist users: helpdesk workflow, labels, milestones, and project board;
- setup of a governance structure based on a Steering Group and a Technical Committee, where the JRC is involved, for the ETF framework, the open source software representing the core of the INSPIRE Reference Validator.

Meetings

- 2017.4 meeting #10 2019-05-22
- 2017.4 meeting #8 2018-11-15
- 2017.4 meeting #9 2019-01-17
- 2017.4 meeting #7 2018-08-30
- 2017.4 meeting #6 2018-06-14

2017.4 meeting #5, 2018-05-24 (virtual)

2017.4 meeting #4, 2018-04-19 (virtual)

Open actions

Task report

Looking good, no incomplete tasks.

Usage and deployment of the ETF validator

On this wiki page we are tracking where the ETF software is currently being used. Please update the information regularly.

Background & context

As INSPIRE is coming into a practical implementation phase there is a great need of tools for validation of INSPIRE metadata, network services and data. To meet this need and to overcome issues with different interpretations in existing validator implementations at EU level, in MS or projects (e.g. in the EU geoportal, the Netherlands, Germany and the eENVplus project), common Abstract and Executable Test Suites (ATS and ETS) and a common validator (the INSPIRE test framework) have been developed under action MIWP-5/2016.3 of the MIWP 2014-2016.
The work under this action resulted in the following ATS and ETS for the following TGs:

- Metadata (v1.3) (ATS, ETS)
- Download services (Atom, WFS) (ATS , ETS)
- View services (ATS)
- Discovery Services (ATS)
- Data specifications (common requirements and theme-specific requirements for Annex I themes) (ATS, ETS)
- Spatial data services (ATS)

In order to provide a complete test framework, the following components would still need to be added to the INSPIRE validator:

- Metadata v2.0 (ATS and ETS)
- Annex II data specifications (ATS, ETS)
- Annex III data specifications (ATS, ETS)
- View Services, WMS (ETS)
- View Services, WMTS (ETS)
- Download Services, SOS (ATS, ETS)
- Download Services, WCS (ATS, ETS)
- Discovery Services (ETS)

Some budget is foreseen in the 2017 work programme of the ELISE ISA2 action for further developments on the validator. However, this will likely have to be complemented with additional contributions from Member States (either through funding or experts) and/or the Commission. It should be discussed how to coordinate the further development and its funding between all parties interested to contribute.

Furthermore, with increasing use, it is expected that there will also be an increasing number of change proposals and bug reports for the software and the implemented tests. These may also affect the underlying Abstract Test Suites or even lead to change proposals to the requirements in the TGs.

Finally, also the discussions around the maturity level concept in action 2016.1 may have an impact on the structure, implementation and/or presentation of the tests in the common validator.

Organisational set-up

This action will be carried out by JRC, with support from

- external contractors (and potentially MS experts) for the development and maintenance of the test framework, ATS and ETS, and
- a temporary MIG sub-group including MIG representatives and experts from the pool of experts (see members here), that will
  - support the resolution of notable comments received on the validator, ETS and ATS and, where relevant, the formulation of change requests to TGs and/or IRs,
  - discuss and provide recommendations of how the maturity level concept can be reflected in the common validator,
  - promote the usage of the validator in the MS (see a list of known instances in the MS here),
  - advise the EC on different scenarios for the long-term sustainability of the test framework.