Considerations on the ArcticSDI Architecture

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Making location count.

Arctic Spatial Data Pilot (ArticSDP)

Sponsored by USGS and NRCan, in collaboration with the Arctic SDI Participants

- Inform the Arctic SDI Strategic Plan 2015-2020
- Test interoperability of international standards
- Showcase the value of a data rich, environment to stakeholders to further understand and respond to impacts of climate change and human activity

Online:
bit.ly/arcticsdp

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ArcticSDI Architecture

- Catalog Challenge
  - OGC CSW
  - OGC OpenSearch (including EO profiles and extensions)
  - STAC
  - WFS3
  - DCAT (specially GeoDCAT-AP)
  - INSPIRE in general
  - Semantic Web/RDF/SPARQL; including schema.org and similar taxonomies
  - SRIM (Semantic Resource Information Model)
  - Application-based catalogs such as Android Store
  - Digital Object Interface Protocol

Centralized Catalog

- Catalog is key
  - If discovery plays a role
  - User experience matters
- Discovery across different flavors of catalogs is challenging
  - Going central rather than running after tech trends
  - Community is manageable
- Quality of Service characteristics
  - Harmonized model
- User experience
  - Missing tool support for complex queries
  - Missing tool support to get to data

Catalog Extended

- Catalog operation costs money
  - Automatization
  - Integration & maintenance
- Governance model
  - Any changes (internal & external)
  - Full traceability
- Annotation and tagging model
- Applications, not only data
  - Applications as Services
  - Apps like in app-stores