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Develop

This section provides information related to ways to customize content in DCA. DCA provides the following options to customize content:

- [Application program interface](#)
- [Customize workflows and templates](#)

Application program interface

Application program interface (API) is a set of functions and procedures that allow the creation and customization of applications which access the features or data of an application. An API specifies how multiple software components interact with each other.

DCA supports Representational state transfer (REST) API architecture. Solution developers can use DCA APIs to develop applications that can communicate with DCA over HTTP or HTTPS and parse the data structures returned. Authentication to the API server is handled using X-Auth protocols. The HPE Identity Driven Manager (IDM) server functions as an authentication server and uses port 5443 for communication. Upon request, the IDM server returns an Auth token that is then supplied in the header of the requests to the DCA API server. The API server validates the token with the IDM server and returns the requested data. The Auth token expires after 30 minutes of creation and a new token must be obtained to prevent subsequent requests from failing.

The DCA API server uses HTTPS port 33444 for communication. For POST, PUT, and PATCH requests, in addition to the Auth token, you must also include `Content-Type: application/json` in the HTTPS headers. The API response is returned in JSON format.

See [API reference](#) for a list of all the APIs that DCA offers. See [native APIs](#) for a list of native APIs provided by DCA.

Customize workflows and templates

DCA provides an ability to customize the out-of-the-box templates and workflows to suit your data center requirements. For example, if you have to update a template to include a new patch for an application, update the patch ID for that application in the template. You then load this updated template in DCA for deploying on resources. DCA allows you to edit a workflow and create a new content pack in Operations Orchestration (OO) Studio and then import the updated content pack into the template. DCA also provides an option to modify steps in the workflow according to your requirements. To modify the steps, edit the code files located under the `/dcafileshare` path of the DCA host server.

See [Customize content](#) for more information on customizing workflows and templates.

API reference

Communication and authentication

DCA supports Representational state transfer (REST) API architecture. Solution developers can use DCA APIs to develop applications that can communicate with DCA over HTTP or HTTPS and parse the data structures returned. Authentication to the API server is handled using X-Auth protocols. The HPE Identity Driven Manager (IDM) server functions as an authentication server and uses port 5443 for communication. Upon request, the IDM server returns an Auth token that is then supplied in the header of the requests to the DCA API server. The

API server validates the token with the IDM server and returns the requested data. The Auth token expires after 30 minutes of creation and a new token must be obtained to prevent subsequent requests from failing.

The DCA API server uses HTTPS port 33444 for communication. For POST, PUT, and PATCH requests, in addition to the Auth token, you must also include Content-Type: application/json in the HTTPS headers. The API response is returned in JSON format.

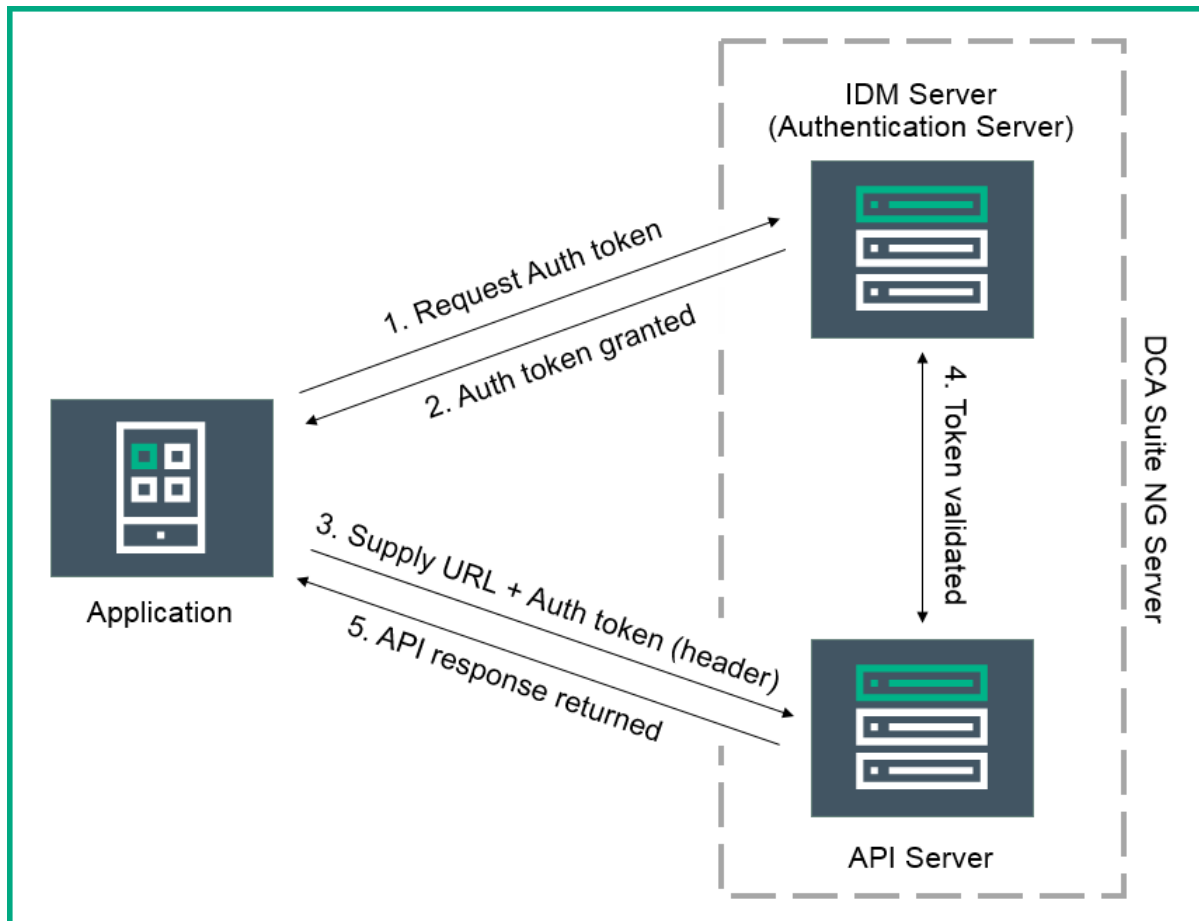
The URL structure for the DCA REST APIs is as follows:

```
https://<host>:<port>/urest/v1/<resource_name>
```

For example:

```
https://10.0.0.0:33444/urest/v1/deployment
```

The following diagram describes the communication and authentication workflow:



Obtain an Auth token

The default passwords are stored in [DCA Premium 2017.05 Password Management](#) document on the HPE Software support website (<https://softwaresupport.hpe.com/>).

To obtain an Auth token, send a request to the IDM server with the following information:

URL	<code>https://<host>:5443/idm-service/v2.0/tokens</code>
Method	POST
Header	<p>Authorization: Basic <base64 encoded IDM credentials> Content-Type: application/json</p> <div style="border: 1px solid #f0e68c; padding: 10px; margin-top: 10px;"> <p>⚠ Note</p> <p>You can also use the default <username> : <password> for IDM service instead of the base64 encoded form .</p> </div>
Body	<pre> {"passwordCredentials": {"username": "<DCA_USER>", "password": "<DCA_USER_PASSWORD>"}, "tenantName": "PROVIDER"} </pre> <div style="border: 1px solid #f0e68c; padding: 10px; margin-top: 10px;"> <p>⚠ For authentication using LDAP, provide the valid LDAP user credentials as follows:</p> <pre> {"passwordCredentials": {"username": "<LDAP_USER>", "password": "<LDAP_USER_PASSWORD>"}, "tenantName": "PROVIDER"} </pre> </div>

The IDM server returns an Auth token.

Make REST requests to the API server

To make REST requests to the API server, supply the Auth token in the header of subsequent requests.

For example, to view the list of deployments, send a request with the following information:

URI	<code>https://<host>:33444/urest/v1/deployment</code>
Method	GET

benchmark API	<ul style="list-style-type: none"> • View all benchmarks • Create a benchmark • View benchmark details by ID • Update benchmark details by ID • Delete benchmark by ID • View benchmark details by ID and revision • Update benchmark details by ID and revision • View top-level requirements of a benchmark • Create a requirement for a benchmark • View the requirement tree for a benchmark • Update the requirement tree for a benchmark • Create a benchmark revision by ID • Submit a benchmark by ID and revision
benchmark_type API	<ul style="list-style-type: none"> • View all benchmark types • View benchmark type details by ID • Create a benchmark type • Delete a benchmark type by ID • Update a benchmark type by ID
compliance_detail API	View compliance details
control API	<ul style="list-style-type: none"> • View all controls • View control by ID • View scripts by control ID
credential API	<ul style="list-style-type: none"> • View all credentials • Create a credential • Delete a credential by ID • Update a credential by ID • Update credential data by ID
dashboardmetrics API	View dashboard metrics
deployment API	<ul style="list-style-type: none"> • View all deployments • Deploy a template • View deployment details by ID • View deployment jobs by ID • Associate a tag with a deployment • Disassociate a tag from a deployment • Initialize deployment compliance • Start a remediation job • Start a scan job

scheduler API	<ul style="list-style-type: none"> • View all jobs • View job details by ID • Create a job in the scheduler
logout-sessions API	Log out of active session
requirement API	<ul style="list-style-type: none"> • View all requirements • View requirement details by ID • Update a requirement by ID • View requirement rules • View sub-requirements of a requirement • Create a sub-requirement
resource API	<ul style="list-style-type: none"> • View all resources • View resource details by ID • Add a credential to a resource • View resource compliance details • View resource credentials • Update resource credentials • Discover application resources
resourcetype API	<ul style="list-style-type: none"> • View all resource types • View resource type details by ID • Associate a tag with a resource type • Disassociate a tag from a resource type
rule API	<ul style="list-style-type: none"> • View all rules • View rule details by ID
scope API	<ul style="list-style-type: none"> • View all scopes • View scope details by ID • View sub-scope details of a scope
tag API	<ul style="list-style-type: none"> • View all tags • View tag details by ID
template API	<ul style="list-style-type: none"> • View all templates • View template details by ID • View compliance prediction for a template • Associate a tag with a template • Disassociate a tag from a template
welcome API	Test API communication path

baseresource API

You can use this API to perform the following operations:

Operation	Method	URI
View base resources	GET	<code>https://<host>:<port>/urest/v1/baseresource</code>

View base resources

To view the base resources applicable for a template, use the following details:

URI

```
https://<host>:<port>/urest/v1/baseresource
```

Method

GET

Parameters

Name	Description	Sample URI
resourcetypeuuid & basehierarchyuuid	<p><i>(Required)</i></p> <p>Lists the base resources that are applicable for the specified template defined by the resource type UUID and the base hierarchy UUID.</p> <p>Type: string</p> <p>Attribute: <valid_resourcetypeuuid> & <valid_basehierarchyuuid></p>	<pre>https://<host>:<port>/urest/v1/baseresource?resourcetypeuuid=423fb10e-d670-4ed2-9aac-b3872e8bfd17&basehierarchyuuid=c0fec4-f4e3-4784-a5b0-68b9ee95e39f</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "name": "127.0.0.1",
  "uuid": "49610902ddc24acf80b4087db994b9c0",
  "type": "node",
  "propertiesOfInterest": {
    "extended_os_family": "NT",
    "name": "127.0.0.1",
    "os_description": "Windows Server 2008 R2 x64"
  }
}
```


benchmark_type API

You can use this API to perform the following operations:

Operation	Method	URI
View all benchmark types	GET	https://<host>:<port>/urest/v1/benchmark_type
View benchmark type details by ID	GET	https://<host>:<port>/urest/v1/benchmark_type/{benchmarkTypeId}
Delete a benchmark type by ID	DELETE	https://<host>:<port>/urest/v1/benchmark_type/{benchmarkTypeId}
Create a benchmark type	POST	https://<host>:<port>/urest/v1/benchmark_type
Update a benchmark type by ID	PUT	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}

View all benchmark types

Use this API to view all the benchmark types.

URI

```
https://<host>:<port>/urest/v1/benchmark_type
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns a list of all benchmarks types, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
[
  {
    "id": "1",
    "name": "Best practices"
  },
  {
    "id": "2",
    "name": "Vulnerabilities"
  }
]
```

View benchmark type details by ID

Use this API to view the details of an existing benchmark type by ID.

URI

```
https://<host>:<port>/urest/v1/benchmark_type/{benchmarkTypeId}
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns the details of an existing benchmark type by ID
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "id": "1",
  "name": "Best practices"
}
```

Delete a benchmark type by ID

Use this API to delete an existing benchmark type by ID.

URI

```
https://<host>:<port>/urest/v1/benchmark_type/{benchmarkTypeId}
```

Method

DELETE

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Deletes an existing benchmark type by ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
Null
```

Create a benchmark type

You can use this API to create a benchmark type.

URI

```
https://<host>:<port>/urest/v1/benchmark_type
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "benchmark_type_name"
}
```

Response code(s)

Code	Status	Description
200	OK	Creates a benchmark type.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Json body

```
{
  "name": "Best Practices"
}
```

Successful output

```
{
  "id": "1",
  "name": "Best practices"
}
```

Update a benchmark type by ID

Use this API to update an existing benchmark type by ID.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}
```

Method

PUT

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>
--------------	---

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "benchmark_type_name"
}
```

Response code(s)

Code	Status	Description
200	OK	Update an existing benchmark type by ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Json body

```
{
  "name": "Best Practices"
}
```

Successful output

```
{
  "id": "1",
  "name": "Best practices"
}
```


benchmark API

You can use this API to perform the following operations:

Operation	Method	URI
View all benchmarks	GET	https://<host>:<port>/urest/v1/benchmark
Create a benchmark	POST	
View benchmark details by ID	GET	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}
Update benchmark details by ID	PUT	
Delete benchmark by ID	DELETE	
View benchmark details by ID and revision	GET	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{revisionNr}
Update a benchmark details by ID and revision	PUT	
View the top-level requirements for a benchmark	GET	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{revisionNr}/requirement
Create a requirement for a benchmark	POST	
View the requirement tree for a benchmark	GET	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/requirement_tree
Update the requirement tree for a benchmark	PUT	
Create a benchmark requirement by ID	POST	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{currentRevisionNr}
Submit a benchmark by ID and revision	POST	https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{revisionNr}/submit

View all benchmarks

To view all the benchmarks available in your DCA environment, use the following details:

URI

```
https://<host>:<port>/urest/v1/benchmark
```

Method

GET

Parameters

Name	Description	Sample URL
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/benchmark?start=0</pre>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/benchmark?count=2</pre>
sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type: Integer</p> <p>Attribute: String</p> <ul style="list-style-type: none"> name startTime templateName 	<pre>https://<host>:<port>/urest/v1/benchmark?sort=name:asc</pre>

filter	<p><i>(Optional)</i></p> <p>Filter the response data by the specified attributes.</p> <p>Type: Integer</p> <p>Attribute: String</p> <ul style="list-style-type: none"> • name • startTime • status • templateName <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ, NE • startTime: BETWEEN, GT, LT, GE, LE • status: EQ, NE • templateName: LIKE, EQ, NE <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE 'Oracle%' into name +LIKE+%27Oracle%25%27.</p>	<pre>https://<host>:<port>/ urest/v1/benchmark ?filter=name LIKE 'Oracle%'</pre>
--------	---	--

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all benchmarks, corresponding to the requested parameters.

400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.
-----	-------------	---

Sample(s)

Successful output

```
{
  "total": 5,
  "count": 1,
  "start": 0,
  "members": [
    {
      "id": "1",
      "name": "BenchmarkName",
      "description": "BenchmarkDescription",
      "benchmarkType": {
        "id": "1",
        "name": "Best practices"
      },
      "complianceScore": {
        "compliantInMSLO": 0,
        "noncompliantInRSLO": 0,
        "noncompliantOutRSLO": 15,
        "unknown": 103,
        "outMSLO": 118,
        "exceptBeforeExp": 4,
        "totalTests": 122,
        "totalComplianceScore": 3,
        "modifiedDT": 0,
        "failed": 0
      }
    }
  ]
}
```

Create a benchmark

Use this API to create a new benchmark.

URI

```
https://<host>:<port>/urest/v1/benchmark
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```

{
  "name": "Company Internal Regulations",
  "description": "Check Permissions for ALL users in /home/*/public_html/*",
  "benchmarkType": {
    "id": "1",
    "name": "Best practices"
  }
}

```

Response codes

Code	Status	Description
201	OK	Returns the details of the given benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```
{
  "id": "33",
  "name": "Company Internal Regulations",
  "revision": 1,
  "description": "Check Permissions for ALL users in /home/*/public_html/*",
  "benchmarkType": {
    "id": "1",
    "name": "Best practices"
  }
}
```

View benchmark details by ID

To view the benchmark details for an existing benchmark, use the following details:

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns the details of the given benchmark ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.

Sample(s)

Successful output

```
{
  "id": "6",
  "name": "CIS Apache HTTP Server 2.4 v1.2.0-test",
  "revision": 4,
```

```

    "description": "This document is intended for system and application administrators,security
specialists, auditors,helpdesk,and platform deployment personnel who plan to develop,deploy,assess,or
secure solutions that incorporate Apache HTTP Server 2.4 running\non Linux.",
    "benchmarkType": {
      "id": "1",
      "name": "Best practices"
    }
  }
}

```

Update benchmark details by ID

To update an existing benchmark by ID, use the following details:

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}
```

Method

PUT

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "benchmark": {
    "id": "1234",
    "name": "benchmark1",
    "description": "description",
    "benchmarkType": {
      "id": "id",
      "name": "Best Practices"
    },
  },
  "complianceScore": {
    "compliantInMSLO": 0,
    "noncompliantInRSLO": 0,
    "noncompliantOutRSLO": 15,
    "unknown": 103,
    "outMSLO": 118,
    "exceptBeforeExp": 4,
    "totalTests": 122,
    "totalComplianceScore": 3,
    "modifiedDT": 0,
    "failed": 0
  },
  "complianceStatus": "Compliant"
},
"requirements": [
  {
    "id": "id",
    "name": "name",
    "order": 1,
    "severity": "Medium",
    "description": "description"
  }
]
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of updated benchmark corresponding to the update operation.
400	BAD REQUEST	Returns an error message describing the invalid values sent in the request.

