SeaDataCloud

SWE Ingestion Service

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Objectives

- Facilitate the publication of observation data (streams)
- Describe observatories (or networks of observatories)
- Ingestion service
  - Receive, decode and check data
  - Operated under the supervision of the PI of the observatories
  - Use SensorML descriptions of the observatories for data decoding
  - Accept SWE-based observation data streams
Short introduction into Sensor Web
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- **GIS**
- **Web Client**
- **Desktop System**

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**OGC/ISO Observations & Measurements**

- **OGC SensorML**
- **OGC Sensor Observation Service**

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**SOS**

- **Observation Network 1**
- **Observation Network 2**
- **Observation Network 3**
Short introduction into Sensor Web

SeaDataCloud Workshop @ EUDAT Conference, Porto (Portugal), 23/01/2018
SWE Ingestion Service
Overview

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- Sensor Platform
- FTP-Server (CSV-Files)
- PI
- SOS-Importer
- Upload Web Site
- Smart Sensor Platform (e.g. NeXOS SEISI)
- SOS-Server
- SeaDataCloud Infrastructure CDI

Pull
Push
Pull
Push
Push
Push
Pull-based Workflow

- Read data from different data sources and push to SWE Ingestion Service
- Description of commands of sensing devices for retrieving data
- Description of outputs of sensing devices or of (CSV) files containing observation data
- Based on SensorML
User Interface

• Editing sensor descriptions: smle
• Extended to support commands, outputs and vocabularies
• Full text search for stored sensor metadata documents
User Interface

• Feedback to Data Providers

• Relevant information
  – Details about successfully /unsuccessfully inserted sensors (metadata)
  – Amount of successfully/ unsuccessfully inserted observations

• This information shall be made accessible through a dedicated operation
Status and Next Steps

- Architecture and interface have been documented ➔ dedicated deliverable
- Ongoing
  - Continue implementation
    - smle, import mechanism
  - Communicate with sensor operators to gather use-cases for pilot
Thank you for your attention!

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