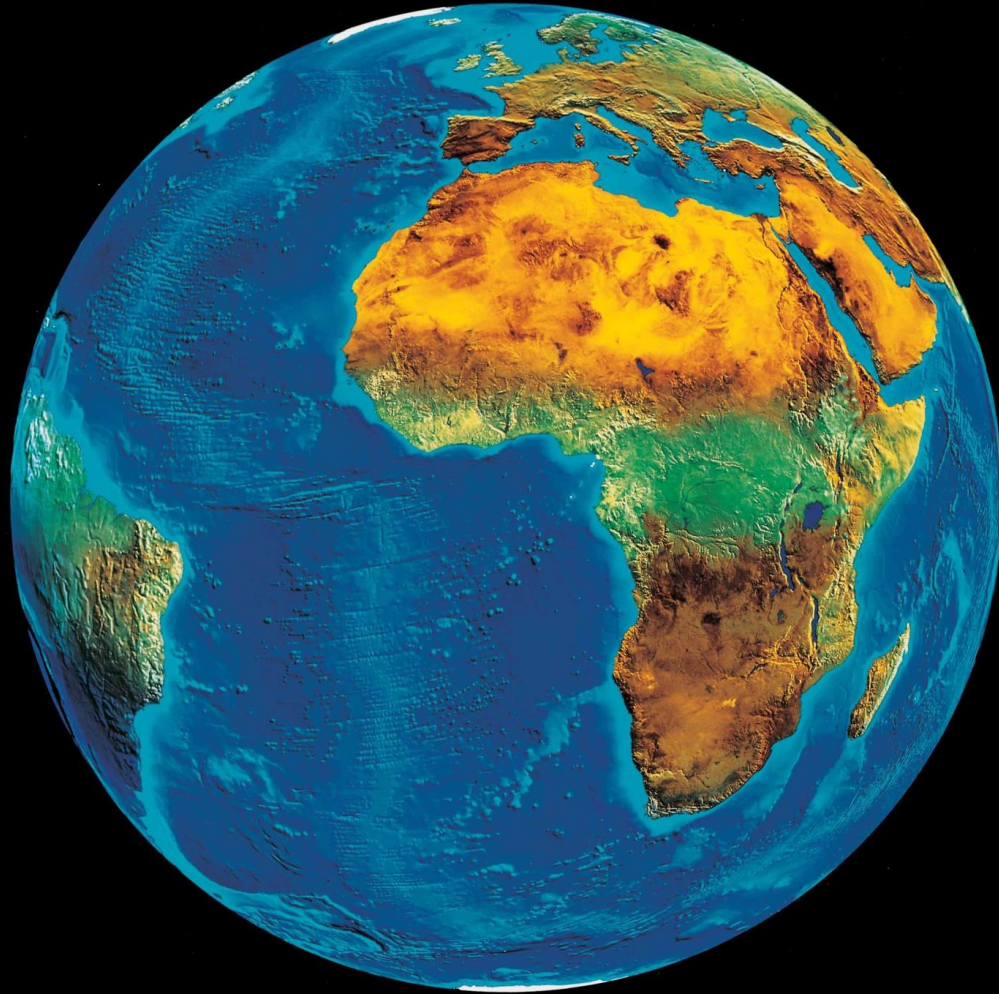


TESTBED-15



Earth Observation Applications Discovery





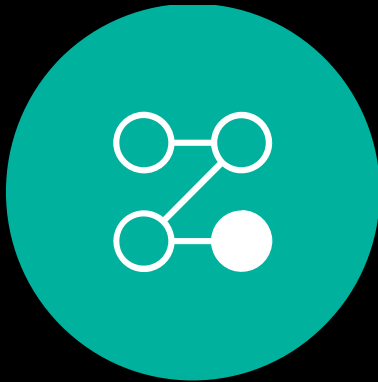
APPS



PROCESSES



CATALOGS



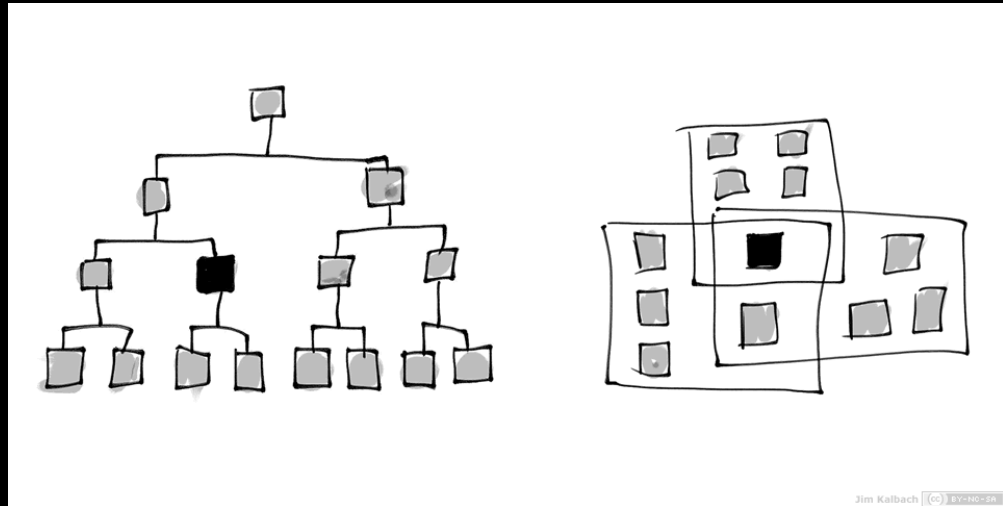
DATA MODEL

- Abstract & classification information
- Data types and IO constraints
- Quality information
- Version and provenance
- Interactive or non-interactive
- Execution environment (e.g. Docker version, hardware requirements)
- Execution end-points (e.g. URLs)
- Metrics for costs estimation (data sizing, processing costs)



SERVICE
INTERFACE

- Search interface for discovery by facet and free-text in combination





SERVICE INTERFACE

- Search interface for discovery by facet and free-text in combination
- Request interface for retrieval of facet dictionary to support browse
- Request interface for retrieval of application metadata
- Management interface for the Creating, Update and Deletion of records in the catalogue

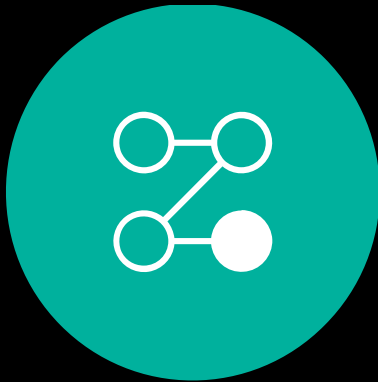
OpenSearch extension for
EO Products & Collections
13-026r8

OWS Context GeoJSON
Encoding Standard
14-055r2

OpenSearch Geo & Time
extension
10-032r8

OpenSearch response encoding
GeoJSON / JSON-LD
17-047

OASIS SRU &
OpenSearch Extension
Search and Retrieval via URL