Sample(s)

JSON body

```
{
  "benchmark": {
    "id": "1234",
    "name": "Benchmark1",
    "description": "Description",
    "benchmarkType": {
      "id": "1234",
      "name": "Best Practices"
    },
  },
  "complianceScore": {
    "compliantInMSLO": 68,
    "noncompliantInRSLO": 49,
    "noncompliantOutRSLO": 0,
    "unknown": 0,
    "outMSLO": 91,
    "exceptBeforeExp": 4,
    "totalTests": 61,
    "totalComplianceScore": 96,
    "modifiedDT": 1474887686493,
    "failed": 0
  },
  "complianceStatus": "Compliant"
},
"requirements": [
  {
    "id": "1",
    "name": "Oracle Database Installation and Patching Requirements",
    "order": 1,
    "severity": "High",
    "description": "description"
  }
]
}
```

Successful output

```
{
  "benchmark": {
    "id": "1",
    "name": "name",
    "description": "description",
    "benchmarkType": {
      "id": "1",
      "name": "Best practices"
    },
  },
  "complianceScore": {
```

```
"compliantInMSLO": 0,  
"noncompliantInRSLO": 0,  
"noncompliantOutRSLO": 15,  
"unknown": 103,  
"outMSLO": 118,  
"exceptBeforeExp": 4,  
"totalTests": 122,  
"totalComplianceScore": 3,  
"modifiedDT": 0,  
"failed": 0  
}  
},  
"requirements": [  
  {  
    "id": "id",  
    "name": "name",  
    "order": 1,  
    "severity": "Medium",  
    "description": ""  
  }  
]  
}
```

Delete benchmark by ID

Use this API to delete an existing benchmark by ID.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}
```

Method

DELETE

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response codes

Code	Status	Description
204	REMOVED	Deletes the specified benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

View benchmark details by ID and revision

Use this API to return a benchmark revision by given id and revision number. Compliance score is not returned for the revision.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{revisionNr}
```

Method

GET

Parameters

Name	Description	Sample URL
id	<p><i>(Required)</i></p> <p>Policy specified by unique id.</p> <p>Type: path</p> <p>Attribute: <positive integer value></p>	<p>https://<host>:<port></p> <p>/urest/v1/control/{controlId}/script</p> <p>?filter=controlType EQ 'Evaluation'</p>
revision	<p><i>(Required)</i></p> <p>The revision number of the policy.</p> <p>Type: path</p> <p>Attribute: <positive integer value></p>	

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response codes

Code	Status	Description
200	OK	Returns the benchmark revision.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```

{
  "id": "6",
  "name": "CIS Apache HTTP Server 2.4 v1.2.0-test",
  "revision": 4,
  "description": "This document is intended for system and application administrators, security specialists, auditors, helpdesk, and platform deployment personnel who plan to develop, deploy, assess, or secure solutions that incorporate Apache HTTP Server 2.4 running on Linux.",
  "benchmarkType": {
    "id": "1",
    "name": "Best practices"
  }
}

```

Update a benchmark details by ID and revision

You can use this API to update an existing benchmark by ID.

URL

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{revisionNr}
```

Method

PUT

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>
--------------	--

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "Company Internal Regulations - Updated name",
  "description": "Check Permissions for ALL users - Updated description",
  "benchmarkType": {
    "id": "1",
    "name": "Best practices"
  }
}
```

Response codes

Code	Status	Description
200	OK	Updates the specified benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	
403	FORBIDDEN	
404	MATCHING OBJECT NOT FOUND	
500	INTERNAL SERVER ERROR	

Sample

```
{
```



```

    "id": "33",
    "name": "Company Internal Regulations - Updated name",
    "revision": 4,
    "description": "Check Permissions for ALL users - Updated description",
    "benchmarkType": {
      "id": "1",
      "name": "Best practices"
    }
  }
}

```

View the top-level requirements for a benchmark

Use this API to view all the first-level requirements for a benchmark.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/requirement
```

Method

GET

Parameters

Name	Description	Sample URL
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port> /urest/v1/benchmark/ {benchmarkId}/ requirement ?start=0</pre>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port> /urest/v1/benchmark/ {benchmarkId}/ requirement ?count=2</pre>

sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type:</p> <ul style="list-style-type: none"> • name • startTime • templateName <p>Attribute: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/requirement</p> <p>?sort=name:asc</p>
------	---	---

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns a list of first-level requirements for the given benchmark, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
[
```

```
{
  "id": "id1",
  "name": "name1",
  "order": 1,
  "severity": "Medium",
  "description": "description1"
},
{
  "id": "id2",
  "name": "name2",
  "order": 2,
  "severity": "Medium",
  "description": "description2"
},
{
  "id": "id3",
  "name": "name3",
  "order": 3,
  "severity": "Medium",
  "description": "description3"
}
]
```

Create a requirement for a benchmark

Use this API to create a requirement under the specified benchmark.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/requirement
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "name",
  "order": 1,
  "severity": "Medium",
  "description": "description"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of created benchmark requirement corresponding to the create operation.
400	BAD REQUEST	Returns an error message describing the invalid values sent in the request.

Sample(s)

JSON body

```
{
  "name": "name",
  "order": 1,
  "severity": "Medium",
  "description": "description"
}
```

Successful output

```
{
  "id": "id",
  "name": "name",
  "order": 1,
  "severity": "Medium",
  "description": "description"
}
```

View the requirement tree for a benchmark

Use this API to view the requirement tree for a benchmark.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/requirement_tree
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

Response code(s)

Code	Status	Description
200	OK	Returns the requirement tree associated with the given benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful response

```
[
  {
    "id": "id",
    "name": "name",
    "order": 1,
    "severity": "Medium",
    "description": "description",
    "rules": [

    ],
    "children": [
      {
        "id": "id",
        "name": "name",
        "order": 1,
        "severity": "Medium",
        "description": "description",
        "rules": [
          {

```

```
"id": "id",
"ruleName": "name",
"ruleType": "Evaluation",
"ruleStatus": "Valid",
"scope": "Oracle 12c",
"requirementId": "id",
"controlId": "id",
"controlName": "name",
"parameters": [
  {
    "id": "id",
    "name": "name",
    "value": "expectedvalue",
    "operator": "string",
    "dataType": "string",
    "actionType": "SCAN",
    "position": 2
  },
  {
    "id": "id",
    "name": "name",
    "value": "expectedvalue",
    "operator": "",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 1
  },
  {
    "id": "id",
    "name": "name",
    "value": "expectedvalue",
    "operator": "string",
    "dataType": "String",
    "actionType": "string",
    "position": 1
  }
]
},
"children": [
]
]
}
```

Update the requirement tree for a benchmark

Use this API to update the requirement tree for a benchmark by the benchmark ID.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/requirement_tree
```

Method

PUT

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
[
  {
    "operation": "UPDATE",
    "pathInTree": "",
    "content": {
      "benchmark": {
        "id": "id",
        "name": "name",
```



```

    "description": "description",
    "benchmarkType": {
      "id": "1234",
      "name": "BenchmarkType"
    }
  }
}
]

```

Response code(s)

Code	Status	Description
200	OK	Returns the details of updated benchmark requirement tree corresponding to the update operation.
400	BAD REQUEST	Returns an error message describing the invalid values sent in the request.

Sample(s)

JSON body

```

[
  {
    "operation": "UPDATE",
    "pathInTree": "",
    "content": {
      "benchmark": {
        "id": "id",
        "name": "name",
        "description": "description",
        "benchmarkType": {
          "id": "1234",
          "name": "BenchmarkType"
        }
      }
    }
  }
]

```

Successful output

```

[
  {
    "id": "id",

```

```

"name": "name",
"order": 1,
"severity": "Medium",
"description": "description",
"rules": [

],
"children": [
{
  "id": "id",
  "name": "name",
  "order": 1,
  "severity": "Medium",
  "description": "description",
  "rules": [
    {
      "id": "id",
      "ruleName": "name",
      "ruleType": "Evaluation",
      "ruleStatus": "Valid",
      "scope": "Oracle 12c",
      "requirementId": "id",
      "controlId": "id",
      "controlName": "name",
      "parameters": [
        {
          "id": "id",
          "name": "name",
          "value": "expectedvalue",
          "operator": "string",
          "dataType": "string",
          "actionType": "SCAN",
          "position": 2
        },
        {
          "id": "id",
          "name": "name",
          "value": "expectedvalue",
          "operator": "",
          "dataType": "String",
          "actionType": "SCAN",
          "position": 1
        },
        {
          "id": "id",
          "name": "name",
          "value": "expectedvalue",
          "operator": "string",
          "dataType": "String",
          "actionType": "string",
          "position": 1
        }
      ]
    }
  ]
}
]

```

```

    }
  ],
  "children": [
    ]
  }
]
}
]

```

Create a benchmark revision by ID

Use this API to submit a new policy revision.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{currentRevisionNr}
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>
--------------	--

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response codes

Code	Status	Description
201	OK	Submits the new policy revision.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```
{
  "id": "33",
  "name": "Company Internal Regulations",
  "revision": 3,
  "description": "Check Permissions for ALL users in /home/*/public_html/*",
  "benchmarkType": {
    "id": "1",
    "name": "Best practices"
  }
}
```

Submit a benchmark by ID and revision

Use this API to submit a policy revision.

URI

```
https://<host>:<port>/urest/v1/benchmark/{benchmarkId}/revision/{revisionNr}/submit
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response codes

Code	Status	Description
201	CREATED	Created the specified benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```
{
  "id": "33",
  "name": "Company Internal Regulations",
  "revision": 4,
  "description": "Check Permissions for ALL users in /home/*/public_html/*",
  "benchmarkType": {
    "id": "1",
    "name": "Best practices"
  }
}
```

compliance_detail API

You can use this API to perform the following operations:

Operation	Method	URI
View compliance details	GET	<code>https://<host>:<port>/urest/v1/compliance/compliance_detail</code>

View compliance details

To view the details of all compliances, use the following details:

URI

```
https://<host>:<port>/urest/v1/compliance/compliance_detail
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
[
  {
    "complianceStatus": "string",
    "control": {
      "id": 0,
      "name": "string"
    },
    "id": "string",
    "job": {
      "description": "string",
      "endDT": 0,
      "id": 0,
      "scheduledDT": 0,
      "startDT": 0,
      "status": "string",
      "type": "string"
    },
    "name": "string",
    "benchmark": {
      "id": 0,
      "name": "string"
    },
    "requirement": {
      "id": 0,
      "name": "string",
      "severity": "string"
    },
    "rule": {
      "id": 0,
      "name": "string"
    },
    "scanStatus": "string",
    "status": "string"
  }
]
```

control API

You can use this API to perform the following operations:

Description	Method	URI
View all controls	GET	https://<host>:<port>/urest/v1/control

View the details of a control by ID	GET	https://<host>:<port>/urest/v1/control/{controlId}
View scripts by control ID	GET	https://<host>:<port>/urest/v1/control/{controlId}/script
Create a control	POST	https://<host>:<port>/urest/v1/control
Delete a control by ID	DELETE	https://<host>:<port>/urest/v1/control/{controlId}
Update a control by ID	PUT	https://<host>:<port>/urest/v1/control/{controlId}
Update control scripts using the control ID	POST	https://<host>:<port>/urest/v1/control/{controlId}/script

View all controls

Use this API to view all controls.

URI

```
https://<host>:<port>/urest/v1/control
```

Method

GET

Parameters

Name	Description	Sample URL
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/control?start=0</p>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/control?count=2</p>
filter	<p><i>(Optional)</i></p> <p>Filter the response data by the specified attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • name • startTime • status • templateName • scope <p>Supported operators:</p> <ul style="list-style-type: none"> • status: EQ • name: LIKE, EQ • templateName: EQ • startTime: BETWEEN, GT, LT • scope: IN <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE 'Oracle%' into name+LIKE+%27Oracle%25%27.</p>	<p>https://<host>:<port>/urest/v1/control?filter=name LIKE 'Oracle'&filter=scope IN '2091,1081'</p>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
201	OK	Returns the details of the control.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample(s)

Successful output

```
{
```

```

"total": 1043,
"count": 1,
"start": 0,
"members": [
  {
    "id": "1",
    "name": "Parameter in the specification Application Configuration File",
    "description": "This will return lines from a given file or directory that contain the specified
text. For example, files in \"/var/tmp/user\" that contain the string \"PATH\". If the file or
directory is not found, then \"file or directory not found\" will be returned.",
    "type": "Evaluation and Remediation",
    "category": "Software Library",
    "location": "controls/ovalcom.hp.livenet.2def0001",
    "library": "com.hp.ocm.library.software",
    "createdDT": 1494248266008,
    "modifiedDT": 1494248289392,
    "resourceTypes": [
      {
        "id": "62"
          "name": "Apache HTTP Server 2.4"
        },
      {
        "id": "64"
          "name": "Apache Tomcat 6"
        },
      {
        "id": "78"
          "name": "MySQL Community Server 5.6"
        },
      {
        "id": "90"
          "name": "MySQL Community Server 5.6"
        }
    ],
    "parameters": [
      {
        "id": "117959",
        "name": "expectedValue",
        "value": "value",
        "operator": "matches RE",
        "dataType": "String",
        "actionType": "STRING",
        "position": 1
      },
      {
        "id": "117958",
        "name": "expectd Value for compliance",
        "value": "value",
        "operator": "",
        "dataType": "String",
        "actionType": "REMEDIATION",
        "position": 4
      }
    ]
  }
]

```

```
{
  "id": "117957",
  "name": "type of delimiter",
  "value": "space",
  "operator": "",
  "dataType": "String",
  "actionType": "REMIATION",
  "position": 3
},
{
  "id": "117956",
  "name": "KeyValue",
  "value": "KeyValue",
  "operator": "",
  "dataType": "String",
  "actionType": "REMIATION",
  "position": 2
},
{
  "id": "117955",
  "name": "File Path",
  "value": "File Path",
  "operator": "",
  "dataType": "String",
  "actionType": "REMIATION",
  "position": 1
},
{
  "id": "117954",
  "name": "type of delimiter",
  "value": "space",
  "operator": "",
  "dataType": "String",
  "actionType": "SCAN",
  "position": 3
},
{
  "id": "117953",
  "name": "KeyValue",
  "value": "KeyValue",
  "operator": "",
  "dataType": "String",
  "actionType": "SCAN",
  "position": 2
},
{
  "id": "117952",
  "name": "File Path",
  "value": "File Path",
  "operator": "",
  "dataType": "String",
  "actionType": "SCAN",
  "position": 1
}
```

```

    }
  ]
}
]
}
```

View control details by ID

Use this API to view the details of a control by ID.

URI

```
https://<host>:<port>/urest/v1/control/{controlId}
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns the details of the control bu ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.

Successful output

```
{
  "id": "1",
  "name": "Parameter in the specification Application Configuration File",
  "description": "This will return lines from a given file or directory that contain the specified text. For example, files in \"/var/tmp/user\" that contain the string \"/PATH\". If the file or directory is not found, then \"file or directory not found\" will be returned.",
  "type": "Evaluation and Remediation",
  "category": "Software Library",
  "location": "controls/ovalcom.hp.livenet.2def0001",
  "library": "com.hp.ocm.library.software",
  "createdDT": 1494248266008,
  "modifiedDT": 1494248289392,
  "resourceTypes": [
    {
      "id": "62",
      "name": "Apache HTTP Server 2.4"
    },
    {
      "id": "64",
      "name": "Apache Tomcat 6"
    },
    {
      "id": "78",
      "name": "MySQL Community Server 5.6"
    },
    {
      "id": "90",
      "name": "JBoss Application Server 7"
    }
  ],
  "parameters": [
    {
      "id": "6",
      "name": "type of delimiter",
      "value": "space",
      "operator": "",
      "dataType": "String",
      "actionType": "REMEDIATION",
      "position": 3
    }
  ]
}
```

```
    },
    {
      "id": "5",
      "name": "KeyValue",
      "value": "KeyValue",
      "operator": "",
      "dataType": "String",
      "actionType": "REMIEDIATION",
      "position": 2
    },
    {
      "id": "4",
      "name": "File Path",
      "value": "File Path",
      "operator": "",
      "dataType": "String",
      "actionType": "REMIEDIATION",
      "position": 1
    },
    {
      "id": "3",
      "name": "type of delimiter",
      "value": "space",
      "operator": "",
      "dataType": "String",
      "actionType": "SCAN",
      "position": 3
    },
    {
      "id": "2",
      "name": "KeyValue",
      "value": "KeyValue",
      "operator": "",
      "dataType": "String",
      "actionType": "SCAN",
      "position": 2
    },
    {
      "id": "1",
      "name": "File Path",
      "value": "File Path",
      "operator": "",
      "dataType": "String",
      "actionType": "SCAN",
      "position": 1
    }
  ]
}
```


View scripts by control ID

Use this API to view all the scripts associated with the specified control.

URI

```
https://<host>:<port>/urest/v1/control/{controlId}/script
```

Method

GET

Parameters

Name	Description	Sample URL
filter	<p><i>(Optional)</i></p> <p>Filters the response data based on a single attribute. For multiple filter parameters, append '&' between the parameters.</p> <p>Type: String</p> <p>Attribute: controlType</p> <p>Supported operators:</p> <ul style="list-style-type: none"> EQ <p>Supported values:</p> <ul style="list-style-type: none"> Evaluation Evaluation and Remediation <p>You must URL encode the operators to include them in the URL query. For example, encode controlType EQ 'Evaluation' into controlType+EQ+%27Evaluation%27.</p>	<pre>https:// <host>:<port> /urest/v1/ control/ {controlId}/ script ? filter=controlType EQ 'Evaluation'</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns the details of the control bu ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.

Successful output

```
[
  {
    "controlType": "Evaluation",
    "fileType": "",
    "scriptContent": "<html><body>Information is obtained by evaluating key/value pairs in the given configuration file. Regular expressions are used to match the key and obtain the associated value.<br><br></p></body></html>"
  }
]
```

Create a control

Use this API to create a new control.

URI

