ASPECT
Vocabulary Bank for Education
&
Application Profile Registry
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Disclaimer

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VBE Overview

- Repository/Bank functions:
  - management
  - dissemination
- Content:
  - vocabularies
  - thesauri
  - controlled lists
  - Etc.
- Scope
  - content relevant to the Aspect project

User Interface

[Diagram of User Interface]
VBE Features

- Allows different organisations (authorities) to manage only their own data but to re-use and/or map to any other data
- Alerts interested parties and systems about changes to data
- Manages the lifecycle and history of vocabularies
- Provides multi-format, multi-lingual versions of vocabularies

Interfaces

- RESTful APIs
  - designed to allow remote systems and users to quickly and easily interact with the repository
  - search function accessed via a SOLR search API
- RSS alerts to most recent changes
- upload vocabularies directly via the user interface
- download vocabularies via the user interface or API
URL Structure (data)

- `<base>/linkeddata`
- `<base>/linkeddata.<format>`
- `<base>/linkeddata/<authority>`
- `<base>/linkeddata/<authority>/<identifier>`
- `<base>/linkeddata/<authority>/<identifier>/header`
- `<base>/linkeddata/<authority>/<identifier>/term/<identifier>`

Examples:
- http://aspect.vocman.com/vbe/linkeddata.vdex
- http://aspect.vocman.com/vbe/linkeddata/EUN/EUN.generalYesNoValues.skos
- http://aspect.vocman.com/vbe/linkeddata/NSDL/NSDL.resourceTypeValues/term/Answer%20Key/reason/BT

URL Structure (management)

- `<base>/linkeddata/<authority>/<identifier>/revisions`
- `<base>/linkeddata/<authority>/<identifier>/current`
- `<base>/linkeddata/<authority>/<identifier>/delta/<fr>/<to>`
- `<base>/linkeddata/repository/revision`

Examples:
- http://aspect.vocman.com/vbe/linkeddata/repository/revision
- http://aspect.vocman.com/vbe/linkeddata/EUN/EUN.generalYesNoValues/current
Using the API

• Two main scenarios:
  – Live in real time for each request
    • **Advantage**: Always retrieve the latest version and no management overhead on local system
    • **Disadvantage**: batch processing speeds, latencies and performance issues related to reliance on real time link
  – Create local copy and synchronise
    • **Advantage**: Always a local copy so no external dependency
    • **Disadvantage**: Need to manage the local copy and updates

Real time access

• Access the vocabulary ‘header’
• Access top terms/concepts
• Access individual terms
• **Reason** call for all broader terms

Note: All calls available for any historical revision
Synchronised local copy

- Check the whole repository to see if any changes
- Check individual vocabularies
- Get differences
- Download whole revision (or differences) in particular format

APR Overview

- Registry functions:
  - describe profiles
  - Compare profiles
  - link to definitive source (e.g. data model, schema)
- Content:
  - core standards (e.g. LOM)
  - profiles of core standards
- Scope
  - profiles relevant to the Aspect project
User Interface

APR Features

• user interface to allow profiles to be defined
• profiles inherit properties from parent (core standard or another profile) using ‘based on’
• registers details of authorities and namespaces
• provides mappings between profiles
• element vocabulary field links to VBE
API Overview

- `<base>/authority/list.json`
  get a list of authorities using JSON

- `<base>/authority/{id}/show.json`
  get an authority definition using JSON

- `<base>/element/list.json?max=X&offset=Y`
  get a list of upto X elements using JSON starting with the Yth element

- `<base>/element/{id}/show.json`
  get an element definition using JSON

- `<base>/mapping/generateMapping.json?sourceProfile={X}&targetProfile={Y}&_action.Generate+Mapping=Generate+Mapping`
  get a mapping definition from profile X to profile Y using JSON

- `<base>/profile/list.json`
  get a list of profiles using JSON

- `<base>/profile/{id}/show.json`
  get a profile definition using JSON

- `<base>/namespace/list.json`
  get a list of the namespaces using JSON

- `<base>/namespace/{id}/show.json`
  get a namespace definition using JSON

API Examples

- `http://apr.vocman.com/profile/list.json`
  a list of profiles

  definition of UK LOM Core

  generate mapping between the LRE and iCOPER profiles