Considerations on the ArcticSDI Architecture

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Dr. Ingo Simonis
Director Interoperability Programs & Science, OGC
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
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