Evidence Driven Indoor Air Quality Improvement



First session (June 21st) – part 1

INTRODUCTION

- Presentations
- OGC Intro
- Data interoperability



SENSORTHINGS API

- Intro
- Data Model
- API

STA REQUESTS

- Locations, Things
- Datastream,
 Multidatastream
- Observations

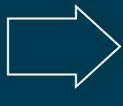
COFFEE BREAK



First session (June 21st) – part 2

FROST

- Characteristics
- Deploy options
- PostgreSQL and plugin



STA+

- STA limitations
- STA+ addidiontal properties
- Applications for EDIAQI

INSPIRE

- Directive
- Regulations
- Technical Guidelines

Q&A

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Training Session on data interoperability: SensorThings API standard and FROST open source server solution

On Wednesday 21st of June 2023, the first training session on data interoperability for sensors was held by the Deda Next team, titled "SensorThings API standard and FROST open source server solution".

The agenda included:

- Introduction (presentation, OGC)
- Examples of data interoperability
- SensorThings API (STA) standard
- STA requests





Second session (July 21st)



Hylke van der Shaaf

Fraunhofer Institute



Martina Forconi

IT



Beatrice Olivari

Analytics



Piergiorgio Cipriano

GIS



Luca Giovannini

Data



Second session (July 21st) – part 1

9:10 - 9:40

Why FROST?

- Reasons
- Evolution
- Live demos

Dr. Hylke van der Schaaf

9:40 - 9:50

Round table

 Questions and comments to Dr. van der Schaaf

Audience

Coffee break

9:50 - 10:30

Deployment on Tomcat

- Example Ferrara
 - PostgreSQL
 - PostGIS
 - TimeScaleDb

Luca Giovannini



Second session (July 21st) – part 2

11:00 - 11:15

Deployment Docker

Brief how-to

Martina Forconi

11:15 - 11:45

Data ingestion w. NiFi

- Examples in Ferrara
 - weather
 - traffic
 - air quality (out)

Beatrice Olivari

Feedback and timeline

- Lab Service
- Thinnect
- Wings

11:45 - 12:00

Semantics for EDIAQI

- Parameters and UoM
- Frequency
- Location / Spatial

Piergiorgio Cipriano

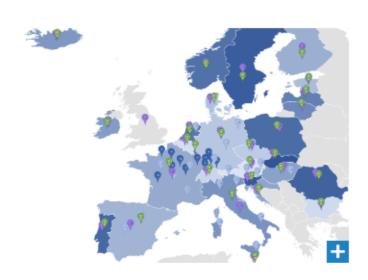


Why FROST?



FROST®-Server - An open source implementation of OGC SensorThings API





Locations of the data sources connected in API4INSPIRE



Description of the project

Against the background of the requirements from numerous applications in the mega trend topic "Internet of Things", the Fraunhofer IOSB decided to develop a server for the Starndard SensorThingsAPI. The objective was to achieve high performance with low resource consumption and an openness that facilitates usability both in the research environment and in commercial applications.

Performance with low resource consumption and an openness that facilitates usability in both the research environment and commercial applications. The desire for openness led to the decision to design the implementation as open source software right from the start, in order to make the way as free as possible for innovation. The result is the FROST®-Server. The name is an acronym and stands for "Fraunhofer Open Source SensorThings API Server". But the name is also intended to suggest that your data is kept "fresh and available"

Meanwhile, the "SensorThings API" is recommended by the European Commission as "Good Practice" for the deployment of measurement data according to the INSPIRE guidelines: "OGC SensorThings API as an INSPIRE download service"

Contact



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