European Commission

INSPIRE Validation, Conformance and Interoperability Testing

INSPIRE Conference – 28 September 2016

www.jrc.ec.europa.eu

Serving society
Stimulating innovation
Supporting legislation

Overview

An ARe³NA project

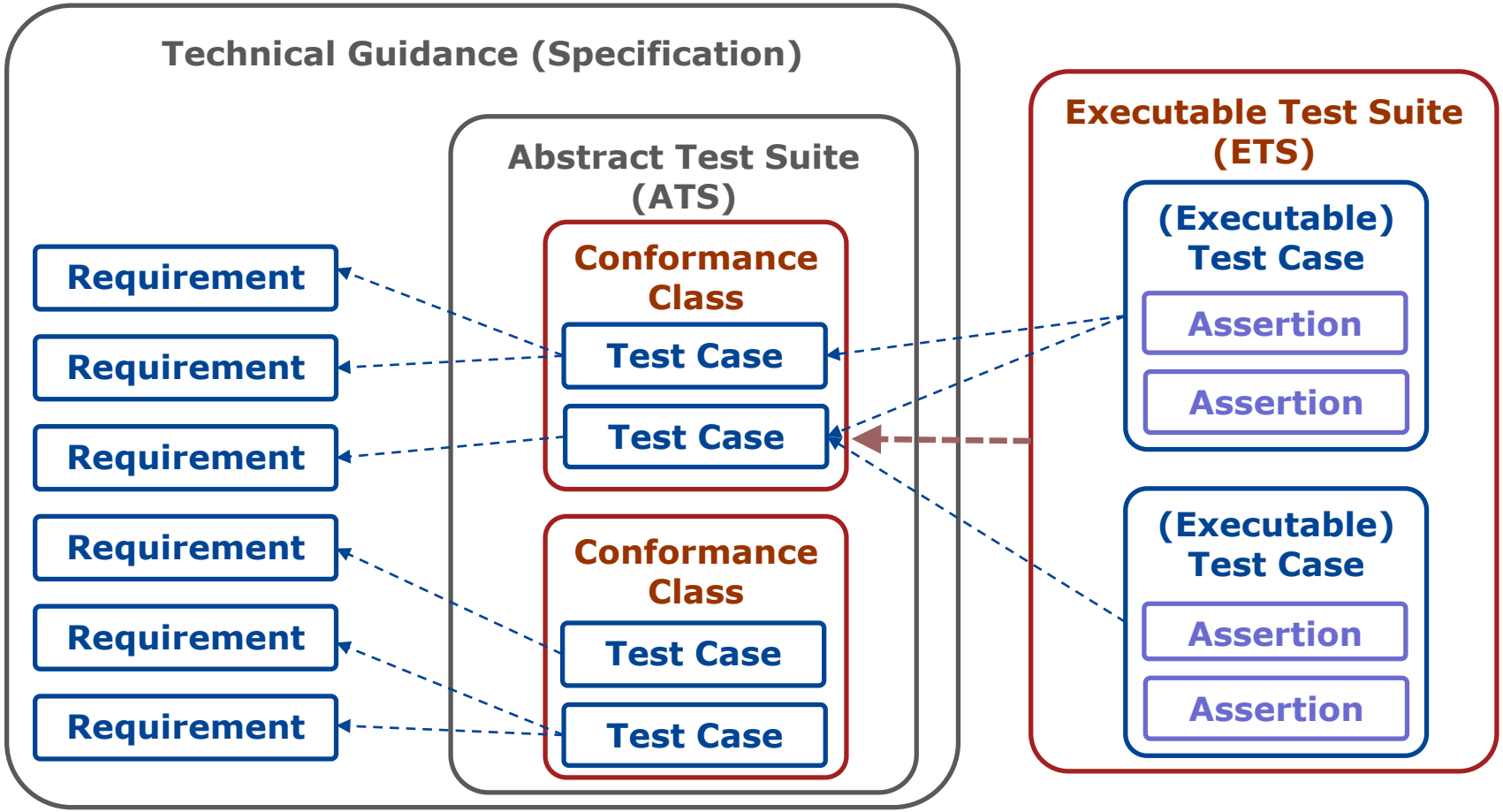
- Contractors: PwC and interactive instruments
- Until mid 2017
- Support and accelerate ongoing work in the MIG-T (MIWP-5)
- Conformance testing of INSPIRE Metadata, Network Services and Data Sets based on an agreed set of abstract tests