```
https://<host>:<port>/urest/v1/control
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "control": {
    "name": "Create control test",
    "description": "Create control test",
    "controlType": {
      "name": ""
    }
  }
}
```

```

    },
    "parameters": [{
        "name": "param1",
        "dataType": "Number",
        "value": "1",
        "position": 1,
        "actionType": "SCAN"
    }, {
        "name": "param2",
        "dataType": "Number",
        "value": "2",
        "position": 2,
        "actionType": "REMIEDIATION"
    }],
    "resourceTypes": [{
        "id": "33",
        "name": "RHEL 7 Compatibles",
        "children": [{
            "id": "34",
            "name": "CentOS 7",
            "children": []
        }, {
            "id": "35",
            "name": "OEL 7",
            "children": []
        }, {
            "id": "36",
            "name": "RHEL 7",
            "children": []
        }],
        "parent": {
            "id": "24",
            "name": "RHEL Compatibles",
            "parent": {
                "id": "23",
                "name": "Linux",
                "parent": {
                    "id": "22",
                    "name": "Unix",
                    "parent": {
                        "id": "12",
                        "name": "Platform",
                        "topLevel": true
                    }
                }
            }
        }
    }],
    "modifiedDT": 0,
    "type": "Evaluation and Remediation",
    "category": "Platform Custom Script"
},
"scripts": [{

```

```

        "fileType": "py",
        "scriptContent": "test script content",
        "controlType": "Evaluation"
    }, {
        "fileType": "py",
        "scriptContent": "test script content",
        "controlType": "Evaluation and Remediation"
    }
}

```

Response codes

Code	Status	Description
201	CREATED	Adds the new control.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```

{
  "control": {
    "id": "1060",
    "name": "Create control test",
    "description": "Create control test",
    "type": "Evaluation and Remediation",
    "category": "Platform Custom Script",
    "location": "controls_0FC49B1C-8D46-4DFE-95AE-819818F16165",
    "library": "com.hp.ocm.library.custom",
    "createdDT": 1492000701788,
    "modifiedDT": 1492000701788,
  }
}

```

```

    "resourceTypes": [{
      "id": "33",
      "name": "RHEL 7 Compatibles"
    }],
    "parameters": [{
      "id": "52904",
      "name": "param",
      "value": "1",
      "operator": "",
      "dataType": "Number",
      "actionType": "SCAN",
      "position": 1
    }, {
      "id": "52905",
      "name": "param",
      "value": "2",
      "operator": "",
      "dataType": "Number",
      "actionType": "REMIEDIATION",
      "position": 2
    }
  ],
  "scripts": [{
    "controlType": "Evaluation",
    "fileType": "py",
    "scriptContent": "test script content"
  }, {
    "controlType": "Evaluation and Remediation",
    "fileType": "py",
    "scriptContent": "test script content"
  }
]
}

```

Delete a control by ID

Use this API to delete a control object specified by ID.

URI

```
https://<host>:<port>/urest/v1/control/{controlId}
```

Method

DELETE

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response codes

Code	Status	Description
204	REMOVED	Deletes the specified control.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.

404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Update a control by ID

Use this API to update a control by ID.

URI

```
https://<host>:<port>/urest/v1/control/{controlId}
```

Method

PUT

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "control": {
    "name": "Create control",
    "description": "Create control",
    "controlType": {
      "name": ""
    },
    "parameters": [{
      "name": "param1",
      "dataType": "Number",
      "value": "1",
      "position": 1,
      "actionType": "SCAN"
    }],
    "resourceTypes": [{
      "id": "33",
      "name": "RHEL 7 Compatibles",
      "children": [{
        "id": "34",
        "name": "CentOS 7",
        "children": []
      }],
      "id": "35",
      "name": "OEL 7",
      "children": []
    }, {
      "id": "36",
      "name": "RHEL 7",
      "children": []
    }],
    "parent": {
      "id": "24",
      "name": "RHEL Compatibles",
      "parent": {
        "id": "23",
        "name": "Linux",
        "parent": {
          "id": "22",
          "name": "Unix",
          "parent": {
            "id": "12",
            "name": "Platform",
            "topLevel": true
          }
        }
      }
    }
  }
}
```

```

    }],
    "modifiedDT": 0,
    "type": "Evaluation",
    "category": "Platform Custom Script"
  },
  "scripts": [{
    "fileType": "py",
    "scriptContent": "test script content",
    "controlType": "Evaluation"
  }]
}

```

Response codes

Code	Status	Description
200	OK	Updates the specified control.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```

{
  "control": {
    "id": "1060",
    "name": "Create control",
    "description": "Create control",
    "type": "Evaluation",
    "category": "Platform Custom Script",
    "location": "controls_0FC49B1C-8D46-4DFE-95AE-819818F16165",
    "library": "com.hp.ocm.library.custom",
  }
}

```

```

    "createdDT": 1492000701788,
    "modifiedDT": 1492000701788,
    "resourceTypes": [{
      "id": "33",
      "name": "RHEL 7 Compatibles"
    }],
    "parameters": [{
      "id": "52904",
      "name": "param",
      "value": "1",
      "operator": "",
      "dataType": "Number",
      "actionType": "SCAN",
      "position": 1
    }]
  },
  "scripts": [{
    "controlType": "Evaluation",
    "fileType": "py",
    "scriptContent": "test script content"
  }]
}

```

Update control scripts using the control ID

Use this API to update the control's script.

URI

```
https://<host>:<port>/urest/v1/control/{controlId}/script
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "id": "1060",
  "name": "Create control test",
  "description": "Create control test",
  "type": "Evaluation",
  "category": "Platform Custom Script",
  "location": "controls_0FC49B1C-8D46-4DFE-95AE-819818F16165",
  "library": "com.hp.ocm.library.custom",
  "createdDT": 1492000938556,
  "modifiedDT": 1492000942650,
  "resourceTypes": [{
    "id": "33",
    "name": "RHEL 7 Compatibles"
  }],
  "parameters": [{
    "id": "52907",
    "name": "param1",
    "value": "1",
    "operator": "",
    "dataType": "Number",
    "actionType": "SCAN",
    "position": 1
  }], {
```

```

        "name": "param2",
        "dataType": "Number",
        "value": "2",
        "position": 2,
        "actionType": "SCAN"
    }]
}

```

Response codes

Code	Status	Description
200	OK	Updates the script details of the specified control.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```

{
  "id": "1060",
  "name": "Create control test",
  "description": "Create control test",
  "type": "Evaluation",
  "category": "Platform Custom Script",
  "location": "controls_0FC49B1C-8D46-4DFE-95AE-819818F16165",
  "library": "com.hp.ocm.library.custom",
  "createdDT": 1492060511400,
  "modifiedDT": 1492060511400,
  "resourceTypes": [{

```

```

        "id": "33",
        "name": "RHEL 7 Compatibles"
    }],
    "parameters": [{
        "id": "52922",
        "name": "param1",
        "value": "1",
        "operator": "",
        "dataType": "Number",
        "actionType": "SCAN",
        "position": 1
    }, {
        "id": "52924",
        "name": "param2",
        "value": "2",
        "operator": "",
        "dataType": "Number",
        "actionType": "SCAN",
        "position": 2
    }]
}

```

credential API

You can use this API to perform the following operations:

Description		
View all credentials	GET	https://<host>:<port>/urest/v1/credential
Create a credential	POST	https://<host>:<port>/urest/v1/credential
Update a credential by ID	PATCH	https://<host>:<port>/urest/v1/credential/{credentialId}
Update credential data by ID	PATCH	https://<host>:<port>/urest/v1/credential_data/{credentialDataId}
Delete a credential by ID	DELETE	https://<host>:<port>/urest/v1/credential/{credentialId}

View all credentials

Use this API to view all the credentials created in DCA.

URI

```
https://<host>:<port>/urest/v1/credential
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns a list of all credentials created in DCA.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
[
  {
    "id": "9df648b5-dd8f-4d42-a025-2299499ee8ac",
    "name": "staging-host-system-account",
    "data": [
      {
        "id": "10979b62-c402-49eb-a2b4-fc536b5e2679",
        "key": "username",
        "value": "root"
      },
      {
        "id": "878ba69f-64cd-4be4-8bb3-77d171bf8db4",
        "key": "password",
        "value": ""
      }
    ]
  },
  {
    "id": "5afa5bdb-8bc9-4111-bc3d-c6f06e61516a",
    "name": "DCA_guest",
    "data": [
      {
        "id": "e00cf8d4-3e14-4ba7-98cb-a2092f0a5198",
        "key": "username",
        "value": "root"
      },
      {
        "id": "2d78f812-631b-435a-a617-09bcda9e9c70",
        "key": "password",
        "value": ""
      }
    ]
  },
  {
    "id": "cb09cd7f-91be-47a2-9914-18d989a67705",
    "name":
"alexandra@example.com-1493965675_AdhocScan_GetComplianceStatusA_192.168.122.34_b04b40f3-6961-492e-
a0bf-3cbf252a930e",
    "data": [
      {
        "id": "fd4a8249-1fb5-4100-88e0-204a21862c80",
        "key": "username",
        "value": "root"
      },
      {
        "id": "3611790b-02e0-4bec-9ab8-89cc4d91cf74",
        "key": "password",
        "value": ""
      }
    ]
  }
]
```


Create a credential

Use this API to create a credential in DCA.

URI

```
https://<host>:<port>/urest/v1/credential
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
```

```

"name": "credential",
"data": [
  {
    "key": "username",
    "value": "user"
  },
  {
    "key": "password",
    "value": "pass"
  }
]
}

```

Response code(s)

Code	Status	Description
200	OK	Creates a credential in DCA.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

JSON

```

{
  "name": "DCA-guest-account",
  "data": [
    {
      "key": "username",
      "value": "root"
    },
    {
      "key": "password",
      "value": ""
    }
  ]
}

```

Successful output

```

[
  {
    "id": "9df648b5-dd8f-4d42-a025-2299499ee8ac",
    "name": "DCA-guest-account",

```

```

    "data": [
      {
        "id": "10979b62-c402-49eb-a2b4-fc536b5e2679",
        "key": "username",
        "value": "root"
      },
      {
        "id": "878ba69f-64cd-4be4-8bb3-77d171bf8db4",
        "key": "password",
        "value": ""
      }
    ]
  }

```

Update a credential by ID

Use this API to update an existing credential by ID.

URI

```
https://<host>:<port>/urest/v1/credential/{credentialId}
```

Method

PATCH

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>
--------------	---

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "newcredential_name",
  "data": [
    {
      "key": "username",
      "value": "user"
    },
    {
      "key": "password",
      "value": "pass"
    }
  ]
}
```

Response code(s)

Code	Status	Description
200	OK	Updates the existing credential, corresponding to the requested ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

JSON

```
{
  "name": "newcredential",
  "data": [
    {
      "key": "username",
```

```
    "value": "user"
  },
  {
    "key": "password",
    "value": ""
  }
]
}
```

Successful output

```
{
  "id": "dcc6d858-0973-4c98-a855-b7f5e343a350",
  "name": "newcredential",
  "data": null
}
```

Update credential data by ID

Use this API to update the data of an existing credential by ID.

URI

```
https://<host>:<port>/urest/v1/credential_data/{credentialDataId}
```

Method

PATCH

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "value": "new_value"
}
```

Response code(s)

Code	Status	Description
200	OK	Updates the data of the existing credential, corresponding to the requested ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

JSON

```
{
  "value": "user2"
}
```

Successful output

```
{
  "id": "8873ce6f-d2cf-4a88-97d8-1e64bd1c902d",
  "key": "username",
  "value": "user2"
}
```

Delete a credential by ID

Use this API to delete a credential by ID.

URI

```
https://<host>:<port>/urest/v1/credential/{credentialId}
```

Method

DELETE

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Delete the credential, corresponding to the requested ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
Null
```

dashboardmetrics API

You can use this API to perform the following operations:

Operation	Method	URI
View dashboard metrics	GET	<code>https://<host>:<port>/urest/v1/dashboardmetrics</code>

View dashboard metrics

To view the values of the dashboard metrics, use the following details:

URI

```
https://<host>:<port>/urest/v1/dashboardmetrics
```


Method

GET

Parameters

Name	Description	Sample URI
fields	<p>(Required)</p> <p>Lists the response data by fields specified by the attributes.</p> <p>Type: Integer</p> <p>Attributes:</p> <ul style="list-style-type: none"> • benchmark • resource • deployment • listDeployment • capacity_util • capacity_opt • capacity_forecast • capacity_allocation 	<p>https://<host>:<port>/urest/v1/dashboardmetrics?fields=capacity_util,capacity_opt</p>

Header

Name	Description
X-Auth-Token	<p>(Required)</p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
[
  {
    "name": "Utilization",
    "metricId": "capacity_util",
    "dashboardMetricValues": [
      {
        "displayLabel": "CPU",
        "unit": "percentage",
        "value": "string",
        "total": "string"
      },
      {
        "displayLabel": "Memory",
        "unit": "percentage",
        "value": "string",
        "total": "string"
      },
      {
        "displayLabel": "Storage",
        "unit": "percentage",
        "value": "string",
        "total": "string"
      }
    ]
  },
  {
    "name": "Optimization",
    "metricId": "capacity_opt",
    "dashboardMetricValues": [
      {
```

```

    "displayLabel": "CPU",
    "unit": "percentage",
    "value": "string",
    "total": "string"
  },
  {
    "displayLabel": "Memory",
    "unit": "percentage",
    "value": "30",
    "total": "90"
  },
  {
    "displayLabel": "Storage",
    "unit": "percentage",
    "value": "string",
    "total": "string"
  }
]
}
]

```

deployment API

You can use this API to perform the following operations:

Operation	Method	URI
View all deployments	GET	https://<host>:<port>/urest/v1/deployment
Deploy a template	POST	
Initialize deployment compliance	POST	https://<host>:<port>/urest/v1/deployment/{deploymentId}/init_compliance
View deployment details by ID	GET	https://<host>:<port>/urest/v1/deployment/{deploymentId}
View deployment jobs by ID	GET	https://<host>:<port>/urest/v1/deployment/{deploymentId}/job
Associate a tag with a deployment	PATCH	https://<host>:<port>/urest/v1/deployment/{deploymentId}/associatetag

Disassociate a tag from a deployment	PATCH	https://<host>:<port>/urest/v1/deployment/{deploymentId}/disassociatetag
Start a scan job	POST	https://<host>:<port>/urest/v1/deployment/{deploymentId}/scan_compliance

View all deployments

To view the total count of deployments along with their details, use the following details:

URI

```
https://<host>:<port>/urest/v1/deployment
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p>(Optional)</p> <p>Indicates the index of the deployment that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer</p> <p>Attributes: <positive integer value></p>	https://<host>:<port>/urest/v1/deployment?start=0
count	<p>(Optional)</p> <p>Indicates the number of deployment to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attributes: <positive integer value></p>	https://<host>:<port>/urest/v1/deployment?count=2

start & count	<p>(Optional)</p> <p>Use both the start and count parameters in the request call to specify the index of the deployment that the response must begin with and the number of deployment to include.</p> <p>Type: Integer</p> <p>Attributes: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/deployment?start=5&count=2</p>
sort	<p>(Optional)</p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> • createTime • name • tagname <p>Supported operators:</p> <ul style="list-style-type: none"> • createTime: asc, desc • name: asc, desc • tagname: asc, desc 	<p>https://<host>:<port>/urest/v1/deployment? sort=createTime:asc https://<host>:<port>/urest/v1/deployment?sort=name:asc https://<host>:<port>/urest/v1/deployment? sort=tagname:desc</p>

filter	<p>(Optional)</p> <p>Filter the response data by the specified attributes.</p> <p>This parameter supports only the AND operator for multi-parameter requests.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> • name • startTime • status • tagname • templateName <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ, NE • startTime: BETWEEN, GT, LT, GE, LE • status: EQ, NE • tagname: LIKE, EQ, NE • templateName: LIKE, EQ, NE <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE 'Oracle%' into name+LIKE+%27Oracle%25%27.</p>	<pre>https://<host>:<port>/urest/v1/ deployment?filter=name LIKE 'Oracle %'</pre>
--------	--	---

quer y	<p><i>(Optional)</i></p> <p>Search for a deployment by the specified attributes.</p> <p>This parameter supports both the AND and OR operators for multi-parameter requests and can be used for more complex queries.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> • name • startTime • status • tagname • templateName <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ, NE • startTime: BETWEEN, GT, LT, GE, LE • status: EQ, NE • tagname: LIKE, EQ, NE • templateName: LIKE, EQ, NE <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE '%Grid%' into name +LIKE+%27%25Grid%25%27.</p>	<pre>https://<host>:<port>/urest/v1/ deployment?query=name%20LIKE %20%27%25Grid%25%27 https://<host>:<port>/urest/ v1/deployment?query=tagname %20LIKE%20%27%25Oracle%25%27</pre>
-----------	---	--

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "total": 2,
  "count": 2,
  "start": 0,
  "members": [
    {
      "createdTime": "string",
      "deploymentId": "string",
      "deploymentName": "string",
      "templateId": "string",
      "templateName": "string",
      "startTime": "string",
      "endTime": "string",
      "user": "string",
      "userGroup": "string",
      "status": "string",
      "baseResourceId": "string",
      "baseResourceName": "string",
      "complianceScore": {
        "lastScanDate": 0,
        "compliantPolicies": 0,
        "totalPolicies": 0
      }
    },
    {
      "createdTime": "string",
      "deploymentId": "string",
      "deploymentName": "string",
      "templateId": "string",
      "templateName": "string",
      "startTime": "string",
```



```

    "endTime": "string",
    "user": "string",
    "userGroup": "string",
    "status": "string",
    "baseResourceId": "string",
    "baseResourceName": "string",
    "complianceScore": {
      "lastScanDate": 0,
      "compliantPolicies": 0,
      "totalPolicies": 0
    }
  }
]
}

```

Deploy a template

To deploy one of the available templates, use the following details:

URI

```
https://<host>:<port>/urest/v1/deployment
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>
--------------	--

