Cloud Service Automation

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For Microsoft Windows and Linux operating systems

Application Programming Interface (API) Guide

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API Guide overview

Cloud Service Automation (CSA) provides a REST (REpresentational State Transfer) Application Programming Interface (API) that allows application developers to interact programmatically with many of the capabilities that CSA offers in the *Cloud Service Management Console* and the *Marketplace Portal*.

CSA exposes subscription, service, and resource information through REST API calls. You can exercise all REST API calls programmatically and from an HTTP client. You'll find more information on HTTP clients in "Retrieving information using REST calls".

This guide is designed to help you learn about the APIs by introducing the CSA capabilities that can be accessed programmatically, how to access them, and walking through several examples. This guide assumes that you:

1. Understand how to use a REST API.
2. Have installed and set up CSA, following the instructions in the *Cloud Service Automation Installation Guide* and the *Cloud Service Automation Configuration Guide*.

Consumption APIs

The following public API calls provide access to CSA consumer data. These calls were introduced in CSA 4.x and can be exercised through a browser at: https://<host>:<port>/csa/apidocs.jsp (substitute the host and port information appropriate for your CSA environment). You can make API calls and view the response from your server. This set of API calls is referred to as the *Consumption APIs*.

> **Note:** The API calls found in this interactive content can also be exercised programmatically or through a REST client. These consumption APIs are not documented in this guide.

The consumption APIs are made up to two groupings, or separate APIs, based on the use cases they address: management APIs and consumer APIs. The management API includes calls typically needed in CSA management roles such as system administrators, service designers, and so on. The consumer API includes calls typically needed in CSA consumer actions, such as shopping for and managing IT services.

The management API uses basic authentication while the consumer API are APIs that start with `/mpp` and use the X-Auth-Token parameter that is retrieved from the idm-service token call.

List of management APIs

API	Description
blueprint	Get information for blueprints
capsule	Install, list, and view capsule content
catalog	Manage service catalogs
component-template	Manage service topology component templates
component-type	Manage service topology component types
composition	List the candidate topologies that can fulfill the given partial topology
constraint	View property constraints
deployment	Manage service topology deployments
definition	Manage process definitions
design	Manage high-level design information
graph	Manage the graph definition of a design
group	Manage groups
instance	Manage service instances
javascriptstore	Manage the javascript respository
lifecycle	View lifecycle actions
metamodel	Manage metamodels for topology and sequence designs
option-model	Manage the option model
offering	Manage the association between resource offerings and resource providers
palette	Retrieve palettes related to designs
property	Manage properties
binding	Manage option model property binding
processengine	Manage process engines

API	Description
provider	Manage resource providers
request	Manage service requests
offering	Manage resource offerings
subscription	Manage subscriptions
tag	Manage tags
topology	Manage service topologies
useraccess	Manage user access for service design containers

> **Note:** API calls including "(internal use only)" in their description should not be used. These are intended for CSA product development only.

List of consumer APIs

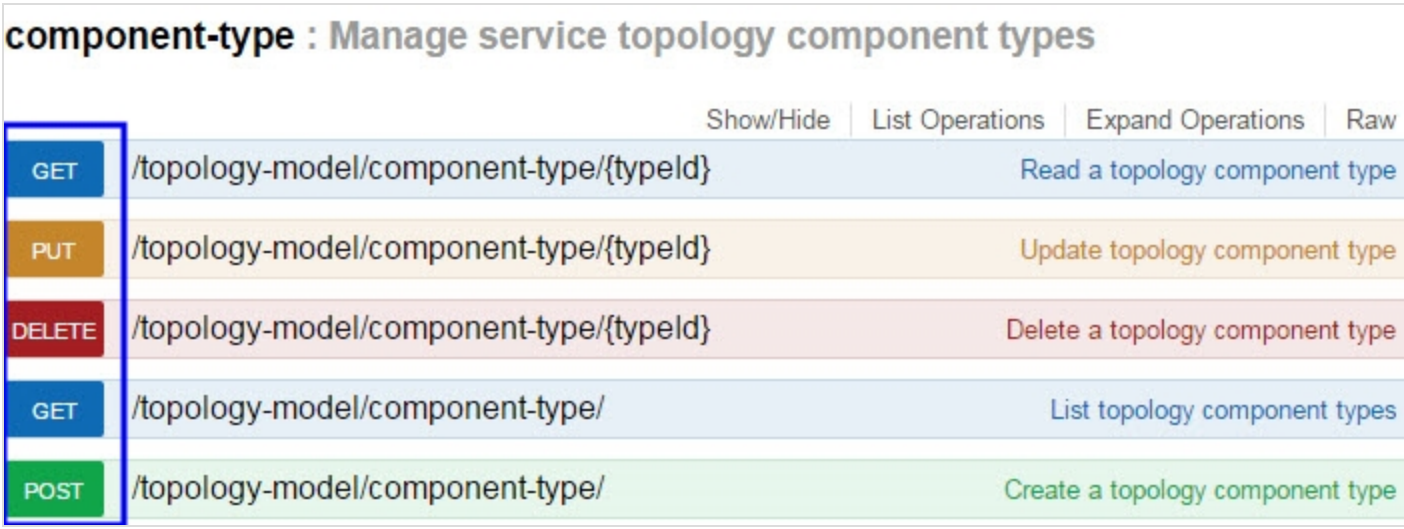
API	Description
csa-group	Manage groups (Can only be used by consumer administrators.)
csa-organization	View information about organizations (Can only be used by consumer administrators.)
csa-user	View users (Can only be used by consumer administrators.)
mpp-approval	Manage approvals
mpp-blobstore	Manage small files such as icons
mpp-cart	Manage carts
mpp-catalog	Manage catalogs
mpp-category	View categories
mpp-detail	Manage service details
mpp-instance	View service instance information
mpp-notification	View subscriptions and notifications
mpp-offering	View service offerings
mpp-order	Place an order and manage existing orders

API	Description
mpp-organization	View organization information
mpp-processengine	Manage process engines
mpp-property	View dynamic property's values
mpp-request	Manage service requests
mpp-subscription	Manage subscriptions
mpp-tag	Manage tags
mpp-user	View user information
mpp-wizard	Read a wizard offering with Marketplace Portal

> **Note:** API calls including "(internal use only)" in their description should not be used. These are intended for CSA product development only.

See "Using consumption API with a browser" for more information on executing an API call from this interactive content.

Here's an example of content you'll see for a consumption API call:

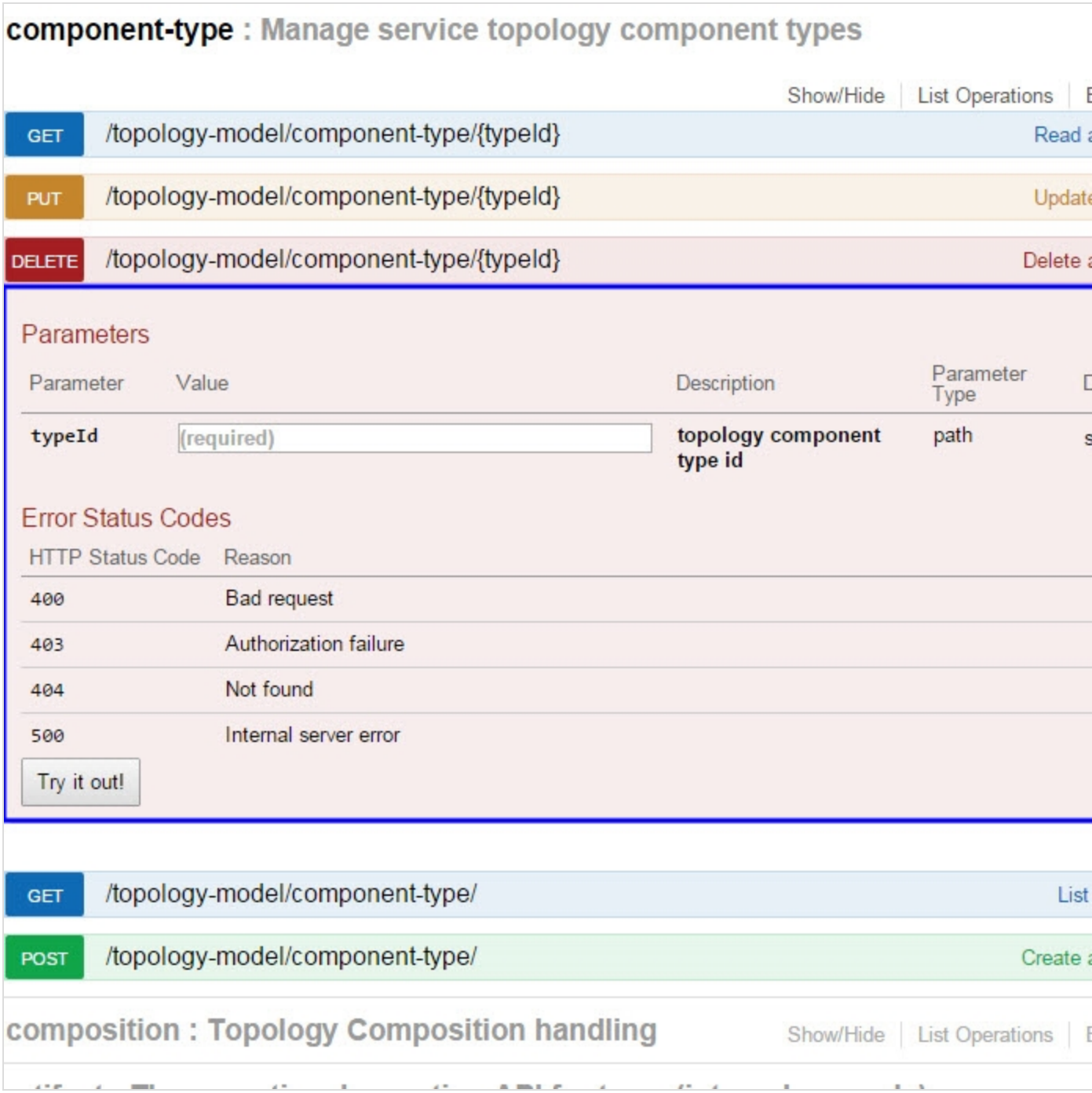


You can click on any method listed to get detailed content for that call, and an interactive "Try it out!" feature.

The content provides an easy access to the following information:

- URI syntax for each call
- Whether there are any required or optional query parameters
- The data type of each parameter
- Model and schema information, if applicable
- Interactive "Try it out!" dialog that lets you submit calls to your server, see the results, and understand how you need to construct your REST URIs and any request body.

When you click the DELETE method, the following is displayed:



Legacy APIs

CSA continues to support the REST API introduced in the CSA 3.x releases. We'll refer to these calls as the **Legacy CSA 3.x API** or simply **Legacy API**. Though there is some overlap between the

information available through this API and through the consumption API, the legacy API provides access to additional information not available through the consumption API. This document includes information on each call:

- URI syntax
- Method (operation)
- Parameter descriptions
- Examples are often included

List of legacy APIs

The following API calls are accessed programmatically or through an HTTP client. These calls are documented in "Legacy APIs" on page 41.

API	Description
artifact	View, create and modify artifacts
availablevalues	Retrieve the list of available values for a dynamic property
catalog	View, create and modify information related to catalogs
export	Export supported artifact(s) as a content archive
import, **import_result**	Import supported artifact(s) from a content archive
lifecycleengine	View and schedule lifecycle actions
login	Provide credentials for REST API calls
notification	View and send notifications
organization, **orgInformation**	View and modify organization information
processinstances	View execution results from OO flows
resourceprovider	Retrieve a list of resource providers that matches the access point URL with the access point URL specified when calling this API.
search	Find specified information in artifacts
user	View information related to users
utilization	View resource utilization information for a subscription

See "Retrieving information using REST calls" for detailed information on how to exercise API calls.

Retrieving information using REST calls

This section provides information about preparing for and executing CSA REST API calls.

Communication with CSA

Solution developers communicate with CSA using HTTP or HTTPS and parse the data structures returned by CSA. The default port for communication is 8444.

Consumption API data is returned in JSON format. Legacy API data can be returned in either XML or JSON format. You must set the HTTP headers `Content-Type:application/xml` or `application/json`, and `accept:application/xml` or `accept:application/json` as appropriate for the call you're making.

Authentication with an integration account

Authentication is handled using HTTP basic authentication. The authentication value is provided to Legacy API calls and to the Consumption *tokens* API call via the basic authorization header.

When exercising an API call from an HTTP client or from the interactive API content, this authorization header is automatically generated using the credentials you supply when you log into CSA as will be required to get permission to make REST calls.

When exercising an API call from your application's code, you must create the authorization header. Supply the Base64 encoded value of the <username>:<password> string for the user you will use for authentication. The default credentials and authorization header for the Legacy and Consumption APIs are shown here:

API	Default user name	Password	Encoded credentials and authorization header
Legacy	`csaTransportUser`	Entered during CSA installation	Base64 encoded user:password: `Y3NhVHJhbnNwb3J0VXNlcjpjc2FUcmFuc3BvcnRVc2Vy`
			Authorization header: `Basic Y3NhVHJhbnNwb3J0VXNlcjpjc2FUcmFuc3BvcnRVc2Vy`

API	Default user name	Password	Encoded credentials and authorization header
Consumption	`idmTransportUser`	Entered during CSA installation	This is used for the idm-service token call. Base64 encoded user:password: `aWRtVHJhbnNwb3J0VXNlcjppZG1UcmFuc3BvcnRVc2Vy`
			This is used for the idm-service token call. Authorization header: `Basic aWRtVHJhbnNwb3J0VXNlcjppZG1UcmFuc3BvcnRVc2Vy`

> **Note:** If you log in to the Cloud Service Management Console, a CSRF (Cross-Script-Request-Forgery) token `called x-csrf-token` is created. This is added to the cookie.
> For example,
> `Cookie: JSESSIONID=DIxnGcNlHazpEAfSdKNvy-KA.csaqa-vm22; X-Auth-Token=eyJ0eXujSc; XSRF-TOKEN=1a11afb8-b057-4f03-8b52-4bad19e3553a; orgName=TEST.COM`

For information on managing built-in accounts, see the "Change CSA Out-of-the-Box User Accounts" section in the *Cloud Service Automation Configuration Guide.*

Consumption API authorization

Consumption API calls require an IdM authentication token. An authentication token is retrieved from the Identity Management component as demonstrated below. The Basic Authorization header as described in "Authentication with an integration account" will be used to retrieve this token. The *token.id* value returned in the response body is the token you need to include in the `X-Auth-Token` HTTP header.

HTTP method	POST
Header	See header information that follows.
REST URL	https://<CSAFQDN>:<port>/idm-service/v2.0/tokens

Payload	`{`
	`"passwordCredentials" : {`
	`"username" : "consumer",`
	`"password" : "cloud"`
	`},`
	`"tenantName" : "CONSUMER"`
	`}`

Parameters	None
Request body	See example that follows
Response body	See example that follows
Returns	200 - success 400 - improperly formatted request body (most common cause is missing Content-Type header) 401 - missing or incorrect basic authentication information 403 - authentication failure 415 - missing Accept or Content-Type header, or one of these headers is not set to application/json

Header	Value	Meaning
Accept	application/json	Output is in JSON format
Content-Type	application/json	Input message body is in JSON format
Authorization	Basic aWRtVHJhbnNwb3J0VXNlcjppZG1UcmFuc3BvcnRVc2Vy	Default authorization header as described in "Authentication with an integration account" Base64 encoded value for `idmTransportUser:<idmTransportUser password>`

> **Note:** The token has an expiration time. Generate a new one on expiry error.

> **Note:** You must include the header information with all API calls.
>
> The administrator credentials may be required for some API calls.

Example JSON request body:

```
{
   "passwordCredentials" : {
   "username" : "consumer",
   "password" : "cloud"
  },
    "tenantName" : "CONSUMER"
  }
```

Example JSON response body:

```
{"token" : {
   "id" : "ab48a9efdfedb23ty3494",
    "expires" : "2010-11-01T03:32:15-05:00",
    "tenant" :{
```

```
     "id" : "t1000",
     "name" : "Consumer"
    }
  },
  "secondaryToken" : "1b07ae0018e34864b424a7ae0dd8e34",
  "refreshToken" : "C/poRbpxftaqZZ12JJYrWd2a1huDwEZ",
  "user" : {
    "id" : "u123",
    "name" : "consumer",
    "roles" : [ {
      "id" : "100",
       "name" : "ROLE_USER"      }, {
       "id": "101",
       "name": "object-store:admin",
       "tenantId": "t1000"
     } ]
    }
}
```

For more information on use cases and examples, see "Sample use cases".

Legacy CSA 3.x API authorization

With the exception of login and orgInformation, legacy API calls require a userIdentifier parameter, as well as a basic authorization header created using an integration account as described in "Authentication with an integration account". Use the login API call to obtain a user's ID for the userIdentifier parameter. The user must have the necessary permissions to access the data requested by the API calls you will be making.

> **Note:** Error code 401 (Not authorized) will be returned if the same user is not specified for authorization and for authentication. The exception to this is when csaTransportUser is used for authentication as it is accepted for authorization on behalf of other users.

To get, for example,the user ID for user `consumer` in organization `CONSUMER`, submit the following URL (via an HTTP client or application code as will be described shortly):

```
https://<host>:<port>/csa/rest/login/CONSUMER/consumer
```

The <id> value in the following return body is the UserIdentifier value you would use in further Legacy API calls:

```
<id>BFA0DB53DA414B90E04059106D1A24B5</id>
 <isCriticalSystemObject>false</isCriticalSystemObject>
 <description>service consumer user</description>
```

```
<detailedDescription>service consumer user</detailedDescription>
<iconUrl>http://localhost/csaconsumer/consumer</iconUrl>
<name>consumer</name>
<displayName>consumer</displayName>
<state>
  ...
</state>
...
```

This ID can be used in subsequent legacy API calls using `https://<host>:<port>/csa/rest/<api call>?userIdentifier=<id>`.

Executing REST calls

CSA REST API calls can be exercised through an HTTP client or programmatically from an application. The consumption API calls can also be exercised through the interactive content as explained in "Using consumption API with a browser". Some calls have more strict permission requirements, administrator level permissions for example, so you will need to supply appropriate credentials.

The base URL for the Legacy API is https://<host>:<port>/csa/rest, which is appended with the specific URI for the API call. For example, to access the import API, you would use the following URL, substituting the host and port information appropriate for your environment:

https://<host>:<port>/csa/rest/import

The base URL for the Consumption API is https://<host>:<port>/csa/api, which is appended with the specific URI for the API call. For example, to access the mpp-offering API, you would use the following URL, again, substituting the host and port information appropriate for your environment:

https://<host>:<port>/csa/api/mpp-offering

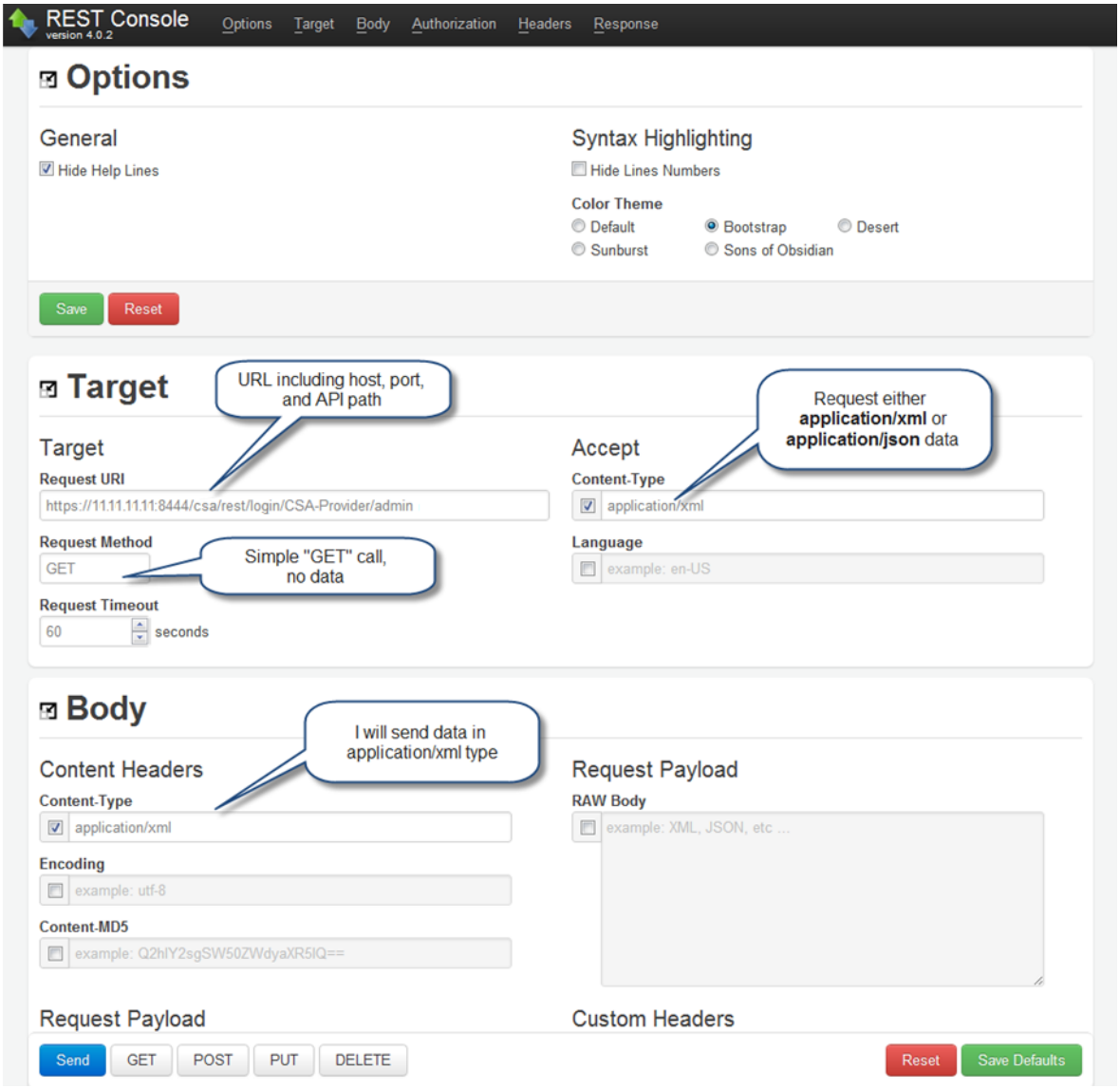
Exercising API calls using an HTTP client

Though you can issue REST calls through any typical HTTP client (browser), you'll likely find it more convenient to use a client designed especially for developers making REST calls. These are often referred to as *REST clients*. A REST client organizes the information you'll work with when making REST calls: headers, methods, request and response bodies, and so on. A REST client makes it easier to compose and submit requests to the CSA 4.60 REST service APIs, as well as for viewing server responses.

A number of REST clients are available. You can add, for example, the REST console plug-in for Google Chrome as follows:

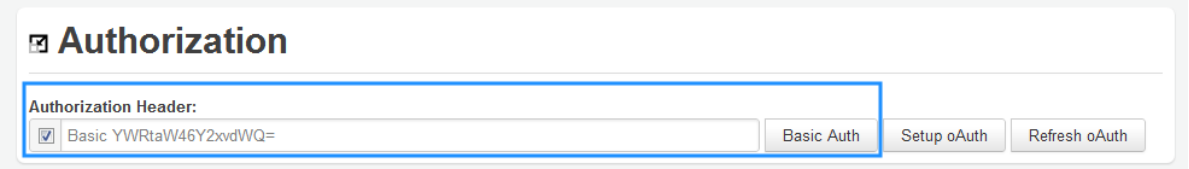
- Start Google Chrome.
- Open Chrome Web Store.
- Use search box to search for REST Console.
- Select Add to Chrome.

