DAL/Registry/GWS joint session "Service interface and metadata"

IVOA interop. meeting, Trieste, May 2008

VOSI: progress report

Guy Rixon

IVOA interop. meeting, Trieste, May 2008

VOSI 0.3

- Presented at Autumn Interop, 2007

- Covers:

  - Capability metadata

  - Availability

  - SOAP and REST bindings

- Discussed:

  - Refinements to availability

    - G. Rixon to propose new schema

  - Extension to cover table/catalogue metadata

    - No consensus on how to proceed

VOSI: progress report; IVOA interop, Trieste, 2008

Capability metadata: example

```
<cap:capabilities [...]>

  <capability standardID="ivo://org.astrogrid/std/Community/accounts">
    <interface xsi:type="vs:ParamHTTP" version="2" role="std">
      <accessURL use="base">https://casx019-zone2.ast.cam.ac.uk:443/community/accounts</accessURL>
    </interface>
  </capability>

  [...]

  <capability standardID="ivo://org.astrogrid/std/VOSI/v0.3#capabilities">
    <interface xsi:type="vs:ParamHTTP">
      <accessURL use="full">http://casx019-zone2.ast.cam.ac.uk/community/VOSI/capabilities</accessURL>
      <queryType>GET</queryType>
      <resultType>application/xml</resultType>
    </interface>
  </capability>

  <capability standardID="ivo://org.astrogrid/std/VOSI/v0.3#availability">
    <interface xsi:type="vs:ParamHTTP">
      <accessURL use="full">http://casx019-zone2.ast.cam.ac.uk/community/VOSI/availability</accessURL>
      <queryType>GET</queryType>
      <resultType>application/xml</resultType>
    </interface>
  </capability>

</cap:capabilities>
```

See http://casx019-zone2.ast.cam.ac.uk/community/VOSI/capabilities for full
example, unredacted.

VOSI 0.4

- Presented first at this Interop (see GWS wiki)

- Covers:

  - Capabilities

  - Availability (simplified)

- Loose ends:

  - Capabilities for VOSI endpoints?

  - XML schema for capabilities document?

  - Are the SOAP bindings redundant?

  - Should elements be default unqualified in schemata?

VOSI: progress report; IVOA interop, Trieste, 2008

Availability: v0.3 example

```
<a:availability [...]>

  <a:available>true</a:available>

  <a:upTime>PT360000S</a:upTime>

  <a:validTo>2008-05-22T20:00:00</a:validTo>

  <a:contact>
    <name>Huh? How do I know? I'm a service. Ask the registry.</name>
  </a:contact>

</a:availability>
```

Availability: v0.4 example

```
<a:availability [...]>

  <a:available>true</a:available>

  <a:upSince>2008-04-20T12:34:00</a:upSince>

  <a:downAt>2008-05-22T20:00:00</a:downAt>

  <a:backAt>2008-05-22T20:10:00</a:backAt>

  <a:note>
    Service will be down for a few minutes at 20:00 today.
    Upgrading to FuBar v1.23.
  </a:note>
  <a:note>
    Mail bofh@hades.org if this is a problem.
  </a:note>

</a:availability>
```

VOSI tables

- Describes table metadata associated with service

- Returns XML document

    – using elements from VODataService

- Can be transcribed into registration ("CatalogService")

- See, e.g.

    – http://casu.ast.cam.ac.uk/ag/iphas-dsa/IDR/vosi/tables

    – (That example limited to VODataService 1.0 elements)

    – (It's a real, production service!)

    – (This is how AstroGrid DSA/catalogue services work.)

Tables metadata: example

```
<t:table-structure [...]>

  <catalog>
    <name>IPHAS IDR</name>
    <schema>
      <table>
        ...
      </table>
      <table>
        ...
      </table>
      <function>
        ...
      </function>
      <join>
        ...
      </join>
    </schema>
  </catalog>

  <function>
    ...
  </function>

  <table>
    ...
  </table>

</t:table-structure>
```

Implementation report

- AstroGrid implemented VOSI 0.3 + extras:
    - capabilities publishing
    - availability monitoring
    - tables metadata using VODataService 1.0
    - REST binding only
- Capabilities: OK
- Tables endpoint: OK; needs VODataService 1.1
- Availability: only just starting to exploit it.

VOSI 0.5?

- Proposal to this session

- Plan A:
  - Keep capabilities, availability as per VOSI 0.4
  - Add standard for tables metadata
    - Use new VODataService 1.1

- Plan B (if can't agree on tables details)
  - Defer tables until VOSI 1.1
  - Do only capabilities, availability in VOSI 1.0