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "string",
  "description": "string",
  "templateId": "string",
  "resources": [
    {
      "TypeUuid": "string",
      "baseResources": [
        {
          "resourceUuid": "string",
          "resourceCiType": "string",
          "TypeUuid": "string"
        }
      ],
      "deploySequence": 1,
      "deploymentParameters": [
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        }
      ]
    }
  ]
}
```

```
{
  "name": "string",
  "value": "string"
},
{
  "name": "string",
  "value": "string"
},
{
  "name": "string",
  "value": "string"
},
{
  "name": "string",
  "value": "string"
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
},
{
  "name": "string",
  "value": ""
}
```

```
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  }
]
},
{
  "TypeUuid": "string",
  "deploySequence": 2,
  "deploymentParameters": [
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    }
  ],
}
```



```

    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  {
    "name": "string",
    "value": ""
  },
  ]
}
]
}

```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "name": "string",
  "description": "string",
  "templateId": "string",
  "resources": [
    {
      "TypeUuid": "string",
      "baseResources": [
        {
          "resourceUuid": "string",
          "resourceCiType": "string",
          "TypeUuid": "string"
        }
      ],
      "deploySequence": 1,
      "deploymentParameters": [
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        },
        {
          "name": "string",
          "value": "string"
        }
      ]
    }
  ]
}
```



```
]
},
{
  "TypeUuid": "string",
  "deploySequence": 2,
  "deploymentParameters": [
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": "string"
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    }
  ]
}
```



```

    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    },
    {
      "name": "string",
      "value": ""
    }
  ]
}

```

Successful output

```

{
  "createdTime": "string",
  "uuid": "string",
  "name": "string",
  "templateId": "string",
  "templateName": "string",
  "startTime": "string",
  "endTime": "string",
  "user": "",
  "userGroup": "",
  "status": "string",
  "action": "",
  "resources": [
    {
      "Id": 19,
      "name": "",
      "TypeUuid": "string",

```

```
"uuid": "",
"ProvisionedResourceName": "",
"deploySequence": 1,
"baseResources": [
  {
    "Id": 16,
    "resourceUuid": "string",
    "resourceCiType": "string",
    "seqNo": 0
  }
],
"deploymentParameters": [
  {
    "Id": 478,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 479,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 480,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 481,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 482,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 483,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 484,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 485,
    "name": "string",
    "value": "string"
  },
  {
```

```
"Id": 486,  
  "name": "string",  
  "value": "string"  
},  
{  
  "Id": 487,  
  "name": "string",  
  "value": "string"  
},  
{  
  "Id": 488,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 489,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 490,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 491,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 492,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 493,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 494,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 495,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 496,  
  "name": "string",  
  "value": ""
```

```

    },
    {
      "Id": 497,
      "name": "string",
      "value": ""
    },
    {
      "Id": 498,
      "name": "string",
      "value": ""
    }
  ],
  "flowExecutionID": "",
  "ItocConfiguration": {
    "Id": 0,
    "resourceType": "",
    "Properties": null
  },
  "complianceScore": {
    "compliantInMSLO": 0,
    "noncompliantInRSLO": 0,
    "noncompliantOutRSLO": 0,
    "unknown": 0,
    "outMSLO": 0,
    "exceptBeforeExp": 0,
    "totalTests": 0,
    "totalComplianceScore": 0,
    "modifiedDT": 0,
    "failed": 0
  }
},
{
  "Id": 20,
  "name": "",
  "TypeUuid": "string",
  "uuid": "",
  "ProvisionedResourceName": "",
  "deploySequence": 2,
  "baseResources": null,
  "deploymentParameters": [
    {
      "Id": 499,
      "name": "string",
      "value": "string"
    },
    {
      "Id": 500,
      "name": "string",
      "value": "string"
    },
    {
      "Id": 501,
      "name": "string",

```

```
    "value": "string"
  },
  {
    "Id": 502,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 503,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 504,
    "name": "string",
    "value": ""
  },
  {
    "Id": 505,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 506,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 507,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 508,
    "name": "string",
    "value": "string"
  },
  {
    "Id": 509,
    "name": "string",
    "value": ""
  },
  {
    "Id": 510,
    "name": "string",
    "value": ""
  },
  {
    "Id": 511,
    "name": "string",
    "value": ""
  },
  {
```

```
"Id": 512,  
"name": "string",  
"value": ""  
},  
{  
  "Id": 513,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 514,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 515,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 516,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 517,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 518,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 519,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 520,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 521,  
  "name": "string",  
  "value": ""  
},  
{  
  "Id": 522,  
  "name": "string",  
  "value": ""
```



```

    },
    {
      "Id": 523,
      "name": "string",
      "value": ""
    },
    {
      "Id": 524,
      "name": "string",
      "value": ""
    },
    {
      "Id": 525,
      "name": "string",
      "value": ""
    },
    {
      "Id": 526,
      "name": "string",
      "value": ""
    },
    {
      "Id": 527,
      "name": "string",
      "value": ""
    },
    {
      "Id": 528,
      "name": "string",
      "value": ""
    },
    {
      "Id": 529,
      "name": "string",
      "value": ""
    },
    {
      "Id": 530,
      "name": "string",
      "value": ""
    }
  ],
  "flowExecutionID": "",
  "ItocConfiguration": {
    "Id": 0,
    "resourceType": "",
    "Properties": null
  },
  "complianceScore": {
    "compliantInMSLO": 0,
    "noncompliantInRSLO": 0,
    "noncompliantOutRSLO": 0,
    "unknown": 0,
  }
}

```

```

    "outMSLO": 0,
    "exceptBeforeExp": 0,
    "totalTests": 0,
    "totalComplianceScore": 0,
    "modifiedDT": 0,
    "failed": 0
  }
}
],
"complianceScore": {
  "lastScanDate": 0,
  "compliantPolicies": 0,
  "totalPolicies": 0
}
}

```

Initialize deployment compliance

You can use this API to initialize the compliance related objects on the specified deployment.

URL

```
https://<host>:<port>/urest/v1/deployment/{deploymentId}/init_compliance
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Success response

Code: 200

Sample:

```
{
  "errors": [
  ],
  "resources": {
    "created": [
      {
        "ref": {
          "sourceURI": "uri",
          "sourceRef": "ref"
        },
        "id": 1234,
        "busId": "id"
      }
    ],
    "skipped": [
    ],
    "updated": [
    ],
    "failed": [
    ]
  },
  "services": {
    "created": [
      {
        "ref": {
          "sourceURI": "uri",
          "sourceRef": "ref"
        },
        "id": 1234,
        "busId": "id",
        "latestRevision": 1
      }
    ],
    "skipped": [
    ]
  }
}
```

```
    ],
    "updated": [

    ],
    "failed": [

    ]
  }
}
```

Error response

Code: 400

Sample:

```
{
  "details": "string",
  "errorCode": "string",
  "message": "string"
}
```

View deployment details by ID

To view the details of a deployment by its ID, use the following details:

URI

```
https://<host>:<port>/urest/v1/deployment/{deploymentId}
```

Method

GET

Parameters

Name	Description	Sample URI
fields	<p><i>(Optional)</i></p> <p>Lists the response data by fields specified by the attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • Resources • Resources.DeploymentParameters • Resources.BaseResources • AttachedPolicy 	<p>https://<host>:<port>/urest/v1/deployment/{deploymentId}?fields=Resources.DeploymentParameters</p>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.

400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.
-----	-------------	---

Sample(s)

Successful output

```
{
  "total": 2,
  "count": 2,
  "start": 0,
  "members": [
    {
      "createdTime": "string",
      "deploymentId": "string",
      "deploymentName": "string",
      "templateId": "string",
      "templateName": "string",
      "startTime": "string",
      "endTime": "string",
      "user": "string",
      "userGroup": "string",
      "status": "string",
      "baseResourceId": "string",
      "baseResourceName": "string",
      "complianceScore": {
        "lastScanDate": 0,
        "compliantPolicies": 0,
        "totalPolicies": 0
      }
    },
    {
      "createdTime": "string",
      "deploymentId": "string",
      "deploymentName": "string",
      "templateId": "string",
      "templateName": "string",
      "startTime": "string",
      "endTime": "string",
      "user": "string",
      "userGroup": "string",
      "status": "string",
      "baseResourceId": "string",
      "baseResourceName": "string",
      "complianceScore": {
        "lastScanDate": 0,
        "compliantPolicies": 0,
        "totalPolicies": 0
      }
    }
  ]
}
```

```
}

```

View deployment jobs by ID

To view the list of all jobs associated with a deployment, use the following details:

URI

```
https://<host>:<port>/urest/v1/deployment/{deploymentId}/job

```

Method

GET

Parameters

Name	Type	Attribute	Required /Optional	Description	Sample URI
type	string	Compliance	Optional	Lists the response data by the compliance states.	https://<host>:<port>/urest/v1/deployment/{deploymentId}/job?type=Compliance>

status	string	<ul style="list-style-type: none"> • Defined • Scheduled • Running • Completed • Failed • Cancelled • Timeout 	Optional	Lists the response data by the status specified by the attributes.	https://<host>:<port>/urest/v1/deployment/{deploymentId}/job?status=Defined,Running
--------	--------	--	----------	--	---

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
[
  {
    "id": "1",
    "type": "REMIATE",
    "description": "description",
    "status": "Completed",
    "scheduledDT": null,
    "startDT": 1483964165103,
    "endDT": 1483964165203
  }
]
```

Associate a tag with a deployment

To associate a tag with a deployment, use the following details:

URI

```
https://<host>:<port>/urest/v1/deployment/{deploymentId}/associatetag
```

Method

PATCH

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token> .</p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "tagName"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "name": "tagName"
}
```

Successful output

```
{
  "createdTime": "0001-01-01T00:00:00Z",
  "uuid": "deploymentId",
  "name": "deploymentname",
  "templateId": "templateId",
  "templateName": "templateName",
  "startTime": "0001-01-01T00:00:00Z",
  "endTime": "0001-01-01T00:00:00Z",
  "user": "string",
  "userGroup": "string",
  "status": "SUCCESS",
  "action": "string",
  "tags": [
    {
      "createdTime": "0001-01-01T00:00:00Z",
      "name": "tagName",
      "uuid": "tagId"
    }
  ],
  "attachedPolicies": null,
  "complianceScore": {
    "lastScanDate": 0,
    "compliantPolicies": 0,
    "totalPolicies": 0
  }
}
```

Disassociate a tag from a deployment

To disassociate a tag from a deployment, use the following details:

URI

```
https://<host>:<port>/urest/v1/deployment/{deploymentId}/disassociatetag
```

Method

PATCH

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "uuid": "tagId"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "uuid": "tagId"
}
```

Successful output

```
{
  "createdTime": "0001-01-01T00:00:00Z",
  "uuid": "deploymentId",
  "name": "deploymentname",
  "templateId": "templateId",
  "templateName": "templateName",
  "startTime": "0001-01-01T00:00:00Z",
  "endTime": "0001-01-01T00:00:00Z",
  "user": "string",
  "userGroup": "string",
  "status": "SUCCESS",
  "action": "string",
  "tags": [
    {
      "createdTime": "0001-01-01T00:00:00Z",
      "name": "none",
      "uuid": "tagId"
    }
  ],
  "attachedPolicies": null,
  "complianceScore": {
    "lastScanDate": 0,
    "compliantPolicies": 0,
    "totalPolicies": 0
  }
}
```

Start a scan job

You can use this API to start a scan job on the specified deployment, which then returns the details about the created scan job.

URL

```
https://<host>:<port>/urest/v1/deployment/{deploymentId}/scan_compliance
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p>(<i>Required</i>)</p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Sample(s)

Successful output

```
[
  {
    "id": "2",
    "type": "SCAN",
    "description": "description",
    "status": "Running",
    "scheduledDT": null,
    "startDT": 1483964165103,
    "endDT": null
  }
]
```

logout-sessions API

You can use this API to perform the following operations:

Operation	Method	URI
Log out of active session	POST	https://<host>:<port>/urest/v1/logout-sessions

Log out of active session

To end the active session, use the following details:

URI

```
https://<host>:<port>/urest/v1/logout-sessions
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Optional)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "isTokenInvalidated": true
}
```

requirement API

You can use this API to perform the following operations:

Operation	Method	URI
View all requirements	GET	https://<host>:<port>/urest/v1/requirement
View requirement details by ID	GET	https://<host>:<port>/urest/v1/requirement/{requirementId}
View requirement rules	GET	https://<host>:<port>/urest/v1/requirement/{requirementId}/rule
View sub-requirements of a requirement	GET	https://<host>:<port>/urest/v1/requirement/{requirementId}/subrequirement
Update a requirement by ID	PUT	https://<host>:<port>/urest/v1/requirement/{requirementId}
Create a sub-requirement	POST	https://<host>:<port>/urest/v1/requirement/{requirementId}/subrequirement

View all requirements

Use this API to view all requirements.

URI

```
https://<host>:<port>/urest/v1/requirement
```

Method

GET

Parameters

Name	Description	Sample URL
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource..</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/requirement?start=0</pre>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/requirement?count=2</pre>
sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> name templateName startTime 	<pre>https://<host>:<port>/urest/v1/requirement?sort=name:asc</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns a list of all requirements, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "total": 10230,
  "count": 2,
  "start": 0,
  "members": [
    {
      "id": "6836",
      "name": "1 Host Configuration",
      "order": 1,
      "severity": "Medium",
      "description": "This section covers security recommendations that you should follow to prepare the host machine that you plan to use for executing containerized workloads. Securing the Docker host and following your infrastructure security best practices would build a solid and secure foundation for executing containerized workloads"
    }
  ]
}
```

```

    },
    {
      "id": "4296",
      "name": "Installation and Patches",
      "order": 1,
      "severity": "Medium",
      "description": "Installation and Patches"
    }
  ]
}

```

View requirement details by ID

Use this API to view the details of a requirement by ID.

URI

```
https://<host>:<port>/urest/v1/requirement/{requirementId}
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requirement, corresponding to the requested ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "id": "4296",
  "name": "Installation and Patches",
  "order": 1,
  "severity": "Medium",
  "description": "Installation and Patches"
}
```

View requirement rules

Use this API to view the rules associated with the specified requirement.

URI

```
https://<host>:<port>/urest/v1/requirement/{requirementId}/rule
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns rules associated with the specified requirement.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
[
  {
    "id": "id",
    "ruleName": "name",
    "ruleType": "Evaluation and Remediation",
    "ruleStatus": "status",
    "scope": "string",
    "requirementId": "id",
    "controlId": "id",
    "controlName": "name",
    "parameters": [
      {
        "id": "184361",
        "name": "name",
        "value": "expectedValue",

```

```
    "operator": "string",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 1
  },
  {
    "id": "184355",
    "name": "name",
    "value": "expectedValue",
    "operator": "string",
    "dataType": "String",
    "actionType": "REMIEDIATION",
    "position": 2
  }
]
}
```

View sub-requirements of a requirement

Use this API to view all the sub-requirements associated with the specified requirement.

URI

```
https://<host>:<port>/urest/v1/requirement/{requirementId}/subrequirement
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns all the sub-requirements associated with the specified requirement.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
[
  {
    "id": "id1",
    "name": "name1",
    "order": 1,
    "severity": "Medium",
    "description": "description1"
  },
  {
    "id": "id2",
    "name": "name2",
    "order": 2,
    "severity": "Medium",
    "description": "description2"
  }
]
```

```
}
]
```

Update a requirement by ID

Use this API to update a requirement by ID.