Example configuration of REST Console plug-in:

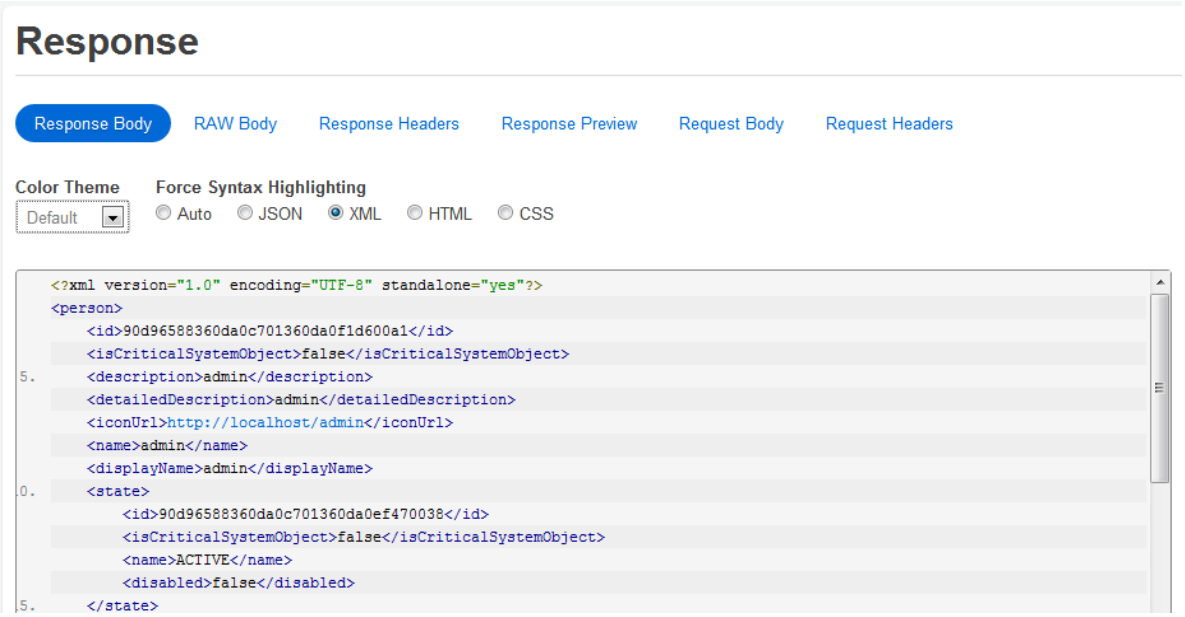


Configure the basic authorization in the Authorization tab using a user name and password. See "Authentication with an integration account" for more information. This user must have privileges to access CSA REST APIs.

Example REST console authorization:



When you issue a request, the output in the Response Body tab is similar to the following:

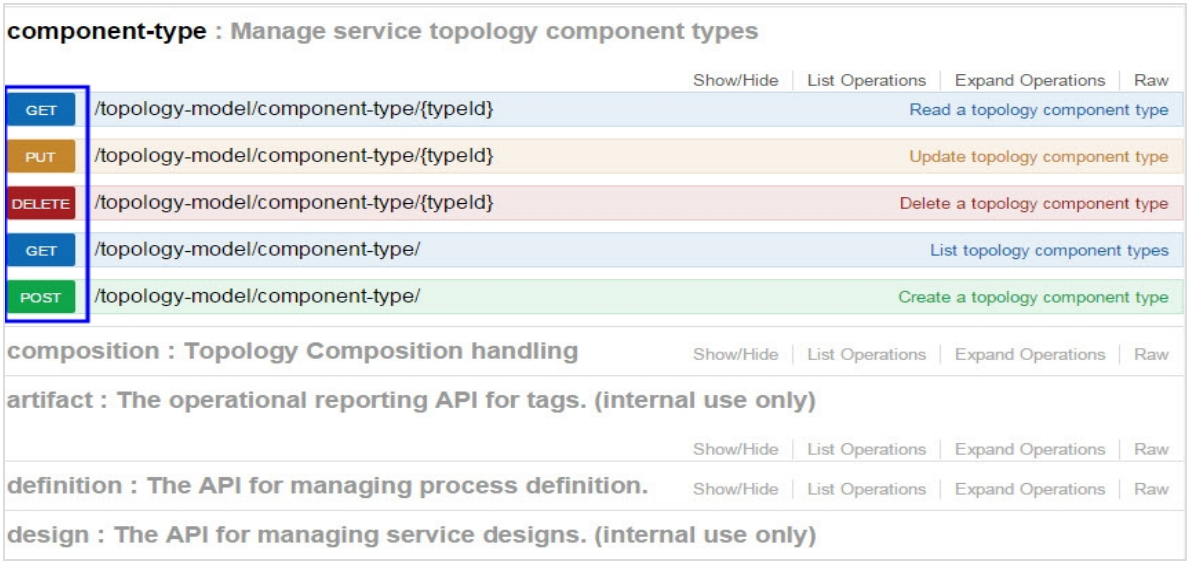


Using consumption API with a browser

In addition to being exercised programmatically or through an HTTP client, the Consumption API can be exercised through the “Try it out!” feature in the interactive API content. You will be prompted to log in to the Cloud Service Management Console to access this content. Basic authentication and authorization required to make REST calls will be configured as part of the login process.

This interactive content is presented in a web interface, and can be accessed at **https://<host>:<port>/csa/apidocs.jsp** from a browser, substituting the host and port information appropriate for your environment.

For example, the following sample contains calls for the component-type API:



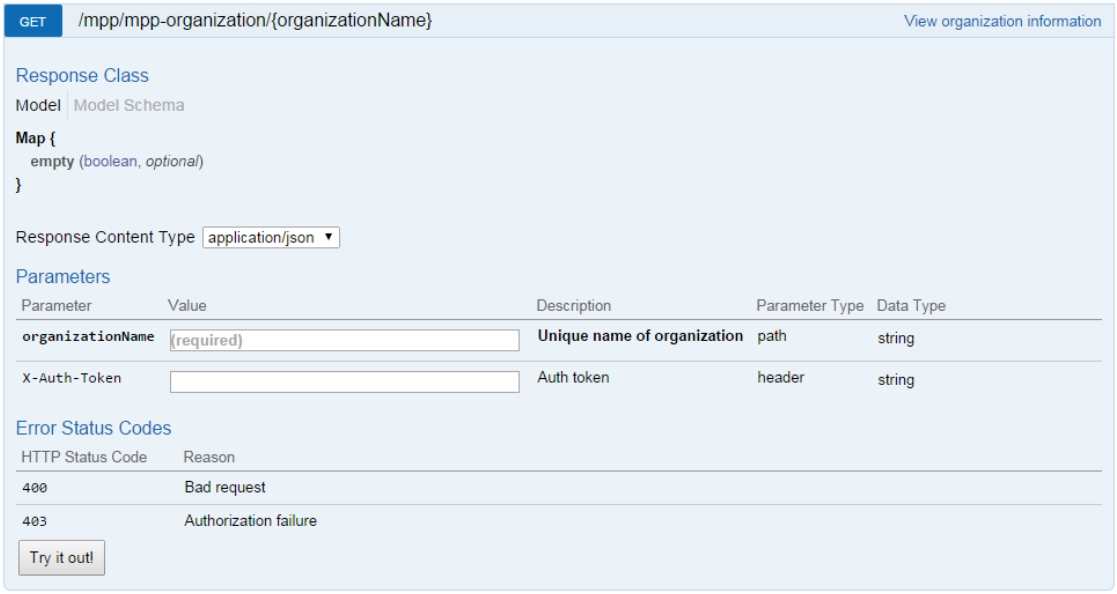
> **Note:** API calls including "(internal use only)" in their description should not be used. These are intended for CSA product development only.

The content provides an easy access to the following information:

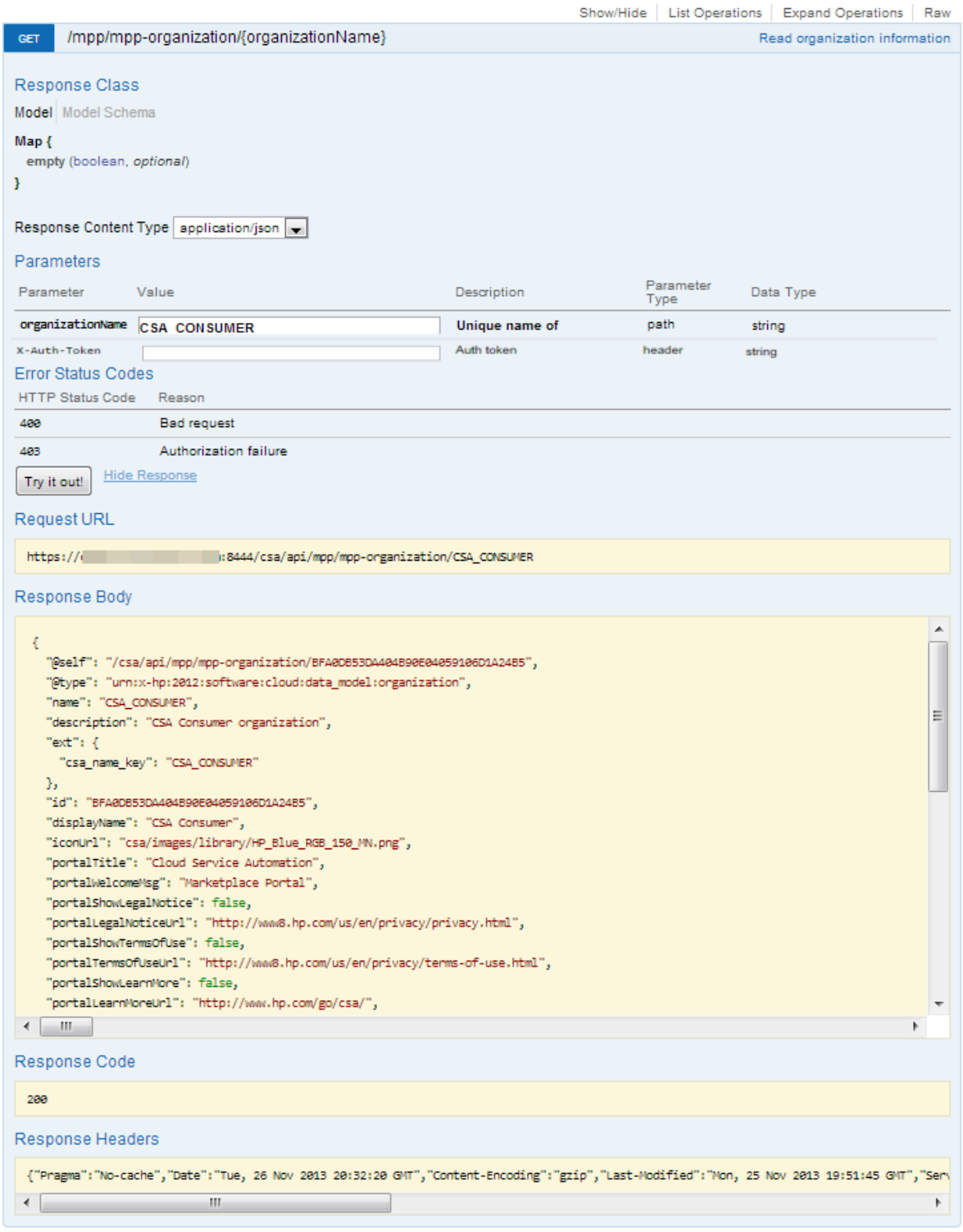
- URI syntax for each call
- Whether there are any required or optional query parameters
- The data type of each parameter
- Model and schema information, if applicable
- Interactive "Try it out!" dialogs that let you submit calls to your server, see the results, and understand how you need to construct your REST URIs and any request body.

The following steps provide an example of executing an API call:

1. If you have access to an CSA instance, launch the interactive API content from a browser at **https://<host>:<port>/csa/apidocs.jsp**.
2. If you are not already logged into CSA, you will be prompted to log in. The user must have appropriate authority to exercise CSA REST calls.
3. Locate the *mpp-organization* API call. Click on that the call title to expand it to show the GET method, if it is not already visible.
4. Click on the *GET* method to view the complete documentation for this call.



5. `organizationName` is a required parameter. Enter an organization name from your CSA instance. You can use `CONSUMER`, a default organization provided out-of-the-box with CSA.
6. Include the IdM authentication token value in the `X-Auth-Token` parameter.
7. Click on the **Try it out!** button.
8. You should now see the request URL that was sent, as well as the response body, response code, and response headers for your request as shown in the following figure:



Not every API call will be this simple to exercise, but this example demonstrates how the interactive API content is presented, and how REST calls can easily be made from this interface. In some

situations you will need to make other API calls first to get information necessary for parameters or a request body.

Making API calls from an application

REST calls can be made from your custom application code. Preparation for making these calls is similar to making them from an HTTP client. Authentication and authorization requirements as explained in "Communication with CSA" must be met.

You also need to set the HTTP headers `Content-Type:application/xml` or `application/json`, and `accept:application/xml` or `accept:application/json` as appropriate for the call you are re making.

The content type `application/xml` only applies to the Legacy APIs.

Troubleshooting return codes

401 - Not authorized

See "Communication with CSA" on page 15for steps to set up authentication.

403 - Forbidden

The user requesting details is not the owner of the object.

404 - Object not found

Check the body of your REST call to make sure it is properly formed and includes valid data.

409 - Conflict

The user attempted to create a duplicate object when one already exists in the system.

500 - Server exception

This is a generic error message that is sent when the server was unable to return a result.

Sample use cases

This section has sample use cases for CSA APIs.

List service offerings

Consumers can get a list of service offerings published on CSA using the offerings REST API.

HTTP method	POST
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-offering/filter
Payload	{"approval":"ALL"}
Headers	X-Auth-Token: <token> Accept: application/json Content-type: application/json
Response	Returns the list of offerings

For rest of the payload options, see the documentation available at https://<host>:<port>/csa/apidocs.jsp.

Sample response:

```
"id": "9028525b4a7aa888014a7ae4d1ad0063",
"catalogId": "90d9650a36988e5d0136988f03ab000f",
"catalogName": "Global Shared Catalog",
"displayName": "Rest Demo",
"offeringVersion": "1",
"category": {
      "displayName": "Application Services",
      "name": "APPLICATION SERVICES"
},
```

Service offering details

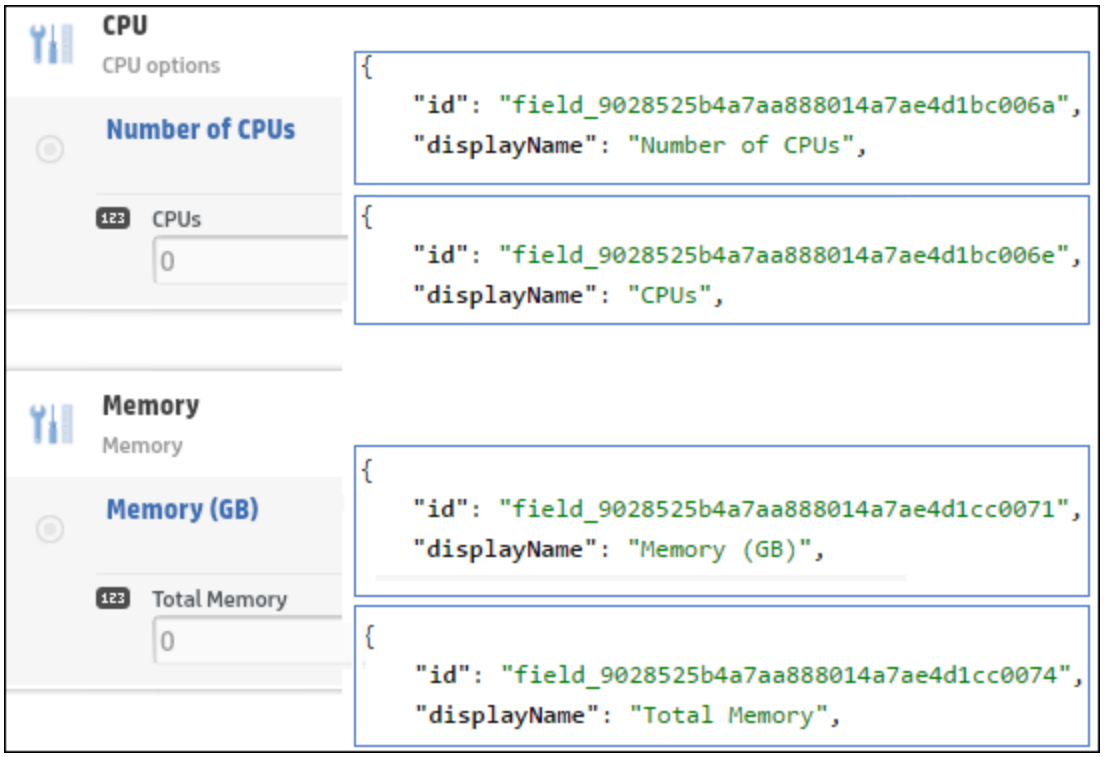
This REST API provide details on customer options configured during service design. These options have to be included during order of a subscription. Check "Service request payloads in CSA 4.x" on page 39 to parse the option model details.

HTTP method	GET
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-offering/<serviceofferingid>?catalogId=<catalogid>&category=<category.name>
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-offering/9028525b4a7aa888014a7ae4d1ad0063?catalogId=90d9650a36988e5d0136988f03ab000f&category=APPLICATION_SERVICES
Response	See sample

Sample response:


```
{
"id": "402894a3481c3e2f0148db2d3c540a4f",
"name": "REST_Example_ab2647eb-f140-4516-989b-3c3e45c09f16", "displayName": "REST
Example",
"catalogId": "90d9650a3698e5d0136988f03ab000f",
"category": {
 "displayName": "Application Servers",
 "name": "APPLICATION SERVERS"
},
"image": "csa/images/library/Service_Design.png",
"approvalRequired": false,
"publishedDate": "2014-10-04T12:41:54.003Z",
"initPrice": {
 "currency": "USD",
 "price": 50
},
"recurringPrice": {
 "currency": "USD",
 "price": 10,
 "basedOn": "Monthly"
},
"fields": [
 {
  "id": "field_402894a3481c3e2f0148db2d3cdf0a56",
  "displayName": "2 CPU",
  "name": "EC9B910A_82A3_B51B_744B_DB26DCD23898",
  "description": "2 CPU",
  "visible": true,
  "disabled": false,
  "hidden": false,
  "value": true,
```


Mapping of subscriber options to its field ID and names:



Some more details on selected option:

```
"fields": [
 {
   "id": "field_9028525b4a7aa888014a7ae4d1bc006a",
   "displayName": "Number of CPUs",
   "name": "EC9B910A_82A3_B51B_744B_DB26DCD23898",
   "description": "",
   "visible": true,
   "disabled": false,
   "hidden": false,
   "value": true,
   "initPrice": {
      "currency": "USD",
         "price": 1
       },
   "recurringPrice": {
      "currency": "USD",
         "price": 0,
         "basedOn": "MONTH"
       },
   "required": false,
   "encrypted": false,
   "confidential": false
};
```

Details on property associated with each option:

```
{
   "id": "field_9028525b4a7aa888014a7ae4d1bc006e",
   "displayName": "CPUs",
   "name": "CPU",
   "description": "",
   "visible": true,
   "disabled": false,
   "hidden": false,
   "value": 0,
   "initPrice": {
      "currency": null,
         "price": null
       },
   "recurringPrice": {
      "currency": null,
         "price": null,
         "basedOn": null
       },
   "maxValue": 2147483647,
   "minValue": -2147483648,
   "required": true,
   "encrypted": false,
   "confidential": false
},
```


Create subscription

Order request is a HTTP POST operation. The service request that needs to be submitted to CSA has two parts bundled as XML structure. First part is on subscription information and second is about customer options. Refer "Service request payloads in CSA 4.x" on page 39 to check sample payloads to generate service request with or without option model.

HTTP method	POST
HTTP header	header Content-Type: multipart/form-data; boundary=Abcdefgh
	Accept: application/json
	X-Auth-Token: Your token value from Get token Call
REST URL	https:// <CSAFQDN>:<port>/csa/api/mpp/mpp-request/9028525b4a7aa888014a7ae4d1ad0063?catalogId=90d9650a36988e5d0136988f03ab000f

Payload	--Abcdefgh
	Content-Disposition: form-data; name="requestForm"
	{
	"categoryName":"APPLICATION_SERVICES",
	"subscriptionName":"sampleRequest",
	"subscriptionDescription": "This is a sample request",
	"startDate":"2015-01-24T05:32:17.000Z",
	"endDate":"2016-01-23T05:32:17.000Z",
	"fields":{
	"field_9028525b4a7aa888014a7ae4d1bc006a":true,
	"field_9028525b4a7aa888014a7ae4d1bc006e":2,
	"field_9028525b4a7aa888014a7ae4d1cc0071":true,
	"field_9028525b4a7aa888014a7ae4d1cc0074":2048},
	"pricing": {},
	"action":"ORDER"
	}
	--Abcdefgh--

Response	{
	"id": "402894a34a0397f7014a287cd96f0770"
	}

Note: Content-type header is a multipart formdata and requires a boundary parameter to identify form data. In this case boundary is set to Abcdefgh

Payload should start with the boundary value set in the header prepending “--“to the value. Payload start with

-- Abcdefgh

Payload should end with the boundary value in the header prepending “--“and ending with “--“. Payload ends with

--Abcdefgh--

Subscription list

HTTP method	POST
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-subscription/filter
Payload	{ "status":null, "category":null,

	"name":null "healthStatus":null }

Response	The highlighted ID is the subscription ID - ff8080814b15cb4b014b1a70cdc0012a
	"members": [
	{
	"@self": "/csa/api/mpp/mpp-subscription/ff8080814b15cb4b014b1a70cdc0012a",
	"@type": "urn:x-hp:2012:software:cloud:data_model:service-subscription",
	"name": "sampleRequest",
	"ext": {
	"csa_name_key": "sampleRequest"
	},
	"id": "ff8080814615cb4b014b1a70cdc0012a",
	"owner": "consumer",
	"image": "csa/images/library/Service_Design.png",
	"status": "ACTIVE",
	"catalogId": "90d9650a36988e5d0136988f03ab000f",
	"serviceId": "9028525b4a7aa888014a7ae4d1ad0063",
	"serviceImage": "/csa/images/library/Service_Design.png",
	"serviceName": "Rest Demo",
	"cancelable": true,
	"transferable": false,
	"modifiable": false,
	"modifiableOptions": false,
	"reorderable": false,
	"deletable": false,

Subscription details

Subscription details REST call is issued to fetch Base price, Recurring price, Total price and Service Instance Id. Service Instance is retrieved to fetch components that make up the service like server, application, properties etc.

Subscription details can be used to trace back order request and offering details.

HTTP method	GET
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-subscription/<subscriptionid>
REST	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-

URL	subscription/ff8080814b15cb4b014b1a70cdc0012a
Response	Following parameters will be useful for other REST calls Catalog Id: 90d9650a36988e5d0136988f03ab000f Instance Id: ff8080814b15cb4b014b1a70cf77014e


```
"members": [
  {
     "@self": "/csa/api/mpp/mpp-
subscription/ff8080814b15cb4b014b1a70cdc0012a",
     "@type": "urn:x-hp:2012:software:cloud:data_model:service-
subscription",
     "name": "sampleRequest",
     "ext": {
        "csa_name_key": "sampleRequest"
     },
     "id": "ff8080814615cb4b014b1a70cdc0012a",
     "owner": "consumer",
     "image": "csa/images/library/Service_Design.png",
     "status": "ACTIVE",
     "catalogId": "90d9650a36988e5d0136988f03ab000f",
     "serviceId": "9028525b4a7aa888014a7ae4d1ad0063",
     "serviceImage": "/csa/images/library/Service_Design.png",
     "serviceName": "Rest Demo",
     "cancelable": true,
     "transferable": true,
     "modifiable": true,
     "modifiableOptions": true,
     "reorderable": true,
     "deletable": false,
   + "attachments": [...],
   + "subscriptionTerm": {...},
   + "initPrice": {...},
   + "recurringPrice": {...},
   + "category":{...},
     "lastUpdated": "2015-01-24T05:36:54.347Z",
     "requiredApproval":false,
     "requestId": "ff8080814b15cb4b014b1a70bbaa00e6",
     "showViewRequest": true,
     "ownerEmail": "",
     "instanceId": "ff8080814b15cb4b014b1a70cf77014e",
     "instanceState": "ACTIVE",
     "offeringVersion": "1",
   + "history": [...]
}
```

Service instance details

Instance details call is used to fetch service components, public actions and its properties defined on your subscription. To get Service instance ID use Subscription details REST call.

