

New Features and Enhancements in Documentum REST Services 7.2

It has been one year since EMC released Documentum Platform REST Services 7.1 for enterprise Single Sign-On enhancements. Now with the release of [Documentum Platform 7.2 GA](#), we are excited to tell you about the new features and enhancements in Documentum Platform REST Services 7.2.

What's New

Full-text Search Resource

Till version 7.1, users use the DQL Query resource to execute the meta data search of objects. The full-text search clause can also be put into a DQL query expression but the DQL result does not give users well experience for the enterprise search characteristics. Starting from release 7.2, users can leverage the newly added Search resource to perform full-text searches on a repository by using the simple search language and URI parameters. Moreover, the Search resource supports a number of useful search options, like search by locations, search by types, and search by facets, etc.

Here is a simple sample of the Search resource. From the Repository resource, a new link relation '<http://identifiers.emc.com/linkrel/search>' can be found in the link collection.

```
{
  id: 1,
  name: "REPO",
  description: "",
  - servers: [
    - {
      name: "REPO",
      host: "contentserver72",
      version: "7.2.0000.0106 Win64.SQLServer",
      docbroker: "contentserver72"
    }
  ],
  - links: [
    + {...},
    - {
      rel: "http://identifiers.emc.com/linkrel/search",
      hreftemplate: "http://localhost:8080/dctm-rest/repositories/REPO/search.json{?collections,facet,include-total,inline,items-per-page,locations,object-type,page,q,sort,timezone,view}"
    },
    + {...}
  ]
}
```

Following the URI template of this link relation, users can perform a full-text search to the Search resource. Below is the sample of the search for the phrase "*EMC World*".

```

{
  id: "http://localhost:8080/dctm-rest/repositories/REPO/search",
  + author: [...],
  updated: "2015-02-10T04:48:01.787+00:00",
  page: 1,
  items-per-page: 100,
  + links: [...],
  - entries: [
    - {
      id: "0900000180010d2a",
      title: "MMTM 2014 Session Report.pdf",
      - author: [
        - {
          name: "dmadmin"
        }
      ],
      summary: "Baldwin 15 Category Tech Talk EMC World 2014 Session Summary... Kazeon Implementation Case Study 21/05/2014 EMC World 2014... Rotterdam EMC World 2014 Session Attendance Results - By ID #22 0... Roadmap EMC Randy Hodge 51 EMC World 2014 Session Attendance",
      updated: "2015-02-10T04:43:45.000+00:00",
      - links: [
        - {
          rel: "edit",
          href: "http://localhost:8080/dctm-rest/repositories/REPO/objects/0900000180010d2a.json"
        }
      ],
      - content: {
        type: "application/json",
        src: "http://localhost:8080/dctm-rest/repositories/REPO/objects/0900000180010d2a.json"
      },
      score: "1.0",
      - terms: [
        "emc",
        "EMC",
        "World",
        "world"
      ]
    }
  ],
},

```

Batches Resource

The Batches resource in Documentum REST Services is a batching framework to execute a number of Documentum REST resource operations in one HTTP request. It is a new feature totally different with Content Server job or DFC batch. This resource provides a set

of batch options such as transactional, sequential, and so on for the batch execution. Furthermore, Documentum REST Services provides the Batch Capabilities resource for users to check the list of resources that are batchable at runtime.

Here is a simple sample of the Batches resource. From the Repository resource, a new link relation '<http://identifiers.emc.com/linkrel/batches>' can be found in the link collection. Besides, there is another link relation '<http://identifiers.emc.com/linkrel/batch-capabilities>' in the same link collection, pointing to the Batch Capabilities resource.

```
{
  id: 1,
  name: "REPO",
  description: "",
  - servers: [
    - {
      name: "REPO",
      host: "contentserver72",
      version: "7.2.0000.0106 Win64.SQLServer",
      docbroker: "contentserver72"
    }
  ],
  - links: [
    + {...},
    - {
      rel: "http://identifiers.emc.com/linkrel/batches",
      href: "http://localhost:8080/dctm-rest/repositories/REPO/batches.json"
    },
    - {
      rel: "http://identifiers.emc.com/linkrel/batch-capabilities",
      href: "http://localhost:8080/dctm-rest/repositories/REPO/batch-capabilities.json"
    }
  ]
}
```


Users can then POST a batch request to the Batches resource URI, in which multiple batch operations can be specified.

