Accessing Metadata with GCMD Interfaces

Keyword Management Service (KMS)
Metadata Web Service (MWS)

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11 slides
Now with more cache

Relational Database

GET, POST, HEAD (future)

Access Manager

RESTful API Layer (KMS & MWS)

Data API Layer

Relational Database

ESDIS Authentication DB

GCMD Authorization DB

GCMD Application Key DB

Future?
• Legacy Interfaces
  • Replaced OpenAPI
  • Should be binary compatible
  • OpenAPI around till summer 2013, let us know
• New Interfaces
• Internally Supports:
  • Document Builder
  • Bulk Uploader
<table>
<thead>
<tr>
<th>Language</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td>cURL</td>
<td>$(curl -u demo:friend &quot;<a href="http://gcmdservices.gsfc.nasa.gov/mws/">http://gcmdservices.gsfc.nasa.gov/mws/</a>&quot;))</td>
</tr>
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<td>Java</td>
<td><a href="http://gcmd.nasa.gov/Connect/clients/mws/SimpleJavaClient.java">http://gcmd.nasa.gov/Connect/clients/mws/SimpleJavaClient.java</a></td>
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<td>Objective-c</td>
<td>command line app objective-c in xcode</td>
</tr>
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• All New Interfaces
• SKOS Data Model
• Internally Supports:
  • Keyword Manager
  • /static/ views
SKOS - Simple Knowledge Organization System (See W3C)

```xml
<rdf:RDF xmlns:rdf="http://www.w3.org/1999/02/22-rdf-syntax-ns#"
    xmlns:skos="http://www.w3.org/2004/02/skos/core#"
    xmlns:owl="http://www.w3.org/2002/07/owl#"
    xml:base="http://gcmdservices.gsfc.nasa.gov/kms/concept/">

  • Only one broader relationship per concept, same scheme
  • Multiple narrower relationships, same scheme
  • Concepts have alt labels
  • Related concept relationships which cross schemes (maybe, future)

</rdf:RDF>
```
GET concepts root
GET concept
GET concepts by type (published, past_published)
GET concept full path
GET all concept versions
GET status (not listed in status)
GET concepts schemes
GET concepts by scheme
GET concepts by scheme and pattern
pre-cache (future)
Concept List in XML or RDF

Narrower Concept in XML or RDF

Full Path XML

Concept XML/RDF

Concept uuid

/concept/<uuid>

/concept_fullpaths/concept_uuid/<uuid>

/concept_scheme/

/scheme/

/concept_schemes

/concepts/root

/concepts/pattern/<pattern>

/concepts/concept_scheme/<scheme>

/concepts/concept_scheme/<scheme>/pattern/<pattern>

/scheme/

/scheme/

/Scheme List in XML

/concept scheme

/show/hide
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