HTTP method	GET
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-instance/<serviceinstanceid>?catalogId=<catalogid>
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-instance/ff8080814b15cb4b014b1a70cf77014e?catalogId=90d9650a36988e5d0136988f03ab000f
Response	Component Id: ff8080814b15cb4b014b1a70cf770171 Public Action: My_Action_October 13, 2014 5:18:11 AM UTC

Sample response:


```
"serviceInstance": {
    "name": "a925721a-c0c4-4d14-8cd6-32cad2783a62",
       "displayName": "RESTSample",
       "description": "",
       "image": "csa/images/library/Service_Design.png"
},
"components": [
   {
       "id": "ff8080814b15cb4b014b1a70cf770171",
       "name": "SERVER__Sat Oct 04 18:03:08 IST 2014",
       "displayName": "Server",
       "description": "This is the default template for the selected component type, it
contains the same settings as the base component type definition.",
       "image": "csa/images/categories/component_type/server.png",
       "status": "DEPLOYED",
     + "properties": [...],
     – "serviceAction": [
       –{
         "id": "ff8080814b15cb4b014b1a70cf770172",
         "name": "My_Action_October 13, 2014 5:18:11 AM UTC",
```

Cancel subscription

HTTP method	POST
HTTP header	Content-Type: multipart/form-data; boundary=Abcdefgh
	Accept: application/json
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-request/<requestid>?catalogId=<catalogid>
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-request/ff8080814b15cb4b014b1a70cdc0012a?catalogId=90d9650a36988e5d0136988f03ab000f

Payload	--Abcdefgh
	Content-Disposition: form-data; name="requestForm"
	{
	"action": "CANCEL_SUBSCRIPTION"
	}
	--Abcdefgh--

Manage your Subscription

There are two cases where you would issue REST call to manage your subscription

1. Request customer actions (public actions).
2. Modify a subscription to update subscription attributes or options

Request a public action

A public action “My_Action” is defined on the component. “My_Action” takes three inputs String, Integer and a Boolean. Request payload has to include all these inputs while requesting a public action call.

From Service Instance details, get component ID where public action has been defined and the name of the public action.

Component Id: `ff8080814b15cb4b014b1a70cf770171`

Public Action: `My_Action_October 13, 2014 5:18:11 AM UTC`

HTTP method	POST
HTTP header	**Content-Type**: multipart/form-data; boundary=Abcdefgh **Accept**: application/json
REST API	https://<CSAFQDN>:<port>/csa/api/ mpp/mpp-request/ <componentid>?catalogId=<catalogid>
REST URL	https://<CSAFQDN>:<port>/csa/api/ mpp/mpp-request/ ff8080814b15cb4b014b1a70cf770171?catalogId=90d9650a36988e5d0136988f03ab000f

Payload	`--Abcdefgh`
	`Content-Disposition: form-data; name="requestForm"`
	`{`
	`"action":"My_Action_October 13, 2014 5:18:11 AM UTC",`
	`"subscriptionId":"ff8080814b15cb4b014b1a70cdc0012a",`
	`"fields":{`
	`"booleanInput":false,"stringInput":"xxx","integerInput":2`
	`}`
	`}`
	`--Abcdefgh--`

> **Note:** If Public action is defined on a resource Subscription, then fetch resourceSubscription ID from Service Instance details call and issue an mpp request to CSA. The URI in such a case would be
>
> /api/ mpp/mpp-request/<resourceSubscriptionId>?catalogId=<catalogid>

Modify subscription

To modify a subscription, fetch the required option model details from the subscription details call, as shown in the following example:

HTTP method	GET
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-subscription/<subscriptionid>/modify
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-subscription/ff8080814b15cb4b014b1a70cdc0012a/modify

CPU options:

```
"id": "field_ff8080814b15cb4b014b1a70cdef0132",
"displayName": "Number of CPUs",
"name": "EC9B910A_82A3_B51B_744B_DB26DCD23898",
"description": "",
"visible": true,
```

```
"id": "field_ff8080814b15cb4b014b1a70cdef0133",
"displayName": "CPUs",
"name": "CPU",
"description": "",
"visible": true,
"disabled": false,
"hidden": false,
"value": 2,
```

Memory options:

```
"id": "field_f8080814b15cb4b014b1a70cdef0138",
"displayName": "Memory (GB)",
"name": "C1988678_C6C2_A878_FEEE_DB29D1FF54DF",
"description": "",
"visible": true,
```

```
"id": "field_ff8080814b15cb4b014b1a70cdef012c",
"displayName": "Total Memory",
"name": "Memory",
"description": "",
"visible": true,
"disabled": false,
"hidden": false,
"value": 2048,
```

Issue a subscription modify request

HTTP method	POST
HTTP header	Content-Type: multipart/form-data; boundary=Abcdefgh
	Accept: application/json
	X-Auth-Token: Your token value from Get token Call
REST API	https://<CSAFQDN>:<port>/csa/api/ mpp/mpp-request/<subscriptionid>?catalogId=<catalogid>
REST URL	https://<CSAFQDN>:<port>/csa/api/ mpp/mpp-request/ ff8080814b15cb4b014b1a70cdc0012a?catalogId=90d9650a36988e5d0136988f03ab000f

Payload	`--Abcdefgh`
	`Content-Disposition: form-data; name="requestForm"`
	`{`
	`"subscriptionName":"sampleRequest",`
	`"subscriptionDescription":"Sample",`
	`"fields":{`
	`"field_ff8080814b15cb4b014b1a70cdef0132":true,`

	"field_ff8080814b15cb4b014b1a70cdef0133":4, "field_ff8080814b15cb4b014b1a70cdef0138":true, "field_ff8080814b15cb4b014b1a70cdef012c":4096 }, "action":"MODIFY_SUBSCRIPTION" } --Abcdefgh--

Download document attached to a CSA service

Documents are attached to Service offering before publishing an offer or to an order request before ordering a subscription. An active subscription will have reference links to these attachments which can be used to download the document.

Subscription details call will fetch the URL to download documents attached to an offering.

To download document use the following REST URL

HTTP method	GET
Content type	application/octet-stream
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-subscription/<subscriptionid>/attachment/<documentid>/file/<filename>
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-subscription/9028525b4a7aa888014a7ae4d1ad0063/attachment/9028525b4a7aa888014a7aed9cac013a /file/offering.txt

In order to fetch documents attached to subscription request, get the request ID and catalog ID from the "Subscription details" on page 32 call.

Use request details call to fetch attachments URL.

HTTP method	GET
REST API	https://<CSAFQDN>:<port>/csa/api/ mpp/mpp-request/<requestId>?catalog=<catalogId>
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-request/402894a34a2e77ae014a2eec8a430020?catalogId=90d9650a36988e5d0136988f03ab000f

Sample response

HTTP method	GET
Content type	application/octet-stream
Accept	application/json
REST API	https://<CSAFQDN>:<port>/csa/api/mpp/mpp-request/<requestid>/attachment/<attachmentid>/file/<filename>
REST URL	https://<CSAFQDN>:<port>/csa/api/mpp/ mpp-request /402894a34a2e77ae014a2eec8a430020/attachment/402894a34a2e77ae014a2eec8d140064/file/ sam.xml

Service request payloads in CSA 4.x

To issue an order request to CSA, you need to send a service request payload along with order request. Let us look at necessary parameters in the payload request that makes a service request. If your service design contains subscriber options (customer options) then these options are bundled under fields { } structure into the service request.

Sample payload without optionModel

```
{ "action":"ORDER", "categoryName":"REPLACE_ME_SERVICE_CATEGORY",
"subscriptionName":"REPLACE_ME_SUBSCRIPTIONNAME", "startDate":"REPLACE_ME_ISO_
DATE", "endDate":" REPLACE_ME_ISO_DATE", "fields":{ } }
```

For example: {"action":"ORDER", "categoryName":"APPLICATION_SERVERS", "subscriptionName":"sampleRequest", "startDate":"2014-12-03T05:04:49.000Z", "endDate":"2015-12-03T05:04:49.000Z", "fields":{}}

Sample payload with optionModel

```
{ ""categoryName":"REPLACE_ME_SERVICE_CATEGORY", "subscriptionName":"REPLACE_ME_
SUBSCRIPTIONNAME", "startDate":"REPLACE_ME_ISO_DATE", "endDate":" REPLACE_ME_ISO_
DATE", "fields":{ "REPLACE_ME_OPTION_FIELD_ID":REPLACE_ME_VALUE_TRUE_OR_FALSE,
"REPLACE_ME_OPTION_PROPERTY_FIELD_ID":REPLACE_ME_PROPERTY_VALUE }, "action":"ORDER"
 }
```

For example: {"categoryName":"APPLICATION_SERVICES", "subscriptionName":"sampleRequest", "startDate":"2015-01-24T05:32:17.000Z", "endDate":"2016-01-23T05:32:17.000Z", "fields":{"field_9028525b4a7aa888014a7ae4d1bc006a":true, "field_

9028525b4a7aa888014a7ae4d1bc006e":2, "field_9028525b4a7aa888014a7ae4d1cc0071":true, "field_9028525b4a7aa888014a7ae4d1cc0074":2048}, "action":"ORDER" }

Legacy APIs

These APIs use a REST interface. See http://en.wikipedia.org/wiki/Representational_state_transfer for general REST information. This documentation assumes that you know how to use REST interfaces.

The base URL for a CSA REST API is https://<host:port>/csa/rest, which is appended with the specific URI for the API call. For example, to access the <example> API, you would use the URL: `https://<host:port>/csa/rest/<example>`.

Because XML content passed into or returned by a REST API calls can be lengthy, example XML content presented in this document will often be abbreviated to include just the more pertinent XML content.

An authorization header must be included in all API requests.

> **Note:** Special or localized characters used in the URL of REST API calls must be encoded before they are sent to the server.

> **Tip:** You should only include one value for a Boolean property and the value must be either true or false.

Artifact API

Use this API to view, create, and modify artifacts.

> This REST API can only be used with sequenced designs. It is not supported for use with topology designs.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

Artifact

URI	Method	Parameters	Description
/artifact	POST	userIdentifier	"Create an artifact" on page 44
/artifact/<artifact_id>	GET	userIdentifier, scope, detail, view	"View an artifact" on page 45
/artifact/<artifact_id>	PUT	userIdentifier, scope, view	"Update an artifact" on page 48
/artifact/<artifact_id>	DELETE	userIdentifier	"Delete an artifact" on page 50
/artifact/fastview/<artifact_id>	GET	userIdentifier, view	"Retrieve a predefined view for an artifact" on page 51
/artifact/<artifact_id>/resolveProperties	GET	userIdentifier, propertyName	"Retrieve resolved properties for an artifact" on page 53

Group

URI	Method	Parameters	Description
/artifact/<organization_id>/group	GET	userIdentifier	"List active groups associated with an organization" on page 56
/artifact/<organization_id>/group	POST	userIdentifier	"Add groups to an organization" on page 57
/artifact/<organization_id>/group/<grou_id>	PUT	userIdentifier	"Update group display name, distinguished name" on page 59
/artifact/<organization_id>/group/<group_id>	DELETE	userIdentifier	"Delete or disassociate group from an organization" on page 60

Resource Provider

URI	Method	Parameters	Description
/artifact	GET	userIdentifier, artifactType	"List resource providers" on page 61

Service Offering

URI	Method	Parameters	Description
/artifact/<service_offering_id>/document	POST	userIdentifier	"Add document to service offering" on page 63
/artifact/<service_offering_id>/document	DELETE	userIdentifier	"Delete document from service offering" on page 65
/artifact/<service_offering_id>/document/<document_id>	POST	userIdentifier	"Update document in service offering" on page 66
/artifact/<catalog_id>/publish	POST	userIdentifier	"Publish service offerings to catalog" on page 67
/artifact/<catalog_id>/unpublish	POST	userIdentifier	"Unpublish service offerings from catalog" on page 69

Note: You can view information about an artifact with GET /artifact/<artifact_id> or GET /artifact/fastview/<artifact_id>. The fastview API can traverse associations, while the standard artifact API only returns information for the artifact.

Artifact types

You can work with the following artifact types using the /artifact API. You can use them with the methods marked in the table.

Artifact type	GET	POST	PUT	DELETE
Approval process	X			
Approval template	X			
Approver	X			

Artifact type	GET	POST	PUT	DELETE
Catalog	X	X	X	X
Group	X			
Named approver approval template	X			
Organization	X	X	X	X
Person	X			
Resource binding	X		X	
Resource environment	X			
Resource offering	X	X	X	
Resource pool	X	X	X	X
Resource provider	X	X	X	X
Resource subscription	X		X	
Service component	X	X	X	X
Service blueprint	X	X	X	X
Service instance	X		X	
Service offering	X	X	X	X
Service request	X			
Subscription	X			

Create an artifact

Details

URI	`/artifact`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.

URI	`/artifact`
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

View an artifact

Details

URI	`/artifact/<artifact_id>`
Method	GET

Parameters	`userIdentifier=<user_id>`
	
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|baseplusone|subtree|view]`
	
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned. If the value is *vie*, then the view parameter is required.
	
	`detail=[required|basic|standard|template|full]`
	
	Optional; default is *full*. See "Values for the detail parameter" on page 189
	
	Note: Some API calls do not support all possible values for this parameter.
	
	`detail=FULL`, even as the default value, is not accepted for organization artifacts because the volume of content returned can be excessively large. Specify `detail=BASIC` to avoid an exception message.
	
	`view=<view_type>`
	
	Required when value for `scope` is *view*; if this parameter is defined, then the value for `scope` is processed as if its value was *view*. The default is *basicinfo*. See "Artifact views" on page 72 for a list of view types.
	
	`restrict=[true|false]`
	
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed:

URI	`/artifact/<artifact_id>`
	createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed. See "Values for the restrict parameter" on page 190 for more information.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/artifact/90e72e4f3b00a69e013b0bf7ed55002e?userIdentifier=<user_id>
```

The following XML was returned in the response:

```
<ResourceEnvironment>
  <id>90e72e4f3b00a69e013b0bf7ed55002e</id>
  <objectId>90e72e4f3b00a69e013b0bf7ed55002e</objectId>
  <createdOn>2012-11-16T17:24:55.765-08:00</createdOn>
  <updatedOn>2012-11-16T17:24:55.765-08:00</updatedOn>
  <createdBy>
    <id>90d96588360da0c701360da0f1d5f483</id>
    <objectId>90d96588360da0c701360da0f1d5f483</objectId>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <name>admin</name>
    <displayName>admin</displayName>
    <disabled>false</disabled>
  </createdBy>
  <updatedBy>
    <id>90d96588360da0c701360da0f1d5f483</id>
    <objectId>90d96588360da0c701360da0f1d5f483</objectId>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <name>admin</name>
    <displayName>admin</displayName>
    <disabled>false</disabled>
  </updatedBy>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <description>TestEnv</description>
  <name>TestEnv_November 17, 2012 1:24:55 AM UTC</name>
  <displayName>TestEnv</displayName>
  <state>
    <id>90d96588360da0c701360da0ef470038</id>
```

```
    <objectId>90d96588360da0c701360da0ef470038</objectId>
    <createdOn>2012-11-01T15:16:54.687-07:00</createdOn>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <description>Active</description>
    <iconUrl>/csa/images/categories/artifact_state/active.png</iconUrl>
    <name>ACTIVE</name>
    <displayName>Active</displayName>
    <disabled>false</disabled>
    <categoryType>
       <id>90d96588360da0c701360da0ef420037</id>
      <objectId>90d96588360da0c701360da0ef420037</objectId>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <name>ARTIFACT_STATE</name>
      <displayName>Artifact State</displayName>
      <extensible>false</extensible>
    </categoryType>
  </state>
  <artifactType>
    <id>90d96588360da0c701360da0eedb0020</id>
    <objectId>90d96588360da0c701360da0eedb0020</objectId>
    <createdOn>2012-11-01T15:16:57.787-07:00</createdOn>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <description>Resource Environment</description>
    <iconUrl>
      /csa/images/categories/artifact_type/resource_environment.png
    </iconUrl>
    <name>RESOURCE_ENVIRONMENT</name>
    <displayName>Resource Environment</displayName>
    <disabled>false</disabled>
    <categoryType>
    <id>90d96588360da0c701360da0eeb40017</id>
      <objectId>90d96588360da0c701360da0eeb40017</objectId>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <name>ARTIFACT_TYPE</name>
      <displayName>Artifact Type</displayName>
      <extensible>false</extensible>
    </categoryType>
  </artifactType>
  <disabled>false</disabled>
  <numberOfProvider>0</numberOfProvider>
  <numberOfServiceDesign>0</numberOfServiceDesign>
  <numberOfCatalog>0</numberOfCatalog>
</ResourceEnvironment>
```

Update an artifact

Details

URI	/artifact/<artifact_id>
Method	PUT

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`view=<view_type>&scope=view`
	Optional; Used to update artifacts based on pre-defined views. See "Artifact views" on page 72 (description column) for a list of view types that support update operation.
	
	`<_artifact_property>_action_=merge`
	Optional; use the *merge* option with the *action* meta tag query parameter to update only a portion of the artifact. The *action* meta tag can either be specified globally for the artifact by including parameter `_action_=merge`, or for a specific property e.g., `_property_values_action_=merge`.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Note: To completely update the artifact, i.e., replace the persistent artifact, do not use the *view* or *merge* parameters and include all artifact content in the request body. Note that if only a portion of the artifiact content is sent in the request body, any unspecified content will be removed from the artifact.

To update a portion of the artifact:

- Use a pre-defined view that contains a subset of the artifact properties; only that subset of properties will be updated per the values specified in the request body. See"Artifact views" on page 72 for a list of view types.
- Use the *merge* option as described under Parameters.
  Note: You can use the *merge* option with the v*iew* parameter to update only the view properties for which you specify values in the request body.

> **Note: Collection specific behavior**
>
> When a *merge* option is specified on a collection, for example `_property_values_action_=merge`, all collection items specified in the PUT request body are updated. Any other collection items are left untouched.
> For the *property* attribute of an artifact, the items of this collection attribute are matched by name. For all other attributes, the collection items are matched by id.

Examples

The following examples demonstrate how to update an artifact.

This example shows how to change the finalize flag of a component using the view parameter.
The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/90e72e4f3af5c989013afb471ebc0264?userIdentifier=&scope=view&view=componentfinalize
```

The following XML was sent in the request body:

```
<ServiceComponent>
  <id>90e72e4f3af5c989013afb471ebc0264</id>
  <toFinalize>false</toFinalize>
</ServiceComponent>
```

This example shows changing the display name of a resource provider. This example does not use the view parameters. To use this approach, retrieve the artifact using GET artifact API, modify the necessary value (in this example - displayName), and use that as the body of the PUT request to update the artifact.
The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/90e72e4f3b00a69e013b0c049ab00033?userIdentifier=<user_id>
```

The following XML was sent in the request body:

```
<ResourceProvider>
  <id>90e72e4f3b00a69e013b0c049ab00033</id>
  <objectId>90e72e4f3b00a69e013b0c049ab00033</objectId>
  <createdOn>2012-11-16T17:38:46.576-08:00</createdOn>
  <updatedOn>2012-11-16T17:38:46.576-08:00</updatedOn>
  <createdBy>
    <id>90d96588360da0c701360da0f1d5f483</id>
    ...
  </createdBy>
  <updatedBy>
```

```
    <id>90d96588360da0c701360da0f1d5f483</id>
    ...
  </updatedBy>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <description>TestProvider</description>
  <name>TestProvider_November 17, 2012 1:38:46 AM UTC</name>
  <displayName>TestProviderModified</displayName>
  <state>
    <id>90d96588360da0c701360da0ef470038</id>
    ...
  </state>
  <artifactType>
    <id>90d96588360da0c701360da0eed8001f</id>
    ...
  </artifactType>
  <disabled>false</disabled>
  <accessPoint>
    <id>90e72e4f3b00a69e013b0c049a740032</id>
    ...
  </accessPoint>
  <providerType>
    <id>90d96588360da0c701360da0eeac0016</id>
    ...
  </providerType>
  <numberOfResourceOffering>0</numberOfResourceOffering>
  <numberOfEnvironment>0</numberOfEnvironment>
  <numberOfPools>0</numberOfPools>
</ResourceProvider>
```

Delete an artifact

Details

URI	`/artifact/<artifact_id>`
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok

URI	`/artifact/<artifact_id>`
	401 - Not authorized 404 - Object not found 500 - Server exception

Deletion is subject to a set of business rules which depend on the type of artifact. The business rules for artifacts are explained in the table below. Note that consumption artifacts are not removed from the database when they are deleted; instead, the artifact is marked as retired. See "Catalog API" on page 78 for retiring consumption artifacts.

Artifact type	Details
Resource provider	Can only be deleted if no active service subscriptions use the resource provider.
Service design	Can be deleted when all associated service offerings or service instances are retired.

Retrieve a predefined view for an artifact

Because the REST API presented here returns content in a different format when retrieving a single result versus multiple results, and could thereby complicate your using the results, it is recommended that the "View an artifact" on page 45 API be used. Performance intensive applications might still choose to use the following API.

Details

URI	`/artifact/fastview/<artifact_id>`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`view=<view_type>`
	Required; see "Artifact views" on page 72 for a list of view types.
	
	`obfuscate`
	Optional; returns the password in obfuscated format. The obfuscate parameter can be used only when the artifact view is set to `accesspoint` (`view=accesspoint`.)

URI	/artifact/fastview/<artifact_id>
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Examples

The following URL was sent. Note that artifact_id is the ID of any artifact that has an accesspoint.

```
https://<host>:port/csa/rest/artifact/fastview/90e72e4f3abe4bf4013ac24735730010?userIdentifier=<user_id>&view=accesspoint
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<resultView>
  <resultMap>
    <entry>
      <key>accessPoint.uri</key>
      <value xsi:type="xs:string">http://amz:443</value>
    </entry>
    <entry>
      <key>accessPoint.password</key>
      <value xsi:type="xs:string">amz</value>
    </entry>
    <entry>
      <key>accessPoint.username</key>
      <value xsi:type="xs:string">amz</value>
    </entry>
    <entry>
      <key>accessPoint.category.name</key>
      <value xsi:type="xs:string">URL</value>
    </entry>
  </resultMap>
</resultView>
```

Filtering

You can filter the results by providing a value for a property in the URI. The query is then filtered based on that property. You can use the properties listed in "Artifact views" on page 72.

> **Note:** The property name that is specified in the URL must have the period (.) character replaced

with the underscore (_) character.

The following example shows the result when the previous example is filtered on a property name.

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/fastview/90e72e4f3b00a69e013b0c049ab0003?us
erIdentifier=<user_id>&view=propertyinfo&property_name=propBLN
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<resultView><resultMap>
    <entry>
      <key>property.values.value</key>
      <value xsi:type="xs:string">true</value>
    </entry>
    <entry>
      <key>property.consumerVisible</key>
      <value xsi:type="xs:boolean">true</value>
    </entry>
    <entry>
      <key>property.displayName</key>
      <value xsi:type="xs:string">Boolean property</value>
    </entry>
    <entry>
      <key>property.valueType.name</key>
      <value xsi:type="xs:string">BOOLEAN</value>
    </entry>
    <entry>
      <key>property.name</key>
      <value xsi:type="xs:string">propBLN</value>
   </entry>
  </resultMap></resultView>
```

Retrieve resolved properties for an artifact

A property can have a property mapping configured that indicates its value is to be retrieved from a property on another artifact. The REST API discussed here provides a mechanism to retrieve the value from the source property. As part of this retrieval, relevant tokens configured on properties are also resolved.