The context

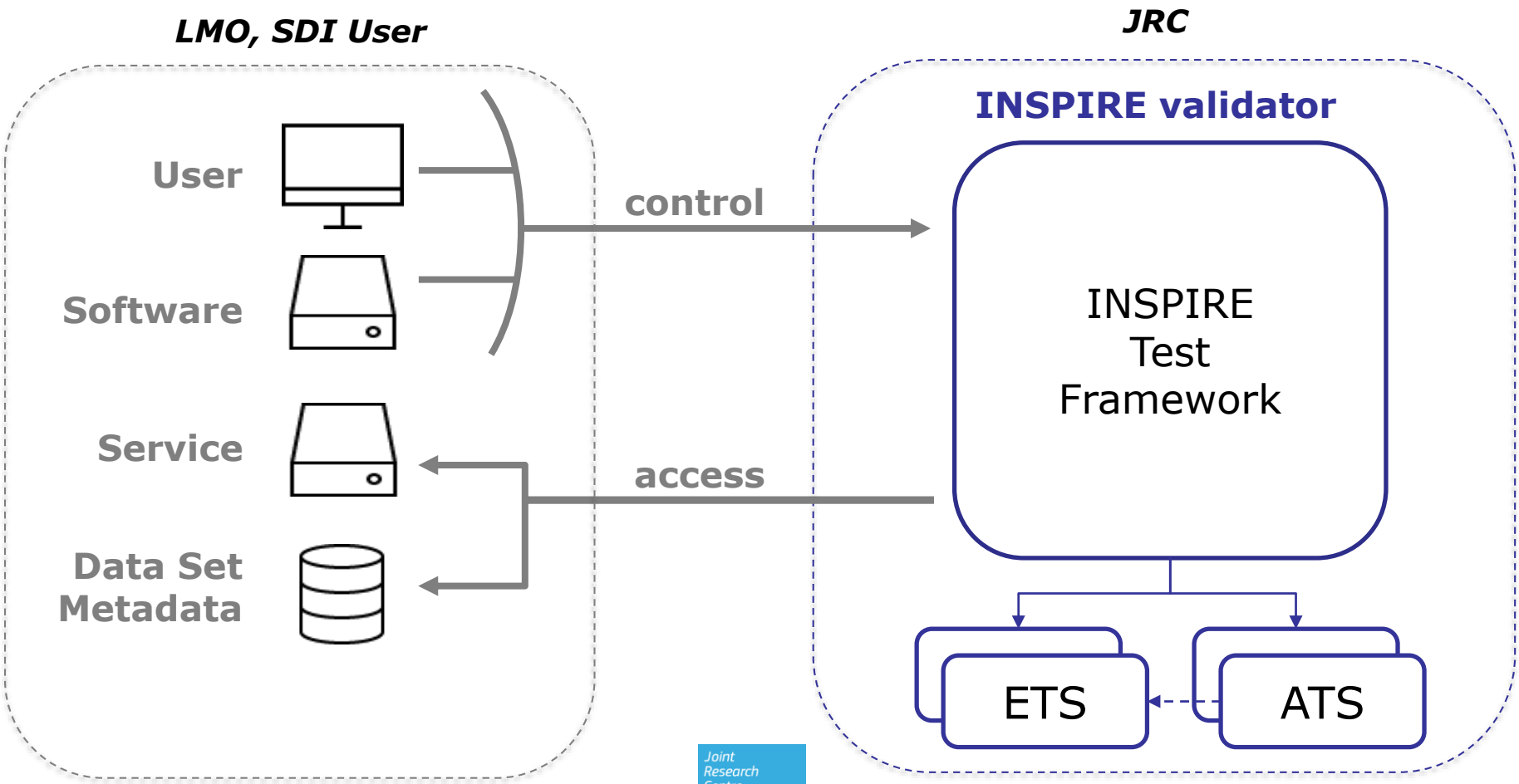
- Currently different validators with different tests are used in Member States
- → Development of a reusable, open source, reference validator
- Build upon existing solutions
- Offering configurable software and test rules for organisations to test conformance
- Create a 'reusable' testing infrastructure for INSPIRE

