Excellence Gateway Read API

The Excellence Gateway Read API provides a simple, REST-like way to access the resources on the Excellence Gateway. It provides metadata about each resource and search functionality to discover relevant resources.

General concepts

The Excellence Gateway is a repository of resources. These are categorized according to several controlled vocabularies of terms. Resources are either documents that can be downloaded, or small self-contained online resources that can be accessed via a web browsed. Documents are described by a set of metadata, and searches against content and against metadata are available using a standard SOLR search URL syntax.

The design of the read API is REST-like, so the sections following describe the entity types that can be accessed, and the syntax of the URLs for their discovery.

Entity types

Content resources

Description

Content resources are either downloadable documents or landing pages for small, self-contained, online resources. As such, they can be of many different media types, but all of them should be suitable for direct browsing by users.

Discovery

Discovery of content resources is by a SOLR-based search. The documentation for SOLR can be found here:

http://lucene.apache.org/solr/documentation.html

To use the Excellence Gateway SOLR search, you should send a GET request to the following URL:

```
GET /resources?mode=solr&...
```

After the first parameter, you may include all the parameters for a standard SOLR search. The common search parameters described in the SOLR reference are all accepted along with those for a DisMax query parser.

The results will be in the XML format described in the SOLR reference guide. See the SOLR schema section for details on the fields in the Excellence Gateway index. In particular the url and metadata-url fields are the locations of the resource and its metadata.

Example request

```
GET /resources?mode=solr&q=esol 16-18&fq=EGresourcetype:("Research study") AND
 EGsupportservices:("Skills for Life support")&fl=title,description,moddate,url&
 start=0&sort=score desc&qf=title^2 description^1.5 content^1&pf=title^2
 description^1.5 content^1&q.alt=*:*&ps=1&rows=10
```

The above query is a text search for the term "ESOL 16-18" with faceted search restrictions on resource type and service area. The requested fields are title, description, modification date, and URL. The results are sorted by relevance and limited to 10 items per page. In calculating the relevance score, some weightings are given to particular fields and similarly to whole phrase matches within those fields.

Example response

```
<?xml version="1.0" encoding="UTF-8"?>
<response>
<lst name="responseHeader">
    <int name="status">0</int>
    <int name="QTime">1</int>
    <lst name="params">
       <str name="q">esol</str>
       ...
    </lst>
</lst>

<result name="response" numFound="4" start="0">

    <doc>
       <str name="description">This starter kit provides support and guidance,
        information and resources for developing and delivering ESOL (English for
        speakers of other languages). It includes the development of blended
        learning approaches.</str>
       <date name="moddate">2012-05-23T10:54:13Z</date>
       <str name="title">ESOL Starter Kit</str>
       <str name="url">http://repository.excellencegateway.org.uk/...</str>
       ...
    </doc>
```

```
<doc>
...
```

Search Suggestion

Description

If you are implementing a search page for users the read api provides support for search suggestions. The api is designed to be usable by a tool such as jQuery autocomplete. The search suggestions are based on the resource title.

Example request

```
GET /searchsuggest?q=edu&callback=myCallback&rows=6
```

If you require facet restrictions then these can be supplied with something like:

```
GET /searchsuggest?q=edu&callback=myCallback&rows=6
 &EGgeogcoverage=["East+of+England"+"South+West"]
 &EGservices=["Best+practice"]
```

However, if you do supply facet restrictions you will have to take responsibility for ensuring consistency across the restrictions passed to the search suggestion, the final search and any user interface elements on the page. How you do this will depend upon the design of your search page.

Example response

```
myCallback({"results":["education","educational","education:","educator",
 "educ","educaplay","educare","education)"]})
```

Metadata

Description

The metadata stored about each content resource can be obtained as an XML document.