URI

```
https://<host>:<port>/urest/v1/requirement/{requirementId}
```

Method

PUT

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "newName",
  "order": 1,
  "severity": "High",
  "description": "newDescription"
```



```
}

```

Response code(s)

Code	Status	Description
200	OK	Returns the updated requirement.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

JSON body

```
{
  "name": "newName",
  "order": 1,
  "severity": "High",
  "description": "newDescription"
}
```

Successful output

```
{
  "id": "6836",
  "name": "newName",
  "order": 1,
  "severity": "High",
  "description": "newDescription"
}
```

Create a sub-requirement

Use this API to create a sub-requirement for the specified requirement.

URI

```
https://<host>:<port>/urest/v1/requirement/{requirementId}/subrequirement
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "name",
  "order": 1,
  "severity": "Medium",
  "description": "new"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the creates sub-requirement for the specified requirement.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "id": "id"
  "name": "name",
  "order": 1,
  "severity": "Medium",
  "description": "new"
}
```

resource API

You can use this API to perform the following operations:

Operation	Method	URI
View all resources	GET	https://<host>:<port>/urest/v1/resource
View resource details by ID	GET	https://<host>:<port>/urest/v1/resource/{resourceId}
View resource compliance details	GET	https://<host>:<port>/urest/v1/resource/{resourceId}/compliance
Update resource credentials	POST	https://<host>:<port>/urest/v1/import/resource/credential
View resource credentials	GET	https://<host>:<port>/urest/v1/resource/{resourceId}/credential

Discover application resources	POST	https://<host>:<port>/urest/v1/resource/resourceId/discover/swplatform
Add a credential to a resource	POST	http://<host>:<port>/urest/v1/resource/{resourceId}/credential
Associate a resource with a template	POST	https://<host>:<port>/urest/v1/resource/{resourceId}/template
Discover application resources	POST	https://<host>:<port>/urest/v1/resource/resourceId/discover/swplatform
Update resource credentials	POST	https://<host>:<port>/urest/v1/import/resource/credential

View all resources

To view all the managed and discovered resources, use the following details:

URI

```
https://<host>:<port>/urest/v1/resource
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	https://<host>:<port>/urest/v1/resource?start=0

count	<p>(Optional)</p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<p>https://<host>:<port>/ urest/v1/resource? count=2</p>
start & count	<p>(Optional)</p> <p>Use both the start and count parameters in the request call to specify the index of the member that the response must begin with and the number of members to include.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<p>https://<host>:<port>/ urest/v1/resource? start=5&count=2</p>
filter	<p>(Optional)</p> <p>Filter the response data by the specified attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • name • parent (returns all child resources for a specified parent resource) • child (returns all parent resource groups for the specified child resource) • parentRG (returns all child resources and resource groups for the specified parent resource group) • status • type (returns either all resources or all resource groups based on the request) <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ • parent: LIKE, EQ • child: LIKE, EQ • parentRG: LIKE, EQ • status: EQ • type: EQ <p>You must URL encode the operators to include them in the URL query. For example, encode statusEQ 'managed%' into status+EQ+%27managed%25%27.</p>	<p>https://<host>:<port>/ urest/v1/resource? filter=name+LIKE+ %27oracle%25%27</p> <p>https://<host>:<port>/ urest/v1/resource? filter=parent+EQ+ %27Resource%25%27</p> <p>https://<host>:<port>/ urest/v1/resource? filter=child+EQ+ %27Resource%25%27</p> <p>https://<host>:<port>/ urest/v1/resource? filter=parentRG+EQ+ %27Resource%25%27</p> <p>https://<host>:<port>/ urest/v1/resource? filter=type+EQ+ %27resourcegroup%25%27</p>

query	<p><i>(Optional)</i></p> <p>Search the response data by the specified attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • name • status <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ • status: EQ <p>You must URL encode the operators to include them in the URL query. For example, encode nameLIKE'%discovered%' into name+LIKE+%27%25discovered%25%27'.</p>	<pre>https://<host>:<port>/ urest/v1/resource? query=name+LIKE+ %27%25oracle%25%27'</pre>
-------	--	---

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "total": 3,
  "count": 3,
  "start": 0,
  "members": [
    {
      "name": "resource1.domain.com",
      "uuid": "4cd80b6555b37e8895ed8d10e4aa7924",
      "ucmdbCIType": "node",
      "isReadOnly": false,
      "actions": [
        {
          "action": "Discover Resources",
          "url": "\/urest\/v1\/resource\/4cd80b6555b37e8895ed8d10e4aa7924\/discover\/all"
        }
      ],
      "appResources": null
    },
    {
      "name": "resource2.domain.com",
      "uuid": "463d3aeed76843ed88e3a382879ccfa6",
      "ucmdbCIType": "node",
      "isReadOnly": false,
      "actions": [
        {
          "action": "Discover Resources",
          "url": "\/urest\/v1\/resource\/463d3aeed76843ed88e3a382879ccfa6\/discover\/all"
        }
      ],
      "appResources": null
    },
    {
      "name": "resource3.domain.com",
      "uuid": "4dcdbcc89fe4c1738e3b7612d30a4110",
      "ucmdbCIType": "node",
      "isReadOnly": false,
      "actions": [
        {
          "action": "Discover Resources",
          "url": "\/urest\/v1\/resource\/4dcdbcc89fe4c1738e3b7612d30a4110\/discover\/all"
        }
      ],
      "appResources": null
    }
  ]
}
```

View resource details by ID

To view the details of the specified resource, use the following details:

URI

```
https://<host>:<port>/urest/v1/resource/{resourceId}
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "name": "resource1.domain.com",
  "uuid": "4cd80b6555b37e8895ed8d10e4aa7924",
  "ucmdbCIType": "node",
  "attributes": [
    {
      "name": "Global ID",
      "value": "4cd80b6555b37e8895ed8d10e4aa7924"
    },
    {
      "name": "OS Description",
      "value": "Red Hat Enterprise Linux Server 6 X86_64"
    },
    {
      "name": "Extended OS Family",
      "value": "LINUX"
    }
  ],
  "description": "ItsLinuxOS",
  "isReadOnly": false,
  "actions": [
    {
      "action": "Discover Resources",
      "url": "\/urest\/v1\/resource\/4cd80b6555b37e8895ed8d10e4aa7924\/discover\/all"
    }
  ],
  "appResources": [
  ]
}
```

View resource compliance details

To view the compliance details for the specified resource, use the following details:

URI

```
https://<host>:<port>/urest/v1/resource/{resourceId}/compliance
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the compliance details compliance details for the specified resource.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid template ID.

Sample(s)

Successful output

```
[
  {
```

```

    "status": "string",
    "scanStatus": "string",
    "complianceStatus": "string",
    "job": {
      "id": 123,
      "type": "string",
      "description": "description",
      "status": "string",
      "scheduledDT": 0,
      "startDT": 1481024809864,
      "endDT": 0
    },
    "resource": {
      "id": "id",
      "name": "name"
    },
    "control": {
      "id": 123,
      "name": "name"
    },
    "rule": {
      "id": 456,
      "name": "name"
    },
    "benchmark": {
      "id": 789,
      "name": "name"
    },
    "requirement": {
      "id": 123,
      "name": "name",
      "severity": "Medium"
    },
    "deployment": {
      "id": "id"
    }
  },
  {
    "status": "string",
    "scanStatus": "string",
    "complianceStatus": "string",
    "job": {
      "id": 123,
      "type": "string",
      "description": "description",
      "status": "string",
      "scheduledDT": 0,
      "startDT": 1481024809864,
      "endDT": 0
    },
    "resource": {
      "id": "id",
      "name": "name"
    }
  }

```

```
    },
    "control": {
      "id": 123,
      "name": "Execute a ORACLE query"
    },
    "rule": {
      "id": 456,
      "name": "name"
    },
    "benchmark": {
      "id": 123,
      "name": "name"
    },
    "requirement": {
      "id": 456,
      "name": "name",
      "severity": "Medium"
    },
    "deployment": {
      "id": "id"
    }
  }
}
```

View resource credentials

To view the list of credentials associated with the specified resource, use the following details:

URI

```
https://<host>:<port>/urest/v1/resource/{resourceId}/credential
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the list of credentials associated with the specified resource.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid template ID.

Sample(s)

Successful output

```
[
  {
    "id": "credentialId",
    "name": "credential",
    "data": [
      {
        "id": "dataId",
        "key": "username",
        "value": "user"
      },
      {
        "id": "dataId",
        "key": "password",
```

```

    "value": "pass"
  }
]
}
]
```

Update resource credentials

To update a resource with the provided credential, use the details provided below. If the resource does not exist, it first creates the resource and then updates its credential. This method overwrites all the credentials that are currently associated with the resource with the provided credential.

URI

```
https://<host>:<port>/urest/v1/import/resource/credential
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
[
  {
    "ResourceId": "resource_id",
    "Credentials": [
      {
        "id": "1",
        "name": "credential1",
        "data": [
          {
            "id": "1",
            "key": "username",
            "value": "user1"
          },
          {
            "id": "2",
            "key": "password",
            "value": "pass"
          }
        ]
      }
    ]
  }
]
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid template ID.

Sample(s)

JSON body

```
[
  {
    "ResourceId": "1",
    "Credentials": [
```

```
{
  "id": "1",
  "name": "credential1",
  "data": [
    {
      "id": "1",
      "key": "username",
      "value": "user1"
    },
    {
      "id": "2",
      "key": "password",
      "value": "pass"
    }
  ]
}
```

Successful output

```
Null
```

Discover application resources

To discover application resources on a given server, use the following details:

URI

```
https://<host>:<port>/urest/v1/resource/resourceId/discover/swplatform
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid template ID.
500	INTERNAL SERVER ERROR	

Sample(s)

JSON body

Successful output

Add a credential to a resource

To add a credential to a resource, use the details provided below. If the resource does not exist, it first creates the resource and then updates its credential. This method overwrites all the credentials that are currently associated with the resource.

URI

```
http://<host>:<port>/urest/v1/resource/{resourceId}/credential
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
[
  {
    "id": "credentialID"
  }
]
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid template ID.

Sample(s)

JSON body

```
[
  {
    "id": "8873ce6f-d2cf-4a88-97d8-1e64bd1c902d"
  }
]
```

Successful output

```
Null
```

Associate a resource with a template

To associate a discovered resource with a template, use the following details:

URI

```
https://<host>:<port>/urest/v1/resource/{resourceId}/template
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p>(<i>Required</i>)</p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>
--------------	--

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "id": "templateId"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid template ID.

Sample(s)

JSON body

```
{
  "id": "df5c1e4c-d7d9-4e97-9bd9-bc827017a7ec"
}
```

Successful output

```
{
  "message": "Successfully associated Template with Resource",
  "details": "",
  "errorCode": ""
}
```

Discover application resources

You can use this API to discover application resources on a given server.

URL

```
https://<host>:<port>/urest/v1/resource/resourceId/discover/swplatform
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{ }
```

Success response

Response code(s)

Code	Status	Description
200	OK	Updates a resource with the provided credential.
500	BAD REQUEST	An error in discovering the applications.

Update resource credentials

You can use this API to update a resource with the provided credential. If the resource does not exist, it first creates the resource and then updates its credential. This method overwrites all the credentials that are currently associated with the resource with the provided credential.

URL

```
https://<host>:<port>/urest/v1/import/resource/credential
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>
--------------	--

For more information about authentication, see [Communication and authentication](#).

JSON body

```
[
  {
    "ResourceId": "1",
    "Credentials": [
      {
        "id": "1",
        "name": "credential1",
        "data": [
          {
            "id": "1",
            "key": "username",
            "value": "user1"
          },
          {
            "id": "2",
            "key": "password",
            "value": "pass"
          }
        ]
      }
    ]
  }
]
```

Response code(s)

Code	Status	Description
200	OK	Updates a resource with the provided credential.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

resourceGroup API

You can use this API to perform the following operations:

Operation	Method	URI
Create resource group	POST	https://<host>:<port>/urest/v1/resourceGroup
Update resource group	PUT	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}
Get resource group details	GET	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}
Delete resource group	DELETE	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}
View children resources or resource groups	GET	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/child_resource
View all parent resource groups	GET	https://<host>:<port>/urest/v1/resource/{resourceId/resourcegroupId}/parent_resourceGroup
Associate resources and resource groups to a target resource group	POST	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/associate_resource
Dissociate resources and resource groups from a target resource group	POST	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/dissociate_resource
Create maintenance window	POST	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow
View details of a maintenance window by ID	GET	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow/{mwuuid}
View all maintenance windows for a particular resource group	GET	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow
Delete a maintenance window	DELETE	https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow/{mwuuid}

Create resource group

To create a resource group, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "name",
```

```

"displayLabel": "name",
"description": "description",
"childResources": [
{
"uuid": "resourcegroupUUID",
"ciType": "node"
}
],
"parentRG": resourcegroupUUID"

```

Response code(s)

Code	Status	Description
201	CREATED	Returns the created resource group ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```

{
"name": "testrg1",
"displayLabel": "testrg1",
"description": "test resource group",
"childResources": [
{
"uuid": "41e0ec696c49c184b5a0ef5dce471350",
"ciType": "node"
}
],
"parentRG": "41e0ec696c49c184b5a0ef5dce471366"
}

```

Successful output

```

{
"resourceGroupUUID": "436cf4dda5416c72a8c5f1baefe7dee3",
"childResources": [
"41e0ec696c49c184b5a0ef5dce471350","42a7eee1270daf55b50c73dbffce569a"
]
}

```

Update resource group

To update an existing resource group, use the below details. If a resource group is read only, an error is displayed.

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}
```

Method

PUT

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "displayLabel": "name",
  "description": "description",
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource group ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "displayLabel": "testrg",
  "description": "test resource group",
}
```

Successful output

```
{
  "resourceGroupUUID": "436cf4dda5416c72a8c5f1baefe7dee3",
}
```

Get resource group details

To get the resource group details of a resource group, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource group ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "name": "testrg1",
  "displayLabel": "testrg1",
  "uuid": "44ff0ed104bdc20e982eb32471c7b96c",
  "description": "test resource group",
  "isReadOnly": true,
  "ucmdbCIType": "dca_resource_group"
}
```

Delete resource group

To to delete a existing resource group, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}
```

Method

DELETE

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
204	NO CONTENT	Deletes the requested resource group.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

View children resources or resource groups

To list all the child resources or resource groups for a particular resource group, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/child_resource
```

Method

GET

Parameters

Name	Description	Sample URI
level	<p>Queries for one or all level of hierarchies for a resource group.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/child_resource?level=1 or ALL</pre>
filter	<p>(Optional)</p> <p>Filter the response data by the specified attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> type <p>Supported operators:</p> <ul style="list-style-type: none"> type: EQ <p>You must URL encode the operators to include them in the URL query. For example, encode typeEQ 'resourcegroup' into status+EQ+resourcegroup.</p>	<pre>https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/child_resource?filter=type EQ 'resourcegroup'</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested child resource(s) or resource group(s).
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "total": 4,
  "count": 4,
  "start": 0,
  "members":
  [
    {
      "name": "node1",
      "uuid": "4c9c1e77a346b37eaa118ed899f8cd79",
      "ucmdbCIType": "node",
      "actions": null,
      "appResources": null
    },
    {
```

```

    "name": "membervnode",
    "uuid": "46079eee9f715333b8c01759c0da4db9",
    "ucmdbCIType": "node",
    "actions": null,
    "appResources": null
  },
  {
    "name": "test3",
    "uuid": "4f2f71aec7346b2387aeca324703f483",
    "ucmdbCIType": "dca_resource_group",
    "isReadOnly": false,
    "actions": null,
    "appResources": null
  },
  {
    "name": "autogroup",
    "uuid": "4b6a603156ced85ab69eeca2d8ce3c",
    "ucmdbCIType": "dca_resource_group",
    "isReadOnly": false,
    "actions": null,
    "appResources": null
  }
]
}

```

View all parent resource groups

To view all the resource groups by the resource or resource group it is associated with, use the below details. Only the immediate parent resource or resource group is displayed and not the entire hierarchy.

URI

```
https://<host>:<port>/urest/v1/{resourceId/resourcegroupId}/parent_resourceGroup
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested parent group.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "total": 2,
  "count": 2,
  "start": 0,
  "members":
  [
    {
      "name": "testrg",
      "uuid": "40697e9aecf02ec7af5d624ee486d727",
      "ucmdbCIType": "dca_resource_group",
      "isReadOnly": false,
      "actions": null,
      "appResources": null
    },
    {
```

```

    "name": "test3",
    "uuid": "4f2f71aec7346b2387aeca324703f483",
    "ucmdbCIType": "dca_resource_group",
      "isReadOnly": false,
    "actions": null,
    "appResources": null
  }
]
}

```

Associate resources and resource groups to a target resource group

To associate one or more resources and resource groups to a target resource group, use the below details. If the resource group is already associated with a parent, an error is returned.

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/associate_resource
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>
--------------	--

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "jobName": "name",
  "jobType": {},
  "targets": [{
    "type": "string",
    "ciType": "node",
    "uuid": "resourceId"
  }, {
    "type": "RESOURCE",
    "ciType": "node",
    "uuid": "resourceId"
  }],
  "skiptargets": null,
  "properties": null,
  "uuid": "resourceGroupUUID"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the message that the resources have been associated to the target resource.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "jobName": "DCA_ASSOCIATE_TO_RG",
  "jobType": {},
  "targets": [{
```

```

    "type": "RESOURCE",
    "ciType": "node",
    "uuid": "44e96913f367280f9e5a5c60f3a876da"
  }, {
    "type": "RESOURCE",
    "ciType": "node",
    "uuid": "41e63c2dcac5db7e9735142ad5368d35"
  }
],
"skiptargets": null,
"properties": null,
"uuid": "48df617e34c5c6bfb50f354c3f80171a"
}

```

Successful output

Dissociate resources and resource groups from a target resource group

To dissociate one or more resources and resource groups from a target resource group, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/dissociate_resource
```

Method

POST

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "jobName": "name",
  "jobType": {},
  "targets": [{
    "type": "string",
    "ciType": "node",
    "uuid": "resourceId"
  }, {
    "type": "RESOURCE",
    "ciType": "node",
    "uuid": "resourceId"
  }],
  "skiptargets": null,
  "properties": null,
  "uuid": "resourceGroupUUID"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the message that the resources have been dissociated from the target resource.

