



PCA Namespace

Namespace, SPARQL endpoint and Linked Data

Outline

- **Current scheme**
- **Problems**
- **Linked Data**
- **Proposal**
 - Namespace
 - Linked Data
 - Endpoint
 - Versioning
 - Partitioning

Current scheme

- **Ns (Namespace): <http://posccaesar.org/rdl/>**
- **Staging ns: <http://posccaesar.org/stg/>**
- **Endpoint: <http://posccaesar.org/endpoint/sparql?>**
- **Staging endpoint: <http://posccaesar.org/staging/sparql?>**

Problems (1/3)

- [http://posccaesar.org/rdl/name](http://posccaesar.org/rdl/<u>name</u>)
- name needs to be unique
- New approach with human readable names is difficult to implement

Problems (2/3)

- **When testing against staging, users need to change both endpoint and namespace!**
- **Production ns: <http://posccaesar.org/rdl/>**
- **Staging ns: <http://posccaesar.org/stg/>**

Problems (3/3)

- All partitions are on the same level
- <http://posccaesar.org/rdl/>
- <http://posccaesar.org/stg/>
- <http://posccaesar.org/endpoint/>
- Eventually we will run out of top level folders.

Linked Data

- **Important for ease of use**
 - More info at URL
 - Human browsing
- **No need to download entire library**
 - RDF available by HTTP accept header
- **Eg. <http://posccaesar.org/rdl/page/RDS327239>**

posccaesar.org/rdl/page/RDS327239 Reader
Apple Yahoo! Google Maps YouTube Wikipedia News Popular
SigTabAgendaMinutes20131029 - POSC Caesar - Trac PUMP | JORD

 POSC Caesar Association &  Fiatech™ PUMP

Showing resource with URI: <http://posccaesar.org/rdl/RDS327239>

PUMP

Equivalent RDS-WIP class ID

[R20735180747](#)

Types

[ClassOfInanimatePhysicalObject](#)

Property

[hasDesignation](#)

[hasStatus](#)

[hasCreator](#)

[hasDefinition](#)

[hasIdPCA](#)

[hasCreationDate](#)

[hasDesignationAbbrev](#)

Value

PUMP

Recorded

u20683

A physical object that is a driven piece of equipment in which energy is either constantly or periodically added to an amount of pumped liquid in order to increase the pressure required for the process in which the pump is in operation.

RDS327239

2006.08.11

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Superclasses

[ARTEFACT](#)

[PHYSICAL OBJECT](#)

Subclasses

[BILGE PUMP](#)

[PORTABLE PUMP](#)

[COOLING PUMP](#)

[DISTILLATE PUMP](#)

[SPRAY POND PUMP](#)

[BOREHOLE PUMP](#)

[FLUSHING PUMP](#)

[BOREHOLE FLUSHING PUMP](#)

[LUBRICATING PUMP](#)

[CAST IRON PUMP](#)

[PAPER STOCK PUMP](#)

[REFRIGERANT PUMP](#)

[BOILER FEED WATER PUMP](#)

Namespace proposal

- **Single location for all namespaces**
- **<http://data.poscaesar.org/>**
- **Example**
 - <http://data.posccaesar.org/rdl/core/pump>
 - <http://data.posccaesar.org/templates/core/registration>

Linked Data

- **Linked data should be available at URI of resource. Special handling for staging and sandboxes**
- **URI: <http://data.posccaesar.org/rdl/pump>**
 - Regular Linked Data: <http://data.posccaesar.org/rdl/pump>
 - Staging Linked Data: <http://staging.data.posccaesar.org/rdl/pump>
 - Both use same uri, and both endpoints use the same namespaces.
 - For query results displayed with XSLT, the href attribute will be altered to the corresponding linked data page.

Endpoint

- **Endpoints and linked data use the same design principle.**
- **Example:**
 - URI: <http://data.posccaesar.org/rdl/core/pump>
 - Production endpoint: <http://data.posccaesar.org/>
 - Staging endpoint: <http://staging.data.posccaesar.org/>
 - Staging linked data: <http://staging.data.posccaesar.org/rdl/core/pump>
- **Also great for hosting on different computers**
 - <http://backup-europe.data.posccaesar.org/rdl/>

Endpoint

- **Query only partition:**

- <http://data.posccaesar.org/> entire library
- <http://data.posccaesar.org/rdl/> only rdl
- <http://data.posccaesar.org/templates/> only templates

- **Download files**

- Entire library: <http://data.posccaesar.org/>
- Only templates: <http://data.posccaesar.org/templates/>

Versioning

- **<http://data.posccaesar.org/rdl/2013/01/01/pump>**
 - This is recommended
- **<http://data.posccaesar.org/2013/01/01/rdl/pump>**
 - Good for handling namespace changes
- **Works because there are no RDF resources starting with a number**
- **Alternative**
 - <http://01.01.2013.data.poscaesar.org/rdl/pump>
 - <http://01-01-2013.data.poscaesar.org/rdl/pump>

Partitioning (1/3)

- **Difficult in general**
- **Possible to partition like P4**
 - <http://data.posccaesar.org/rdl/electrical/>
 - <http://data.posccaesar.org/rdl/piping/>
- **But what about Electrical Pump?**
- **Duplicates and use of owl:sameAs is a poor plan**

Partitioning (2/3)

- **Partition into obvious groups**
 - <http://data.posccaesar.org/p4/>
 - <http://data.posccaesar.org/templates/>
 - <http://data.posccaesar.org/rdl/>

- **This is a recommendation**

Partitioning (3/3)

- **Making main namespaces partitionable in the future**
- **<http://data.posccaesar.org/rdl/core/>**
- **<http://data.posccaesar.org/templates/core/>**
- **This is the recommendation**

Other Ways to Partition (not recommended)

- **Partition by class and property and individual**
 - <http://data.posccaesar.org/rdl/classes/>
 - <http://data.posccaesar.org/rdl/properties/object/>
 - <http://data.posccaesar.org/rdl/properties/literal/>
 - <http://data.posccaesar.org/rdl/individuals/>
- **Unclear when using punning**
- **Not recommended**

Available to others

- **Namespaces:**

- Classes: <http://data.posccaesar.org/rdl/core/>
- Templates: <http://data.posccaesar.org/templates/core/>

- **Endpoint:**

- <http://yourSandboxName.data.posccaesar.org/>

- **Linked data:**

- Eg. <http://yourSandboxName.data.posccaesar.org/templates/core/yourTemplate1>

Questions?