CEOS OpenSearch Project

WGISS-40
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Agenda

• Status  Yoshiyuki Kudo

• OpenSearch Implementation status report
  • CNES  (Jerome Gasperi*)
  • FedEO  (Yves Coene*)
  • CWIC & IDN  (Covered in CWIC session)

• Project closure

• Discussion for the new project
CEOS OpenSearch Project

Establish **OpenSearch Best Practices** of CEOS Catalog systems

**OpenSearch**?
- Simple spec of catalog web service
- OSDD, HTTP/GET, Atom
- Easy to implement
- Mainstream web technology aware
- OGC standard (geo+time ext.)
Purpose

• **Promote the use of the OpenSearch** standard as a means of data discovery for Earth Data providers

• **Define the expectations and requirements** of candidate OpenSearch implementations

• **Remove ambiguity** in implementation where possible

• **Facilitate the aggregation of results** between disparate Earth Data providers via OpenSearch common standards

• Allow for clients to **access search engines** via an OpenSearch Description Document (OSDD) **with no a priori knowledge of the interface**

• Facilitate **smooth integration** between related OpenSearch implementations, such as a dataset resource collection that refers to granule resource collections from another provider
The trail ...

Project formation

Common catalog interface to CEOS agencie catalogs (CWIC, fedEO, …) ? (2012)

Project formed in **WG1SS-35** (May 2013)

Agreed

CEOS OpenSearch BP is in alignment with:

OGC OpenSearch Spec 10-032r8, 13-026r4 (draft)

input

CEOS Comments (39 comments) **WG1SS-36**

Draft

comments from the team (google docs)

first draft **WG1SS-37**

draft version release **WG1SS-38**

input

commonality practices worth sharing

practices from implementations

CWIC, IDN, fedEO, CNES

ver.1

comments (google docs)

Public Comment

Dec 2014

Refinement

ver 1.0 **WG1SS-39**

Jun 2015

ver 1.0.1
CEOS OpenSearch
Best Practice Document

- 40+ pages

- 17 Best Practices
  - Based on Implementations in CEOS agencies
  - Classification
    - requirement
    - recommended
    - optional
  - Example codes

http://ceos.org/ourwork/workinggroups/wgiss/projects/opensearch/
# 17 Best Practices

<table>
<thead>
<tr>
<th>ID</th>
<th>Category</th>
<th>Title</th>
<th>Classification</th>
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<tbody>
<tr>
<td>001</td>
<td>Two step search</td>
<td>Support of two step search</td>
<td>Recommended</td>
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<tr>
<td>002</td>
<td>OSDD</td>
<td>Support of OpenSearch Parameter Extension (Draft 2)</td>
<td>Recommended</td>
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<tr>
<td>003</td>
<td></td>
<td>rel attribute of the URL in OSDD</td>
<td>Recommended</td>
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<tr>
<td>004</td>
<td>Compliance Declaration</td>
<td>CEOS OpenSearch Best Practice identifier</td>
<td>Recommended</td>
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<tr>
<td>005</td>
<td>Search Request</td>
<td>Supported search parameters</td>
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<td>006</td>
<td></td>
<td>Multiwords for searchTerms</td>
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<tr>
<td>007</td>
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<td>Use of startIndex over startPage</td>
<td>Recommended</td>
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<td>008</td>
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<td>Search with geo:name</td>
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<td>009</td>
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<td>Output encoding format in search URL</td>
<td>Optional</td>
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<td>010</td>
<td>Search Response</td>
<td>Output encoding format support (atom)</td>
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<td>Support of dc:identifier returnable and geo:uid queriable</td>
<td>Requirement</td>
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<td>Metadata representation in search response</td>
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<td>atom:summary</td>
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<td>Exceptions</td>
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CEOS OpenSearch Best Practice Document

Version 1.0 published
(May 29, 2015)

Version 1.0.1* published
(Jun 10, 2015)

* Change: Recommendation of startIndex over startPage (CEOS-BP-007)
Best Practice and Developer guide document

• Dev guide?
  • Originally developed by NASA
  • Proposal of making it a “CEOS document” at WGISS-39

• Now we have 2 documents: BP and Dev guide
  • Overlaps
    • Better to reorganize
      • Purpose, Target readers
      • Merger (where appropriate)

• Propose the dev guide discussion happening in the context of Best Practice document update (V2.0) in the new effort/project
Current OpenSearch Project closure

- Close the current OpenSearch project with the fulfillment of the project goal (publish BP v1.0)
Discussion for the new project

**Document** | **Focus**
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BP v1 | recommendations for interoperability (CEOS “standard flavor”)
BP v2 | Example:
  - Ranking / relevance score
  - Search results aggregation at client side
  - GeoJSON as an output encoding format
  - Recommended Schema.org itemtype/itemprop
  - Alignment with advanced technologies such as semantic web
  - New recommendations from NASA, ESA, CNES…
Dev guide | 

Relevancy in the context of CEOS, WGISS ?
Need project plan (goal) and lead!