European Commission

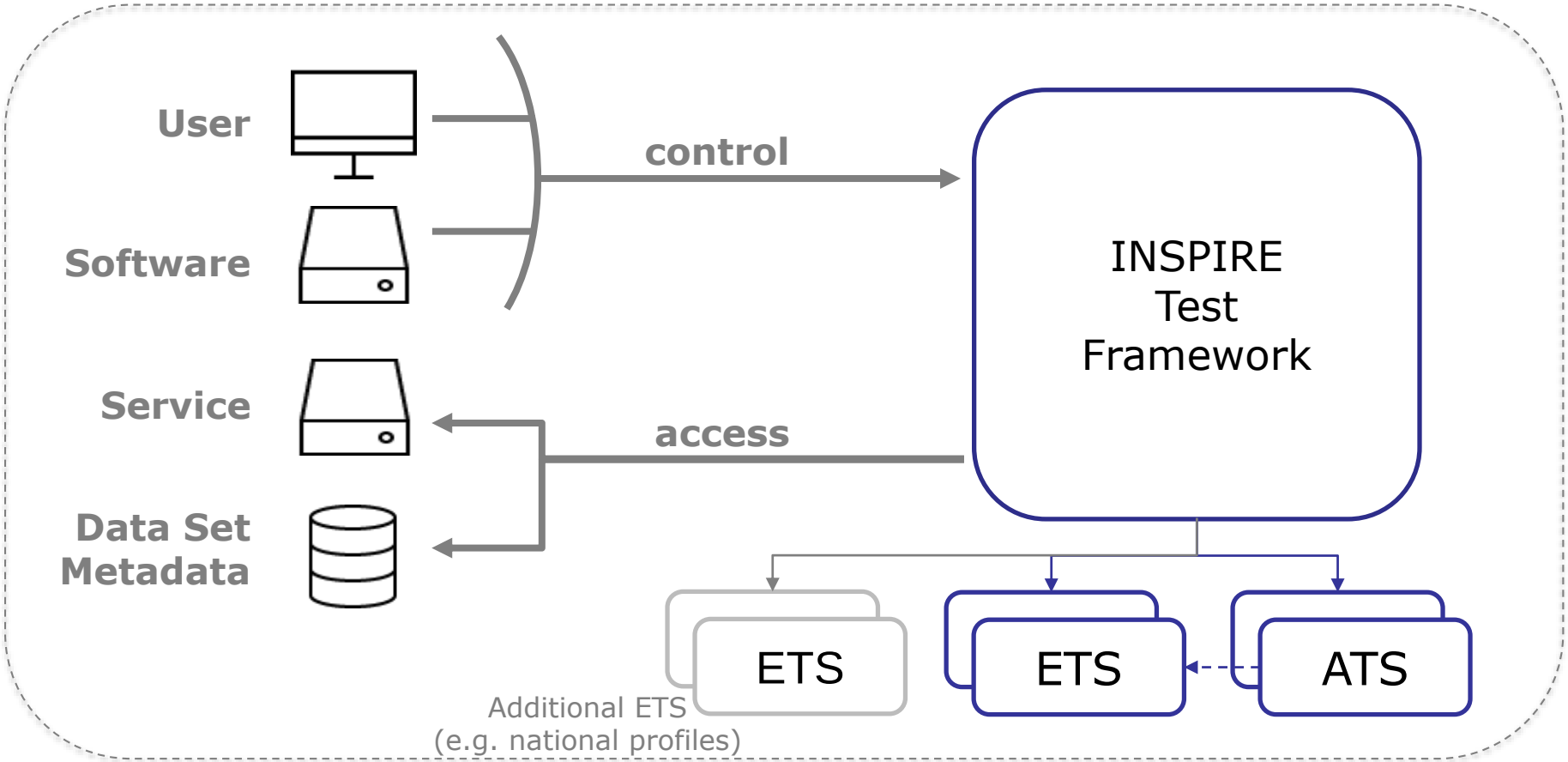
Agreed requirements and tests are the basis



