ODIP prototype 3
IFREMER contribution

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3rd ODIP workshop Townsville
August, 2014
Outline

- Initially SOS server and client prototype
- Operational SOS observation service in Oceanotron
- On-going test with 52 north
- SWE framework for ingestion, archiving and access (sensorNanny)
SOS web client, prototype

- **Sextant** Spatial Data Infrastructure and portal component

- Access to water column and coastal environment time series

- SOS / Version 1
SOS client prototype: WMS step
SOS client prototype: SOS describeSensor
SOS client prototype: SOS getObservation
Oceanotron / SOS service

- Oceanotron serves profiles/pointSeries and trajectories observations collections
- from myOcean (netcdf files) and SeaDataNet (ODV binary collection)
- Enables subsetting (x,y,z,t,phenomena+phenomena values)
- Provides Opendap and ncWMS services
- SOS v2/getObservation (SDN profiles) has just been implemented operationally
- Enables subsetting of collections
- Delivers netcdf and O&M XML or JSON results
- Works with online and asynchronous results for big volumes
sensor-Nanny / SOS-T service

- Provides a transactional SOS service
- Insert/Delete/Get procedures (in sensorML) and observation (O&M), version 2
- Full UUID and resolvable URI identifiers for every records (http://sensornanny.ifremer.fr/record/fbe5b8ef-da07-4ad7-8f58-49478dd8fd1f)
- Manages records in XML or JSON
- Validates records before registration against official XSD and internal (SDN) schematron
- Back-end storage is at the moment, XML files on disk
- On-going development to use JSON documents in no-SQL database (couchBase) as back-end
sensor-Nanny / SOS-T service

- Demo

http://www.ifremer.fr/sensornanny/
SensorML models

- ARGO float
- Research vessels (navigation integrated system + thermosalinograph)
- VAIMOS automated sailing boat (with student)
- Fixed observatories (together with MARUM and HCMR) within JERICO
Questions

- Is DeleteObservation missing in SOS?
- InsertObservation is there any equivalent to `<swes:procedureDescriptionFormat>
  [format]
</swes:procedureDescriptionFormat>`
  To insert JSON records.
- Is there any standard reversible conversion from XML to JSON? We used JSONArray