http://localhost:8080/dctm-rest/repositories/REPO/batches.json POST

form-data x-www-form-urlencoded raw JSON

```
1 {
2   "transactional": true,
3   "sequential": false,
4   "on-error": "CONTINUE",
5   "return-request": false,
6   "operations": [
7     {
8       "id": "request 001",
9       "description": "Create a document",
10      "request": {
11        "method": "POST",
12        "uri": "http://localhost:8080/dctm-rest/repositories/REPO/folders/0c0000018000156c/documents",
13        "headers": [{"name": "Content-Type", "value": "application/vnd.emc.documentum+json"}],
14        "entity": "{\"properties\":{\"object_name\": \"IIG Raw Report.xls\"}}"
15      }
16    },
17    {
18      "id": "request 002",
19      "description": "Create a folder",
20      "request": {
21        "method": "POST",
22        "uri": "http://localhost:8080/dctm-rest/repositories/REPO/folders/0c0000018000156c/folders",
23        "headers": [{"name": "Content-Type", "value": "application/vnd.emc.documentum+json"}],
24        "entity": "{\"properties\":{\"object_name\": \"EMC World 2015\"}}"
25      }
26    }
27  ]
28 }
29
30 }
```

The Batch resource response returns the batch state and individual operation results.

Body Headers (4) STATUS 201 Created TIME 189 ms

Pretty Raw Preview JSON XML

```

1 {
2   "transactional": true,
3   "sequential": false,
4   "on-error": "CONTINUE",
5   "return-request": false,
6   "state": "FINISHED",
7   "submitted": "2015-02-10T09:47:01.544+00:00",
8   "started": "2015-02-10T09:47:01.544+00:00",
9   "finished": "2015-02-10T09:47:01.670+00:00",
10  "owner": "dmadmin",
11  "operations": [
12    {
13      "id": "request 001",
14      "description": "Create a document",
15      "state": "FINISHED",
16      "started": "2015-02-10T09:47:01.544+00:00",
17      "finished": "2015-02-10T09:47:01.618+00:00",
18      "response": {
19        "status": 201,
20        "headers": [
21          {
22            "name": "Location",
23            "value": "http://localhost:8080/dctm-rest/repositories/REPO/documents/0900000180010d2d.json"
24          },
25          {
26            "name": "Content-Type",
27            "value": "application/vnd.emc.documentum+json;charset=UTF-8"
28          }
29        ],
30        "entity": "{\n\"name\": \"document\", \"type\": \"dm_document\", \"definition\": \"http://localhost:8080/dctm-rest/repositories/REPO/types/dm_document.json\", \"properties\": {\n\"object_name\": \"IIIG Raw Report.xls\", \"r_object_type\": \"dm_document\", \"title\": \"\", \"subject\": \"\", \"authors\": null, \"keywords\": null, \"a_status\": \"\", \"r_creation_date\": \"2015-02-10T09:47:00.000+00:00\", \"r_modify_date\": \"2015-02-10T09:47:00.000+00:00\", \"r_modifier\": \"dmadmin\", \"r_access_date\": null, \"a_is_hidden\": false, \"i_is_deleted\": false, \"a_archive\": false, \"a_compound_architecture\": \"\", \"a_link_resolved\": false, \"i_reference_cnt\": 1, \"i_has_fc"

```

Extensibility For New Resource Development

Besides the out-of-the-box resources, Documentum REST Services 7.2 provides a SDK for users to develop custom resources. The SDK contains the development libraries, toolkits, and code samples enabling users to create custom resources in an easy and efficient way. The is a key differentia that transforms Documentum REST Services from a single set of out-of-the-box resources to be an extensible REST services development framework.

Major Enhancements

Documentum REST Services 7.2 has a lot of enhancements with regard to functionalities and performance improvements. Below are a part of important changes.

Enhancement in The DQL Query Resource

To facilitate content consumption, Documentum REST Services 7.2 generates link relations, including edit link and thumbnail link, in DQL results.

Enabling Full-Text Search in Collection Filters

On collection resources that support the filter parameter *q*, a client application now is able to filter the result of a collection resource with new full-text search criteria.

Enabling Ticketed Sign-On for Documentum Inline Users

A new authentication scheme for Documentum inline users is available which provides the ticket based sign-on with Documentum Client Token cookies.

Please stay tuned for more feature introduction and tutorials for specific features. Further reading: [Documentum Platform REST Services 7.2 Release Notes](#).

[Learn more about Documentum REST Services >>](#)