

SWE Ingestion Service

Christian Autermann, 52° North GmbH

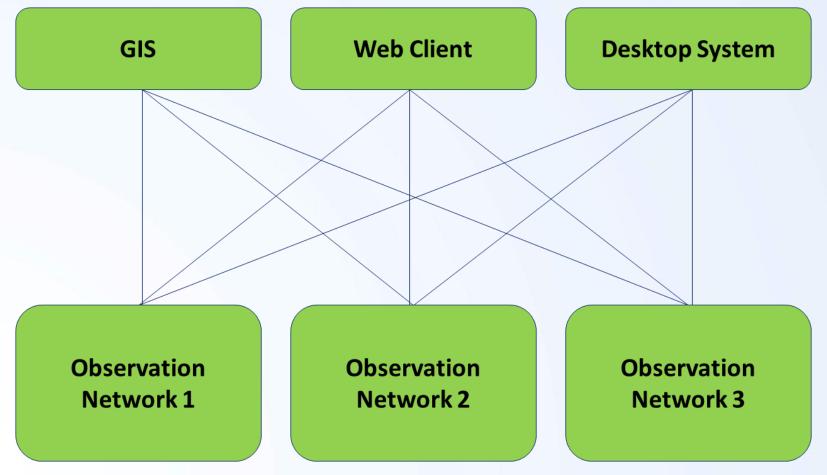


Objectives

- 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









GIS

Web Client

Desktop System

OGC/ISO Observations & Measurements

OGC SensorML

OGC Sensor Observation Service

SOS

Observation Network 1

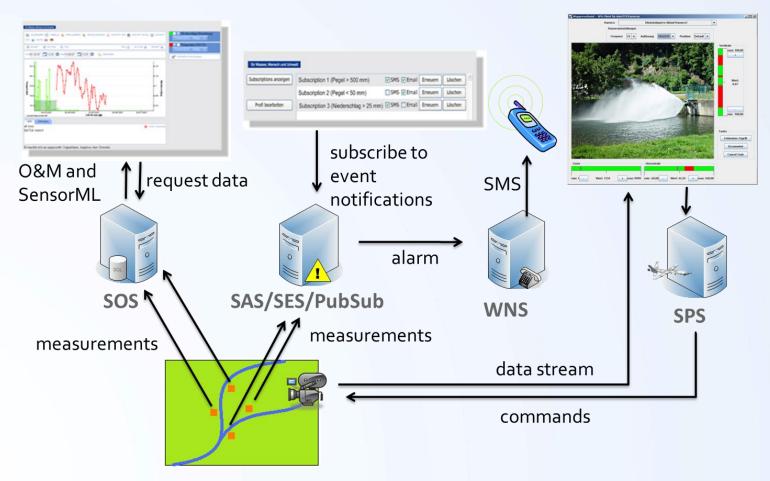
SOS

Observation Network 2

SOS

Observation Network 3



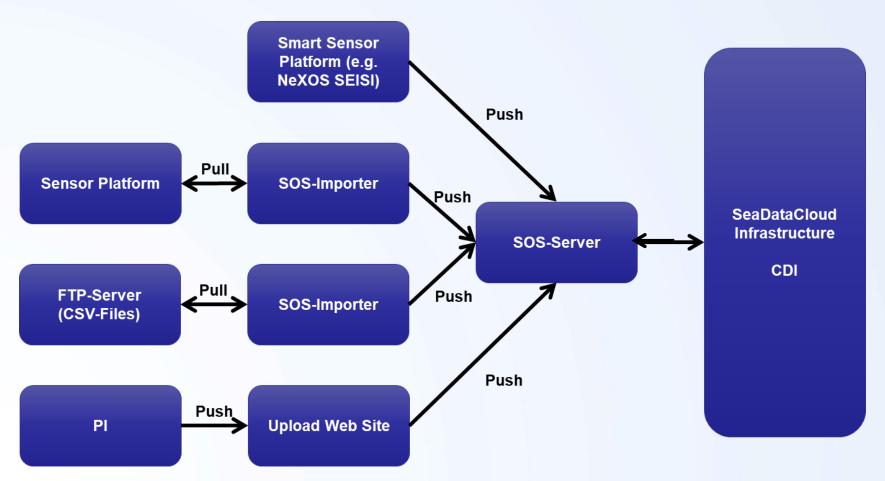




SWE Ingestion Service



Overview





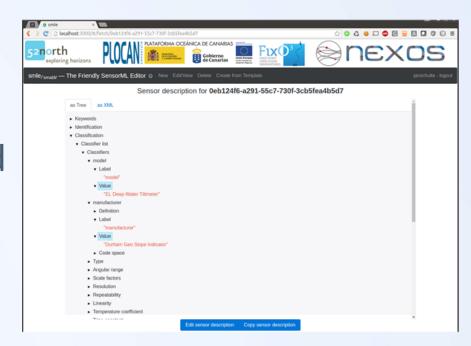
Pull-based Workflow

- 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 usecases for pilot



Thank you for your attention!

- c.autermann@52north.org
- jirka@52north.org