# 1. DataCollections in Use

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This is basically a call to support VODataService 1.1 DataCollections and VOResource relations in registry interfaces.

- Scenarios
- In VOResource
- The Plea

# 2. Scenario for DataCollections I

A SIAP service providing images of lensed quasars from multiple observatories.

I want

- one SIAP service to
  - keep all-VO searches feasible and to
  - provide one-stop shopping for the lensing community.
- *and* the metadata for each data collection (observatory, instrument, coverage, creator, etc) for
  - discoverability
  - provenance
  - satisfying the data provider's vanity

# 3. Scenario for DataCollections II

A TAP service giving access to many tables.

I want

- a single TAP service giving access to all data to
  - allow joins without large overhead
  - keep all-VO TAP searches (e.g., ObsTAP) feasible
- *and* records for all the individual tables in the registry (reasons see above).

# 4. ...in VOResource, data

The registred data:
```
<ri:Resource [...] xsi:type="vs1:DataCollection">
  <title>Apache Point observations of lensed quasars</title>
  [...] <content> [...]
    <relationship>
      <relationshipType>served-by</relationshipType>
      <relatedResource
        ivo-id="ivo://org.gavo.dc/lensunion/q/im"
        >Lens Image Archive</relatedResource>
      <relatedResource
        ivo-id="ivo://org.gavo.dc/__system__/tap/run"
          >GAVO Data Center TAP service</relatedResource>
    </relationship>
  </content>
```
Note how the data is exposed both using a customSSIAP/web service and throught ObsTAP.

# 5. ...in VOResource, service

```
<ri:Resource [...] xsi:type="vs:CatalogService">
  <title>Lens Image Archive</title>[...]
    <content>[...]
      <relationship>
        <relationshipType>service-for</relationshipType>
        <relatedResource
          ivo-id="ivo://org.gavo.dc/apo/res/apo/frames"
            >Apache Point observations of lensed quasars
        </relatedResource>
        <relatedResource
          ivo-id="ivo://org.gavo.dc/danish/red/data"
          >Danish Observatory Lens Images</relatedResource>
        [...]
      </relationship>
    </content>
```

# 6. So what?

- Correct me if I'm wrong
- Registries, registry clients: Please let people find DataCollections and the services for them
- Data providers: Users don't want to query hundreds of services if they can avoid it – so, services over collections are a nice trait whereever they make sense
- Should we recommend registering DataCollection for what's in ObsTAP services?

The VOR records documents were generated by the GAVO Data Center Helper Suite[1]'s OAI-PMH interface.

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[1] http://soft.g-vo.org/dachs