Example response

```
<record>
   <general>
      <title>Janet</title>
      <languages>
```

```xml
                <language>en-gb</language>
            </languages>
            <description>
                Janet is a world-leading network that was established over 25 years ago
                 to service the requirements of the research and education sectors in the
                 UK. The Janet network connects over 18 million end users in
                 universities, colleges of higher and further education, research
                 councils, schools and museums who collectively form the Janet community.
                 We have developed the network to enable the community to connect,
                 collaborate and provide innovative ways to support teaching and
                 learning.
            </description>
        </general>
        <lifecycle>
            <version>1</version>
            <status>final</status>
            <contributions>
                <contribution>
                    <role>author</role>
                    <entity>John Smith</entity>
                </contribution>
            </contributions>
        </lifecycle>
        <meta-metadata>
            <identifier>
            <catalog>metadata-internal</catalog>
            <entry>249283</entry>
            </identifier>
            <contributions>
                <contribution>
                    <role>creator</role>
                    <entity>John Smith</entity>
                    <date>2011-11-07</date>
                </contribution>
            </contributions>
            <metadata-schema>http://www.qia.org.uk/schemes/EG1_0</metadata-schema>
            <metadata-language>en-gb</metadata-language>
        </meta-metadata>
        <technical>
            <location>http://repository.excellencegateway.org.uk/...</location>
        </technical>
        <rights>
            <has-cost>no</has-cost>
            <has-use-restrictions>yes</has-use-restrictions>
            <use-restrictions/>
            <copyright-location/>
        </rights>
        <classification>
            <taxon-path>
            <source>EGaudience</source>
            <taxon>
            <id>020100</id>
            <entry>Practitioners</entry>
            </taxon>
            <taxon>
```

```xml
            <id>020097</id>
            <entry>Managers</entry>
            </taxon>
            </taxon-path>
            <taxon-path>
            <source>EGgeogcoverage</source>
            <taxon>
            <id>020004</id>
            <entry>UK-wide</entry>
            </taxon>
            </taxon-path>
            <taxon-path>
            <source>EGinfoarch2011</source>
            <taxon>
            <id>020108</id>
            <entry>Support for improvement</entry>
            </taxon>
            </taxon-path>
        </classification>
</record>
```

Field name	Type	Description
general/title	String	The title of the resource
general/languages/language	String	A language this resource is available in
general/description	String	A short description of the resource
lifecycle/version	Number	A version number for the resource
lifecycle/status	String	The status of the resource. Either 'draft' or 'final'
lifecycle/contributions/contribution/role	String	A type of contribution, 'author', 'publisher' etc.
lifecycle/contributions/contribution/entity	String	The person or entity responsible for the contribution
technical/location	String	A URL from which the resource can be fetched
technical/size	Number	For downloadable documents, the size of the file in bytes
technical/filename	String	For downloadable documents, the original file name

rights/has-cost	Boolean	False when the resource is free to use, true otherwise
rights/has-use-restrictions	Boolean	True when restrictions exist on the use of the resource, false otherwise
rights/use-restrictions	String	A description of the restrictions on use
rights/copyright-location	String	A URL from which copyright details can be fetched
rights/copyright-location	String	A URL from which copyright details can be fetched
classifications/taxon-path/source	String	The identifier for a vocabulary from which all taxon tags within this taxon-path are drawn.
classifications/taxon-path/taxon/id	String	The identifier for a taxonomic term that has been applied to this resource.
classifications/taxon-path/taxon/entry	String	The name of the taxonomic term that has been applied.

Discovery

Discovery of metadata is also via SOLR-based search. Use the approach described in the content resources discovery section above.

Vocabulary

Description

The content of the Excellence Gateway is organized by a set of controlled vocabularies. These can be obtained via the read API.

Example response

```
<vocab id="EGssa">
   <term id="5" name="Construction, Planning and the Built Environment">
      <term id="5.1" name="Architecture"/>
      <term id="5.2" name="Building and Construction"/>
      <term id="5.3" name="Urban, Rural and Regional Planning"/>
   </term>
   <term id="13" name="Education and Training">
      <term id="13.2" name="Direct Learning Support"/>
      <term id="13.1" name="Teaching and Lecturing"/>
```

```
        </term>
    <term id="9" name="Arts, Media and Publishing">
        <term id="9.2" name="Crafts, Creative Arts and Design"/>
        <term id="9.3" name="Media and Communication"/>
        <term id="9.1" name="Performing Arts"/>
        <term id="9.4" name="Publishing and Information Services"/>
    </term>
</vocab>
```

Discovery

A list of current vocabularies can be found by sending a GET request to:

```
GET /vocabularies
```

Example response

```
<ArrayOfstring xmlns:i="http://www.w3.org/2001/XMLSchema-instance"
 xmlns="http://schemas.microsoft.com/2003/10/Serialization/Arrays">
    <string>http://api.excellencegateway.org.uk/vocabularies/EGcoverage</string>
    <string>http://api.excellencegateway.org.uk/vocabularies/EGregions</string>
</ArrayOfstring>
```

SOLR schema

The SOLR index for the Excellence Gateway contains the following fields of interest:

Field name	Type	Description
url	String	The URL of the content resource. It can be assumed that users may browse directly to this URL
metadata-url	String	The URL from which the metadata for this resource may be retrieved
pid	String	A unique identifier for the resource
title	Text	The title of the resource
description	Text	A short description of the resource
moddate	Date	The last modification date of the resource

create-date	Date	The creation date of the resource
[taxonomic fields]	Multi-string	One field per indexed vocabulary. The field name matches the name of the vocabulary and contains the term identifier for each term within the vocabulary that this resource was tagged with
archived	Boolean	When true, this resource is archived and may be outdated
filesize	Number	For downloadable documents, the size of the file in bytes
filename	String	For downloadable documents, the original file name