

TORUS implemented

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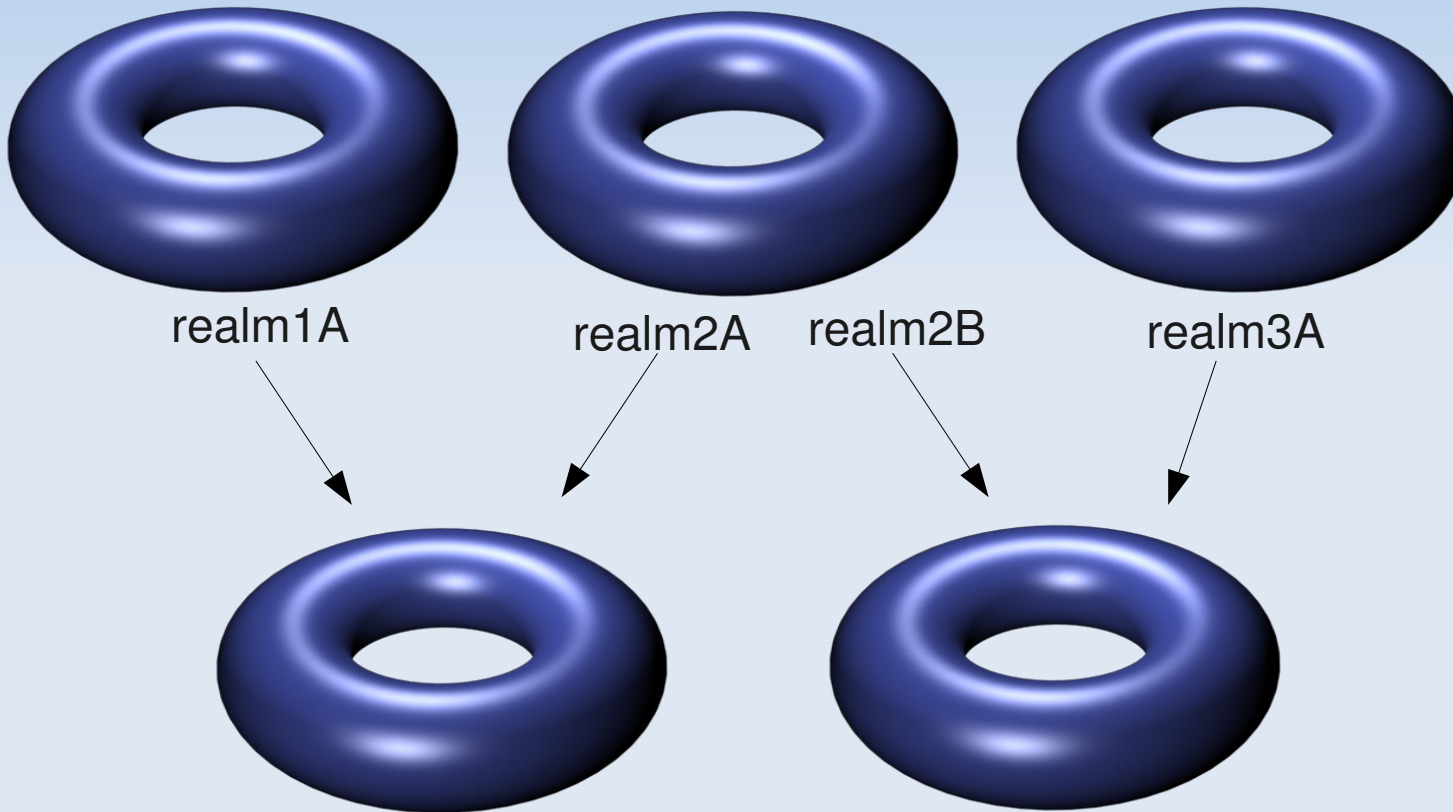
TORUS implemented

- May be viewed as a "platform/language independent, xml-based, single inheritance model"
- Represented as a file system structure:

```
torusId/  
  records/  
    |- world/  
    |- myrealm/
```

records ~ "overriding" symlinks

TORUSes are stackable



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- Makes it possible to represent hierarchical systems (organization>members>users) and alter/add data on each level of the hierarchy
- URI addressability - solution to overly complicated relational schemas - relations are expressed as direct links to records (one-to-one) or realms (one-to-many, many-to-many)

RESTful API

- Entities: record, layer, realm, property
- Listing records in a realm:
GET /records/realm/?layers=original,override&query={cql}
- Creating (overriding - worldId supplied) records:
POST record.xml /records/realm/
- Updating, Removing records from a realm:
PUT, DELETE ../records/realm/{rec_id}

Record profiles (interfaces)

- Torus records/layers are designed to be a generic data containers, there's nothing in the API that is bound to a specific record profile
- Describes a set of required/optional properties (fields) - "searchable" (IR target) profile, identity profile (user authentication)

Snippets of XML

Single record, final layer (after applying overrides)
response:

GET /records/auth-17/id27/?layers=final

```
<record type="searchable"
  uri="http://torus.org/records/auth-17/id27">
  <layer name="final">
    <id>auth-17/id-27</id> # internal id in the TORUS
    <zurl>z3950://loc.gov:210/voyager</zurl>
    <comment>Please ignore this comment</comment>
    <worldId>B.2</worldId> # identifies the 'parent' in the
                          # world list (internal id)
  </layer>
</record>
```