



Contribution ID: 169

Type: **Workshop**

INSPIRE/api

In recent years, new modalities of data provision have been emerging, foremost REST APIs. Under this new RESTful paradigm, various issues with the existing OGC Web Services (OWS) have been alleviated, allowing for far more intuitive data provision and use. The API4INSPIRE project is currently evaluating both the OGC API - Features and SensorThings API standards for inclusion within INSPIRE.

In this workshop, we will focus on the provision and use of INSPIRE relevant data through these APIs. After providing a brief overview of the functionality of these APIs, details on available software for their provision will be presented. Pertaining to OGC API – Features we will describe how this API is currently being supported by GeoServer ; in addition, a simple server developed within the API4INSPIRE project and capable of providing simple features in accordance with the SF-0 specification will be presented. For the provision of SensorThings API we will provide details of the Fraunhofer Open Source SensorThings Server FROST .

Various datasets utilizing these APIs are being made available, allowing participants to experience the potential of this new technology through direct experimentation with operational APIs. The APIs we have made available are as follows:

- Airy Austria: Air quality and meteorological data, together with data on the air transport network
- Urban Data Plattform Hamburg: Lots of sensor and geo data on the bottom, cool applications on the top, and some juicy APIs in between.
- Franco-Germanic Flows: Cross-border Water data providing alternative perspectives on the Rhine
- Covid-19 ad-hoc: Based on current events, an interesting collection of air quality, Covid-19 cases and a background layer of demographic data.

After this Workshop, the participants should have a good basic understanding of both APIs including provision and usage options. In addition, they should be able to understand the potential of integrating API based data within their own applications. More detailed information on both provision and use of the APIs under discussion will be provided in follow-up workshops; details will be provided.

In order to support our evaluation process, we will be requesting volunteers to participate in interviews on their views towards the current API developments, as well as making a survey open to the wider attendees at the conference.

The API data sources presented will remain available, and additional development support will be provided during the week; the most interesting applications developed with these APIs will be presented at the end of the conference.

This on-going “API4INSPIRE“ study is funded in the frame of the European Location Interoperability Solutions for e-Government action (ELISE) , part of the ISA² Programme. The ELISE Action supports Better Regulation and Digital Single Market Strategy goals, including specific actions of the e-Government Action Plan and the European Interoperability Framework , which are reinforced by the Tallinn Declaration vision and the Communications on Building the Data Economy and on Artificial Intelligence for Europe .

In particular, ELISE studies explore the role of location information in digital government and the technologies involved in delivering innovative public services. Is worth mentioning, the “Digital Government Benchmark – API study” providing an early-stage analysis of Web APIs as enablers for the digital transformation of government. A multiple-case study comparative analysis has been applied to selected cases, with a particular focus on geospatial API.

Sub-category

2.12 Other

IJSDIR

No, I will not submit an article to IJSDIR

Primary authors: SCHLEIDT, Kathi (DataCove e.U.); Dr VANDER SCHAAF, Hylke (Fraunhofer IOSB); OLIVEIRA, Nuno; Mr HERTWECK, Philipp (Fraunhofer IOSB); Ms KLEIN, Melinda (DataCove e.U.)

Presenter: SCHLEIDT, Kathi (DataCove e.U.)

Track Classification: 2: Digital solutions