Central deployment



Reusable, e.g. by an LMO



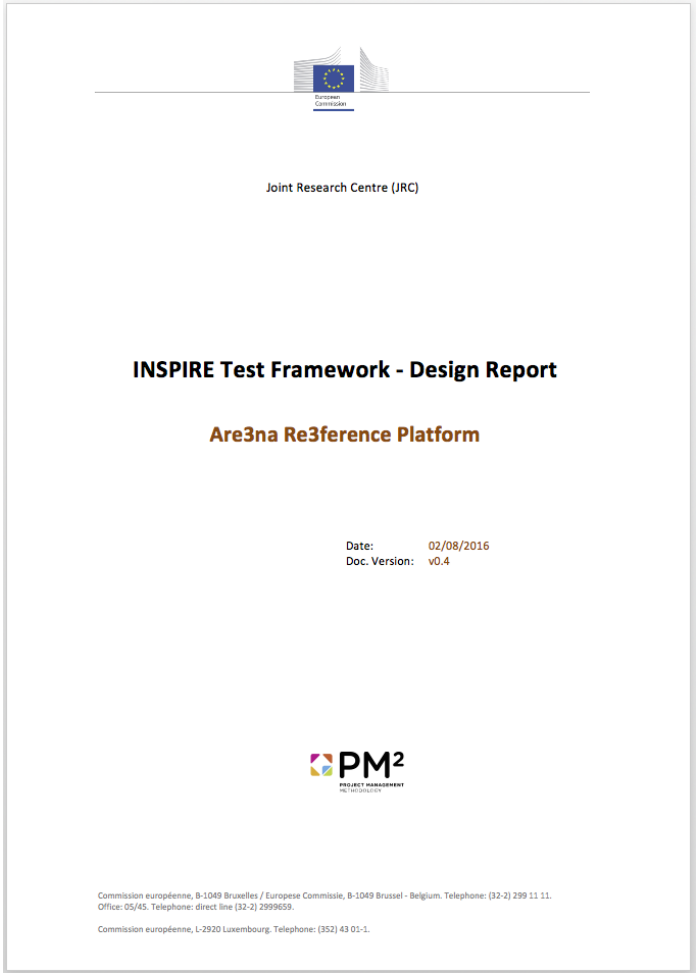
Design Report

Baseline Design

- Version 0.4, 02/08/2016
- Basis for development of the INSPIRE Test Framework

Based on ETF tooling

- Supports test engines for validating web services and very large XML document sets
- Existing ETSs as a starting point
- Extended with additional capabilities (work in progress)



Joint Research Centre (JRC)

INSPIRE Test Framework - Design Report

Are3na Re3ference Platform

Date: 02/08/2016
Doc. Version: v0.4

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ETS development – current status