DATA
MODEL

OWS Context GeoJSON
Encoding Standard
14-055r2

OWS W*S
Operations

dcat:DataService

Data Quality
Vocabulary

GeoDCAT-AP



SERVICE
INTERFACE

- Transactions: OGC API Common



APP
DEVELOPER



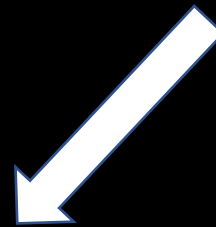
CATALOG



APP
DEVELOPER



EXPLOITATION/
PROCESSING
PLATFORM



CATALOG



APP
DEVELOPER



EXPLOITATION/
PROCESSING
PLATFORM



CATALOG



APP
CONSUMER

CLIENT



CATALOG



APP
CONSUMER



CLIENT



EXPLOITATION
PLATFORM



CATALOG



EXPLOITATION
PLATFORM

Recommendations

- Follow the recommendation made in the OGC API Hackathon Engineering report (OGC 19-062) to align the time and bbox related search parameters from the OGC OpenSearch Geo and Time Extensions (OGC 10-032r8) and the OGC API - Features - Part 1: Core standard
- Additional work is needed to harmonize the link model and OpenSearch response metadata in GeoJSON (OGC 17-047) with the OGC API Features Standard.
- This may require an update to OGC 14-055r2 (which defines a link model incompatible with OGC API Features) and the specifications that are based on the OGC 14-055r2 specification, including Earth Observation Product (OGC 17-003), Earth Observation Collection (OGC 17-084) and OpenSearch Response (OGC 17-047).