There are two approaches to retrieving resolved properties:

- Retrieve all properties
- Retrieve a single named property

Details

URI	`/artifact/<artifact_id>/resolveProperties`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`propertyName=<property_name>`
	Optional; the name of the property you want to retrieve. Only retrieves the value for the property specified.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was used to retrieve all properties for an artifact:

```
https://<host>:<port>/csa/rest/artifact/<id>/resolveProperties?userIdentifier=<user_id>
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Properties>
    <property> ... </property>
    <property> ... </property>
    <property>
        <id>90d9651a3684c7f0013684cafda80005</id>
        <createdOn>2012-04-05T16:15:57.480-07:00</createdOn>
        <updatedOn>2012-04-05T16:15:57.497-07:00</updatedOn>
        <isCriticalSystemObject>false</isCriticalSystemObject>
        <name>PARENT_SVC_COMPONENT_ID</name>
        <artifact>
            <id>90d9651a3684c7f0013684cafda80008</id>
            <isCriticalSystemObject>false</isCriticalSystemObject>
            <name>TEST_CHILD_COMPONENT</name>
            <disabled>false</disabled>
        </artifact>
        <propertyBindings>
```

```
            <id>90d9651a3684c7f0013684cb28820009</id>
            <createdOn>2012-04-05T16:16:08.450-07:00</createdOn>
            <updatedOn>2012-04-05T16:16:08.450-07:00</updatedOn>
            <propertyBindingType>
                <name>SOURCE</name>
                <categoryType>
                    <name>PROPERTY_BINDING_TYPE</name>
                </categoryType>
            </propertyBindingType>
            <artifact>90d9651a3684c7f0013684c91f8c0004</artifact>
            <artifactPropertyName>SVC_COMPONENT_ID</artifactPropertyName>
        </propertyBindings>
        <scope> ... </scope>
        <valueType> ... </valueType>
        <values><id>90d9651a3684c7f0013684c91f8b0002</id>
            <createdOn>2012-04-05T16:13:55.083-07:00</createdOn>
            <updatedOn>2012-04-05T16:13:55.083-07:00</updatedOn>
            <value>90d9651a3684c7f0013684c91f8c0004</value></values>
        <maxOccurs>0</maxOccurs>
        <minOccurs>0</minOccurs>
        <orderIndex>0</orderIndex>
        <confidential>false</confidential>
        <encrypted>false</encrypted>
        <consumerReadOnly>false</consumerReadOnly>
        <consumerVisible>false</consumerVisible>
    </property><property> ... </property>
</Properties>
```

The following URL was used to retrieve a single property:

```
https://<host>:<port>/csa/rest/artifact/<id>/resolveProperties?
userIdentifier=<user_id>&propertyName=PARENT_SVC_COMPONENT_ID
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Properties>
       <property>
        <id>90d9651a3684c7f0013684cafda80005</id>
        <name>PARENT_SVC_COMPONENT_ID</name>
        ...
    </property>
</Properties>
```

List active groups associated with an organization

Details

URI	`/artifact/<organization_id>/group`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/8a81818f3d02fb7e013d0308891d0003/group?user
Identifier=90d96588360da0c701360da0f1d5f483
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<GroupList>
  <count>1</count>
  <limit>1</limit>
  <group>
    <id>8a81818f3d02fb7e013d030af854000f</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>sc_February 22, 2013 5:54:43 PM UTC</name>
    <displayName>ServiceConsumer1</displayName>
    <state>...</state>
    <artifactType>...</artifactType>
    <disabled>false</disabled>
    <distinguishedName>
      cn=ServiceConsumer,ou=ConsumerGroup,ou=CSAGroups
    </distinguishedName>
```

```
    <role>
      ...
    </role>
  </group>
</GroupList>
```

Add groups to an organization

Details

URI	`/artifact/<organization_id>/group`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Note that the role must be specified for each group in the request body. Valid roles are as follows.
For Consumer type organizations:

- SERVICE_CONSUMER
- CONSUMER_ORGANIZATION_ADMINISTRATOR

For Provider type organizations:

- CONSUMER_SERVICE_ADMINISTRATOR
- CONTENT_MANAGER
- CSA_ADMIN
- RESOURCE_SUPPLY_MANAGER
- SERVICE_BUSINESS_MANAGER
- SERVICE_DESIGNER
- SERVICE_OPERATIONS_MANAGER

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/8a81818f3d1421e7013d1423635a0003/group?user
Identifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent:

```
<GroupList>
  <group>
    <displayName>My-Group-Name</displayName>
    <distinguishedName>
      cn=TestConsumer,ou=ConsumerGroup,ou=CSAGroups
    </distinguishedName>
    <role>
      <name>SERVICE_CONSUMER</name>
    </role>
  </group>
  <group>
    <displayName>Another-Group-Name</displayName>
    <distinguishedName>
      cn=TestConsumer2,ou=ConsumerGroup,ou=CSAGroups
    </distinguishedName>
    <role>
      <name>SERVICE_CONSUMER</name>
    </role>
  </group>
 </GroupList>
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<GroupList>
  <count>2</count>
  <limit>2</limit>
  <group>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>My-Group-Name</name>
    <displayName>My-Group-Name</displayName>
    <disabled>false</disabled>
    <distinguishedName>
      cn=TestConsumer,ou=ConsumerGroup,ou=CSAGroups
    </distinguishedName>
    <role>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>SERVICE_CONSUMER</name>
```

```
      <disabled>false</disabled>
    </role>
  </group>
  <group>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>Another-Group-Name</name>
    <displayName>Another-Group-Name</displayName>
    <disabled>false</disabled>
    <distinguishedName>
      cn=TestConsumer2,ou=ConsumerGroup,ou=CSAGroups
    </distinguishedName>
    <role>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>SERVICE_CONSUMER</name>
      <disabled>false</disabled>
    </role>
  </group>
</GroupList>
```

Update group display name, distinguished name

Use this /artifact URI to update the group display name and/or distinguised name for the specified organization.

Details

URI	`/artifact/<organization_id>/group/<group_id>`
Method	PUT
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/8a81818f3d02fb7e013d0308891d0003group/8a818
18f3d1437e2013d1795d41107ea?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent:

```
<GroupList>
  <group>
    <displayName>My-New-Group-Name</displayName>
    <distinguishedName>
      cn=TestConsumer,ou=ConsumerGroup,ou=CSAGroups
    </distinguishedName>
  </group>
</GroupList>
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Group>
  <id>8a81818f3d1437e2013d1795d41107ea</id>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <name>sc_February 22, 2013 5:54:43 PM UTC</name>
  <displayName>My-New-Group-Name</displayName>
  <state>
    <id>90d96588360da0c701360da0ef470038</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>ACTIVE</name>
    <disabled>false</disabled>
  </state>
  <artifactType>
    <id>90d96588360da0c701360da0eeff002b</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>GROUP</name>
    <disabled>false</disabled>
  </artifactType>
  <disabled>false</disabled>
  <distinguishedName>
    cn=TestConsumer,ou=ConsumerGroup,ou=CSAGroups
  </distinguishedName>
</Group>
```

Delete or disassociate group from an organization

Use this URI to delete a group or to disassociate it from an organization. If no organization is associated with this group, the group will be deleted. Otherwise, the group will be disassociated from the specified organization.

Details

URI	`/artifact/<organization_id>/group/<group_id>`
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/8a81818f3d1421e7013d1423635a0003/group/8a81818f3d1437e2013d1795d41107ea?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was returned:

```
<messageList>
  <messages>Removed role association for My-New-Group-Name</messages>
</messageList>
```

List resource providers

Details

URI	`/artifact`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get

URI	`/artifact`
	userIdentifier" on page 122 for the steps required to get the userIdentifier value. `artifactType=RESOURCE_PROVIDER` Required; the only valid value is `RESOURCE_PROVIDER`. Basic view information is provided in the return content. `restrict=[true|false]` Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.See "Values for the restrict parameter" on page 190 for more information.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:`https://<host>:<port>/csa/rest/artifact?userIdentifier=90d96588360da0c701360da0f1d5f483&artifactType=RESOURCE_PROVIDER`

The following XML was returned in the response:

```
<ResourceProviderList>
  <count>3</count>
  <limit>0</limit>
  <resourceProvider>
    <id>90e72e583d4c6e77013d4c96b1ab0010</id>
    <objectId>90e72e583d4c6e77013d4c96b1ab0010</objectId>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <description>Sitescope A</description>
    <name>Sitescope_A_March 9, 2013 12:39:36 AM UTC</name>
    <displayName>Sitescope A</displayName>
    <disabled>false</disabled>
  </resourceProvider></ResourceProviderList>
```

Add document to service offering

Details

URI	`/artifact/<service_offering_id>/document`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent with headers:

- Content-type: multipart/form-data
- Content-Disposition: form-data; name="file"
- Content-Type: application/octet-stream

```
https://<host>:<port>/csa/rest/artifact/90cef5de3c63429f013c68b8cdda0bad/document?userIdentifier=90cef5de3c63429f013c642c7fc708ab
```

To better demonstrate how to use this REST API URI, see the sample python script that attaches a text file to a service offering. The script is created based on HTML documentation and you can find more information on HTML form at: http://www.w3.org/TR/html401/interact/forms.html#h-17.13.4.2.

```
""" Sample python script that attaches a text file in the current directory to
an ACTIVE CSA service offering on a local host, with default credentials.
Script usage:
    <scrip-name.py> <service offering uuid> <filename> <admin uuid>
The following example attaches file doc.txt to the service offering with id
90cec0773c83a11a013c871e4c1a0503 using an admin user ID
90d96588360da0c701360da0f1d5f483
post-doc.py 90cec0773c83a11a013c871e4c1a0503 doc.txt
```

```
90d96588360da0c701360da0f1d5f483
Tested with: ActivePython 3.2.2.3
"""
from xml.dom.minidom import parse, parseString
from http.client import HTTPSConnection
from base64 import b64encode
import mimetypes
import sys
def get_content_type(filename):
    return mimetypes.guess_type(filename)[0] or 'application/octet-stream'
def get_file_contents(filename):
    CRLF = '\r\n'
    f = open(filename, 'r')
    return CRLF.join(f.readlines())
def encode_multipart_formdata(filename):
    BOUNDARY = '----------CSA_r0ck$_$'
    CRLF = '\r\n'
    L = []
    L.append('--' + BOUNDARY)
    L.append('Content-Disposition: form-data; name="file"; filename="%s"' %
filename)
    L.append('Content-Type: %s' % get_content_type(filename))
    L.append('')
    L.append(get_file_contents(filename))
    L.append('--' + BOUNDARY + '--')
    L.append('')
    body = CRLF.join(L)
    content_type = 'multipart/form-data; boundary=%s' % BOUNDARY
    return content_type, body
def addDocumentToOffering(offeringId, documentName, userId):
    conn = HTTPSConnection("localhost:8444")
    userAndPass = b64encode(b"csaTransportUser:csaTransportUser").decode("ascii")
    post_url = "/csa/rest/artifact/" + offeringId +
"/document?userIdentifier="+userId
    content_type, body = encode_multipart_formdata(documentName)
    content_length =  str(len(body))
    headers = {'Authorization' : 'Basic %s' %  userAndPass,
               'Content-Type' :'%s' % content_type, 'content-length' : str(len
(body)), 'Accept' : 'application/xml'}
    conn.request('POST', post_url, body, headers=headers)
    res = conn.getresponse()
    data = res.read()
    print(data)
def main(offeringId, documentName, userId):
    addDocumentToOffering(offeringId, documentName, userId)
if __name__ == "__main__":
    offeringId = sys.argv[1]
    documentName = sys.argv[2]
    userId = sys.argv[3]
```

```
main(offeringId, documentName, userId)
```

Delete document from service offering

Details

URI	`/artifact/<service_offering_id>/document/<document_id>`
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/90cef5de3c63429f013c68b8cdda0bad/document/90cef5de3c63429f013c68b8cdda0bad?userIdentifier=90cef5de3c63429f013c642c7fc708ab
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Document>
    <id>90cef5de3c63429f013c68d4146a0bce</id>
    <isCriticalSystemObject> false </isCriticalSystemObject>
    <name>Example Offering Doc.txt</name>
    <state>
        ...
    </state>
    <artifactType>
        ...
    </artifactType>
    <disabled>false</disabled>
    <url>/csa//document/download?id=90cef5de3c63429f013c68d4146a0bce</url>
```

```
    <content>Sample Doc Content</content>
    <mimeType>application/octet-stream</mimeType>
    <documentType>
       ...
    </documentType>
</Document>
```

Update document in service offering

Details

URI	`/artifact/<service_offering_id>/document/<document_id>`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent with headers:

- Content-type: multipart/form-data
- Content-Disposition: form-data; name="file"
- Content-Type: application/octet-stream

```
https://<host>:<port>/csa/rest/artifact/90cec0123ae20db2013ae2111e3e000a/document/9
0cec0123afffe57013afffec64f0001?userIdentifier=90d96588360da0c701360da0f1d5f483
```

See "Add document to service offering" on page 63 for a more detailed example.

Publish service offerings to catalog

Details

URI	`/artifact/<catalog_id>/publish`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/90e72e323b5330cc013b5358c0940021/publish?us
erIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<CatalogItems>
  <catalogItem>
    <artifactContext>
      <name>OFFERING1_January 30, 2013 6:18:47 PM UTC</name>
    </artifactContext>
    <artifactContextType>
      <name>SERVICE_OFFERING</name>
      <categoryType>
        <name>ARTIFACT_TYPE</name>
      </categoryType>
    </artifactContextType>
    <category>
      <name>CRM</name>
      <categoryType>
```

```
        <name>CATALOG_CATEGORY</name>
      </categoryType>
    </category>
  </catalogItem>
  <catalogItem>
    <artifactContext>
      <name>OFFERING2_January 28, 2013 11:32:17 PM UTC</name>
    </artifactContext>
    <artifactContextType>
      <name>SERVICE_OFFERING</name>
      <categoryType>
        <name>ARTIFACT_TYPE</name>
      </categoryType>
    </artifactContextType>
    <category>
      <name>ACCESSORY</name>
      <categoryType>
        <name>CATALOG_CATEGORY</name>
      </categoryType>
    </category>
  </catalogItem>
  <catalogItem>
    <artifactContext>
      <name>OFFERING1_January 30, 2013 6:18:47 PM UTC </name>
    </artifactContext>
    <artifactContextType>
      <name>SERVICE_OFFERING</name>
      <categoryType>
        <name>ARTIFACT_TYPE</name>
      </categoryType>
    </artifactContextType>
    <category>
      <name>AABBCCDD</name>
      <displayName>AABBCCDD</displayName>
      <categoryType>
        <name>CATALOG_CATEGORY</name>
      </categoryType>
    </category>
  </catalogItem>
</CatalogItems>
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<messageList>
  <messages> Publish OFFERING1_January 30, 2013 6:18:47 PM UTC to category AABBCCDD
failed. Category doesn't exist.</messages>
  <messages> Publish OFFERING2_January 28, 2013 11:32:17 PM UTC to category
ACCESSORY succeeded.</messages>
```

```
  <messages> Publish OFFERING1_January 30, 2013 6:18:47 PM UTC to category CRM
succeeded.</messages>
</messageList>
```

Unpublish service offerings from catalog

Details

URI	`/artifact/<catlog_id>/unpublish`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/90e72e323b5330cc013b5358c0940021/unpublish?
userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request:

```
<CatalogItems>
  <catalogItem>
    <artifactContext>
      <name>OFFERING1_January 30, 2013 6:18:47 PM UTC</name>
    </artifactContext>
    <artifactContextType>
      <name>SERVICE_OFFERING</name>
      <categoryType><name>ARTIFACT_TYPE</name></categoryType>
    </artifactContextType>
    <category>
      <name>CRM</name>
```

```
      <categoryType>
        <name>CATALOG_CATEGORY</name>
      </categoryType>
    </category>
  </catalogItem>
  <catalogItem>
    <artifactContext>
      <name>OFFERING2_January 28, 2013 11:32:17 PM UTC</name>
    </artifactContext>
    <artifactContextType>
      <name>SERVICE_OFFERING</name>
      <categoryType><name>ARTIFACT_TYPE</name></categoryType>
    </artifactContextType>
    <category>
      <name>AABBCCDD</name>
      <displayName>AABBCCDD</displayName>
      <categoryType><name>CATALOG_CATEGORY</name></categoryType>
    </category>
  </catalogItem>
</CatalogItems>
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<messageList>
  <messages> Unpublish Service Offering OFFERING1_January 30, 2013 6:18:47 PM UTC
from category CRM succeeded.</messages>
  <messages> Unpublish Service Offering OFFERING2_January 28, 2013 11:32:17 PM UTC
from category AABBCCDD failed. Category doesn't exist.</messages>
</messageList>
```

Retrieve artifact state and status

Details

URI	`/artifact/state/<artifact_id>`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Request	None

URI	`/artifact/state/<artifact_id>`
Body	
Return Body	ArtifactStateInfo
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

For all artifacts, possible values for the returned artifactState are:

- ACTIVE
- RETIRED

The following state and status information will be returned for specific artifact types.

For service instance artifacts, state will be returned and will contain one of the following values:

- ACTIVE
- CANCELLED
- CANCELLING
- CANCEL_FAILED
- DEPLOYING
- EXPIRE_FAILED
- EXPIRING
- FAILED
- MODIFYING
- MODIFY_FAILED
- IN_PROGRESS
- PUBLIC_ACTION_FAILED
- RESERVED
- UPGRADING
- UPGRADE_FAILED

For service request artifacts:

- State will be returned and will contain one of the following values:
  - APPROVED
  - CANCELLED
  - COMPLETED
  - IN_PROGRESS
  - PENDING_APPROVAL

  - REJECTED
  - SUBMITTED
- Status will be returned. If no value was set a null value will be returned. Otherwise it will contain one of the following values:
  - FAILURE
  - SUCCESS

For service subscription artifacts, status will be returned and will contain one of the following values:

- ACTIVE
- CANCELLED
- EXPIRED
- PAUSED
- PENDING
- TERMINATED

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/artifact/state/90e72e323ad23bd6013ad23f63da0016?user
Identifier=90d96588360da0c701360da0f1d5f483
```

The following JSON was returned in the response body:

```
{
  "id": "90e72e323fe4c9ae013fe4def98a0125",
  "artifactType": "SERVICE_INSTANCE",
  "artifactState": "ACTIVE",
  "state": "FAILED",
  "status":null
}
```

Artifact views

Artifact views provide a convenient way to perform retrieve or update actions. When views are used with artifact GET and fastview GET requests, the response includes only the relevant information depending on the type of view requested. When used with PUT requests, the body of the request can include just relevant information, compared to typical PUT requests.

Advantages of Views

- With GET requests, views retrieve only the relevant data for the artifact and avoid loading all the data for the artifact. This leads to better performance.
- With PUT requests, the burden is not on the user to know all the artifact details to update the artifact. The user can pass only the necessary information.
- An example of using views is presented in "Update an artifact" on page 48 (using componentfinalize view).

Note: If you are updating with artifact views, you need to specify all the view's properties.

The following predefined views are available.

View name	Properties	Description

accesspoint	`accessPoint.username`
	`accessPoint.password`
	`accessPoint.uri`
	`accessPoint.category.name`
		This retrieves information from the access point object. Any entity that has the accessPoint property should work with this view.

actioninfo	`action.actionState.name`
	`action.actionStatus`
	`action.errorOnTimeout`
	`action.failOnError`
	`action.timeout`
	`action.processDefinition.name`
	`action.consumerVisible`
	`action.stateConstraint.lifecycleState.name`
	`action.stateConstraint.lifecycleSubstate.name`
		Retrieves the properties for the action object in addition to all the basicinfo and propertyinfo properties. Note: If the intention is to update an existing action, then action.id must be specified.

artifactinfo	`state.name`
	`artifactType.name`
	`disabled`
	`ownedBy.name`
		Retrieves the required properties from an artifact object in addition to all

View name	Properties	Description
		the basicinfo properties.
basicinfo	id name displayName description iconUrl detailedDescription isCriticalSystemObject	Retrieves information from any Identity object. All artifacts and some additional entities (e.g., accessPoint) are identity objects.
candidatepools*	resourceBinding.candidateProvider .candidatePool.id .candidatePool.objectId .candidatePool.isCriticalSystemObject .candidatePool.name .candidatePool.displayName .candidatePool.disabled .candidatePool.useProviderEnv	Use this view to retrieve candidate resource provider pools for a given resource binding.
candidateproviders*	resourceBinding.candidateProvider .resourceProvider.id .resourceProvider.objectId .resourceProvider.isCriticalSystemObject .resourceProvider.name .resourceProvider.displayName .resourceProvider.disabled	Use this view to retrieve candidate resource providers for a given resource binding.
componentchild	componentChild.name componentChild.displayName componentChild.description componentChild.iconUrl componentChild.detailedDescription componentChild.isCriticalSystemObject componentChild.ownedBy.name componentChild.state.name componentChild.artifactType.name componentChild.disabled componentChild.serviceInstance.id componentChild.componentType.name componentChild.lifecycleProperties.lifecycleState.name componentChild.lifecycleProperties.lifecycleSubstate.name	Use this view to add/update service components from the parent service component.

View name	Properties	Description
	componentChild.id	
componentfinalize	toFinalize	Use this view to change the finalize flag for a component.
componentlifecycle	lifecycleProperties.lifecycleState.name lifecycleProperties.lifecycleSubstate.name	Use this view to change the lifecycle state and substate for a component.
componentroot	componentRoot.name componentRoot.displayName componentRoot.description componentRoot.iconUrl componentRoot.detailedDescription componentRoot.isCriticalSystemObject componentRoot.ownedBy.name componentRoot.state.name componentRoot.artifactType.name componentRoot.disabled componentRoot.serviceInstance.id componentRoot.componentType.name componentRoot.lifecycleProperties.lifecycleState.name componentRoot.lifecycleProperties.lifecycleSubstate.name componentRoot.id	Use this view to add a root service component to a ServiceBlueprint or a ServiceInstance object.
disabledesign	ServiceBlueprint.disabled	Use this view to enable or disable a ServiceBlueprint.
propertyinfo	property.name property.values.value property.valueType.name property.consumerVisible property.displayName	Retrieves a list of all the properties. Used for creating new properties.
propertyvalue	property.name property.values.value property.consumerVisible property.displayName	This view is useful if the need is only to update a

View name	Properties	Description
		property value.
resourcebindinginfo	resourceBinding.isCriticalSystemObject resourceBinding.state.name resourceBinding.artifactType.name resourceBinding.disabled resourceBinding.bindingState.name resourceBinding.resourceOffering.name resourceBinding.lifeCycleProperties.lifecycleState.name resourceBinding.lifeCycleProperties.lifecycleSubstate.name resourceBinding.resourceProvider.name	Use this view to create/update a Resource Binding.
validproviders*	resourceBinding.id resourceBinding.validProvider.resourceBinding.id resourceBinding.validProvider.resourceProvider.id	Use this view to retrieve or to update valid resource providers for a given resource binding.
validproviderspools*	resourceBinding.id resourceBinding.validProvider.resourceBinding.id resourceBinding.validProvider.resourceProvider.id resourceBinding.validProvider.validPool.id	Use this view to update valid resource providers and valid resource provider pools for a given resource binding.

* For the candidatepools, candidateproviders, validproviders and validproviderpools artifact views, while the provider selection is in progress the list of providers will be returned. Once a provider is selected no list will be returned.

Availablevalues API

Use this API to retrieve the list of available values for a dynamic property.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/availablevalues/<property_id>` *property_id* is an option model property, and is part of service design, offering and subscription artifacts.
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Request Body	Ampersand (&) separated name=value pairs, where the value on the left side of the equal sign (=) represents the parameter name configured for a dynamic property, and the value on the right side is the value the user selected from the parent property. For example, a request body might contain: *first=parent1value&countparam=mycount*.
Returns	200 - Ok 400 - Not authorized 404 - Not found 500 - Server exception

Example use context

From the subscriber portal a property is selected from a drop down list. The values of any associated dynamic properties must be spontaneously populated - they are dynamic and therefore cannot be populated in advance.

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/availablevalues/90e763a43ddc18e5013ddc2f134c0088
?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following was sent in the request body:

```
first=parent1Value
```

The following response was returned:

```
<Property>
  <id>90e763a43ddc18e5013ddc2f134c0088</id>
  <name>child1</name>
  <displayName>child1</displayName>
  <dynamicValueEnabled>true</dynamicValueEnabled>
  <dynamicScriptName>sample_jsp.jsp</dynamicScriptName>
  <dynamicScriptParameters>
    first=[CLIENT:parent1]
  </dynamicScriptParameters>
  <availableValues>
    <value>value1</value>
    <displayName>value1 displayName</displayName>
    <description>value1 description</description>
  </availableValues>
  ...
</Property>
```

Catalog API

Use this API to get information related to catalogs.

Base URL

https://<host>:<port>/csa/rest

URIs

The URIs in the following tables are appended to the base URL.

Catalog

A catalog is the collection of services available to a consumer.

URI	Method	Parameters	Description
/catalog	GET	userIdentifier, scope, detail	"List catalogs" on page 82
/catalog/<catalog_id>	GET	userIdentifier, scope, detail	"Get catalog details" on page 84

Category

Categories allow you to classify service offerings in a service catalog.

URI	Method	Parameters	Description
/catalog/<catalog_id>/category	POST	userIdentifier	"Create catalog categories" on page 86
/catalog/<catalog_ id>/category/<category_id>	PUT	userIdentifier	"Update catalog categories" on page 88
/catalog/<catalog_ id>/category/<category_id>	DELETE	userIdentifier	"Delete catalog category" on page 90

Offering

An offering allows you to define service designs that are published to a service catalog.

URI	Method	Parameters	Description
/catalog/<catalog_id>/offering	GET	userIdentifier, scope, detail, hasApproval	"List offerings in the catalog" on page 91
/catalog/<catalog_ id>/offering/<offering_id>	GET	userIdentifier, scope, detail	"Get offering details " on page 93

Request

A request is created whenever a user initiates, changes, or deletes a subscription.

URI	Method	Parameters	Description
/catalog/<catalog_id>/request	GET	userIdentifier, scope, detail, submitter	"List requests in the catalog" on page 197
/catalog/<catalog_id>/request	POST	userIdentifier	"Submit a request" on page 94
/catalog/<catalog_id>/request/<request_id>	GET	userIdentifier, scope, detail	"Get request details" on page 97
/catalog/<catalog_id>/request/<request_id>/cancel	GET	userIdentifier	"Cancel a request" on page 99
/catalog/<catalog_id>/request/<request_id>	DELETE	userIdentifier	"Retire a request" on page 100

Approval

An approval is created when the approval manager approves a request.