400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.
-----	-------------	---

Sample(s)

JSON body

```
{
  "jobName": "DCA_DISASSOCIATE_FROM_RG",
  "jobType": {},
  "targets": [{
    "type": "RESOURCE",
    "ciType": "node",
    "uuid": "4046ff9cd1192382b9495c3acd0c9369"
  }, {
    "type": "RESOURCE",
    "ciType": "node",
    "uuid": "4433b8dff9f962dcb85202ec2ccb3261"
  }],
  "skiptargets": null,
  "properties": null,
  "uuid": "49de3fd4d40e153099808f6a4774263c"
}
```

Create maintenance window

To create a maintenance window, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow
```

Method

POST

Parameters

Not applicable

Header

Header	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name" : "name",
  "maintenanceWindowdesc" : "DAYS maintenance WIndow",
  "onDate" : null,
  "startTime" : "hh:mm:ss",
  "endTime" : "hh:mm:ss",
  "maintenanceWindowType" : "type",
  "daysOfWeek" : "day,day"
  "daysOfMonth" : null,
  "recurrencePeriod" : "string",
  "recurrenceInterval" : integer,
  "cronPattern" : null
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested maintenance window ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "name" : "Run DAYS",
  "maintenanceWindowdesc" : "DAYS maintenance WIndow",
  "onDate" : null,
  "startTime" : "08:04:00",
  "endTime" : "08:24:00",
  "maintenanceWindowType" : "MAINTENANCE_WINDOW_TYPE_READ",
  "daysOfWeek" : "WEDNESDAY,THURSDAY"
  "daysOfMonth" : null,
  "recurrencePeriod" : "WEEKS",
  "recurrenceInterval" : 2,
  "cronPattern" : null
}
```

Successful output

```
{
  "uuid": "0ecb29cb-b262-4d96-98ab-4d2f5554d47a"
}
```

View details of a maintenance window by ID

To view the details of a particular maintenance window, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow/{mwwuid}
```

Method

GET

Parameters

Not applicable

Header

Header	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested maintenance window.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "uuid": "0ecb29cb-b262-4d96-98ab-4d2f5554d47a",
  "name": "Run DAYS",
  "onDate": "05/10/2017",
  "startTime": "08:04:00",
  "endTime": "08:24:00",
  "maintenanceWindowType": "MAINTENANCE_WINDOW_TYPE_READ"
}
```

View all maintenance windows

To view all maintenance windows for a particular resource group, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow?start=0</pre>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow?count=1</pre>
start & count	<p><i>(Optional)</i></p> <p>Use both the start and count parameters in the request call to specify the index of the member that the response must begin with and the number of members to include.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow?start=0&count=1</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the list of all maintenance window schedules, corresponding to the requested resource group.
410	GONE	

Sample(s)

Successful output

```
{
  "total": 2,
  "count": 2,
  "start": 0,
  "members": [
    {
      "uuid": "8e9e9448-2472-478b-902c-09836e062ea4",
      "name": "Run DAYS",
      "onDate": "05/10/2017",
      "startTime": "08:04:00",
      "endTime": "08:24:00",
      "maintenanceWindowType": "MAINTENANCE_WINDOW_TYPE_READ"
    },
    {
      "uuid": "0ecb29cb-b262-4d96-98ab-4d2f5554d47a",
```

```

"name": "Run DAYS",
"onDate": "05/10/2017",
"startTime": "08:04:00",
"endTime": "08:24:00",
"maintenanceWindowType": "MAINTENANCE_WINDOW_TYPE_READ"
}
    ]
}

```

Delete a maintenance window

To delete an existing maintenance window, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourceGroup/{resourceGroupUUID}/maintenanceWindow/{mmuuid}
```

Method

DELETE

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
410	GONE	
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

resourcetype API

You can use this API to perform the following operations:

Operation	Method	URI
View all resource types	GET	<code>https://<host>:<port>/urest/v1/resourcetype</code>
View resource type details by ID	GET	<code>https://<host>:<port>/urest/v1/resourcetype/{resourcetypeId}</code>
Associate a tag with a resource type	PATCH	<code>https://<host>:<port>/urest/v1/resourcetype/{resourcetypeId}/associatetag</code>
Disassociate a tag from a resource type	PATCH	<code>https://<host>:<port>/urest/v1/resourcetype/{resourcetypeId}/disassociatetag</code>

View all resource types

To view all the available resource types, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourcetype
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the resource type that the response will begin with, where '0' represents the first available resource type.</p> <p>Type: Integer Attribute: <positive integer value></p>	https://<host>:<port>/urest/v1/resource?type=start=0
count	<p><i>(Optional)</i></p> <p>Indicates the number of resource type to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer Attribute: <positive integer value></p>	https://<host>:<port>/urest/v1/resource?type=count=2
start & count	<p><i>(Optional)</i></p> <p>Use both the start and count parameters in the request call to specify the index of the resource type that the response must begin with and the number of members to include.</p> <p>Type: Integer Attribute: <positive integer value></p>	https://<host>:<port>/urest/v1/resource?type=start=5&count=2

sort	<p>(<i>Optional</i>)</p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • createdTime • name • tagname <p>Supported operators:</p> <ul style="list-style-type: none"> • createdTime: asc, desc • name: asc, desc • tagname: asc, desc 	<pre>https://<host>:<port>/ urest/v1/resourcetype? sort=createdTime:asc https://<host>:<port>/ urest/v1/resourcetype? sort=name:asc https://<host>:<port>/ urest/v1/resourcetype? sort=tagname:desc</pre>
filter	<p>(<i>Optional</i>)</p> <p>Filter the response data by the specified attributes. This parameter supports only the AND operator for multi-parameter requests.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • createdTime • description • name • tagname <p>Supported operators:</p> <ul style="list-style-type: none"> • createdTime: BETWEEN, GT, LT, GE, LE • description: LIKE, EQ, NE • name: LIKE, EQ, NE • tagname: LIKE, EQ, NE <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE 'Oracle%' into name+LIKE+%27Oracle%25%27.</p>	<pre>https://<host>:<port>/urest/v1/ resourcetype?filter=createdTime %20GT %20%27%252017-03-14T06:24:09.4015 13Z%25%27 https://<host>:<port>/urest/v1/ resourcetype?filter=description %20LIKE%20%27%25Oracle%25%27 https://<host>:<port>/urest/v1/ resourcetype?filter=name%20LIKE %20%27%25Oracle%25%27</pre>

query	<p><i>(Optional)</i></p> <p>Search for a resource type by the specified attributes.</p> <p>This parameter supports both the AND and OR operators for multi-parameter requests and can be used for more complex queries.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • name • createTime • description • tagname <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ • createTime: BETWEEN, GT, LT, GE, LE • description: LIKE, EQ • tagname: LIKE, EQ, NE <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE '%Grid%' into name%20LIKE%20%27%25Grid%25%27.</p>	<pre>https://<host>:<port>/urest/v1/ resourcetype?query=name%20LIKE %20%27%25Grid%25%27 https://<host>:<port>/ urest/v1/resourcetype? query=createTime%20GT %20%27%252017-03-07T06:52:2 5%25%27 https://<host>:<port>/ urest/v1/resourcetype? query=description%20LIKE %20%27%25database%25%27 https://<host>:<port>/ urest/v1/resourcetype? query=tagname%20LIKE %20%27%25Oracle%25%27</pre>
-------	--	--

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "total": 3,
  "count": 3,
  "start": 0,
  "members": [
    {
      "createdTime": "2017-04-24T06:53:14.768747Z",
      "uuid": "73c96dd2-94dd-4ff9-8894-fd344a80e317",
      "name": "Windows",
      "description": "A server with a Windows OS installed",
      "licenseCategory": "server",
      "resourceTypeVersion": "1",
      "schemaVersion": "2.0",
      "icon": "platform-windows.png"
    },
    {
      "createdTime": "2017-04-24T06:53:13.660084Z",
      "uuid": "d81fb8a1-1689-49e2-9f0b-c4faae1bb181",
      "name": "UnProvisioned Server",
      "description": "A server with no OS installed",
      "licenseCategory": "",
      "resourceTypeVersion": "1",
      "schemaVersion": "2.0",
      "icon": "unprovisioned-server.png"
    },
    {
      "createdTime": "2017-04-24T06:53:13.432042Z",
      "uuid": "92972473-fc92-4004-a0e3-b3d88c63a44d",
      "name": "Solaris",
      "description": "A server with a Solaris OS installed",
      "licenseCategory": "server",
      "resourceTypeVersion": "1",
      "schemaVersion": "2.0",
      "icon": "platform-solaris.png"
    }
  ]
}
```

```
}

```

View resource type details by ID

To view the details of the specified resource type, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourcetype/{resourcetypeId}
```

Method

GET

Parameters

Name	Description	Sample URI
fields	<p><i>(Optional)</i></p> <p>The attributes can be appended to the request, separated by a comma to get the details as shown in the sample call.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> ciTypeMapping baseResourceHierarchies.BaseResources attributes lifeCycleActions.Flow.Properties lifeCycleActions.Flow.DeploymentParameters generalActions 	<pre>https://<host>:<port>/urest/v1/resourcetype/resourcetypeID?fields=CiTypeMapping.Filters,BaseResourceHierarchies.BaseResources.Filters,Attributes,LifeCycleActions.Flow.Properties,LifeCycleActions.Flow.DeploymentParameters,GeneralActions</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "createdTime": "2017-04-24T06:53:13.432042Z",
  "uuid": "92972473-fc92-4004-a0e3-b3d88c63a44d",
  "name": "Solaris",
  "description": "A server with a Solaris OS installed",
  "licenseCategory": "server",
  "resourceTypeVersion": "1",
  "schemaVersion": "2.0",
  "attachedTags": [
    {
      "createdTime": "2017-04-24T06:52:13.423394Z",
      "name": "Solaris",
      "uuid": "c15c3480-33f3-45e0-b182-153ff9de7275"
    }
  ],
}
```

```
"icon": "platform-solaris.png"
}
```

Associate a tag with a resource type

To associate a tag with a resource type, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourcetype/{resourcetypeId}/associatetag
```

Method

PATCH

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "tagName"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "name": "OS"
}
```

Successful output

```
{
  "createdTime": "2017-04-24T06:53:13.432042Z",
  "uuid": "92972473-fc92-4004-a0e3-b3d88c63a44d",
  "name": "Solaris",
  "description": "A server with a Solaris OS installed",
  "licenseCategory": "server",
  "resourceTypeVersion": "1",
  "schemaVersion": "2.0",
  "attachedTags": [
    {
      "createdTime": "2017-04-24T06:52:13.423394Z",
      "name": "Solaris",
      "uuid": "c15c3480-33f3-45e0-b182-153ff9de7275"
    },
    {
      "createdTime": "2017-04-24T06:53:10.338397Z",
      "name": "OS",
      "uuid": "2165a4ef-1bb6-4644-a349-e7a610f374ca"
    }
  ]
}
```

```

    ],
    "icon": "platform-solaris.png"
  }

```

Disassociate a tag from a resource type

To disassociate a tag from a resource type, use the following details:

URI

```
https://<host>:<port>/urest/v1/resourcetype/{resourcetypeId}/disassociatetag
```

Method

PATCH

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "uuid": "tagId"
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "uuid": "c15c3480-33f3-45e0-b182-153ff9de7275"
}
```

Successful output

```
{
  "createdTime": "2017-04-24T06:53:13.432042Z",
  "uuid": "92972473-fc92-4004-a0e3-b3d88c63a44d",
  "name": "Solaris",
  "description": "A server with a Solaris OS installed",
  "licenseCategory": "server",
  "resourceTypeVersion": "1",
  "schemaVersion": "2.0",
  "attachedTags": [
    {
      "createdTime": "2017-04-24T06:52:13.423394Z",
      "name": "Solaris",
      "uuid": "c15c3480-33f3-45e0-b182-153ff9de7275"
    }
  ],
  "icon": "platform-solaris.png"
}
```

rule API

You can use this API to perform the following operation:

Operation	Method	URI
View rule details by ID	GET	<code>https://<host>:<port>/urest/v1/rule/{ruleId}</code>
Create a requirement rule using the requirement ID and control ID	POST	<code>https://<host>:<port>/urest/v1/benchmark</code>
Delete a rule by ID	DELETE	<code>https://<host>:<port>/urest/v1/rule/{:ruleId}</code>
Update a rule by ID	POST	<code>https://<host>:<port>/urest/v1/rule/{ruleId}</code>

View rule details by ID

Use this API to view the details of a rule by ID.

URL

```
https://<host>:<port>/urest/v1/rule/{ruleId}
```

Method

GET

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	

Sample(s)

Successful output

```
{
  "id": "id",
  "ruleName": "name",
  "ruleType": "Evaluation",
  "ruleStatus": "Valid",
  "scope": "Oracle 12c",
  "requirementId": "id",
  "controlId": "id",
  "controlName": "name",
  "parameters": [
    {
      "id": "id1",
      "name": "name1",
      "value": "$instanceHome",
      "operator": "operator",
```

```
    "dataType": "String",
    "actionType": "SCAN",
    "position": 2
  },
  {
    "id": "id2",
    "name": "name2",
    "value": "$instanceName",
    "operator": "operator",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 1
  },
  {
    "id": "id3",
    "name": "name3",
    "value": "expectedValue",
    "operator": "operator",
    "dataType": "String",
    "actionType": "STRING",
    "position": 1
  }
]
}
```

Create a requirement rule using the requirement ID and control ID

Use this API to add a new rule for a requirement identified by ID and control ID.

URI

```
https://<host>:<port>/urest/v1/benchmark
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "ruleName": "Test rule",
  "name": "Test rule",
  "ruleType": "Evaluation",
  "scope": {
    "id": "33",
    "name": "RHEL 7 Compatibles"
  },
  "control": {
    "name": "control_test",
    "id": "1048",
    "type": "Evaluation",
    "parameterLists": {
      "evaluation": [],
      "remediation": []
    },
    "resourceTypes": [{
      "id": "33",
      "name": "RHEL 7 Compatibles"
    }]
  },
  "controlName": "control_test",
  "parameterLists": {
```

```

        "evaluation": [],
        "remediation": []
    },
    "parameters": []
}

```

Response codes

Code	Status	Description
201	OK	Creates the requirement rule.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample

Successful output

```

{
  "id": "13096",
  "ruleName": "Test rule",
  "ruleType": "Evaluation",
  "ruleStatus": "Valid",
  "scope": {
    "id": "33",
    "name": "RHEL 7 Compatibles"
  },
  "requirementId": "8262",
  "controlId": "1048",
  "controlName": "control_test",
  "parameters": []
}

```

Delete a rule by ID

Use this API to delete a rule by ID.

URI

```
https://<host>:<port>/urest/v1/rule/{:ruleId}
```

Method

DELETE

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

None

Response codes

Code	Status	Description
204	REMOVED	Deletes the specified rule.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Update a rule by ID

Use this API to Update a rule by ID.

URI

```
https://<host>:<port>/urest/v1/rule/{ruleId}
```

Method

POST

Parameters

None

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute:</p> <p>application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "ruleName": "Test rule - updated name",
  "parameters": [{
    "id": "52936",
    "name": "Directory permission",
    "value": "dir_perm_evaluation",
    "operator": "=",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 3
  }, {
    "id": "52935",
    "name": "File permission",
    "value": "file_perm_evaluation",
    "operator": "=",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 2
  }, {
    "id": "52934",
    "name": "Path",
    "value": "path_to_file_evaluation",
    "operator": "=",

```

```

        "dataType": "String",
        "actionType": "SCAN",
        "position": 1
    }, {
        "id": "52933",
        "name": "Path",
        "value": "path_to_file_remediation",
        "operator": "=",
        "dataType": "String",
        "actionType": "REMIEDIATION",
        "position": 1
    }, {
        "id": "52932",
        "name": "File permission",
        "value": "file_perm_remediation",
        "operator": "=",
        "dataType": "String",
        "actionType": "REMIEDIATION",
        "position": 2
    }, {
        "id": "52931",
        "name": "Directory permission",
        "value": "dir_perm_remediation",
        "operator": "=",
        "dataType": "String",
        "actionType": "REMIEDIATION",
        "position": 3
    }
}

```

Response codes

Code	Status	Description
200	OK	Updates the specified rule.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL

500	INTERNAL SERVER ERROR	Issues with the website's server.
-----	-----------------------	-----------------------------------

Sample

Successful output

```
{
  "id": "13115",
  "ruleName": "Test rule - updated name",
  "ruleType": "Evaluation and Remediation",
  "ruleStatus": "Valid",
  "scope": {
    "id": "33",
    "name": "RHEL 7 Compatibles"
  },
  "requirementId": "8274",
  "controlId": "1053",
  "controlName": "check_permissions_with_params",
  "parameters": [{
    "id": "52936",
    "name": "Directory permission",
    "value": "dir_perm_evaluation",
    "operator": "=",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 3
  }, {
    "id": "52935",
    "name": "File permission",
    "value": "file_perm_evaluation",
    "operator": "=",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 2
  }, {
    "id": "52934",
    "name": "Path",
    "value": "path_to_file_evaluation",
    "operator": "=",
    "dataType": "String",
    "actionType": "SCAN",
    "position": 1
  }, {
    "id": "52933",
    "name": "Path",
    "value": "path_to_file_remediation",
    "operator": "=",
    "dataType": "String",
    "actionType": "REMEDIATION",
  }
}
```

```

    }, {
      "position": 1
    }, {
      "id": "52932",
      "name": "File permission",
      "value": "file_perm_remediation",
      "operator": "=",
      "dataType": "String",
      "actionType": "REMIEDIATION",
      "position": 2
    }, {
      "id": "52931",
      "name": "Directory permission",
      "value": "dir_perm_remediation",
      "operator": "=",
      "dataType": "String",
      "actionType": "REMIEDIATION",
      "position": 3
    }
  ]
}

```

scheduler API

You can use this API to perform the following operations:

Operation	Method	URI
View all job requests	GET	<a href="https://<host>:<port>/urest/v1/scheduler/jobRequest">https://<host>:<port>/urest/v1/scheduler/jobRequest
View job request details by job request ID	GET	<a href="https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestuuid}">https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestuuid}
View all jobs for a job request	GET	<a href="https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestuuid}/job">https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestuuid}/job
View all jobs	GET	<a href="https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestUuid}/job">https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestUuid}/job
View job details by ID	GET	<a href="https://<host>:<port>/urest/v1/scheduler/job/{jobUUID}">https://<host>:<port>/urest/v1/scheduler/job/{jobUUID}
Create a job in the scheduler	POST	<a href="https://<host>:<port>/urest/v1/scheduler/jobRequest">https://<host>:<port>/urest/v1/scheduler/jobRequest

View all job requests

To view all the jobs in the scheduler, use the following details:

URI

```
https://<host>:<port>/urest/v1/scheduler/jobRequest
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/scheduler/jobRequest?start=0</pre>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/scheduler/jobRequest?count=2</pre>
start & count	<p><i>(Optional)</i></p> <p>Use both the start and count parameters in the request call to specify the index of the member that the response must begin with and the number of members to include.</p> <p>Type: Integer Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/scheduler/jobRequest?start=5&count=2</pre>

filter	<p>(Optional)</p> <p>Filter the response data by the specified attributes.</p> <p>Type: String Attribute:</p> <ul style="list-style-type: none"> • name • status <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ • status: EQ <p>You must URL encode the operators to include them in the URL query. For example, encode statusEQ 'managed%' into status+EQ+%27managed%25%27</p>	<p>https://<host>:<port>/ urest/v1/scheduler/ jobRequest?filter=status+EQ +%27managed%25%27</p>
query	<p>(Optional)</p> <p>Search the response data by the specified attributes.</p> <p>Type: String Attribute:</p> <ul style="list-style-type: none"> • id • status • type • startDT • endDT • target.type • target.id <p>Supported operators:</p> <ul style="list-style-type: none"> • status, type: string • id: number • startDT, endDT: date 	<p>https://<host>:<port>/urest/ v1/scheduler/jobRequest? query=status EQ 'Completed'</p>

sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • id • status • startDT • scheduledDT <p>Supported operators:</p> <ul style="list-style-type: none"> • id: asc, desc • startDT: asc, desc • scheduledDT: asc, desc 	<pre>https://<host>:<port>/ urest/v1/scheduler/ jobRequest?sort=id:asc https://<host>:<port>/ urest/v1/scheduler/ jobRequest? sort=startDT:asc https://<host>:<port>/ urest/v1/scheduler/ jobRequest? sort=scheduledDT:desc</pre>
------	---	---

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the list of all the job requests.

400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.
-----	-------------	---

Sample(s)

Successful output