Available draft test suites

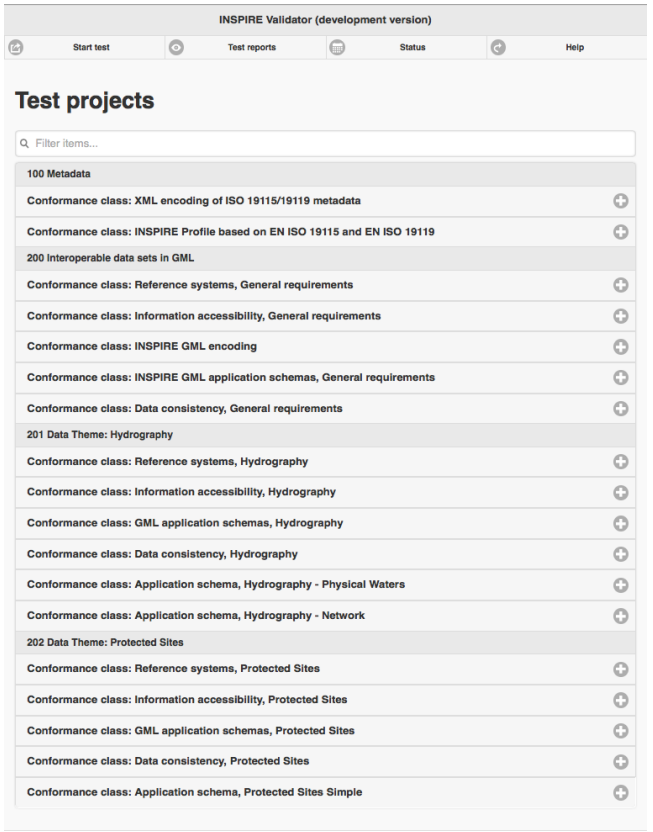
- Metadata (ISO 19115/19119)
- Data Specification Template
- Data Specification – Hydrography
- Data Specification – Protected Sites

Under development

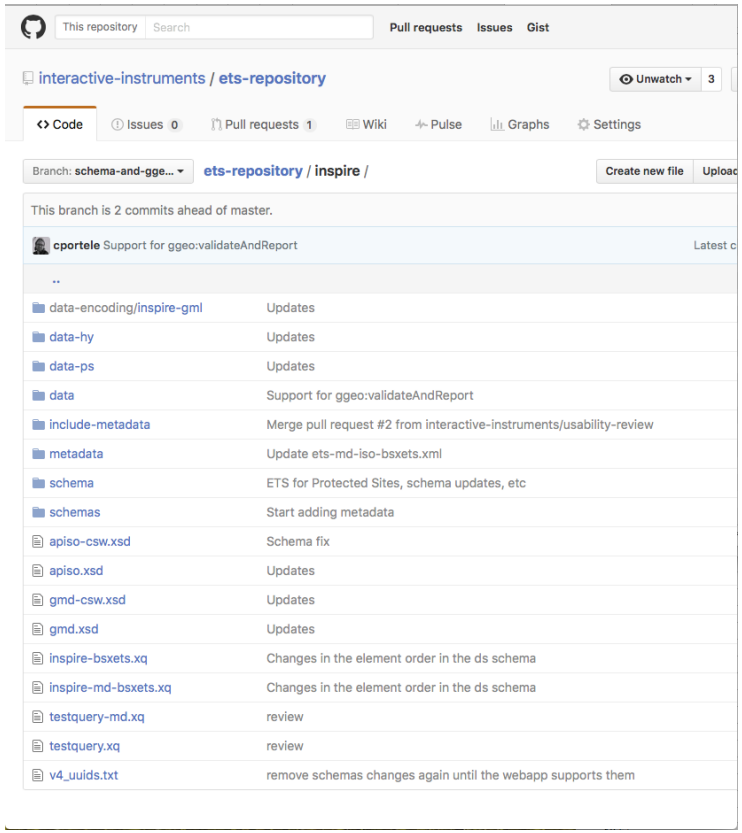
- Other Annex I data specifications

Next

- Download services



ETS development – on GitHub



BaseX: Testing XML documents

Clemens Portele edited this page a day ago · 11 revisions

Required knowledge

To develop Executable Test Suites for testing XML documents in ETF using BaseX, you should be familiar with:

- XQuery and XML technologies in general
- the ETF domain model (TODO: create overview page)

Introduction

In ETF, sets of XML documents are tested using BaseX, an XML database. An Executable Test Suite is essentially an XQuery that operates on the set of XML documents under test and returns an XML document with the root element `etf:TestTaskResult`.