URI	Method	Parameters	Description
/catalog/<catalog_id>/approval	GET	userIdentifier, scope, detail, approver, returnRetired	"List approvals in the catalog" on page 195
/catalog/<catalog_id>/approval/<approval_id>	GET	userIdentifier, scope, detail	"Get approval details" on page 100
/catalog/<catalog_id>/approval/<approval_id>	PUT	userIdentifier	"Update approval decision using an external approval system" on page 101
/catalog/<catalog_id>/approval/<approval_id>	DELETE	userIdentifier	"Retire an approval" on page 111
/catalog/<catalog_	PUT	userIdentifier	"Update approval decision using

URI	Method	Parameters	Description
id>/approval/<approval_ id>/approver			CSA approval process" on page 103

Approval policy

URI	Method	Parameters	Description
/catalog/<catalog_id>/policy/<policy_ id>/setCatalogApprovalPolicy	POST	userIdentifier	"Update catalog approval policies" on page 104
/catalog/<catalog_id>/policy/<policy_ id>/setSOApprovalPolicy	POST	userIdentifier	"Update service offerings approval policy" on page 106

Subscription

A subscription is created when a consumer requests a service offering and includes all of the options selected by the consumer when the subscription was initiated.

URI	Method	Parameters	Description
/catalog/<catalog_ id>/subscription	GET	userIdentifier, scope, detail, requestor	"List subscriptions in the catalog" on page 199
/catalog/<catalog_ id>/subscription/<subscription_ id>	GET	userIdentifier, scope, detail	"Get subscription details" on page 108

Resource Subscription

URI	Method	Parameters	Description
/catalog/<catalog_ id>/resourceSubscription	GET	userIdentifier, scope, detail	"Get resource subscription details" on page 111

Instance

An instance is created when a request is approved and includes details about the requested services such as the status of services, IP addresses, etc.

URI	Method	Parameters	Description
catalog/<catalog_id>/instance	GET	userIdentifier, scope, detail, requestor	"List instances in the catalog" on page 196
catalog/<catalog_id>/instance/<instance_id>	GET	userIdentifier, scope, detail	"Get instance details" on page 110

List catalogs

Details

URI	`/catalog`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	
	`detail=[required|basic|standard|template|full]`
	Optional; default is *basic*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	
	`restrict=[true|false]`
	
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and

URI	`/catalog`
	categoryType. If the value is *false*, then the output fields are displayed. See "Values for the restrict parameter" on page 190 for more information.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/catalog
?userIdentifier=90d9652b35f46a930135f35b327e00a0&scope=base&detail=basic
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<CatalogList>
    <count>12</count>
    <limit>0</limit>
    <catalog>
        <id>402895e566cb32ss0136cb831752000f</id>
        <objectId>402895e566cb32ss0136cb831752000f</objectId>
        <createdOn>2012-04-19T09:23:04.913-06:00</createdOn>
        <updatedOn>2012-04-19T09:23:04.913-06:00</updatedOn>
        <isCriticalSystemObject>false</isCriticalSystemObject>
        <description>Default catalog for the organization.</description>
        <name>consumer_catalog_a</name>
        <displayName>Consumer Catalog A</displayName>
        <state>
            <id>90d96588364da0c701370da0ss320037</id>
            <objectId>90d96588364da0c701370da0ss320037</objectId>
            <createdOn>2012-04-19T09:22:25.943-06:00</createdOn>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <description>Active</description>
            <iconUrl>/csa/images/categories/artifact_state/active.png</iconUrl>
            <name>ACTIVE</name>
            <displayName>Active</displayName>
            <disabled>false</disabled>
            <categoryType>
                <id>90d96588364da0c701370da0ss320038</id>
                <objectId>90d96588364da0c701370da0ss320038</objectId>
                <isCriticalSystemObject>true</isCriticalSystemObject>
                <name>ARTIFACT_STATE</name>
```

```
                <displayName>Artifact State</displayName>
                <extensible>false</extensible>
            </categoryType>
        </state>
        <artifactType>
            <id>90d96588364da0c701370da0ss320039</id>
            <objectId>90d96588364da0c701370da0ss320039</objectId>
            <createdOn>2012-04-19T09:22:26.050-06:00</createdOn>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <description>Catalog</description>
            <iconUrl>/csa/images/categories/artifact_type/catalog.png</iconUrl>
            <name>CATALOG</name>
            <displayName>Catalog</displayName>
            <disabled>false</disabled>
            <categoryType>
                <id>90d96588364da0c701370da0ss320030</id>
                <objectId>90d96588364da0c701370da0ss320030</objectId>
                <isCriticalSystemObject>true</isCriticalSystemObject>
                <name>ARTIFACT_TYPE</name>
                <displayName>Artifact Type</displayName>
                <extensible>false</extensible>
            </categoryType>
        </artifactType>
        <disabled>false</disabled>
    </catalog>
...
</CatalogList>
```

Get catalog details

Details

URI	`/catalog/<catalog_id>` Use "List catalogs" on page 82 to get the catalog ID.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.

URI	`/catalog/<catalog_id>` Use "List catalogs" on page 82 to get the catalog ID.

	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	
	`detail=[required|basic|standard|template|full]`
	Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	
	`restrict=[true|false]`
	
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	
	See "Values for the restrict parameter" on page 190 for more information.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/catalog/402895e566cb32ss0136cb831752000f
?userIdentifier=90d9652b35f46a930135f35b327e00a0&scope=base&detail=required
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Catalog>
    <id>402895e345cb67dd0136ss331752000f</id>
    <objectId>402895e345cb67dd0136ss331752000f</objectId>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>Catalog_Consumer_A</name>
    <displayName>Consumer Catalog A</displayName>
    <state>
        <id>90d96567360da0c701360ss0ef470038</id>
        <objectId>90d96567360da0c701360ss0ef470038</objectId>
        <isCriticalSystemObject>true</isCriticalSystemObject>
        <name>ACTIVE</name>
        <displayName>Active</displayName>
        <disabled>false</disabled>
```

```
        <categoryType>
            <id>90d67588360da0c701360ss0ef420037</id>
            <objectId>90d67588360da0c701360ss0ef420037</objectId>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <name>ARTIFACT_STATE</name>
            <displayName>Artifact State</displayName>
            <extensible>false</extensible>
        </categoryType>
    </state>
    <artifactType>
        <id>90d96586760da0c701360da0ssd2001d</id>
        <objectId>90d96586760da0c701360da0ssd2001d</objectId>
        <isCriticalSystemObject>true</isCriticalSystemObject>
        <name>CATALOG</name>
        <displayName>Catalog</displayName>
        <disabled>false</disabled>
        <categoryType>
            <id>90d67588360da0c701360da0ssb40017</id>
            <objectId>90d67588360da0c701360da0ssb40017</objectId>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <name>ARTIFACT_TYPE</name>
            <displayName>Artifact Type</displayName>
            <extensible>false</extensible>
        </categoryType>
    </artifactType>
    <disabled>false</disabled>
</Catalog>
```

Create catalog categories

Details

URI	`/catalog/<catalog_id>/category`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

In the request body:

- Any category specified in the request body that already exists will be left unchanged.
- displayName is required.
- iconUrl and description are optional, and will be set to null if not specified.

Example

The following URL was sent to create an approval policy with two named approvers:

```
https://<host>:<port>/csa/rest/catalog/90e72e323c88421f013c8d7fad120076/category
?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request:

```
<Catalog>
  <catalogCategory>
    <displayName>Example first Catalog Category</displayName>
    <iconUrl>/catalog/category/x.png</iconUrl>
    <description>description for catalog category</description>
  </catalogCategory>
  <catalogCategory>
      <displayName>Example second category</displayName>
  </catalogCategory>
</Catalog>
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Catalog>
  <id>8a81818f3d02fb7e013d0308894a0004</id>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <description>Default catalog for the organization.</description>
  <iconUrl>
    /csa/images/library/briefcase-consumer_default_img-60.png
  </iconUrl>
  <name>Catalog_QA_ORG</name>
  <displayName>QA Org Catalog</displayName>
  ...
  <catalogCategory> ... </catalogCategory>
  ...
  <catalogCategory>
    <id>8a81818f3d128500013d1341a5d3000e</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>EXAMPLE_SECOND_CATEGORY</name>
    <displayName>Example second category</displayName>
    <disabled>false</disabled>
```

```
  </catalogCategory>
  <catalogCategory> ... </catalogCategory>
  ...
  <catalogCategory>
    <id>8a81818f3d128500013d1341a5c6000d</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <description>description for catalog category</description>
    <iconUrl>/catalog/category/x.png</iconUrl>
    <name>EXAMPLE_FIRST_CATALOG_CATEGORY</name>
    <displayName>Example first Catalog Category</displayName>
    <disabled>false</disabled>
  </catalogCategory>
  <catalogCategory> ... </catalogCategory>
  ...
</Catalog>
```

Update catalog categories

Details

URI	`/catalog/<catalog_id>/category/<category_id>`
Method	PUT
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok (Indicates the REST call executed without error. See XML return content for details on categories updated.) 401 - Not authorized 404 - Object not found 500 - Server exception

Note that any CatalogCategory elements not specified in the request body will be left unchanged.

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/catalog/8a81818f3d02fb7e013d0308894a0004/
category/8a81818f3d128500013d1341a5c6000d
?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request:

```
<CatalogCategory>
  <displayName>Changing first example category name</displayName>
  <iconUrl>/catalog/category/x.png</iconUrl>
  <description>New description for first example category</description>
</CatalogCategory>
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Catalog>
  <id>8a81818f3d02fb7e013d0308894a0004</id>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <description>Default catalog for the organization.</description>
  <iconUrl>
    /csa/images/library/briefcase-consumer_default_img-60.png
  </iconUrl>
  <name>Catalog_QA_ORG</name>
  <displayName>QA Org Catalog</displayName>
  ...
  <catalogCategory> ... </catalogCategory>
  ...
  <catalogCategory>
    <id>8a81818f3d128500013d1341a5c6000d</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <description>description for catalog category</description>
    <iconUrl>/catalog/category/x.png</iconUrl>
    <name>CHANGING_FIRST_EXAMPLE_CATEGORY_NAME</name>
    <displayName>Changing first example category name</displayName>
    <disabled>false</disabled>
  </catalogCategory>
  ...
</Catalog>
```

Delete catalog category

Details

URI	`/catalog/<catalog_id>/category/<category_id>`
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok (Indicates the REST call executed without error. See XML return content for details on category deleted.) 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/catalog/8a81818f3d02fb7e013d0308894a0004/
category/8a81818f3d128500013d1341a5c6000d
?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The XML return content is basic catalog information as returned with the POST and PUT methods and most notably, will not include the category just deleted.

List offerings in the catalog

Details

URI	`/catalog/<catalog_id>/offering` Use "List catalogs" on page 82 to get the catalog ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|view]`
	Optional; default is *base*.
	`detail=basic`
	Optional; The only valid value is *basic*.
	`hasApproval=[true|false]`
	Optional; default is *false*. If *true*, then hasApproval attribute is returned. If *false*, then the attribute is not returned.
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	See "Values for the restrict parameter" on page 190 for more information.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent to get a list of offerings in a catalog using the default values for scope (base) and detail (basic):

```
https://<host>:<port>/csa/rest/catalog/402895e33732af18013732b6f435006boffering?use
rIdentifier=90d9652b67ss6a930135f35b327e00a0
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceOfferingList>
  <count>3</count>
  <limit>0</limit>
  <ServiceOffering
    <id>90e763db3dd1a9a4013dd1e16aa16c95</id>
    <objectId>90e763db3dd1a9a4013dd1e16aa16c95</objectId>
    <createdOn>2013-04-03T14:50:43.873-07:00</createdOn>
    <updatedOn>2013-04-03T14:50:43.873-07:00</updatedOn>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <description>3 Level Option for testing service offerings Integration Service
Offering</description>
    </artifactType>
    <serviceBlueprint>
    <detailedDescription>3 Level Option for testing service offerings Integration
Service Offering</detailedDescription>
    <iconUrl>/csa/images/library/compliance.png</iconUrl>
    <name>ServiceOffering for ApprovalPolicy</name>
    <displayName>ServiceOffering for ApprovalPolicy</displayName>
    <state> … </state>
    <artifactType> … </artifactType>
    <disabled>false</disabled>
    <offeringState> … </offeringState>
  </ServiceOffering>
  <ServiceOffering> … </ServiceOffering>
  <ServiceOffering> … </ServiceOffering>
</ServiceOfferingList>
```

Get offering details

Details

URI	`/catalog/<catalog_id>/offering/<offering_id>` Use "Catalog API" on page 78 to get the catalog ID and "List offerings in the catalog" on page 91 to get the offering ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	`detail=[required|basic|standard|template|full]`
	Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	See "Values for the restrict parameter" on page 190 for more information.
	`excludedoc=[true|false]`
	Optional; default is *true*. If the value is true, then the document field is not included in the REST response. If the value is *false* then the document field is included in the REST repsonse.
	See "Values for the excludedoc parameter" on page 189 for more information.

Returns	200 - Ok 401 - Not authorized

URI	`/catalog/<catalog_id>/offering/<offering_id>` Use "Catalog API" on page 78 to get the catalog ID and "List offerings in the catalog" on page 91 to get the offering ID.
	404 - Not found 500 - Server exception

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/catalog/402895e33732af18013732b6f435006b/
offering/402895e337326d300137327ce1e30074
?userIdentifier=90d9652b67ss6a930135f35b327e00a0
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceOffering>
    <id>402895e337326d300137327ce1e30074</id>
    <objectId>402895e337326d300137327ce1e30074</objectId>
    <createdOn>2012-05-09T10:44:34.147-06:00</createdOn>
    <updatedOn>2012-05-09T11:48:26.170-06:00</updatedOn>
        ...
</ServiceOffering>
```

Submit a request

Details

URI	`/catalog/<catalog_id>/request` Use "List catalogs" on page 82 to get the catalog ID.
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.

URI	`/catalog/<catalog_id>/request` Use "List catalogs" on page 82 to get the catalog ID.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

> **Note:** To submit a request for a subscription that is owned by a group, you must send the group name in the request. You should not use the group DN.

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/catalog/90540a9734f502880134f502c82e0011/request
?userIdentifier=90d9667ss5f46a930135f35b327e00a0
```

The following XML was sent in the request:

```
<ServiceRequest>
<description>Request description</description>
<name>Request name</name>
<displayName>Request display name</displayName>
<artifactContext>
   <id>51bceb48dc57467393170c61200242a7</id>
</artifactContext>

<requestedAction>
  <name>ORDER</name>
  <property>
      <name>START_DATE</name>
      <values>
          <value>2016-07-19</value>
      </values>
   </property>

   <property>
      <name>SERVICE_NAME</name>
      <values><value>Subscription 001</value></values>
   </property>
   <property>
      <name>SERVICE_DESCRIPTION</name>
      <values><value>subsDesc - Subscription 001</value></values>
   </property>
```

```
   <property>
      <name>OWNER_GROUP</name>
      <values>
          <value>MyGroup</value>
      </values>
   </property>

   <property>
      <name>OPTION_MODEL</name>
      <values>
        <optionModel>
          <name>SD2</name>
          <optionSets>
            <name>42FBA7E6-17EF-7B1A-C4DD-0A5CB0246E55</name>
            <options><name>D914556A-6F6A-1BE0-035E-0A5CB021BE9B</name>
               <property>
                    <name>INT</name>
                    <values><value>99</value></values>
               </property>
               <property>
                    <name>BOOLEAN</name>
                    <values><value>true</value></values>
               </property>
              <property>
                    <name>STR</name>
                    <values><value>test</value></values>
               </property>
            </options>
          </optionSets>
          <optionSets>
            <name>D6A80E16-2977-4111-14B9-0A5E5D5B2F56</name>
            <options><name>18CA9979-7C9D-F5AC-06B5-0A5E5D5B3B51</name>
            </options>
          </optionSets>
        </optionModel>
      </values>
   </property>

</requestedAction>
</ServiceRequest>
```

The following XML was returned in the response:

```
<ServiceRequest>
    <id>8a818185382a26cc01382abf331c037e</id>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <disabled>false</disabled>
</ServiceRequest>
```

Get request details

Details

URI	`/catalog/<catalog_id>/request/<request_id>` Use "Catalog API" on page 78 to get the catalog ID and "List requests in the catalog" on page 197 to get the request ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	`detail=[required|basic|standard|template|full]`
	Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	See "Values for the restrict parameter" on page 190 for more information.

Returns	201 - Ok, object returned 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://localhost:8444/csa/rest/catalog/8a8181853810699a0138106dcebc0011/request/8a8181853810699a01381079190800a7/ ?userIdentifier=8a8181853810699a01381076be5400a0
```

The following XML was returned:

```
<ServiceRequest>
   <id>8a8181853810699a01381079190800a7</id>
   <objectId>8a8181853810699a01381079190800a7</objectId>
   <createdOn>2012-06-21T12:16:08.073-07:00</createdOn>
   <updatedOn>2012-06-21T12:16:50.787-07:00</updatedOn>
   <createdBy>
      <id>8a8181853810699a01381076be5400a0</id>
      <objectId>8a8181853810699a01381076be5400a0</objectId>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>consumer1</name>
      <disabled>false</disabled>
   </createdBy>
   <updatedBy>
      <id>90d96588360da0c701360da0f1d5f483</id>
      <objectId>90d96588360da0c701360da0f1d5f483</objectId>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <name>admin</name>
      <displayName>admin</displayName>
      <disabled>false</disabled>
   </updatedBy>
   <isCriticalSystemObject>false</isCriticalSystemObject>
   <description>SD2 Offering</description>
   <detailedDescription>desc - SD2 offering</detailedDescription>
   <iconUrl>/csa/images/library/application.png</iconUrl>
   <name>request 1</name>
   <displayName>request 1</displayName>
   <catalogItem>
      <id>8a8181853810699a01381079202c00d7</id>
      <createdOn>2012-06-21T12:16:09.900-07:00</createdOn>
      <updatedOn>2012-06-21T12:16:09.900-07:00</updatedOn>
      <createdBy>
         <id>8a8181853810699a01381076be5400a0</id>
         <objectId>8a8181853810699a01381076be5400a0</objectId>
         <isCriticalSystemObject>false</isCriticalSystemObject>
         <name>consumer1</name>
         <disabled>false</disabled>
      </createdBy>
```

```
      ...
      <priceCategory>
         <id>90d9650a36897af90136897bc93e0016</id>
         <objectId>90d9650a36897af90136897bc93e0016</objectId>
         <createdOn>2012-06-21T11:51:43.633-07:00</createdOn>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <description>SETUP</description>
         <iconUrl>/csa/images/categories/price/setup.png</iconUrl>
         <name>SETUP</name>
         <displayName>SETUP</displayName>
         <disabled>false</disabled>
         <categoryType>
            <id>90d9650a36897af90136897bc7c70014</id>
            <objectId>90d9650a36897af90136897bc7c70014</objectId>
            <isCriticalSystemObject>false</isCriticalSystemObject>
            <name>PRICE_CATEGORY</name>
            <displayName>Price Category</displayName>
            <extensible>false</extensible>
         </categoryType>
      </priceCategory>
      <fixedPrice>3000.0</fixedPrice>
      <unitPrice>0.0</unitPrice>
   </basePrice>
</ServiceRequest>
```

Cancel a request

Details

URI	`/catalog/<catalog_id>/request/<request_id>/cancel` Use "Catalog API" on page 78 to get the catalog ID and "List requests in the catalog" on page 197 to get the request ID.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized

URI	`/catalog/<catalog_id>/request/<request_id>/cancel` Use "Catalog API" on page 78 to get the catalog ID and "List requests in the catalog" on page 197 to get the request ID.
	404 - Not found 500 - Server exception

Retire a request

Details

URI	`/catalog/<calalog_id>/request/<request_id>` Use "Catalog API" on page 78 to get the catalog ID and "List requests in the catalog" on page 197 to get the request ID.
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Get approval details

Details

URI	`/catalog/<calalog_id>/approval/<approval_id>` Use "Catalog API" on page 78 to get the catalog ID and "List requests in the catalog" on page 197 to get the approval ID.
Method	GET

URI	`/catalog/<calalog_id>/approval/<approval_id>` Use "Catalog API" on page 78 to get the catalog ID and "List requests in the catalog" on page 197 to get the approval ID.

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	
	`detail=[required|basic|standard|template|full]`
	Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Update approval decision using an external approval system

Details

URI	`/catalog/<calalog_id>/approval/<approval_id>` Use "Catalog API" on page 78 to get the catalog ID and "List approvals in the catalog" on page 195 to get the approval ID.
Method	PUT
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Body	ApprovalProcess instance required in request body.

URI	`/catalog/<calalog_id>/approval/<approval_id>` Use "Catalog API" on page 78 to get the catalog ID and "List approvals in the catalog" on page 195 to get the approval ID.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent to approve a subscription request:

```
https://<host>:<port>/csa/rest/catalog/90540a9734f502880134f502c82e0011/
approval/65920b6356n204770943t567ss2r1503
?userIdentifier=90d9667ss5f46a930135f35b327e00a0
```

The following XML was sent in the request:

```
<ApprovalProcess>
    <approvalResult>
        <name>APPROVED</name>
    </approvalResult>
</ApprovalProcess>
```

The following URL was sent to reject a subscription request:

```
https://<host>:<port>/csa/rest/catalog/
```

The following XML was sent in the request:

```
<ApprovalProcess>
    <approvalResult>
        <name>REJECTED</name>
    </approvalResult>
    <approvalComment>comment</approvalComment>
</ApprovalProcess>
```

Update approval decision using CSA approval process

Details

URI	`/catalog/<calalog_id>/approval/<approval_id>/approver` Use "Catalog API" on page 78 to get the catalog ID and "List approvals in the catalog" on page 195 to get the approval ID.
Method	PUT
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Body	ApprovalProcess instance required in request body.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent to approve a subscription request:

```
https://<host>:<port>/csa/rest/catalog/90540a9734f502880134f502c82e0011/
approval/65920b6356n204770943t567ss2r1503/approver
?userIdentifier=90d9667ss5f46a930135f35b327e00a0
```

The following XML was sent in the request:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Approver>
    <person>
        <userName>approver0@hp.com</userName>
        <organization>
```

```
            <name>CONSUMER</name>
        </organization>
    </person>
    <approverResult>
        <name>APPROVED</name>
    </approverResult>
</Approver>
```

The following URL was sent to reject a subscription request:

```
https://<host>:<port>/csa/rest/catalog/90540a9734f502880134f502c82e0011/
approval/65920b6356n204770943t567ss2r1503/approver
?userIdentifier=90d9667ss5f46a930135f35b327e00a0
```

The following XML was sent in the request:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Approver>
    <person>
        <userName>approver0@hp.com</userName>
        <organization>
            <name>CONSUMER</name>
        </organization>
    </person>
    <approverResult>
        <name>REJECTED</name>
    </approverResult>
    <approvalComment>comment</approvalComment>
</Approver>
```

Update catalog approval policies

Use this API to associate an approval policy with the specified catalog.