```
{
  "total": 4,
  "count": 4,
  "start": 0,
  "members": [
    {
      "jobType": {
        "executionEngine": "00",
        "name": "COMPLIANCE_SCAN",
        "flowUUID": "71b5678b-bf41-4ca2-ae07-2a99767ed5e5"
      },
      "targets": [
        {
          "type": "RESOURCEGROUP",
          "uuid": "460fb797a262d8079d1f36fef18ef7a4"
        }
      ],
      "skiptargets": null,
      "properties": [
        {
          "property": "policyId",
          "value": "5"
        }
      ],
      "schedule": {
        "maintenanceWindowType": "MAINTENANCE_WINDOW_TYPE_READ",
        "recurrenceInterval": 2,
        "recurrencePeriod": "WEEKS",
        "remediationMode": "NEXT_MAINTENANCE_WINDOW"
      },
      "uuid": "78043b72-1c6e-443d-9a24-960296ef30c1"
    },
    {
      "jobType": {
        "executionEngine": "00",
        "name": "ADHOC_COMPLIANCE_SCAN",
        "flowUUID": "0595325f-5ed7-4f1e-9157-9144fd876179"
      },
      "targets": [
        {
          "type": "RESOURCE",
          "uuid": "40cec8cfe6be3ec786df0987d51da0fe"
        }
      ],
    }
  ],
}
```



```

    "skiptargets": null,
    "properties": [
      {
        "property": "benchmarkId",
        "value": "10"
      }
    ],
    "uuid": "ee4eedab-40e0-4569-a95a-8dd762bf4358"
  },
  {
    "jobType": {
      "executionEngine": "00",
      "name": "ADHOC_COMPLIANCE_SCAN",
      "flowUUID": "0595325f-5ed7-4f1e-9157-9144fd876179"
    },
    "targets": [
      {
        "type": "RESOURCE",
        "uuid": "40cec8cfe6be3ec786df0987d51da0fe"
      }
    ],
    "skiptargets": null,
    "properties": [
      {
        "property": "benchmarkId",
        "value": "10"
      }
    ],
    "uuid": "cf3d6886-8848-4cd4-af4b-c759d2909368"
  },
  {
    "jobType": {
      "executionEngine": "00",
      "name": "ADHOC_COMPLIANCE_SCAN",
      "flowUUID": "0595325f-5ed7-4f1e-9157-9144fd876179"
    },
    "targets": [
      {
        "type": "RESOURCE",
        "uuid": "407db231c8ebe61986c2ca3e8f44482e"
      }
    ],
    "skiptargets": null,
    "properties": [
      {
        "property": "benchmarkId",
        "value": "10"
      }
    ],
    "uuid": "e829f7ee-3768-4d0b-80a8-2385a1994bf0"
  }
]
}

```

View job request details by job request ID

To view the details of a specified job request, use the following details:

URI

```
https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestuuid}
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested job request ID.

400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.
-----	-------------	---

Sample(s)

Successful output

```
{
  "jobType": {
    "executionEngine": "00",
    "name": "COMPLIANCE_SCAN",
    "flowUUID": "71b5678b-bf41-4ca2-ae07-2a99767ed5e5"
  },
  "targets": [
    {
      "type": "RESOURCEGROUP",
      "uuid": "4b6fc1f488a29644b5680e4bf6a2d693",
      "name": "resource1"
    }
  ],
  "skiptargets": null,
  "properties": [
    {
      "property": "policyId",
      "value": "4"
    }
  ],
  "schedule": {
    "maintenanceWindowType": "MAINTENANCE_WINDOW_TYPE_READ",
    "recurrenceInterval": 3,
    "recurrencePeriod": "WEEKS",
    "remediationMode": "REMEDiate_NEXT_MAINTENANCE_WINDOW"
  },
  "uuid": "4238a1de-40d1-4f06-9c94-fc2e9929db6e"
}
```

View all jobs for a job request

To view all the jobs for a specified job request, use the following details:

URI

```
https://<host>:<port>/urest/v1/scheduler/jobRequest/{jobRequestuuid}/job
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the list of all jobs for a request job request ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "total": 2,
  "count": 2,
  "start": 0,
  "members": [
    {
      "id": 470,
```

```

    "uuid": "f53eeaab-c01f-463c-8b4d-e516b2e97087",
    "jobType": "COMPLIANCE_SCAN",
    "jobName": "Policy Compliance Scan",
    "executionId": "175604441",
    "username": "admin",
    "startTime": 1494403440000,
    "ooScheduleId": "437ea43c-64cc-4070-88b7-b6adaaaa3187",
    "jobStatus": "Running",
    "policyId": "4",
    "resourceUUID": "44bd28185a19c013839b58356664516d",
    "resourceGroupUUID": "4b6fc1f488a29644b5680e4bf6a2d693",
    "jobStartTime": "2017-05-10 08:04:00.000000"
  },
  {
    "id": 471,
    "uuid": "29c11e22-07d6-4b9d-b10d-3a85e17267dc",
    "jobType": "COMPLIANCE_SCAN",
    "jobName": "Policy Compliance Scan",
    "executionId": "188006384",
    "username": "admin",
    "startTime": 1494403740000,
    "ooScheduleId": "54161a37-1ca7-4961-85ae-deb6e4b2b345",
    "jobStatus": "Running",
    "policyId": "4",
    "resourceUUID": "47feacfc0712bc818df88b5aa26fa69c",
    "resourceGroupUUID": "4b6fc1f488a29644b5680e4bf6a2d693",
    "jobStartTime": "2017-05-10 08:09:00.000000"
  }
]
}

```

View all jobs

To view all the jobs, use the following details:

URI

```
https://<host>:<port>/urest/v1/scheduler/job
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the member that the response will begin with, where '0' represents the first available resource.</p> <p>Type: Integer Attribute: <positive integer value></p>	<p>https://<host>:<port>/ urest/v1/scheduler/job? start=0</p>
count	<p><i>(Optional)</i></p> <p>Indicates the number of members to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer Attribute: <positive integer value></p>	<p>https://<host>:<port>/ urest/v1/scheduler/job? count=0</p>
start & count	<p><i>(Optional)</i></p> <p>Use both the start and count parameters in the request call to specify the index of the member that the response must begin with and the number of members to include.</p> <p>Type: Integer Attribute: <positive integer value></p>	<p>https://<host>:<port>/ urest/v1/scheduler/job? start=5&count=2</p>
filter	<p><i>(Optional)</i></p> <p>Filter the response data by the specified attributes.</p> <p>Type: String Attribute:</p> <ul style="list-style-type: none"> • name • status • type <p>Supported operators: name: LIKE, EQ status: EQ</p> <p>You must URL encode the operators to include them in the URL query. For example, encode jobType EQ 'ADHOC_COMPLIANCE_SCAN' into jobType+EQ +ADHOC_COMPLIANCE_SCAN</p>	<p>https://<host>:<port>/ urest/v1/scheduler/job? filter=jobType+EQ +ADHOC_COMPLIANCE_SCAN</p>

query	<p><i>(Optional)</i></p> <p>Search the response data by the specified attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • id • status • type • startDT • endDT <p>Supported operators:</p> <ul style="list-style-type: none"> • status, type: string • id: number • startDT, endDT: date 	<pre>https://<host>:<port>/urest/ v1/scheduler/job? query=jobStatus EQ 'RUNNING'</pre>
sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, and in ascending or descending order.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • id • status • startDT • scheduledDT <p>Supported operators:</p> <ul style="list-style-type: none"> • id: asc, desc • startDT: asc, desc • scheduledDT: asc, desc 	<pre>https:// <host>:<port>/urest/ v1/scheduler/job? sort=id:asc https:// <host>:<port>/urest/ v1/scheduler/job? sort=startDT:asc https:// <host>:<port>/urest/ v1/scheduler/job? sort=scheduledDT:des c</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the list of all the jobs
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "total": 3,
  "count": 3,
  "start": 0,
  "members": [
    {
      "id": "1",
      "type": "ADHOC_COMPLIANCE_SCAN",
      "status": "Completed",
      "scheduledDT": 0,
      "startDT": 1491826854546,
      "endDT": 1491826930864,
      "target": {
        "id": "4dbc5714321b443dbacb3fd15d32fe4",
        "type": "RESOURCE",

```



```

    "name": ""
  },
  "data": {
    "id": "13",
    "type": "BENCHMARK",
    "name": "CIS Red Hat Enterprise Linux 7 Benchmark v1.0.0"
  }
},
{
  "id": "2",
  "type": "ADHOC_COMPLIANCE_SCAN",
  "status": "Completed",
  "scheduledDT": 0,
  "startDT": 1491854567773,
  "endDT": 1491854575045,
  "target": {
    "id": "4dbc5714321b443dbacbf3fd15d32fe4",
    "type": "RESOURCE",
    "name": ""
  },
  "data": {
    "id": "18",
    "type": "BENCHMARK",
    "name": "cg prior to demo"
  }
}
]

```

View job details by ID

To view the details of a specified job, use the following details:

URI

```
https://<host>:<port>/urest/v1/scheduler/job/{jobUUID}
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the job for the requested job ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "id": 16,
  "uuid": "jobUUID",
  "jobDesc": "ADHOC_COMPLIANCE_SCAN",
  "jobType": "ADHOC_COMPLIANCE_SCAN",
  "recurrence": "now",
  "username": "user",
  "startTime": "mm/dd/yyyy hh:mm:ss",
  "jobStatus": "Completed"
}
```

Create a job in the scheduler

To create a job in the scheduler, use the following details:

URI

```
https://<host>:<port>/urest/v1/scheduler/jobRequest
```

Method

POST

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "type": "name",
  "target": {
    "type": "RESOURCE",
    "uuid": "resourceUUID"
  },
  "properties": [{
    "property": "benchmarkId",
    "value": "benchmarkID"
  }]
}
```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested job ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "type": "name",
  "target": {
    "type": "RESOURCE",
    "uuid": "resourceUUID"
  },
  "properties": [{
    "property": "benchmarkId",
    "value": "benchmarkID"
  }]
}
```

Successful output

```
"jobType" : {
  "name" : "ADHOC_COMPLIANCE_SCAN"
},
"targets" : [{
  "type" : "RESOURCE",
  "uuid" : "4ae6cd6a1ef2da7ab2e4ab452c12bcc7",
  "name" : "resource1"
}],
"properties" : [ {
  "property" : "benchmarkId",
  "value" : "1"
}, {
  "property" : "prop2",
  "value" : "978"
} ]
}`) { "uuid": "jobUUID" }

"jobType" : {
  "name" : "COMPLIANCE_SCAN"
},
"targets" : [{
  "type" : "RESOURCE",
  "uuid" : "4d34bbab2a8c0d44a57f9df133e3abf1",
```

```

    "name" : "resource1"
  }],
  "properties" : [ {
    "property" : "policyId",
    "value" : "%s"
  }, {
    "property" : "prop2",
    "value" : "978"
  } ]
} `,policyId)

```

scope API

You can use this API to perform the following operations:

Operation	Method	URI
View all scopes	GET	<code>https://<host>:<port>/urest/v1/scope</code>
View scope details by ID	GET	<code>https://<host>:<port>/urest/v1/scope/{scopeId}</code>
View subscopes of a scope	GET	<code>https://<host>:<port>/urest/v1/scope/{scopeId}/subscope</code>

View all scopes

Use this API to view all scopes.

URI

```
https://<host>:<port>/urest/v1/scope
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response codes

Code	Status	Description
200	OK	Returns the details of the given benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample(s)

Successful output

```
[
```

```
{
  "id": "1",
  "name": "Business Service"
},
{
  "id": "8",
  "name": "Device"
},
{
  "id": "11",
  "name": "Docker Image"
},
{
  "id": "2",
  "name": "Group"
},
{
  "id": "12",
  "name": "Platform"
},
{
  "id": "4",
  "name": "Resource Manager"
},
{
  "id": "59",
  "name": "Software"
},
{
  "id": "3",
  "name": "Unknown"
}
]
```

View scope details by ID

To view applicable scope by a specified ID, use the following details:

URI

```
https://<host>:<port>/urest/v1/scope/{scopeId}
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response codes

Code	Status	Description
200	OK	Returns the details of the given benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample(s)

Successful output

```
{
  "id": "1",
  "name": "Business Service"
}
```

View subscopes of a scope

To view all the subscopes of a specified scope, use the following details:

URI

```
https://<host>:<port>/urest/v1/scope/{scopeId}/subscope
```

Method

GET

Parameters

Not applicable

Header

Name	Type	Attribute	Required/Optional	Description
X-Auth-Token	string	<valid_token>	Required	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response codes

Code	Status	Description
200	OK	Returns the details of the given benchmark.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, or invalid header sent in request.
401	NOT AUTHORIZED	The X-Auth-token used for authentication is incorrect.
403	FORBIDDEN	Wrong permissions or ownership over your web content files and folders.
404	MATCHING OBJECT NOT FOUND	<ul style="list-style-type: none"> Website content removed or moved to another URL Incorrect URL
500	INTERNAL SERVER ERROR	Issues with the website's server.

Sample(s)

Successful output

```
[
  {
    "id": "13",
    "name": "Microsoft (MS) Windows"
  },
  {
    "id": "22",
    "name": "Unix"
  }
]
```

tag API

You can use this API to perform the following operations:

Operation	Method	URI
View all tags	GET	https://<host>:<port>/urest/v1/tag
View tag details by ID	GET	https://<host>:<port>/urest/v1/tag/{tagId}

View all tags

To view all the available tags, use the following details:

URI

```
https://<host>:<port>/urest/v1/tag
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the tag that the response will begin with, where '0' represents the first available tag.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/tag?start=0</pre>
count	<p><i>(Optional)</i></p> <p>Indicates the number of tags to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https://<host>:<port>/urest/v1/tag?count=2</pre>

start & count	<p><i>(Optional)</i></p> <p>Use both the start and count parameters in the request call to specify the index of the tag that the response must begin with and the number of tags to include.</p> <p>Type: Integer</p> <p>Attribute: <positive integer value></p>	<pre>https:// <host>:<port>/urest/ v1/tag? start=5&count=2</pre>
sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, in ascending or descending order.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • name • createTime <p>Supported operators:</p> <ul style="list-style-type: none"> • name: asc, desc • createTime: asc, desc 	<pre>https://<host>:<port> /urest/v1/tag? sort=name:asc</pre>
query	<p>Search the response by the specified attributes.</p> <p>Type: String</p> <p>Attribute:</p> <ul style="list-style-type: none"> • name • nameLow <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ, NE (performs case-sensitive search) • nameLow: LIKE, EQ, NE (performs case-insensitive search but the search keyword sent in the request must be in lower case) <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE '%Oracle%' to name%20LIKE%20%27%25Oracle%25%27.</p>	<pre>https://>:<port>/urest/ v1/tag?query=name%20EQ %20%27Oracle%27 https://>:<port>/urest/ v1/tag?query=namelow %20EQ%20%27Oracle%27</pre>

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	

Sample(s)

Successful output

```
{
  "total": 5,
  "count": 5,
  "start": 0,
  "members": [
    {
      "createdTime": "2017-04-05T11:17:59.906215Z",
      "name": "Oracle",
      "uuid": "7952b029-a131-4c44-960f-562c2476a32c"
    },
    {
      "createdTime": "2017-04-04T11:18:17.88021Z",
      "name": "CDB",
      "uuid": "5cb2b9d7-e1a6-49be-b51b-5c6490e3067c"
    }
  ],
}
```

```
{
  "createdTime": "2017-04-05T11:21:03.49105Z",
  "name": "CIS",
  "uuid": "f7c189d8-2141-4cd1-b584-abe6aef84cff"
},
{
  "createdTime": "2017-04-04T11:18:17.887711Z",
  "name": "Container Database",
  "uuid": "b1b1cac9-e607-4640-8582-fdf7b1abe762"
},
{
  "createdTime": "2017-04-04T11:18:16.526439Z",
  "name": "DB2",
  "uuid": "f6fa43f3-cd77-4d7c-aa53-2c2f462779e6"
}
]
```

View tag details by ID

To view an existing tag by ID, use the following details:

URI

```
https://<host>:<port>/urest/v1/tag/{tagId}
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	

Sample(s)

Successful output

```
{
  "createdTime": "2017-04-05T11:21:03.49105Z",
  "name": "CIS",
  "uuid": "f7c189d8-2141-4cd1-b584-abe6aef84cff"
}
```

template API

You can use this API to perform the following operations:

Operation	Method	URI
View all templates	GET	https://<host>:<port>/urest/v1/template
View template details by ID	GET	https://<host>:<port>/urest/v1/template/{templateId}
View compliance prediction for a template	GET	https://<host>:<port>/urest/v1/analytic/template/{templateId}/predicted_compliance_pct
Associate a tag with a template	PATCH	https://<host>:<port>/urest/v1/template/{templateId}/associatetag
Disassociate a tag from a template	PATCH	https://<host>:<port>/urest/v1/template/{templateId}/disassociatetag

View all templates

To view all the available templates, use the following details:

URI

```
https://<host>:<port>/urest/v1/template
```

Method

GET

Parameters

Name	Description	Sample URI
start	<p><i>(Optional)</i></p> <p>Indicates the index of the template that the response will begin with, where '0' represents the first available template.</p> <p>Type: Integer</p> <p>Attributes: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/template?start=0</p>
count	<p><i>(Optional)</i></p> <p>Indicates the number of templates to include in the response. The minimum value for this parameter is '1'.</p> <p>Type: Integer</p> <p>Attributes: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/template?count=2</p>
start & count	<p><i>(Optional)</i></p> <p>Use both the start and count parameters in the request call to specify the index of the template that the response must begin with and the number of templates to include.</p> <p>Type: Integer</p> <p>Attributes: <positive integer value></p>	<p>https://<host>:<port>/urest/v1/template?start=5&count=2</p>
sort	<p><i>(Optional)</i></p> <p>Sort the response data alphabetically or chronologically, in ascending or descending order.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> • createdTime • name • tagname <p>Supported operators:</p> <ul style="list-style-type: none"> • createdTime: asc, desc • name: asc, desc • tagname: asc, desc 	<p>https://<host>:<port>/urest/v1/template?sort=createdTime:asc</p> <p>https://<host>:<port>/urest/v1/template?sort=name:desc</p> <p>https://<host>:<port>/urest/v1/template?sort=tagname:asc</p>

query	<p><i>(Optional)</i></p> <p>Search the response by the specified attributes.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> • createdTime • name • tagname <p>Supported operators:</p> <ul style="list-style-type: none"> • name: LIKE, EQ, NE • createdTime: BETWEEN, GT, LT, GE, LE • tagname: LIKE, EQ, NE <p>You must URL encode the operators to include them in the URL query. For example, encode name LIKE '%oracle%' to name%20LIKE%20%27%25oracle%25%27.</p>	<pre>https:// <host>:<port>/urest/ v1/template? query=createdTime %20GT %20%27%252017-03-07T0 6:52:25%25%27 https:// <host>:<port>/urest/ v1/template? query=name%20LIKE %20%27%25Oracle%25%27 https:// <host>:<port>/urest/ v1/template? query=tagname%20LIKE %20%27%25Oracle %25%27</pre>
-------	--	---

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.

