Development and QA, TBL

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Available Web Services

EDG exposes common operations as public for use in Web Services, such as

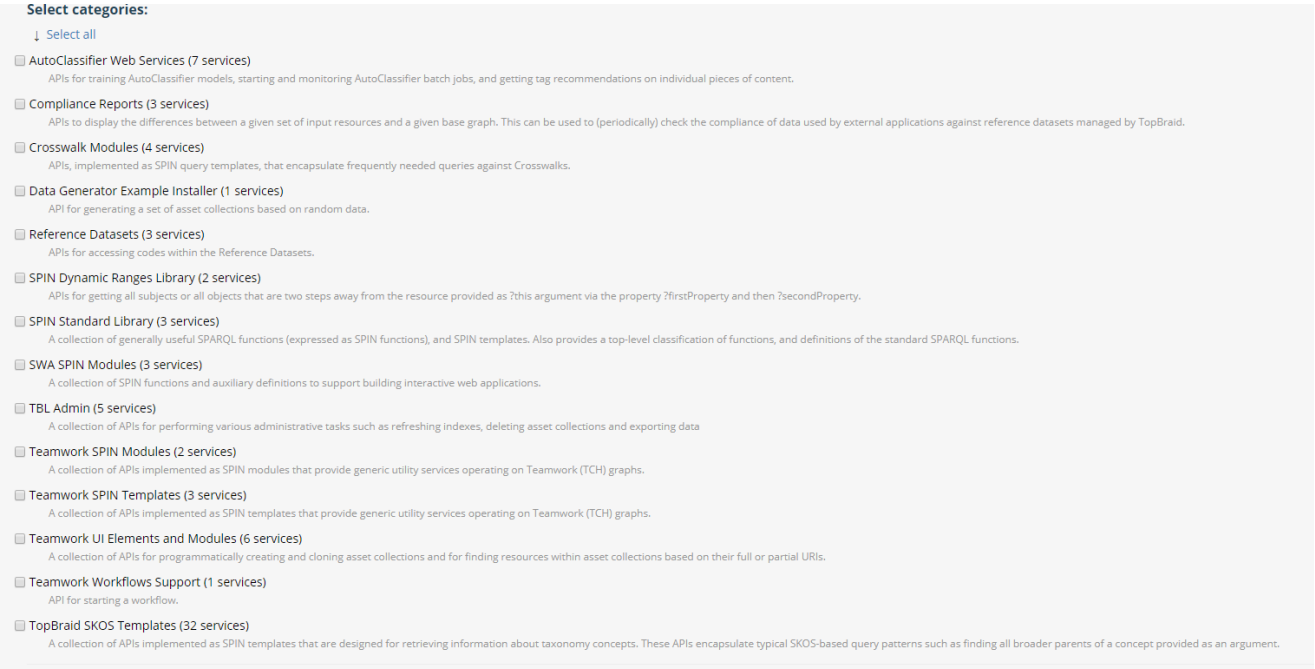
- SPIN Templates from .spin. files
- SPARQLMotion scripts from .sms. files
- SWP Services from .ui. files.

CRUD operation are also exposed through SPARQL endpoint which can be called via a REST API. TopBraid also includes support for GraphQL services and mutations since version 6.0. This support is limited to RDF data that is under control of the TopBraid EDG (teamwork) framework, and in particular to only certain asset collections (which can be recognized by their GraphQL link on the Export tab). Find out more here https://www.topquadrant.com/technology/graphql/

Using the provided IDE, TopBraid Composer, additional template web services can be developed if needed. For more information on Web Services with TopBraid see http://www.topquadrant.com/2015/07/24/web-services-and-topquadrant-products/ and http://www.topquadrant.com/2013/07/01/creating-web-services-with-the-topbraid-platform/. TopBraid includes a facility for auto-generating API documentation. This means that any API that has been developed and deployed is automatically fully documented when marked as public. This includes pre-built TopQuadrant provided APIs as well as any customer developed APIs.

Authentication applied to EDG will also apply to the web service call. Please see Server Installation and Integration#WebServiceAuthentication for more information.

Selecting the Available Web Services displays a page that lists web services available on this server. Selecting the checkbox next to any of these names displays documentation below the list about how to call that web service.



AutoClassifier Web Services

APIs for training AutoClassifier models, starting and monitoring AutoClassifier batch jobs, and getting tag recommendations on individual pieces of content.

Graph URI: `http://evn.topbraidlive.org/tagger/autoclassifier-services`

acsrv:AutoClassifyContent (ui:Service)

A service that runs the AutoClassifier on a snippet of content provided in the service call. Delivers results in JSON. The _base parameter is ignored.

Each recommended concept has the following fields:

- concept: The concept's URI
- label: The concept's label (literal with the configuration's language settings; only available if a vocabulary graph can be established)
- probability: The concept's probability (0..1)

Arguments

autotagger:configuration (rdfs:Resource): The AutoClassifier configuration resource (often a content tag set resource), a resource in the configuration graph described with tagger:xxx properties
arg:configurationGraph (rdfs:Resource): [Optional] Graph containing the configuration resource. If unspecified, assume that the configuration resource itself is a named graph containing its own description.
arg:text (xsd:string): The text to auto-classify
autotagger:trainingID (xsd:string): [Optional] The ID of a training result (see StartTraining servicde) to be employed by the AutoClassifier; if not specified, use the URI of the configuration resource
autotagger:vocabularyGraph (rdfs:Resource): [Optional] Named graph of the concept vocabulary; will be used to retrieve labels for recommended concepts. Defaults to tagger:objectGraph of configuration resource.

Service Syntax

```
http://.../swp?
_viewClass=acsrv:AutoClassifyContent&_base=...&configuration=...&configurationGraph=...&text=...&trainingID=...&vocabularyGraph=...
```

Service Body (Prototype)

```
<acsrv:AutoClassifyImpl ui:args="*"/>
```

For template services, the following values can either be supplied in the HTTP request's Accept header or as the value of the _format argument:

Response type	Format name	Arguments accepted
application/sparql-results+xml	SPARQL XML Results	xml
application/sparql-results+json	SPARQL JSON Results	json
application/sparql-results+json-simple	Simple JSON Format	json-simple
text/csv	Comma separated values	csv

text/tab-separated-values	Tab separated values	tsv
application/rdf+xml	RDF/XML	application/rdf+xml
text/turtle	Turtle	text/turtle

If you do not explicitly specify the response type, defaults will be used. The default serialization of SELECT result sets is JSON, following the SPARQL protocol. When you call a service from a web browser's address bar, the mime type will typically be requested as something that includes the string "xml", and in this case it will produce SPARQL XML Results. CONSTRUCT queries are returned in Turtle format by default.

The value of the _base argument can be a full graph URI or a short graph name. To define short graph names, go to the Server Administration -> Server Configuration Parameters page. In the section named "URI Parameters" define an instance of "Short graph names".

To call a saved SPARQL query outside the EDG application, navigate to the Export tab -> Export using Saved SPARQL Query and copy the Service URL.

Run all DASH Test Cases

TBL can run unit tests defined as instances of `dash:TestCase`. Typically, such test cases are created with *TopBraid Composer*, which has a menu item for creating new test case files. See http://datashapes.org/testcases.html for details.