The content model is specified using an XML schema.

The current stable schema is available here and can be used for validating ETF XML structues:

```
<EtfModelItem xmlns="http://www.interactive-instruments.de/etf/2.0"
 xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.interactive-instruments.de/etf/2.0 http://services.int

</EtfModelItem>
```

Here is a simple example with one test case with two test assertions:

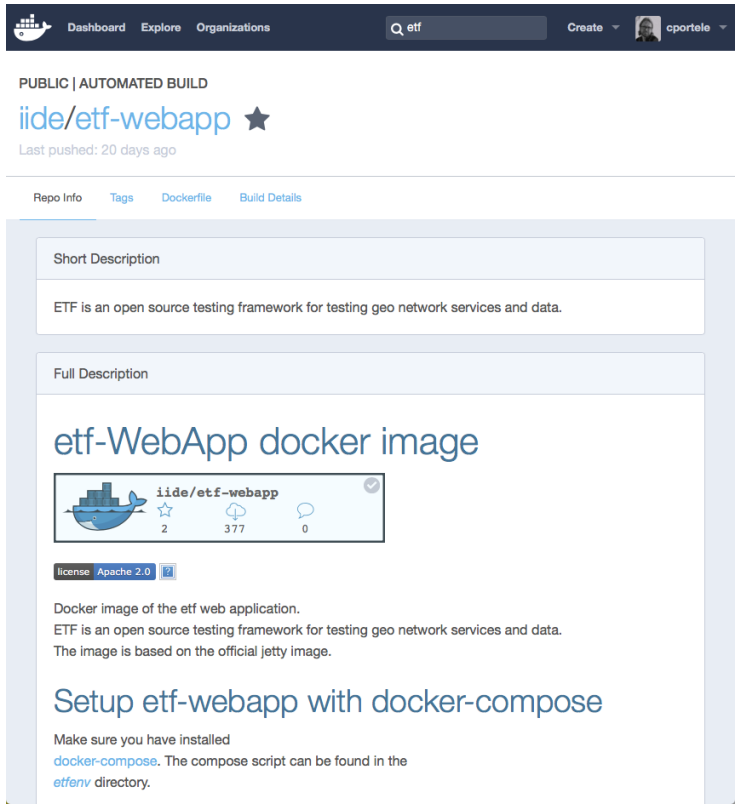
```
<TestTaskResult xmlns="http://www.interactive-instruments.de/etf/2.0"
    xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
    xsi:schemaLocation="http://www.interactive-instruments.de/etf/2.0 http://services.int
```

ETS development – planned reuse

- Use ETF tests for DLS + VS as starting point
  - WMS 1.3 / INSPIRE View Service
  - WFS 2.0 Pre-defined / INSPIRE Download Service
  - WFS 2.0 Direct Access / INSPIRE Download Service
  - ATOM INSPIRE Download Service
  - Updates needed based on the Abstract Test Suites and to improve usability
- Integrate OGC CITE Tests

Local deployment

- Easiest option will be using the Docker image of ETF
- Adding the Executable Test Suites from the repository on GitHub
- Steps to be documented soon



More information

Demos at the INSPIRE booth

- Today, 12:30 – 13:00
- Tomorrow, 13:30 – 14:00

Talk to us, we are all here until Friday

- Jon Herrmann, interactive instruments
- Clemens Portele, interactive instruments
- Jens Scheerlinck, PwC
- Robin Smith, JRC
- Michael Lutz, JRC

If you are interested in testing the INSPIRE validator, please write to are3na@jrc.ec.europa.eu