Details

URI	`/catalog/<calalog_id>/policy/<policy_id>/setCatalogApprovalPolicy` Use "Catalog API" on page 78 to get the catalog ID. Use "List organization's approval policies" on page 136 to get an organization's approval policy IDs.
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get

URI	`/catalog/<calalog_id>/policy/<policy_id>/setCatalogApprovalPolicy` Use "Catalog API" on page 78 to get the catalog ID. Use "List organization's approval policies" on page 136 to get an organization's approval policy IDs.
	userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Response Body	The response body will be an ApprovalPolicyVO of base/full.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/catalog/8a81818f3d4251ed013d46c2b7f602bc/
policy/8a81818f3d4251ed013d4259f57c0008/setCatalogApprovalPolicy?
userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ApprovalPolicyList>
  <count>2</count>
  <limit>0</limit>
  <approvalPolicy>
    <id>8a81818f3d4251ed013d46cc859002c1</id>
    ...
    <approvalTemplate xsi:type="namedApproverApprovalTemplateVO">
     <id>8a81818f3d4251ed013d46cc31ed02be</id>
      <name>EXAMPLE_APPROVAL_POLICY_March 7, 2013 9:40:19 PM UTC </name>
      <automaticApproval>false</automaticApproval>
      <automaticPeriodDuration>0</automaticPeriodDuration>
      <minApprovalRequired>0</minApprovalRequired>
      <approvalLevel>1</approvalLevel>
    </approvalTemplate>
    <catalog>
      <id>8a81818f3d4251ed013d46c2b7f602bc</id>
      <name>SOFTWARE_CATALOG</name>
    </catalog>
  </approvalPolicy>
  <approvalPolicy>
    <id>8a81818f3d4251ed013d46cc85e402c2</id>
    <approvalTemplate>
```

```
      <name>USER_CONTEXT_APPROVAL_TEMPLATE_QAORG</name>
      <automaticApproval>false</automaticApproval>
      <automaticPeriodDuration>0</automaticPeriodDuration>
      <minApprovalRequired>0</minApprovalRequired>
      <approvalLevel>1</approvalLevel>
    </approvalTemplate>
    <catalog>
      <id>8a81818f3d4251ed013d46c2b7f602bc</id>
      ...
      <name>SOFTWARE_CATALOG</name>
      ...
    </catalog>
  </approvalPolicy>
</ApprovalPolicyList>
```

Update service offerings approval policy

Use this API to update the approval policy for multiple service offerings published in the specified catalog.

Details

URI	`/catalog/<calalog_id>/policy/<policy_id>/setCatalogSOApprovalPolicy` Use "Catalog API" on page 78 to get the catalog ID. Use "List offerings in the catalog" on page 91 to get a catalog's service offering IDs, and "List organization's approval policies" on page 136 to get all the approval policies for an organization. Traverse through the list to get the approval policy for the service offering.
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Request Body	The request body contains the list of service offering IDs that are to be updated.
Response Body	The response body will be a MessageListVO with success and failure messages.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/catalog/8a81818f3d4251ed013d46c2b7f602bc/
policy/8a81818f3d4251ed013d46cc8590012c/setCatalogSOApprovalPolicy?
userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request body:

```
<ServiceOfferingList>
  <ServiceOffering>
    <id>8a81818f3d4251ed013d427c75e5005d<id>
  </ServiceOffering>
  <ServiceOffering>
    <id>8a81818f3d4251ed013d427c75e127c3<id>
  </ServiceOffering>
  <ServiceOffering>
    <id>12345<id>
  </ServiceOffering>
</ServiceOfferingList>
```

The following XML was returned:

```
<messageList>
  <messages>Updated approval policy of action of ORDER for service offering with id
8a81818f3d4251ed013d427c75e5005d</messages>
  <messages>Updated approval policy of action of MODIFY_SUBCRIPTION for service
offering with id 8a81818f3d4251ed013d427c75e127c3</messages>
  <messages>Failed to set approval policy for service offering with id 12345. The
service offering is not found.</messages>
</messageList>
```

Get subscription details

Details

URI	`/catalog/<catalog_id>/subscription/<subscription_id>` Us "Catalog API" on page 78 to get the catalog ID and "List subscriptions in the catalog" on page 199 to get the subscription ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	`detail=[required|basic|standard|template|full]`
	Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	See "Values for the restrict parameter" on page 190 for more information.
	`excludedoc=[true|false]`
	Optional; default is *true*. If the value is true, then the document field is not included in the REST response. If the value is *false* then the document field is included in the REST repsonse.
	See "Values for the excludedoc parameter" on page 189 for more information.

Returns	200 - Ok 401 - Not authorized

URI	`/catalog/<catalog_id>/subscription/<subscription_id>` Us "Catalog API" on page 78 to get the catalog ID and "List subscriptions in the catalog" on page 199 to get the subscription ID.
	404 - Not found 500 - Server exception

Examples

The following URL was sent:`https://<host>:<port>/csa/rest/catalog/402895e33732af18013732b6f435006b/subscription/90d957ea3806fa7e013807acc79000b3?userIdentifier=90d9652b67ss6a930135f35b327e00a0`

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceSubscription>
    <id>90d957ea3806fa7e013807acc79000b3</id>
    <name>MY SR</name>
    <displayName>MY SR</displayName>
    <optionModel>...</optionModel>
    <serviceInstance>...</serviceInstance>
    <serviceOffering>...</serviceOffering>
    <subscriptionStatus>...</subscriptionStatus>
    <initiatingServiceRequest>...</initiatingServiceRequest>
    <basePrice xsi:type="recurrentPricingVO">...</basePrice>
    <basePrice xsi:type="initialPricingVO">...</basePrice>
    <totalPrice xsi:type="recurrentPricingVO">...</totalPrice>
    <totalPrice xsi:type="initialPricingVO">...</totalPrice>
    <pricingModel>...</pricingModel>
    <associatedRequest>
        <id>90e396c83a4cfd80013a4d06e29702bc</id>
        <name>Test Modify subscription</name>
    </associatedRequest>
    <associatedRequest>
        <id>90e396c83a4cfd80013a4d017e740003</id>
        <name>Test2 Modify subscription</name>
    </associatedRequest>
    ...
</ServiceSubscription>
```

Get instance details

Details

URI	`/catalog/<catalog_id>/instance/<instance_id>` Use "Catalog API" on page 78 to get the catalog ID and "List instances in the catalog" on page 196 to get the instance ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned.
	`detail=[required|basic|standard|template|full]`
	Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	See "Values for the restrict parameter" on page 190 for more information.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Retire an approval

Details

URI	`/catalog/<catalog_id>/approval/<approval_id>`
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Caution: The approval is retired regardless of whether it was rejected or approved.

Get resource subscription details

Details

URI	`/catalog/<catalog_id>/resourceSubscription/<resource_subscription_id>`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|baseplusone|subtree]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is

URI	`/catalog/<catalog_id>/resourceSubscription/<resource_subscription_id>`
	baseplusone, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned. `detail=[required|basic|standard|template|full]` Optional; default is *full*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
Returns	200 - Ok 401 - Not authorized 500 - Server exception

Export API

Use this API to export a supported artifact as a content archive. Supported artifacts include resource environments, resource offerings, service designs, service offerings, and catalogs.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/export/<artifact_id>`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Note that the directory the archive will be downloaded to is defined by the REST client or browser in use.

Artifact archives are structured as following.

- Resource environment archive contains:
  - Resource environment XML
  - Manifest XML
- Resource offering archive contains:
  - Resource offering XML
  - Icons used for customizing resource offering
  - Manifest.XML
- Service design archive contains:
  - Service design XML
  - Resource offering XMLs
  - Icons used for customizing resource offerings and service design
  - Dynamic option JSP files
  - Manifest XML
- Service offing archive contains:
  - Service offering XML
  - Service design XML
  - Resource offering XMLs
  - Icons used for customizing service offering, service design, and resource offerings
  - Dynamic option JSP files
  - Manifest XML
- Catalog archive contains:
  - Catalog XML
  - Service offering XMLs
  - Service design XMLs
  - Resource offering XMLs
  - Resource environment XMLs
  - Icons used for customizing catalog, service offerings, service designs, and resource offerings
  - Dynamic option JSP files
  - Manifest XML
- Component palette archive contains:
  - Component palette XML
  - Service component type XMLs
  - Service component template XMLs
  - Resource offering type XMLs
  - Artifact relationship XMLs
  - Icon used for customizing component palette, service component types and templates
  - Manifest XML

Example

The following URL was sent to export a catalog:

```
https://<host>:<port>/csa/rest/export/8a81818f3d02fb7e013d0308894a0004
?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following response headers were returned, and include the name of the downloaded archive zip file, CATALOG_QA_Org_Catalog_8a81818f3d02fb7e013d0308894a0004.zip:

```
Status Code: 200 OK
Cache-Control: must-revalidate, post-check=0, pre-check=0
Content-Disposition: attachment;filename="CATALOG_QA_Org_Catalog_
8a81818f3d02fb7e013d0308894a0004"
Content-Type: application/zip;charset=UTF-8
Date: Tue, 26 Feb 2013 00:09:36 GMT
Expires: 0
Pragma: public
Server: Apache-Coyote/1.1
Transfer-Encoding: chunked
content-transfer-encoding: binary
```

Import API

Use this API to import artifacts from a content archive. Archives are created via the export REST API, the content archive tool, or the Cloud Service Management Console. The import operation imports the primary artifact and all associated artifacts.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/import`
Method	POST

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`previewImport=[true|false]`
	Optional; default is false. If true, then the file will only be validated to determine that an import can succeed, without actually performing an import.
	
	`file=<multipart_representation_of_service_offering_zip_file>`
	Required; type 'Multipart/Form-Data' archive zip to be imported. Note that the directory the file will be imported from is defined by the REST client or browser in use. Typically the file parameter will not include a directory path.
	
	`update=[true|false]`
	Optional; default is false. If true, any existing artifacts of the same type and with the same name will be overwritten; otherwise the artifacts are created. Cannot be used with *updatePreserveExisting* parameter.
	
	`updatePreserveExisting=[true|false]`
	Optional; default is false. If true, any existing artifacts of the same type with the same name will be preserved (not overwritten) and renamed. Existing references to these artifacts will automatically use the renamed artifacts. New artifacts are created from the archive. Cannot be used with *update* parameter.
	
	`orgForCatalogImport=<organization_name>`
	Required for import of catalog archive; the name of the organization to be used when creating the imported catalog.
	
	`associateProviders=[true|false]`
	Optional; default is false. If true, resource providers in the archive are bound to existing resource offerings and resource environments of the same provider type and display name in the database.
	
	`validateType=[COMPONENT_PALETTE|CATALOG|SERVICE_OFFERING|SERVICE_BLUEPRINT|SERVICE_DESIGN|RESOURCE_OFFERING|RESOURCE_ENVIRONMENT]`
	Optional; if specified, content archive is verified to be of the specified type. ||

Returns	200 - Updated 400 - Bad request 404 - Not found 500 - Server exception

> **Caution:** Component palette import is an update operation, and so *associateProviders* and *updatePreserveExisting* parameters will be ignored.

The following headers must be set when using this API to upload the content archive:

- Content-type: multipart/form-data
- Content-Disposition: form-data; name="file"
- Content-Type: application/octet-stream

Example

The following URL was sent to import the contents of the specified archive.

```
https://<host>:<port>/csa/rest/import?userIdentifier=90d96588360da0c701360da0f1d5f483&update=true&file=SERVICE_OFFERING_SO_ONE_90cec2ff3c81b896013c81b8c1780097.zip
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ImportOperationResult>
  <additionalSummaryMessages>
    Service offering SO ONE imported successfully.
(Id=90cec2ff3dc1d73b013dc1df0b750028)
  </additionalSummaryMessages>
  <additionalSummaryMessages>
    Service design SD ONE imported successfully.
(Id=90cec2ff3dc1d73b013dc1df09db0018)
  </additionalSummaryMessages>
  <importResultRecord>ea933ec5-ad7b-42b6-b47c-965ff76f7693</importResultRecord>
  <importStatus>SUCCESS</importStatus>
  <importSummary>Import of Service offering archive successful.</importSummary>
</ImportOperationResult>
```

Import_result API

Use this API to view detailed result information from importing a content archive. See "Import API" on page 114 for details on importing a content archive.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/import_result/<importResultRecord_id>` importResultRecord IDs are returned by the "Import API" on page 114"Import API" on page 114
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`format=HTML`
	Optional; returns results as HTML rather than the default XML

Returns	200 - Ok 400 - Bad request 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/import_result/ea933ec5-ad7b-42b6-b47c-965ff76f7693
       ?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was returned:

```
<ImportResult>
  <importResultLogEntry>
    <limit>0</limit>
    <artifactDescription>SO ONE</artifactDescription>
    <artifactDisplayName>SO ONE</artifactDisplayName>
    <artifactName>
      SO_ONE_February 11, 2013 7:08:05 PM UTC
    </artifactName>
    <artifactType>SERVICE_OFFERING</artifactType>
    <importOperation>Error</importOperation>
  </importResultLogEntry>
  <importResultLogEntry>
    <artifactDescription>SD ONE</artifactDescription>
    <artifactDisplayName>SD ONE</artifactDisplayName>
    <artifactName>SD_ONE_February 11, 2013 7:03:41 PM UTC</artifactName>
```

```
    <artifactType>SERVICE_BLUEPRINT</artifactType>
    <importOperation>Error</importOperation>
  </importResultLogEntry>
  <importSummary>
    Import of Service offering archive successful.
  </importSummary>
  <status>SUCCESS</status>
  <timeOfImport>March 31, 2013 7:19:01 PM UTC</timeOfImport>
  <userInformation>admin</userInformation>
</ImportResult
```

Lifecycle engine API

Use this API to work with lifecycle actions.Base URL.

> This REST API can only be used with sequenced designs. It is not supported for use with topology designs.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

URI	Method	Parameters	Description
/lifecycleengine	GET	userIdentifier, serviceInstanceId	"Get latest lifecycle execution record for a service instance" on page 120
/lifecycleengine/<lifecycle_action_id>	GET	userIdentifier	"Get details for a lifecycle execution record" on the next page
/lifecycleengine/execute	POST	userIdentifier	"Schedule lifecycle transition for service instance" on page 121

Get details for a lifecycle execution record

Details

URI	`/lifecycleengine/<lifecycle_action_id>`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/lifecycleengine/90d96588360da0c701360da0f25400c2
?userIdentifier=90s96588670da0c701360da0f1d540a1
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<LifecycleExecutionRecord>
    <callbackPending>false</callbackPending>
    <executionState>
        <id>90d96588360da0c701360da0f25400c2</id>
        <objectId>90d96588360da0c701360da0f25400c2</objectId>
        <isCriticalSystemObject>true</isCriticalSystemObject>
        <name>READY</name>
        <disabled>false</disabled>
        <categoryType>
            <id>90d96588360da0c701360da0f25200c1</id>
            <objectId>90d96588360da0c701360da0f25200c1</objectId>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <name>LIFECYCLE_EXECUTION_STATE</name>
            <extensible>false</extensible>
```

```
        </categoryType>
    </executionState>
    <reverse>false</reverse>
    <serviceInstance>
        <id>90d96588372d758101372d75aeb90087</id>
        <objectId>90d96588372d758101372d75aeb90087</objectId>
        <isCriticalSystemObject>false</isCriticalSystemObject>
        <disabled>false</disabled>
    </serviceInstance>
    <targetState>
        <id>90d96588360da0c701360da0f23700bb</id>
        <objectId>90d96588360da0c701360da0f23700bb</objectId>
        <isCriticalSystemObject>true</isCriticalSystemObject>
        <name>DEPLOYED</name>
        <disabled>false</disabled>
        <categoryType>
            <id>90d96588360da0c701360da0f21300ae</id>
            <objectId>90d96588360da0c701360da0f21300ae</objectId>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <name>LIFECYCLE_STATE</name>
            <extensible>false</extensible>
        </categoryType>
    </targetState>
</LifecycleExecutionRecord>
```

Get latest lifecycle execution record for a service instance

Details

URI	`/lifecycleengine`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`serviceInstanceId=<service_instance_id>`
	Required; the ID of the service instance.

Returns	200 - Ok

URI	`/lifecycleengine`
	401 - Not authorized 404 - Not found 500 - Server exception

Schedule lifecycle transition for service instance

Details

URI	`/lifecycleengine/execute`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on the next page for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

Use the following URL:

```
https://<host>:<port>/csa/rest/lifecycleengine/execute
?userIdentifier=90s96588670da0c701360da0f1d540a1
```

The following XML was sent in the request:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<LifecycleExecutionRequest>
    <reverse>false</reverse>
    <serviceComponentId>90d96588372d758101372d75aebb009f</serviceComponentId>
    <serviceInstanceId>90d96588372d758101372d75aeb90087</serviceInstanceId>
    <targetStateName>DEPLOYED</targetStateName>
</LifecycleExecutionRequest>
```

Login API

Use this API to generate the userIdentifier credential for the other Legacy APIs.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

URI	Method	Parameters	Description
/login/<organization_name>/<user_name>	GET	none	"Get userIdentifier" below
/login/<organization_name>/userLookup	GET	userName	"Get userIdentifier for user name with slash" on the next page

See "orgInformation API" on page 148 for getting an organzation's credentials.

Get userIdentifier

Details

URI	`/login/<organization_name>/<user_name>/` Where <organization_name> is the desired organization name and <user_name> is the desired user name in that organization, to generate a user identifier.
Method	GET
Returns	200 - Ok 401 - Not authorized

URI	`/login/<organization_name>/<user_name>/` Where <organization_name> is the desired organization name and <user_name> is the desired user name in that organization, to generate a user identifier.
	404 - Not found 500 - Server exception

Note: Unlike most API calls, the arguments (organization name and user name) are part of the URL path rather than parameters.

Caution: If the trailing slash is not included, a portion of the user name might be truncated when the user name includes non-alphanumeric characters. A best practice is to always include a trailing slash.

Example

To get the userIdentifier, we used the following URL:

```
https://<host>:<port>/csa/rest/login/MyOrganization/admin/
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<person>
    <id>90s96588670da0c701360da0f1d540a1</id> <!-- This is userIdentifier -->
    ... <!-- Remaining XML is not relevant for this example. -->
</person>
```

The value for `userIdentifier` is the first <id> value returned in the XML.

Get userIdentifier for user name with slash

Details

URI	`/login/<organization_name>/userLookup`
Method	GET
Parameters	`userName=<user_name>` Required; the user name you want to use as credentials for CSA.

URI	`/login/<organization_name>/userLookup`
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

To get the userIdentifier, we used the following URL:

```
https://<host>:<port>/csa/rest/login/MyOrganization/userLookup
?userName=admin/domain
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<person>
    <id>90s96588670da0c701360da0f1d540a1</id> <!-- This is userIdentifier -->
    ... <!-- Remaining XML is not relevant for this example. -->
</person>
```

The value for `userIdentifier` is the first <id> value returned in the XML.

Notification API

Use this API to retrieve the notification objects associated with <party_id>, or to send a notification to users or organizations.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

URI	Method	Parameters	Description
/notification/party/<party_id>	GET	userIdentifier, maxResults	"View list of notification objects" below
/notification/party	POST	userIdentifier	"Send notification" on the next page

View list of notification objects

Details

URI	`/notification/party/<party_id>` where, the party ID is the UUID of a person, organization, or group. See How to find a party ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`maxResults=<n>`
	Optional; where n is the number of notification objects to return. Notification objects are ordered by createdOn date with most recent first. By default all notification objects will be returned.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was
sent:

```
https://<host>:<port>/csa/rest/notification/party/BFA0DB53DA414B90E04059106D1A24B5
?userIdentifier=BFA0DB53DA414B90E04059106D1A24B5
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<NotificationList><notification>
        <notifContentBody>Your service subscription for {0} is now active. To view
the details or make modifications,  go to the {1} and click the Subscriptions
tab.</notifContentBody>
        <notifSubject>Your subscription is now active</notifSubject>
        <notifactionId>90d957ea3806fa7e01380f95d38d073a</notifactionId>
        <recepientId>BFA0DB53DA414B90E04059106D1A24B5</recepientId>
        <recepientName>consumer</recepientName>
        <senderContextArtifactName>CONSUMER</senderContextArtifactName>
        <senderContextArtifactTypeName>ORGANIZATION</senderContextArtifactTypeName>
        <tokens><tokenSequence>0</tokenSequence><value>my request</value></tokens>
        <tokens><tokenSequence>1</tokenSequence><value>CSA
Consumer</value></tokens>
    </notification></NotificationList>
```

Send notification

Details

URI	`/notification/party/<party_id>`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Request body format

```
<Notification>
    <subject>Notification Subject goes in here</subject>
    <contentBody>Enter any text here, optionally including tokens: token0 = {0}.
Token1 = {1}</contentBody>
```

```
    <artifactContextId>UUID of the subscription</artifactContextId>
    <!-- Each recipient must have an id and type. Only PERSON and ORGANIZATION are
valid types. Notifications will be sent to valid recipients and an error message
returned for the invalid ones. Response code 200 OK will be returned if there is at
least one valid recipient.
    -->
    <recipient>
        <id>UUID of the recipient</id>
        <type>PERSON</type>
    </recipient>
    <recipient>
        <id>UUID of organization</id>
        <type>ORGANIZATION</type>
    </recipient>
    <!-- tokens must be specified if your contentBody contains tokens. No token
validation is done.
     -->
    <tokens>
        <tokenSequence>0</tokenSequence>
        <value>Token 0 content</value>
    </tokens>
    <tokens>
        <tokenSequence>1</tokenSequence>
        <value>Token 1 content</value>
    </tokens>
</Notification>
```

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/notification/party?userIdentifier=90cec3a03a93ef8901
3a93f07b880001
```

The following XML was sent in the request (note that the second recipient.id is bad):

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Notification>
    <subject>Test Subject</subject>
    <contentBody>Test content body, token0 = {0}. Token1 = {1}</contentBody>
    <recipient>
        <id>90cec3a03a93ef89013a93f07b880001</id>
        <type>PERSON</type>
    </recipient>
    <recipient>
        <id>bad org id</id>
        <type>ORGANIZATION</type>
```

```
    </recipient>
     <tokens>
        <tokenSequence>0</tokenSequence>
        <value>Token 0 test content</value>
    </tokens>
    <tokens>
        <tokenSequence>1</tokenSequence>
        <value>Token 1 test content</value>
    </tokens>
</Notification>
```

The following response header status code was returned: `200 OK`

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<NotificationPostResponse>
    <count>1</count>
    <errorMessage>Please enter a valid value for the recipient user id = bad org
id</errorMessage>
    <notification>
        <notifContentBody>Test content body, token0 = {0}. Token1 = {1}
</notifContentBody>
        <notifCreatedOn>2012-11-14T10:25:06.021-07:00</notifCreatedOn>
        <notifSubject>Test Subject</notifSubject>
        <notifactionId>90cec39c3ae64d82013afff3e9c3002c</notifactionId>
        </recepientArtifactTypeId>
            90d96588360da0c701360da0ef03002c
        </recepientArtifactTypeId>
        <recepientArtifactTypeName>PERSON</recepientArtifactTypeName>
        <recepientEmailAddr>
            acctgconsumer@econ-csa.com
        </recepientEmailAddr>
        <recepientId>90cec3a03a93ef89013a93f07b880001</recepientId>
        <recepientName>acctgconsumer</recepientName>
        <senderContextArtifactId>
            90cec3a03a93ef89013a93f07b880001
        </senderContextArtifactId>
        <senderContextArtifactTypeId>
            90d96588360da0c701360da0ef03002c
        </senderContextArtifactTypeId>
        <senderContextArtifactTypeName>
            PERSON
        </senderContextArtifactTypeName>
        <source>EXTERNAL</source>
        <tokens>
            <tokenSequence>1</tokenSequence>
            <value>Token 1 test content</value>
        </tokens>
        <tokens>
```

```
            <tokenSequence>0</tokenSequence>
            <value>Token 0 test content</value>
        </tokens>
    </notification>
</NotificationPostResponse>
```

Organization API

Use this API to view organizations.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

URI	Method	Parameters	Description
/organization	GET	userIdentifier, scope, detail	"View a list of organizations" on the next page Note: The user identified by userIdentifier must have admin access.
/organization/<organization_id>	GET	userIdentifier, scope, detail	"View an organization" on page 133
/organization/<organization_id>/approvalPolicy	GET	userIdentifier	"List organization's approval policies" on page 136
/organization/<organization_id>/approvalPolicy	POST	userIdentifier	"Create approval policy" on page 137
/organization/<organization_id>/approvalPolicy/<policy_id>	PUT	userIdentifier	"Update approval policy" on page 142
/organization/<organization_id>/approvalPolicy/<policy_	DELETE	userIdentifer	"Delete approval policy" on page 145

URI	Method	Parameters	Description
id>			
/organization/accessPoint	GET	userIdentifier, orgName	"Retrieve organization LDAP access point information" on page 144
/organization/offering	PUT	userIdentifier, queryType, newReleases	"List most requested, recently requested, or new offerings" on page 146

View a list of organizations

Details

URI	`/organization/`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	Note: The user identified by userIdentifier must have admin access.
	`scope=base`
	Optional; the only valid value is *base*.
	`detail=basic`
	Optional; The only valid value is *basic*.
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	See "Values for the restrict parameter" on page 190 for more information.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://localhost:8444/csa/rest/organization/
?userIdentifier=90d96588360da0c701360da0f1d5f483&scope=base&detail=basic
```

The following XML was returned:

```
<OrganizationList>
  <count>3</count>
   <limit>0</limit>
   <organization>
      <id>8a8181853810699a0138106dcdd00003</id>
      <objectId>8a8181853810699a0138106dcdd00003</objectId>
      <createdOn>2012-06-21T12:03:47.920-07:00</createdOn>
      <updatedOn>2012-06-21T12:04:10.597-07:00</updatedOn>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <description>desc - CSA organization</description>
      <iconUrl>/csa/images/library/Earth_48.png</iconUrl>
      <name>CSA</name>
      <displayName>CSA</displayName>
      <state>
         <id>90d96588360da0c701360da0ef470038</id>
         <objectId>90d96588360da0c701360da0ef470038</objectId>
         <createdOn>2012-06-21T11:51:43.267-07:00</createdOn>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <description>Active</description>
         <iconUrl>/csa/images/categories/artifact_state/active.png</iconUrl>
         <name>ACTIVE</name>
         <displayName>Active</displayName>
         <disabled>false</disabled>
         <categoryType>
            <id>90d96588360da0c701360da0ef420037</id>
            <objectId>90d96588360da0c701360da0ef420037</objectId>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <name>ARTIFACT_STATE</name>
            <displayName>Artifact State</displayName>
            <extensible>false</extensible>
         </categoryType>
      </state>
      <artifactType>
         <id>90d96588360da0c701360da0eefc002a</id>
         <objectId>90d96588360da0c701360da0eefc002a</objectId>
         <createdOn>2012-06-21T11:51:43.253-07:00</createdOn>
         <isCriticalSystemObject>true</isCriticalSystemObject>
```

```
      <description>Organization</description>
      <iconUrl>/csa/images/categories/artifact_type/organization.png</iconUrl>
      <name>ORGANIZATION</name>
      <displayName>Organization</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0eeb40017</id>
         <objectId>90d96588360da0c701360da0eeb40017</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>ARTIFACT_TYPE</name>
         <displayName>Artifact Type</displayName>
         <extensible>false</extensible>
      </categoryType>
   </artifactType>
   <disabled>false</disabled>
   <partyType>
      <id>90d96588360da0c701360da0eff1005d</id>
      <objectId>90d96588360da0c701360da0eff1005d</objectId>
      <createdOn>2012-06-21T11:51:43.293-07:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Organization</description>
      <iconUrl>/csa/images/categories/party_type/organization.png</iconUrl>
      <name>ORGANIZATION</name>
      <displayName>Organization</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0efe20059</id>
         <objectId>90d96588360da0c701360da0efe20059</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>PARTY_TYPE</name>
         <displayName>Party Type</displayName>
         <extensible>false</extensible>
      </categoryType>
   </partyType>
   <businessRole>
      <id>90d96588360da0c701360da0f0020061</id>
      <objectId>90d96588360da0c701360da0f0020061</objectId>
      <createdOn>2012-06-21T11:51:43.300-07:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Consumer</description>
      <iconUrl>/csa/images/categories/business_role/consumer.png</iconUrl>
      <name>CONSUMER</name>
      <displayName>Consumer</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0effd0060</id>
         <objectId>90d96588360da0c701360da0effd0060</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>BUSINESS_ROLE</name>
```

```
            <displayName>Business Role</displayName>
            <extensible>false</extensible>
         </categoryType>
      </businessRole>
   </organization>
   ...
   </organization>
</OrganizationList>
```

View an organization

Details

URI	`/organization/<organization_id>` "View a list of organizations" on page 130 to get the organization ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|baseplusone]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the base plus the first level children are returned. Note that *subtree* is **not** a valid value for this API call.
	
	`detail=[required|basic]`
	Optional; default is *basic*. See "Values for the detail parameter" on page 189.
	
	`restrict=[true|false]`
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	
	See "Values for the restrict parameter" on page 190 for more information.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://localhost:8444/csa/rest/organization/8a8181853810699a0138106dcdd00003/
?userIdentifier=8a8181853810699a01381076be5400a0
```

The following XML was returned:

```
<Organization>
   <id>8a8181853810699a0138106dcdd00003</id>
   <objectId>8a8181853810699a0138106dcdd00003</objectId>
   <createdOn>2012-06-21T12:03:47.920-07:00</createdOn>
   <updatedOn>2012-06-21T12:04:10.597-07:00</updatedOn>
   <isCriticalSystemObject>false</isCriticalSystemObject>
   <description>desc - CSA organization</description>
   <iconUrl>/csa/images/library/Earth_48.png</iconUrl>
   <name>CSA</name>
   <displayName>CSA</displayName>
   <state>
      <id>90d96588360da0c701360da0ef470038</id>
      <objectId>90d96588360da0c701360da0ef470038</objectId>
      <createdOn>2012-06-21T11:51:43.267-07:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Active</description>
      <iconUrl>/csa/images/categories/artifact_state/active.png</iconUrl>
      <name>ACTIVE</name>
      <displayName>Active</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0ef420037</id>
         <objectId>90d96588360da0c701360da0ef420037</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>ARTIFACT_STATE</name>
         <displayName>Artifact State</displayName>
         <extensible>false</extensible>
      </categoryType>
   </state>
   <artifactType>
      <id>90d96588360da0c701360da0eefc002a</id>
      <objectId>90d96588360da0c701360da0eefc002a</objectId>
      <createdOn>2012-06-21T11:51:43.253-07:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Organization</description>
      <iconUrl>/csa/images/categories/artifact_type/organization.png</iconUrl>
      <name>ORGANIZATION</name>
```

```
      <displayName>Organization</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0eeb40017</id>
         <objectId>90d96588360da0c701360da0eeb40017</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>ARTIFACT_TYPE</name>
         <displayName>Artifact Type</displayName>
         <extensible>false</extensible>
      </categoryType>
   </artifactType>
   <disabled>false</disabled>
   <partyType>
      <id>90d96588360da0c701360da0eff1005d</id>
      <objectId>90d96588360da0c701360da0eff1005d</objectId>
      <createdOn>2012-06-21T11:51:43.293-07:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Organization</description>
      <iconUrl>/csa/images/categories/party_type/organization.png</iconUrl>
      <name>ORGANIZATION</name>
      <displayName>Organization</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0efe20059</id>
         <objectId>90d96588360da0c701360da0efe20059</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>PARTY_TYPE</name>
         <displayName>Party Type</displayName>
         <extensible>false</extensible>
      </categoryType>
   </partyType>
   <businessRole>
      <id>90d96588360da0c701360da0f0020061</id>
      <objectId>90d96588360da0c701360da0f0020061</objectId>
      <createdOn>2012-06-21T11:51:43.300-07:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Consumer</description>
      <iconUrl>/csa/images/categories/business_role/consumer.png</iconUrl>
      <name>CONSUMER</name>
      <displayName>Consumer</displayName>
      <disabled>false</disabled>
      <categoryType>
         <id>90d96588360da0c701360da0effd0060</id>
         <objectId>90d96588360da0c701360da0effd0060</objectId>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <name>BUSINESS_ROLE</name>
         <displayName>Business Role</displayName>
         <extensible>false</extensible>
      </categoryType>
```

```
   </businessRole>
</Organization>
```

List organization's approval policies

Details

URI	`/organization/<organization_id>/approvalPolicy`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/organization/8a81818f3d1421e7013d1423635a0003/
approvalPolicy?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ApprovalPolicyList>
  <UserContextApprovalTemplate>
    <id>8a81818f3d1421e7013d1423646e0008</id>
    <objectId>8a81818f3d1421e7013d1423646e0008</objectId>
    <createdOn>2013-02-25T17:34:56.623-08:00</createdOn>
    <updatedOn>2013-02-25T17:34:56.627-08:00</updatedOn>
    ...
    <name>USER_CONTEXT_APPROVAL_TEMPLATE_QA_ORG_1</name>
    <displayName>
      QA Org 1 User Context Approval Template
    </displayName>
```

```
    <state> ... </state>
    <artifactType> ... </artifactType>
    ...
    <automaticApproval>false</automaticApproval>
    <automaticPeriodDuration>0</automaticPeriodDuration>
    <minApprovalRequired>0</minApprovalRequired>
    <approvalType>
      <id>90d96588360da0c701360da0f0b40094</id>
      <objectId>90d96588360da0c701360da0f0b40094</objectId>
      <createdOn>2013-02-25T17:32:55.620-08:00</createdOn>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>User Context Template</description>
      <iconUrl>
        /csa/images/categories/approval_type/user_context_template.png
      </iconUrl>
      <name>USER_CONTEXT_TEMPLATE</name>
      <displayName>User Context Template</displayName>
      <disabled>false</disabled>
      <categoryType>
        <id>90d96588360da0c701360da0f0ac0092</id>
        <objectId>90d96588360da0c701360da0f0ac0092</objectId>
        <isCriticalSystemObject>true</isCriticalSystemObject>
        <name>APPROVAL_TYPE</name>
        <displayName>Approval Type</displayName>
        <extensible>false</extensible>
      </categoryType>
    </approvalType>
    <approvalLevel>1</approvalLevel>
  </UserContextApprovalTemplate>
  <NamedApproverApprovalTemplate> ... </NamedApproverApprovalTemplate>
  <NamedApproverApprovalTemplate> ... </NamedApproverApprovalTemplate>
</ApprovalPolicyList>
```

Create approval policy

Details

URI	`/organization/<organization_id>/approvalPolicy`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get

URI	`/organization/<organization_id>/approvalPolicy`
	userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

The types of approval policies supported are: NamedApproverApprovalTemplate, NamedGroupApprovalTemplate, UserContextApprovalTemplate, and DelegatedApprovalTemplate.

In NamedApproverApprovalTemplate request body:

- displayName is required.
- approver is optional.
- minApprovalRequired is optional. If no approver is specified, defaults to 0. If any approver is specified, defaults to 1. Value cannot be greater than the number of approvers specified.
- automaticApproval is optional; if not present, default to false.If automaticApproval is true:
  - automaticPeriodDuration (in days) is optional; if not present, defaults to 0. Valid value is integer from 0 to 365.
  - automaticApprovalDecision is required; valid value is APPROVED or REJECTED.

Example request body:

```
<NamedApproverApprovalTemplate>
  <displayName>Name Ex Template 03</displayName>
  <approver><userName>consumer</userName></approver>
  ...
  <approver><userName>consumer04</userName></approver>
  <minApprovalRequired>1</minApprovalRequired>
  <automaticApproval>true</automaticApproval>
  <automaticPeriodDuration>12</automaticPeriodDuration>
  <automaticApprovalDecision>
    <name>REJECTED</name>
  </automaticApprovalDecision>
</NamedApproverApprovalTemplate>
```

In NamedGroupApprovalTemplate request body:

- displayName is required.
- group's distinguishedName is required.
- minApprovalRequired is optional and defaults 1. Value cannot be greater than the number of users in the group.
- automaticApproval is optional; if not present, defaults to false.If automaticApproval is true:
  - automaticPeriodDuration (in days) is optional; if not present, defaults to 0. Valid value is integer from 0 to 365.

- automaticApprovalDecision is required; valid value is APPROVED, or REJECTED.

Example request body:

```
<NamedGroupApprovalTemplate>
  <displayName>Name Group Template 01</displayName>
  <group>
       <distinguishedName>
              cn=ServiceConsumer,ou=ConsumerGroup,ou=CSAGroups
       </distinguishedName>
  </group>
  <minApprovalRequired>0</minApprovalRequired>
  <automaticApproval>true</automaticApproval>
  <automaticApprovalDecision><automaticApprovalDecision>
    <name>REJECTED</name>
  </automaticApprovalDecision>
</NamedGroupApprovalTemplate>
```

In UserContextApprovalTemplate request body:

- displayName is required.
- automaticApproval is optional; if not present, defaults to false.If automaticApproval is set to true:
  - automaticPeriodDuration (in days) is optional; if not present, defaults to 0. Valid value is integer from 0 to 365.
  - automaticApprovalDecision is required; valid value is APPROVED, or REJECTED.

Example request body:

```
<UserContextApprovalTemplate>
  <displayName>User ContextTemplate 01</displayName>
  <automaticApproval>true</automaticApproval>
  <automaticPeriodDuration>7</automaticPeriodDuration>
  <automaticApprovalDecision>
    <name>APPROVED</name>
  </automaticApprovalDecision>
</UserContextApprovalTemplate>
```

In DelegatedApprovalTemplate request body:

- displayName is required.
- processDefinition is required, id is needed.
- automaticApproval is optional; if not present, defaults to false. If automaticApproval is set to true:
  - automaticPeriodDuration (in days) is optional; if not present, defaults to 0. Valid value is integer from 0 to 365.
  - automaticApprovalDecision is required; valid value is APPROVED, or REJECTED.

Example request body:

```
<DelegatedApprovalTemplate>
  <displayName>Name Ex Template 03</displayName>
  <processDefinition>
    <id>90d96507362a000a01362a0048bc00ad</id>
  </processDefinition>
  <automaticApproval>true</automaticApproval>
  <automaticPeriodDuration>30</automaticPeriodDuration>
  <automaticApprovalDecision>
    <name>REJECTED</name>/
  </automaticApprovalDecision>
</DelegatedApprovalTemplate>
```

Example

The following URL was sent to create an approval policy with two named approvers:

```
https://<host>:<port>/csa/rest/organization/8a81818f3d1421e7013d1423635a0003/
approvalPolicy?userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request:

```
<NamedApproverApprovalTemplate>
  <displayName>My-New-Approval-Template</displayName>
  <approver><userName>ProjectManager</userName></approver>
  <approver><userName>BudgetManager</userName></approver>
  <minApprovalRequired>2</minApprovalRequired>
  <automaticApproval>true</automaticApproval>
  <automaticPeriodDuration>14</automaticPeriodDuration>
  <automaticApprovalDecision>
    <name>APPROVED</name>
  </automaticApprovalDecision>
</NamedApproverApprovalTemplate>
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<NamedApproverApprovalTemplate>
  <id>8a81818f3d1437e2013d17f249c30a0c</id>
  <objectId>8a81818f3d1437e2013d17f249c30a0c</objectId>
  <createdOn>2013-02-26T11:19:47.397-08:00</createdOn>
  <updatedOn>2013-02-26T11:19:47.440-08:00</updatedOn>
  <createdBy> ... </createdBy>
  <updatedBy> ... </updatedBy>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <name>
    My-New-Approval-Template_February 26, 2013 7:19:47 PM UTC
  </name>
```

```
  <displayName>My-New-Approval-Template</displayName>
  <state> ... </state>
  <artifactType>
    <id>90d96588360da0c701360da0eef20027</id>
    <objectId>90d96588360da0c701360da0eef20027</objectId>
    <createdOn>2013-02-25T17:32:55.667-08:00</createdOn>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <description>Approval Template</description>
    ...
  </artifactType>
  <ownedBy> ... </ownedBy>
  <disabled>false</disabled>
  <automaticApproval>true</automaticApproval>
  <automaticPeriodDuration>14</automaticPeriodDuration>
  <minApprovalRequired>2</minApprovalRequired>
  <approvalType>
    <id>90d96588360da0c701360da0f0b00093</id>
    <objectId>90d96588360da0c701360da0f0b00093</objectId>
    <createdOn>2013-02-25T17:32:55.620-08:00</createdOn>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <description>Named Approver Template</description>
    ...
  </approvalType>
  <automaticApprovalDecision> ... </automaticApprovalDecision>
  <approver>
    <id>8a81818f3d1437e2013d17eec74408d8</id>
    ...
    <userName>BudgetManager</userName>
    ...
  </approver>
  <approver>
    <id>8a81818f3d1437e2013d177b13f107dd</id>
    ...
    <userName>ProjectManager</userName>
    ...
  </approver>
</NamedApproverApprovalTemplate>
```

Update approval policy

Details

URI	`/organization/<organization_id>/approvalPolicy/<policy_id>`
Method	PUT
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/organization/8a81818f3d1421e7013d1423635a0003/
approvalPolicy/8a81818f3d1437e2013d17f249c30a0c?
userIdentifier=90d96588360da0c701360da0f1d5f483
```

The following XML was sent in the request. It will change the list of approvers to user ProjectManager, set automaticApproval to false, and set automaticApprovalDecision to REJECTED.

```
<NamedApproverApprovalTemplate>
  <displayName>Updated-My-Approval-Template</displayName>
  <approver><userName>ProjectManager</userName></approver>
  <minApprovalRequired>0</minApprovalRequired>
  <automaticApproval>false</automaticApproval>
  <automaticPeriodDuration>0</automaticPeriodDuration>
  <automaticApprovalDecision>
    <name>REJECTED</name>
  </automaticApprovalDecision>
</NamedApproverApprovalTemplate>
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<NamedApproverApprovalTemplate>
  <id>8a81818f3d1437e2013d17f249c30a0c</id>
  <objectId>8a81818f3d1437e2013d17f249c30a0c</objectId>
  <createdOn>2013-02-26T11:19:47.397-08:00</createdOn>
  <updatedOn>2013-02-26T11:45:06.900-08:00</updatedOn>
  ...
  <name>
    My-New-Approval-Template_February 26, 2013 7:19:47 PM UTC
  </name>
  <displayName>Updated-My-Approval-Template</displayName>
  ...
  <automaticApproval>false</automaticApproval>
  <automaticPeriodDuration>0</automaticPeriodDuration>
  <minApprovalRequired>1</minApprovalRequired>
  <approvalType>
    <id>90d96588360da0c701360da0f0b00093</id>
    ...
    <name>NAMED_APPROVER_TEMPLATE</name>
    ...
  </approvalType>
  <automaticApprovalDecision>
    <id>90d96588360da0c701360da0f091008c</id>
    ...
    <name>REJECTED</name>
    <displayName>Denied</displayName>
    ...
  </automaticApprovalDecision>
  <approver>
    <id>8a81818f3d1437e2013d177b13f107dd</id>
    ...
    <name>ProjectManager</name>
    ...
    <organization>
      <id>8a81818f3d1421e7013d1423635a0003</id>
      <objectId>8a81818f3d1421e7013d1423635a0003</objectId>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>QA_ORG_1</name>
      <displayName>QA Org 1</displayName>
      <disabled>false</disabled>
    </organization>
  </approver>
</NamedApproverApprovalTemplate>
```

Retrieve organization LDAP access point information

Details

URI	`/organization/accessPoint`
Method	GET

Parameters	`orgName=<organization_name>`
	Required; the name of the organization for which the LDAP access point information is to be retrieved.
	
	`userIdentifier=<user_id>`
	
	Required; the user ID that you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	The user identified by userIdentifier must have admin access.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/organization/accessPoint?orgName=ACCOUNTING
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<AccessPointInfo>
    <password>JfyPejrtsQc0J4bKDPmznlg==</password>
    <searchSubtree>false</searchSubtree>
    <uri>ldap://localhost:389/dc=csa,dc=org</uri>
    <userSearchBase>
        ou=eConsumerUsers,ou=EnterpriseUsers
    </userSearchBase>
    <userSearchFilter>uid={0}</userSearchFilter>
    <username>cn=admin,dc=csa,dc=org</username>
</AccessPointInfo>
```

Delete approval policy

Details

URI	`/organization/<organization_id>/approvalPolicy/<policy_id>`
Method	DELETE
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Object not found 500 - Server exception

Example

The following URL was sent:`https://<host>:<port>/csa/rest/organization/8a81818f3d1421e7013d1423635a0003/approvalPolicy/8a81818f3d1437e2013d17f249c30a0c?userIdentifier=90d96588360da0c701360da0f1d5f483`

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<NamedApproverApprovalTemplate>
  <id>8a81818f3d1437e2013d17f249c30a0c</id>
  <objectId>8a81818f3d1437e2013d17f249c30a0c</objectId>
  <createdOn>2013-02-26T11:19:47.397-08:00</createdOn>
  <updatedOn>2013-02-26T11:45:06.900-08:00</updatedOn>
  <name>My-New-Approval-Template_February 26, 2013 7:19:47 PM UTC</name>
  <displayName>Updated-My-Approval-Template</displayName>
  <state>
    <id>90d96588360da0c701360da0ef4b0039</id>
    <objectId>90d96588360da0c701360da0ef4b0039</objectId>
    <createdOn>2013-02-25T17:32:55.547-08:00</createdOn>
    <isCriticalSystemObject>true</isCriticalSystemObject>
    <description>Retired</description>
```

```
    <iconUrl>/csa/images/categories/artifact_state/retired.png</iconUrl>
    <name>RETIRED</name>
    <displayName>Retired</displayName>
    <disabled>false</disabled>
    <categoryType> ... </categoryType>
  </state></NamedApproverApprovalTemplate>
```

List most requested, recently requested, or new offerings

Details

URI	`/organization/offering` Organization is determined by userIdentifier.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID that you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`queryType=[mostRequested|recentlyRequested|newReleases]`
	Optional; the ten most requested, most recently requested, or newly released offerings in all catalogs for the organization are returned.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/organization/offering?userIdentifier=90e763db3ed8fe91013ed90155e600b0&queryType=mostRequested
```

The following XML was returned in the response:

```
<ServiceOfferingList>
   <count>1</count>
   <limit>0</limit>
   <ServiceOffering>
     <id>90e763db3ed8fe91013ed9017c4e0264</id>
     <createdOn>2013-05-24T17:05:53.358-07:00</createdOn>
     <updatedOn>2013-05-24T17:06:05.287-07:00</updatedOn>
     <isCriticalSystemObject>false</isCriticalSystemObject>
     <description>Ready to do more today? Standardize on Red Hat Enterprise Linux
and get more of everything you expect from an enterprise-class open source
operating system with flexibility, efficiency and control.</description>
     <detailedDescription>Ready to do more today? Standardize on Red Hat Enterprise
Linux and get more of everything you expect from an enterprise-class open source
operating system with flexibility, efficiency and control.</detailedDescription>
     <iconUrl>/csa/images/offerings/Microsoft-Frontpage-icon.png</iconUrl>
     <name>Enterprise Red Hat Linux Server</name>
     <displayName>Enterprise Red Hat Linux Server</displayName>
     <catalogItem>
       <id>90e763db3ed8fe91013ed901a9ae047d</id>
       <catalog>
         <id>90e763db3ed8fe91013ed90156b100b4</id>
         <isCriticalSystemObject>false</isCriticalSystemObject>
         <disabled>false</disabled>
       </catalog>
       <category>
         <id>90d96588360da0c701360da0f4cc00ec</id>
         <isCriticalSystemObject>false</isCriticalSystemObject>
         <name>APPLICATION_SERVERS</name>
         <displayName>Application Servers</displayName>
         <disabled>false</disabled>
       </category>
     </catalogItem>
     …
     <catalogItem>…</catalogItem>
     <state>
       <isCriticalSystemObject>false</isCriticalSystemObject>
       <disabled>false</disabled>
     </state>
     <artifactType>
        <id>90d96588360da0c701360da0eecb001b</id>
       <isCriticalSystemObject>false</isCriticalSystemObject>
       <disabled>false</disabled>
     </artifactType>
     <disabled>false</disabled>
   </ServiceOffering>
 </ServiceOfferingList>
```

orgInformation API

Use this API to get an organization's credentials.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/orgInformation/<organization name>`
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID that you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value. > The user identified by userIdentifier must have admin access.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/orgInformation/my_organization
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<Organization>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <description>My Organization</description>
```

```
    <name>my_organization</name>
    <disabled>false</disabled>
</Organization>
```

Processinstances API

The Processinstances API is used to return execution results from OO flows. When OO makes one of these REST calls, the process instance properties are updated accordingly. When the process completes, the process notification handler passes these properties to the caller.

> This REST API can only be used with sequenced designs. It is not supported for use with topology designs.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

URI	Method	Parameters	Description
/processinstances/<process_instance_id>	GET	`userIdentifier=<user_id>` Required; the user ID that you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value. > The user identified by userIdentifier must have admin access.	"Retrieve a process instance" on page 151
/processinstances	POST	userIdentifier	"Create a process instance" on page 152
/processinstances/<process_instance_id>	PUT	userIdentifier, scope, view, action	"Update a process

URI	Method	Parameters	Description
			instance" on page 154
/processinstances/<process_instance_id>/execute	POST	userIdentifier	"Execute a process instance" on page 157

Process instance structure

XML structure

An abbreviated version of the XML for a process instance is provided below. Only properties that are relevant for APIs are shown; the XML returned by an API call will usually include much more than what is shown here.