400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.
-----	-------------	---

Sample(s)

Successful output

```
{
  "total": 3,
  "count": 3,
  "start": 0,
  "members": [
    {
      "createdTime": "2017-04-04T11:18:21.206375Z",
      "uuid": "ea48c2b6-13ec-4171-8fec-a22014b2f7a9",
      "name": "CIS Compliant Oracle 12.1.0.2.0 on existing RHEL 6.x with CDB and PDB",
      "description": "This template installs Oracle Database software on an existing RHEL6.x server in the location specified by the Oracle Home parameter.",
      "version": "",
      "owner": "",
      "icon": "platform-oracle.png"
    },
    {
      "createdTime": "2017-04-04T11:18:22.253084Z",
      "uuid": "89bc30-c11c-11e6-a4a6-cec0c932ce01",
      "name": "MSSQL 2014 with latest patch on existing Windows 2012R2",
      "description": "This template installs MSSQL 2014 software with latest patch on Windows 2012R2 server.",
      "version": "",
      "owner": "",
      "icon": "platform-mssql.png"
    },
    {
      "createdTime": "2017-04-04T11:18:21.538942Z",
      "uuid": "aa5a005c-c0bc-4800-826c-3fc0998a1d1d",
      "name": "FISMA Compliant Docker Image",
      "description": "This template deploys a Docker Image and scans it for FISMA Compliance",
      "version": "",
      "owner": "",
      "icon": "platform-docker.png"
    }
  ]
}
```

View template details by ID

To view the details of the specified template, use the following details:

URI

```
https://<host>:<port>/urest/v1/template/{templateId}
```

Method

GET

Parameters

Name	Description	Sample URI
fields	<p>(Optional)</p> <p>The attributes can be appended to the request, separated by a comma.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> attachedPolicies.policy deploymentDetails resourceTypes resourceTypes.baseResources resourceTypes.attributes 	<pre>https://<host>:<port>/urest/v1/template/<templateId>?fields=resourceTypes,deploymentDetails,attachedPolicies.policy</pre>

view	<p><i>(Optional)</i></p> <p>Specifies a predefined set of attributes to be included in the response.</p> <p>Type: String</p> <p>Attributes:</p> <ul style="list-style-type: none"> • summary • condense 	<p>https://<host>:<port>/urest/v1/template/<templateId>?view=condense</p>
------	---	---

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
```

```

"createdTime": "2017-04-04T11:18:20.835301Z",
"uuid": "18e28e7e-c11c-11e6-a4a6-cec0c932ce01",
"name": "CIS Compliant Oracle 12.1.0.2.0 on existing RHEL 6.x with CDB and PDB",
"description": "This template installs Oracle Database software on an existing RHEL6.x server in the
location specified by the Oracle Home parameter.",
"attachedTags": [
  {
    "createdTime": "2017-04-04T11:18:20.798794Z",
    "name": "Oracle12",
    "uuid": "f111e251-b49e-4438-aa86-58cb74165928"
  }
],
"version": "",
"owner": "",
"icon": "platform-oracle.png",
"noOfDeployments": 1,
"compliancepct": 0
}

```

View compliance prediction for a template

To view the predicted compliance (in percentage) for the specified template, use the following details:

URI

```
https://<host>:<port>/urest/v1/analytic/template/{templateId}/predicted_compliance_pct
```

Method

GET

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>

For more information about authentication, see [Communication and authentication](#).

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

Successful output

```
{
  "compliancepct": 75.25
}
```

Associate a tag with a template

To associate a tag with a template, use the following details:

URI

```
https://<host>:<port>/urest/v1/template/{templateId}/associatetag
```

Method

PATCH

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "name": "tagName"
}
```


Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "name": "RHEL6"
}
```

Successful output

```
{
  "createdTime": "2017-04-04T11:18:20.835301Z",
  "uuid": "18e28e7e-c11c-11e6-a4a6-cec0c932ce01",
  "name": "CIS Compliant Oracle 12.1.0.2.0 on existing RHEL 6.x with CDB and PDB",
  "description": "This template installs Oracle Database software on an existing RHEL6.x server in the location specified by the Oracle Home parameter.",
  "attachedTags": [
    {
      "createdTime": "2017-04-04T11:18:20.798794Z",
      "name": "Oracle12",
      "uuid": "f111e251-b49e-4438-aa86-58cb74165928"
    },
    {
      "createdTime": "2017-04-04T11:22:20.826799Z",
      "name": "RHEL6",
      "uuid": "2e1f3c64-b86a-4844-b083-44ee5c937f55"
    }
  ],
  "version": "",
  "owner": "",
  "icon": "platform-oracle.png",
  "noOfDeployments": 1,
  "compliancepct": 0
}
```

Disassociate a tag from a template

To disassociate a tag from a template, use the following details:

URI

```
https://<host>:<port>/urest/v1/template/{templateId}/disassociatetag
```

Method

PATCH

Parameters

Not applicable

Header

Name	Description
X-Auth-Token	<p><i>(Required)</i></p> <p>Authenticates the request call to the API server and provides secure access to the resources while protecting your user credentials.</p> <p>Type: string</p> <p>Attribute: <valid_token></p>
Content-Type	<p><i>(Required)</i></p> <p>Defines the MIME type of the transmitted content.</p> <p>Type: string</p> <p>Attribute: application/json</p>

For more information about authentication, see [Communication and authentication](#).

JSON body

```
{
  "uuid": "tagId"
```

```
}

```

Response code(s)

Code	Status	Description
200	OK	Returns the details of the requested resource ID.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI or invalid header.

Sample(s)

JSON body

```
{
  "uuid": "f111e251-b49e-4438-aa86-58cb74165928"
}
```

Successful output

```
{
  "createdTime": "2017-04-04T11:18:20.835301Z",
  "uuid": "18e28e7e-c11c-11e6-a4a6-cec0c932ce01",
  "name": "CIS Compliant Oracle 12.1.0.2.0 on existing RHEL 6.x with CDB and PDB",
  "description": "This template installs Oracle Database software on an existing RHEL6.x server in the location specified by the Oracle Home parameter.",
  "attachedTags": [
    {
      "createdTime": "2017-04-04T11:22:20.826799Z",
      "name": "RHEL6",
      "uuid": "2e1f3c64-b86a-4844-b083-44ee5c937f55"
    }
  ],
  "version": "",
  "owner": "",
  "icon": "platform-oracle.png",
  "noOfDeployments": 1,
  "compliancepct": 0
}
```

welcome API

You can use this API to perform the following operations:

Operation	Method	URI
Test API communication path	GET	https://<host>:<port>/welcome

Test API communication path

To test if communication path is established with the API server, use the details provided below. The successful response displays a welcome message.

URI

```
https://<host>:<port>/welcome
```

Method

GET

Parameters

Not applicable

Header

Not applicable

JSON body

Not applicable

Response code(s)

Code	Status	Description
200	OK	Returns a list of all resources, corresponding to the requested parameters.
400	BAD REQUEST	Returns an error message describing the specific problem. This could be caused by an invalid URI, invalid header, or invalid parameter sent in request.

Sample(s)

Successful output

```
{
  "welcomeMessage": "Welcome to HPE DataCenter Automation"
}
```

Customize content

Workflows and templates can be customized in DCA to suit your data center requirements.

Note

You can perform these procedures only if Operations Orchestration (OO) Studio is installed in your environment.

The following sections provide detailed information:

- [Customize workflows](#)
- [Customize templates](#)

Customize templates

As an author, you can create a template for the February 2017 Oracle patch. This template should be able to do either of the following tasks:

- Install Oracle 12.1.0.2 with patch ID 22233344 and create an Oracle database named ORCA1
- Patch an existing Oracle 12.1.02 database with patch ID 22233344

Customizing a template involves the following steps:

1. Initiate the customization of an OOTB template
2. Update the patch ID
3. Load new template into DCA
4. Verify the new template in DCA

Initiate the customization of an OOTB template


OOTB templates from DCA are available in the `/dcafileshare/dca/api/template` folder.

To initiate the customization of an OOTB template:

1. Make a copy of the existing template file: **Template-CIS-Compliant-RHEL7-Oracle12-withPatch.json** as **MyOracle12-withLatestPatch.json**. The initial portion of the json file contains the uuid, name, and description of the template as follows:

```
{
  "uuid": "1c6dd64a-4c78-437e-9549-e05f49f274a3",
  "name": "CIS Compliant Oracle 12.1.0.2 with latest patch,
on existing RHEL 7.1",
  "description": "This template installs Oracle Database
software on an existing RHEL 7 server in the location
specified by the Oracle Home parameter, patches it and
provisions a database"
```


2. Update the UUID with a unique UUID.



Note

Instead of randomly editing few characters, use an online tool like <https://www.uuidgenerator.net/> to generate a new UUID.

3. Change the name of the template.



Note

This is the name that is displayed in the DCA user interface when the templates are listed.

4. Change the description attribute as per your requirement.

Update the patch ID

The resource types section of the template file displays the different types of resources that will be created when you deploy this template.

```
"resourceTypes": [{
```

Oracle Software is listed at sequence number 1 in the list of resource types, which indicates that Oracle Software will be installed first when deploying this template.

```
{
  "seqNo": "1",
  "uuid": "cf916726-a1b2-4fbd-b373-78196069a2b2",
```

```

"name": "Oracle Software",
"baseResourceHierarchy": "eabed053-821d-4890-a030-
cb3c86f6c8ee",
"attributes": [{
"name": "file_system_path",
"value": "/opt/oraHome"
}, {
"name": "version",
"value": "12.1.0.2.0"
}, {
"name": "last_patch_id",
"value": "19769480"
}]
},

```

To update the Patch ID in the template:

1. Change the `last_patch_id` attribute in the attributes section to enable the template to install a different patch. For example, if you want to install a patch with ID 22233344, change the value of the `last_patch_id` attribute from 1979480 to 22233344.



Note

Ensure that the enclosing double quotes are not removed while changing the `last_patch_id` attribute.

2. Save the file.

Load new template

DCA exposes REST APIs to create new templates. The OOTB templates are loaded onto the DCA server using the same set of REST APIs.


To load the new template into DCA:

1. Locate the following script that loads the OOTB templates: **`/dcfileshare/importScripts/importDCAContent.sh`**. Running this script loads the template files from this location: **`/dcfileshare/dca/api/template`** folder.

2. Make a copy of the script and edit the following line to load the template files from a different folder:

```
DCA_TM_CONTENT_PATH="/dcashare/dca/api/template"
```

3. Run the **importDCAContent.sh** file to load the template file from a new location into DCA.

 The **importDCAContent.sh** file must use an external IP and node port when run from outside the container. Go to `/depot/DCA/kubernetes/dca/`, locate and use the `nodePort` parameter from the **dca-api-svc.yaml** file for this purpose.

Verify the new template in DCA

To verify the new template:

1. Go to DCA user interface to ensure that the new template is loaded.
2. Perform a test deployment by deploying the newly created template from the DCA user interface. See [Templates](#) for details on how to deploy a template.

Customize workflows

Create your own workflow

1. Create a copy of your existing workflow in OO Studio. Edit according to your requirement. See [OO documentation](#) for detailed information.
2. Create a content pack using OO Studio. See [OO documentation](#) for detailed information.
3. Import the created content pack in OO Central. Note the OO flow UUID for the workflow you imported. See [OO documentation](#) for detailed information.
4. Edit the PostgreSQL database in DCA to update the new OO flow.
 - a. Connect to the `dca_core_db` PostgreSQL database in the DCA server.
 - b. Run the following queries:

- `insert into dca_core_lcm_paths(custom_uuid_generated, oo_flow_uuid_for_the_new_flow, 1)`
- `insert into dca_core_lcm_flows(oo_flow_id, provider_utility_flow, flow_parameter_set, oo_flow_name, provider_utility_flow_name) values(<oo_flow_uuid_for_the_new_flow>, 'e567fa26-9fac-40d0-831e-00edd33617ab', '<flow_input_json_string>', '<Name_of_the_new_flow>', 'LCM Subflow')`

Syntax for Input json string:

```
{"flowUuid": "<oo_flow_uuid_for_the_new_flow>", "runName": "Name of the new flow", "logLevel": "EXTENDED", "inputs":
```



```
{
  "input1": "",
  "input2": "",
  "serverTargetPassword": "",
  "discoveryPlatform": "",
  "downloadSourceHost": "",
  "downloadSourcePath": "",
  "oracleHome": "",
  "patchArchive": "",
  "server.BecomeRoutine": "",
  "cleanCodeBase": "",
  "cleanJRE": "",
  "downloadFromSA": "",
  "saFolderPath": "",
  "cleanupDownloadedFiles": "",
  "cleanupOnFailure": "",
  "cleanupOnSuccess": "",
  "debugLevel": "",
  "existingOPatchBackupLocation": "",
  "ignorableOracleErrors": "",
  "ignoreSIDs": "",
  "InventoryFiles": "",
  "oCMResponseFile": "",
  "oPatchArchive": "",
  "oPatchVersion": "",
  "patchDownloadLocation": "",
  "patchExtractLocation": "",
  "preparatorySQLScript": "",
  "recompileInvalidObjects": ""
}
```

**Note**

The json string must be valid.

- insert into `dca_core_lcm_artifacts` (action, rt_name, parameter_name, current_value, desired_value, paths, comparator) values (<Action name>, "RT Name", "parameter name that will be edited in the template for the flow to be triggered", "current parameter value", "desired parameter value", "custom_uuid_generated used in the 1st query", "==")
The `rt_name` and `parameter_name` specified above must match the resource type name and attribute name in the template that you are deploying.

**Note**

Ensure that the combination of the inserted row does not match with any existing row in the database for same action name, resource type name, parameter name, current value, and desired value.

5. Edit the vendor provided **binaries.json** file under the **/dcashare/content/oo/dma path** in the DCA server.
 - a. Add the following line at the end of the file if the new flow requires any binaries:
"new rt name":{"parameter_name":"new parameter name", "parameter_value":"new desired value", "platform":"linux/windows", "binaries":"binaries to be used by the flow for the desired state"}
 - b. Add the following line at the end of the file if no binaries are required: "new rt name" :[]
6. Edit the **mappings.json** file under the **/dcashare/content/oo/dma path** in the DCA server to make use of the same input value for multiple parameters in the flow.
 - a. Add a new parameter mapping specification for the new flow in the following syntax:
"oo flow uuid for the new flow":{

```

        "flow_uuid" : "oo flow uuid for the new flow",
        "flow_name" : "Name for the new flow",
        "inputs" : {
            "parameter1" : "source parameter
name",
            "parameter2" : "source parameter
name",
            "parameter3" : "source parameter
name2"
        }
    }
}

```


7. Log in to DCA.
8. Go to **Resource > Template** and deploy the template.

Edit an existing workflow

1. Create a copy of your existing workflow in OO Studio. Edit according to your requirement. See [OO documentation](#) for detailed information.
2. Using the copy of the existing workflow, create a content pack using OO Studio. See [OO documentation](#) for detailed information.
3. Import the created content pack in OO Central. Note the OO flow UUID for the workflow you imported. See [OO documentation](#) for detailed information.
4. Edit the PostgreSQL database in DCA to update the new OO flow.
 - a. Connect to dca_core_db postgres database in DCA server.
 - b. Run the following queries:
 - update dca_core_lcm_flows set oo_flow_id=<new one> where oo_flow_id="old one"
 - update dca_core_lcm_paths set oo_flow_id=<new one> where oo_flow_id="old one"
5. Edit the vendor provided **binaries.json** file under the **/dcafileshare/content/oo/dma** path in the DCA server.
6. Search for old UUID and replace with the new UUID.
7. Edit the **mappings.json** file under the **/dcafileshare/content/oo/dma** path in the DCA server.
8. Search for old UUID and replace with the new UUID.
9. Log into DCA.
10. Go to the **Resource > Template** and deploy the template.

Edit a step

You can edit code files available in DCA to modify steps in the workflow. If the target is on a Linux platform, use the dma_oo_client_code_linux.zip file; if the target is on a Windows platform, use the dma_oo_client_code_windows.zip file located under the /dcafileshare path of the server.

 **Note**

If you update the code files in the /dcafileshare path, the edited code files will be overwritten.

1. Extract the code file.
2. Navigate to the **steps** folder.
3. Edit the Python file for the step you want to modify. Make the required changes to modify one step or more.
4. Save the file.
5. Compress (ZIP) the folder while retaining the same name as it was before extracting.
6. Delete the **md5** file in the target system where you want to deploy the modified steps. This syncs the code files between the server and target systems and the latest code files are copied into the target system.
7. Log in to DCA.
8. Go to the **Resource > Template** and deploy the template.

Related topic

[Resources](#)

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