```
<ProcessInstance>>
   <property>
     <isCriticalSystemObject></isCriticalSystemObject>
     <name></name>
     <paramRoleType>
       <isCriticalSystemObject></isCriticalSystemObject>
       <name></name>
       <disabled></disabled>
     </paramRoleType>
     <scope>
       <isCriticalSystemObject></isCriticalSystemObject>
       <name></name> </scope>
     <valueType>
       <isCriticalSystemObject></isCriticalSystemObject>
       <name></name>
       <disabled></disabled>
     </valueType>
     <values>
       <value></value>
     </values>
     <maxOccurs></maxOccurs>
     <minOccurs></minOccurs>
     <orderIndex></orderIndex>
     <confidential></confidential>
     <encrypted></encrypted>
     <readOnly></readOnly>
   </property>
   <processDefinition>
```

```
    <id></id>
    <name></name>
  </processDefinition>
  <processInstanceState>
    <isCriticalSystemObject></isCriticalSystemObject>
    <name></name>
    <disabled></disabled>
  </processInstanceState>
  <context></context>
</ProcessInstance>
```

Retrieve a process instance

Details

URI	`/processinstances/<process_instance_id>` Where <process_instance_id> is the process instance ID.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID that you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value. > The user identified by userIdentifier must have admin access.
Response Body	ProcessInstance VO
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

The following was sent to retrieve a process instance:

```
https://<host>:<port>/csa/rest/processinstances/90d9652b3752ad4f013752ae38cb0065
```

The following XML was sent in the response:

```
<ProcessInstance>>
   <property>
     <isCriticalSystemObject>false</isCriticalSystemObject>
     <name>Unit Test Process Instance Property</name>
```

```
    <paramRoleType>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>INPUT</name>
      <disabled>false</disabled>
    </paramRoleType>
    <valueType>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>INPUT</name>
      <disabled>false</disabled>
    </valueType>
    <values>
      <value>Unit Test Process Instance Property Value</value>
    </values>
    <maxOccurs>0</maxOccurs>
    <minOccurs>0</minOccurs>
    <orderIndex>0</orderIndex>
    <confidential>false</confidential>
    <encrypted>false</encrypted>
    <readOnly>false</readOnly>
  </property>
  <processDefinition>
    <id>90d9652b35f41cbc0135f41cf1310004</id>
    <name>Unit Test Process Definition 1</name>
  </processDefinition>
  <processInstanceState>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>INITIALIZED</name>
    <disabled>false</disabled>
  </processInstanceState>
  <context>Context for Unit Test Process Instance</context>
  <artifactId>ID of the artifact executing the action</artifactId>
  <timeout>3600</timeout>
  <errorOnTimeout>false</errorOnTimeout>
</ProcessInstance>
```

Create a process instance

Details

URI	/processinstances
Method	POST

URI	`/processinstances`
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Request Body	ProcessInstance VO
Response Body	ProcessInstance VO
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

The following must be provide in the request body:

- Process definition ID.
- Context string. Includes contextual information that is relevant for the caller after the process instance has been created.
- Artifact ID.
- Properties. The properties provided here will be merged with the process definition properties.

Two implicit tokens (reserved flow input variable names) are provided to process instances executed through the OO execution engine.

- CSA_PROCESS_ID - will be provided the value of the UUID of the process instance.
- CSA_CONTEXT_ID - will be provided the value of the Artifact ID. This is the artifact for which this process instance executes.

The following was sent to create a process instance:

```
https://<host>:<port>/csa/rest/processinstances/?userIdentifier=90d9652b35f35a930135f35b327e00a0
```

The following XML was sent in the request:

```
<ProcessInstance>>
   <property>
     <isCriticalSystemObject>false</isCriticalSystemObject>
     <name>Unit Test Process Instance Property</name>
     <paramRoleType>
       <isCriticalSystemObject>false</isCriticalSystemObject>
       <name>INPUT</name>
       <disabled>false</disabled>
     </paramRoleType>
     <valueType>
       <isCriticalSystemObject>false</isCriticalSystemObject>
       <name>STRING</name>
```

```
      <disabled>false</disabled>
    </valueType>
    <values>
      <value>Unit Test Process Instance Property Value</value>
    </values>
    <maxOccurs>0</maxOccurs>
    <minOccurs>0</minOccurs>
    <orderIndex>0</orderIndex>
    <confidential>false</confidential>
    <encrypted>false</encrypted>
    <readOnly>false</readOnly>
  </property>
  <processDefinition>
    <id>90d9652b35f41cbc0135f41cf1310004</id>
    <name>Unit Test Process Definition 1</name>
  </processDefinition>
  <processInstanceState>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <name>INITIALIZED</name>
    <disabled>false</disabled>
  </processInstanceState>
  <context>Context for Unit Test Process Instance</context>
  <artifactId>ID of the artifact executing the action</artifactId>
  <timeout>3600</timeout>
  <errorOnTimeout>false</errorOnTimeout>
</ProcessInstance>
```

Update a process instance

Details

URI	`/processinstances/<process_instance_id>` Where <process_instance_id> is the process instance ID.
Method	PUT

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`view=<view_type>&scope=view`
	Optional; used to update process instance based on pre-defined views. Possible values for *view_type* are `propertyinfo` and `processinstancestate`. With

URI	`/processinstances/<process_instance_id>` Where <process_instance_id> is the process instance ID.
	`processinstancestate`, the process instance state, return code and status can be changed. `<property_>action<_>=merge` Optional; use the *merge* option with the *action* meta tag query parameter to update only a portion of the process instance. The following the use cases are allowed: • With `view=propertyinfo`, specifying `property_action_=merge` will merge the properties specified in the request body with the existing process instance properties. • With `view=processinstancestate`, specifying `action=merge` will merge the state information specified in the request body with the existing process instance state.
Request Body	ProcessInstance VO
Response Body	Updated ProcessInstance VO
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Process instance state (processInstanceState) values:

- INITIALIZED
- PENDING
- READY
- ACTIVE
- COMPLETED
- ERROR
- CANCELED

Process instance return code (processReturnCode) values:

- SUCCESS
- FAILURE
- RUNNING
- TIMEOUT

The request body sent in the API will be strictly validated for the following:

- Process Instance Id sent has to exist in CSA, otherwise the call will fail with appropriate error message.
- Process Instance state will be validated using the rule that the state cannot be changed to a transitional state while it is already in a terminal state. The terminal states are 'COMPLETED, ERROR, CANCELED' . So if the process instance state is already in any of the above states, this call will fail if it attempts to set the state to a different value than what it is currently. In addition, a process instance which is already in Active state cannot be reset back to Ready state using this call.

Examples

The following was sent to update propertyinfo of a process instance:

```
https://<host>:<port>/csa/rest/processinstances/90d9652b362d4ecd01362d4fb7be0f71?us
erIdentifier=90d9652b362d4ecd01362d4ef51e00a5&view=propertyinfo&scope=view&propert
y_action_=merge
```

The following XML was sent in the request to update a property:

```
<ProcessInstance>>
   <id>90d9652b362d4ecd01362d4fb7be0f71</id>
   <property>
     <name>Property Name</name>
     <valueType>
       <name>STRING</name>
     </valueType>
     <values>
       <value>Hello World!</value>
     </values>
   </property>
 </ProcessInstance>
```

The following was sent to update the process instance state:

```
https://<host>:<port>/csa/rest/processinstances/90d9652b362d4ecd01362d4fb7be0f71?us
erIdentifier=90d96588360da0c701360da0f1d5f483&scope=view&view=processinstancestate&
action=merge
```

```
<ProcessInstance>>
   <id>90d9652b3752ad4f013752ae38cb0065</id>
   <processInstanceState>
     <name>COMPLETED</name>
   </processInstanceState>
 </ProcessInstance>
```

The following was sent to update the process instance return code:

```
https://<host>:<port>/csa/rest/processinstances/90d9652b3752ad4f013752ae38cb0065?us
erIdentifier=90d96588360da0c701360da0f1d5f483&scope=view&view=processinstancestate&
action=merge
```

```
<ProcessInstance>>
   <id>90d9652b3752ad4f013752ae38cb0065</id>
   <processReturnCode>
     <name>SUCCESS</name>
   </processReturnCode>
 </ProcessInstance>
```

The following was sent to update the process instance state, status and return code:

```
https://<host>:<port>/csa/rest/processinstances/90d9652b3752ad4f013752ae38cb0065?us
erIdentifier=90d96588360da0c701360da0f1d5f483&scope=view&view=processinstancestate&
action=merge
```

```
<ProcessInstance>>
   <id90d9652b3752ad4f013752ae38cb0065</id>
   <processInstanceState>
     <name>COMPLETED</name>
   </processInstanceState>
   <processReturnCode>
     <name>SUCCESS</name>
   </processReturnCode>
   <status>The Process Instance has successfully completed.</status>
 </ProcessInstance>
```

Execute a process instance

Details

URI	`/processinstances/<process_instance_id>/execute`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Response Body	ProcessInstance VO
Returns	200 - Ok

URI	`/processinstances/<process_instance_id>/execute`
	401 - Not authorized 404 - Not found 500 - Server exception

The following was sent to retrieve a process instance:

```
https://<host>:<port>/csa/rest/processinstances/90d9652b362d4ecd01362d4fb7be0f71/execute/?userIdentifier=90d9652b35f35a930135f35b327e00a0
```

Resource Provider API

Use this API to retrieve a list of resource providers that matches the access point URL with the access point URL specified when calling this API.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/resourceProvider`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`accessPointUrl`
	Required; the URL that refers to the access point URL of the resource provider to be searched.
	Note: The `accesspointUrl` parameter is case insensitive.

Returns	200 - Updated

URI	/resourceProvider
	400 - Bad request 404 - Not found 401 - Not authorized

Example

The following URL was sent to import the contents of the specified archive.

```
https://<host>:<port>/csa/rest/resourceProvider?userIdentifier=8a8185f448fbf5840148fcddd03d000d&accessPointUrl=http://admin:8082/
```

The following XML was returned:

```
<ResourceProviderList>
<count>0</count>
<limit>0</limit>
<resourceProvider>
<id>8a8185f4497d011b01497d028a210003</id>
<createdOn>22014-11-04T14:52:38.817-08:00</createdOn>
<updatedOn>2014-11-04T14:52:38.817-08:00</updatedOn>
<isCriticalSystemObject>false</isCriticalSystemObject>
<iconUrl>
/csa/images/categories/provider_type/vmware_vcenter.png
</iconUrl>
<name>test</name>
<displayName>test</displayName>
<property>
<id>8a8185f4497d011b01497d028a9d0004</id>
<createdOn>2014-11-04T14:52:38.943-08:00</createdOn>
<updatedOn>2014-11-04T14:52:44.673-08:00</updatedOn>
<createdBy>
<id>90d96588360da0c701360da0f1d600a1</id>
<isCriticalSystemObject>false</isCriticalSystemObject>
<disabled>false</disabled>
<distinguishedName>csa://Organizations/CSA-Provider/users/admin</distinguishedName>
<userName>admin</userName>
<organization>
<id>90d96588360da0c701360da0f15b009e</id>
<isCriticalSystemObject>false</isCriticalSystemObject>
<disabled>false</disabled>
</organization>
</createdBy>
<updatedBy>
<id>90d96588360da0c701360da0f1d600a1</id>
```

```
<isCriticalSystemObject>false</isCriticalSystemObject>
<disabled>false</disabled>
<distinguishedName>csa://Organizations/CSA-Provider/users/admin</distinguishedName>
<userName>admin</userName>
<organization>
<id>90d96588360da0c701360da0f15b009e</id>
<isCriticalSystemObject>false</isCriticalSystemObject>
<disabled>false</disabled>
</organization>
</updatedBy>
<isCriticalSystemObject>false</isCriticalSystemObject>
<description>
 This property has been automatically created, and must be set to a datacenter name
</description>
<iconUrl>/csa/images/categories/value_type/string.png</iconUrl>
<name>DATACENTERNAME</name>
<displayName>DATACENTERNAME</displayName>
<valueType>
<id>90d96588360da0c701360da0efb50054</id>
<createdOn>2014-11-04T14:35:47.523-08:00</createdOn>
<isCriticalSystemObject>true</isCriticalSystemObject>
<description>String</description>
<iconUrl>/csa/images/categories/value_type/string.png</iconUrl>
<name>STRING</name>
<displayName>String</displayName>
<disabled>false</disabled>
<categoryType>
<id>90d96588360da0c701360da0efa0004e</id>
<createdOn>2014-11-04T14:35:47.270-08:00</createdOn>
<isCriticalSystemObject>true</isCriticalSystemObject>
<description>Value Type</description>
<name>VALUE_TYPE</name>
<displayName>Value Type</displayName>
<extensible>false</extensible>
</categoryType>
</valueType>
<values>
<id>8a8185f4497d011b01497d02a1010006</id>
<createdOn>2014-11-04T14:52:44.673-08:00</createdOn>
<updatedOn>2014-11-04T14:52:44.673-08:00</updatedOn>
<value>CSA</value>
<maxOccurs>1</maxOccurs>
<minOccurs>0</minOccurs>
<orderIndex>-1</orderIndex>
<confidential>false</confidential>
<encrypted>false</encrypted>
<consumerReadOnly>false</consumerReadOnly>
<consumerVisible>true</consumerVisible>
<measurable>false</measurable>
```

```
</property>
<state>
<id>90d96588360da0c701360da0ef470038</id>
<isCriticalSystemObject>false</isCriticalSystemObject>
<name>ACTIVE</name>
<disabled>false</disabled>
</state>
<artifactType>
<id>90d96588360da0c701360da0eed8001f</id>
<isCriticalSystemObject>false</isCriticalSystemObject>
<name>RESOURCE_PROVIDER</name>
<disabled>false</disabled>
</artifactType>
<disabled>false</disabled<providerType>
<id>90d96588360da0c701360da0ee93000f</id>
<isCriticalSystemObject>true</isCriticalSystemObject>
<description>VMware vCenter</description>
<iconUrl>
/csa/images/categories/provider_type/vmware_vcenter.png
</iconUrl>
<name>VMWARE_VCENTER</name>
<displayName>VMware vCenter</displayName>
<disabled>false</disabled>
</providerType>
</resourceProvider>
<ResourceProviderList>
```

Search API

Details

URI	`/search`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`query=<string>`
	Required; returns search results that contain *string* in their display name or

URI	`/search`
	description. `type=[all|subscription|service_offering|service_request|approval_process]` Optional; default is *all*. The type of objects to search.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

User API

Use this API to get information related to users.

Base URL

https://<host>:<port>/csa/rest

URIs

The following URIs are appended to the base URL:

Request

A request is created whenever a user initiates, changes, or deletes a subscription.

URI	Method	Parameters	Description
/user/instance/<instance_id>/request	GET	userIdentifier	"List service requests for subscription" on page 165
/user/myrequest	GET	userIdentifier, scope, detail, submitter, returnRetired,	"List active requests for user"

URI	Method	Parameters	Description
		submitStartDate, submitEndDate	on page 166
/user/request/count	GET	userIdentifier	"Get count of requests for user" on page 168
/user/multipleRequest/cancel	POST	userIdentifier	"Cancel multiple service requests" on page 169
/user/multipleRequest/delete	POST	userIdentifier	"Delete multiple service requests" on page 170

Approval

An approval is created when the approval manager approves a request.

URI	Method	Parameters	Description
/user/approval/count	GET	userIdentifier	"Get count of approvals for user" on page 173
/user/multipleApprovals/delete	POST	userIdentifier	"Delete multiple approval requests" on page 173
/user/myapproval	GET	userIdentifier, scope, detail, returnRetired, approver, creationStartDate, CreationEndDate	"List approvals for approver" on page 172

Subscription

A subscription is created when a consumer requests a service offering and includes all of the options selected by the consumer when the subscription was initiated.

URI	Method	Parameters	Description
/user/mysubscription	GET	userIdentifier, scope, detail, requestor, returnRetired,	"List subscriptions for

URI	Method	Parameters	Description
		creationStartDate, creationEndDate, modificationStartDate, modificationEndDate	user" on page 175
/user/subscription/count	GET	userIdentifier	"Get count of subscriptions for user" on page 177
/user/subscription	GET	userIdentifier, queryType	"Get list of recent or expiring soon subscriptions for user" on page 178
/user/multipleSubscription/delete	POST	userIdentifier	"Delete multiple subscriptions" on page 184

Instance

An instance is created when a request is approved and includes details about the requested services such as the status of services, IP addresses, etc.

URI	Method	Parameters	Description
/user/myinstance	GET	userIdentifier, scope, detail, requestor, returnRetired, creationStartDate, creationEndDate	"List instances for user" on page 185

List service requests for subscription

Details

URI	`/user/instance/<instance_id>/request` Retuns the list of service requests for the specified subscription. A request's details will include information on any failed action instances.
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Method	GET
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/user/instance/90cec3a03a94d689013aa91e1b9b1218/reque
st ?userIdentifier=BFA0DB53DA414B90E04059106D1A24B5
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceRequestList>
  <count>3</count>
  <limit>0</limit>
  <ServiceRequest>
    <id>90cec3a03a667c69013a9331365f3a54</id>Â Â Â
    <createdOn>2012-10-11T22:03:27.361-07:00</createdOn>
    <updatedOn>2012-10-11T22:04:20.553-07:00</updatedOn>
    <createdBy> ... </createdBy>
    <updatedBy> ... </updatedBy>
    <isCriticalSystemObject>false</isCriticalSystemObject>
    <description>OctoberSampleService</description>
    <iconUrl>/csa/images/library/Icon034_48.png</iconUrl>
```

```
    <name>Wednesday Demo</name>
    <displayName>Wednesday Demo</displayName>
    <disabled>false</disabled>
    <requestState> ... </requestState>
    <requestedAction> ... </requestedAction>
    <actionInstance>
      <id>90cec3a03a667c69013a9331a2800070</id>
      <createdOn>2012-10-11T22:04:05.248-07:00</createdOn>
      <updatedOn>2012-10-11T22:04:15.152-07:00</createdOn>
      <action> ... </action>
      <processInstance> ... </processInstance>
      <actionInstanceState> ... </actionInstanceState>
      <context>90cec3a03a667c69013a9331365f3a54</context>
      <callbackBean>requestPorcessorActionCallbackHandler</callbackBean>
      <callbackPending>false</callbackPending>
      <status> ... </status>
      <actionInstanceReturnCode> ... </actionInstanceReturnCode>
      <archive>false</archive></actionInstance>
  </ServiceRequest>
  ...
</ServiceRequestList>
```

List active requests for user

Details

URI	`/user/myrequest`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; this user must be in the same organization as submitter, and must have the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|view]`
	Optional; default is *base*.
	
	`detail=basic`
	Optional; The only valid value is *basic*.
	
	`sbmitter=<user_name>`
	Required; user name must be valid, and is the user whose request list will be returned by this call. *submitter* must be in the same organization as the user specified

URI	`/user/myrequest`

	by *userIdentifier*.
	
	`returnRetired=[true|false]`
	Optional; default is *false*.
	
	`submitStartDate=<yyyy-MM-ddTHH:mm:ss>`
	Optional; requests submitted **on or after** start date and time will be included in the return. *T* serves as a separator between data and time. Time will default to 00:00:00 if not specified. Date and time are assumed to be in the time zone of the CSA server.
	
	`submitEndDate=<yyyy-MM-ddTHH:mm:ss>`
	Optional; requests submitted **before** end date and time will be included in the return. *T* serves as a separator between data and time. Time will default to 00:00:00 if not specified. Date and time are assumed to be in the time zone of the CSA server.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/user/myrequest?userIdentifier=8a8181853810699a013810
76be5400a0 &submitter=acctgconsumer
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceRequestList>
    <count>21</count>
    <limit>0</limit>
    <ServiceRequest>
        <id>8a8181853810699a01381079190800a7</id>
        <objectId>8a8181853810699a01381079190800a7</objectId>
        <createdOn>2012-06-21T12:16:08.073-07:00</createdOn>
        <updatedOn>2012-06-21T12:16:50.787-07:00</updatedOn>
        <isCriticalSystemObject>false</isCriticalSystemObject>
        <description>SD2 Offering</description>
        <detailedDescription>desc - SD2 offering</detailedDescription>
        <iconUrl>/csa/images/library/application.png</iconUrl>
        <name>request 1</name>
        <displayName>request 1</displayName>
        <state>
            <id>90d96588360da0c701360da0ef470038</id>
```

```
            <objectId>90d96588360da0c701360da0ef470038</objectId>
            <createdOn>2012-06-21T11:51:43.267-07:00</createdOn>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <description>Active</description>
            <iconUrl>/csa/images/categories/artifact_state/active.png</iconUrl>
            <name>ACTIVE</name>
            <displayName>Active</displayName>
            <disabled>false</disabled>
            <categoryType>
                <id>90d96588360da0c701360da0ef420037</id>
                <objectId>90d96588360da0c701360da0ef420037</objectId>
                <isCriticalSystemObject>true</isCriticalSystemObject>
                <name>ARTIFACT_STATE</name>
                <displayName>Artifact State</displayName>
                <extensible>false</extensible>
            </categoryType>
        </state>
        ...
    </ServiceRequest>
</ServiceRequestList>
```

Get count of requests for user

Details

URI	`/user/request/count` Gets the number of requests for the user associated with userIdentifier. The results are grouped by request state.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Cancel multiple service requests

Details

URI	`/user/multipleRequest/cancel`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok (Indicates the REST call executed without error. See XML return content for whether all specified requests were canceled.) 401 - Not authorized 404 - Object not found 500 - Server exception

A request can only be cancelled if its state is PENDING.
Note:

- When a pending subscription modification request is canceled, only the modification is canceled; the subscription is not changed.
- Once a subscription request has been approved, the request can no longer be canceled. The subscription, though, can be canceled.

Example

Use the following URL:

```
https://<host>:<port>/csa/rest/user/multipleRequest/cancel
?userIdentifier=90d965c0379fd06601379fd192b30ee6
```

The following XML was sent in the request:

```
<ServiceRequestList>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2c015103a4</id>
        <catalogItem>
            <catalog>
```

```
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </ServiceRequest>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2b43fc0356</id>
        <catalogItem>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </ServiceRequest>
</ServiceRequestList>
```

The following XML was returned in the response. The count value indicates the number of service requests successfully canceled. A ServiceRequest element is included for each canceled service request

```
<ServiceRequestList>
    <count>2</count>
    <limit>0</limit>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2c015103a4</id>
  ...
    </ServiceRequest>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2b43fc0356</id>
  ...
    </ServiceRequest>
</ServiceRequestList>
```

Delete multiple service requests

Details

URI	`/user/multipleRequest/delete`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.

URI	`/user/multipleRequest/delete`
Returns	200 - Ok (Indicates the REST call executed without error. See XML return content for whether all specified requests were deleted.) 401 - Not authorized 404 - Object not found 500 - Server exception

A request can only be deleted if its state is APPROVED, DENIED, or CANCELED.

Example

Use the following URL:

```
https://<host>:<port>/csa/rest/user/multipleRequest/delete
?userIdentifier=90d965c0379fd06601379fd192b30ee6
```

The following XML was sent in the request:

```
<ServiceRequestList>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2c015103a4</id>
        <catalogItem>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </ServiceRequest>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2b43fc0356</id>
        <catalogItem>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </ServiceRequest>
</ServiceRequestList>
```

The following XML was returned in the response. The count value indicates the number of service requests successfully deleted. A ServiceRequest element is included for each deleted service request.

```
<ServiceRequestList>
    <count>2</count>
    <limit>0</limit>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2c015103a4</id>
        ...
```

```
    </ServiceRequest>
    <ServiceRequest>
        <id>90e72e283b05aff1013b0b2b43fc0356</id>
        ...
    </ServiceRequest>
/ServiceRequestList>
```

List approvals for approver

Details

URI	`/user/myapproval`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with.See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|view]`
	Optional; default is *base*.
	
	`detail=basic`
	Optional; The only valid value is *basic*.
	
	`returnRetired=[true|false]`
	Optional; default is *false*.
	
	`approver=<user_name>`
	Required; user name must be valid, and is the user whose approval list will be returned by this call. *approver* must be in the same organization as the user specified by *userIdentifier*.
	
	`creationStartDate=<yyyy-MM-ddTHH:mm:ss>`
	Optional; approval requests created on or after start date and time will be included in the return. *T* serves as a separator between data and time. Time will default to 00:00:00 if not specified. Date and time are assumed to be in the time zone of the CSA server.
	
	`creationEndDate=<yyyy-MM-ddTHH:mm:ss>`
	Optional; approval requests created before end date and time will be included in the return. *T* serves as a separator between data and time. Time will default to 00:00:00 if not specified. Date and time are assumed to be in the time zone of the CSA server.

	Caution: The users specified by `userIdentifier` and `approver` must be in the same organization.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Get count of approvals for user

Details

URI	`/user/approval/count` Gets the number of approvals for the user associated with userIdentifier. The results are grouped by approval result state.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Delete multiple approval requests

Details

URI	`/user/multipleApprovals/delete`
Method	POST

URI	`/user/multipleApprovals/delete`
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok (Indicates the REST call executed without error. See XML return content for whether all specified approval requests were deleted.) 401 - Not authorized 404 - Object not found 500 - Server exception

An approval request can only be deleted if its state is APPROVED or DENIED.

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/user/multipleApprovals/delete
?userIdentifier=90d965c0379fd06601379fd192b30ee6
```

The following XML was sent in the request:

```
<ApprovalProcessList>
    <approvalProcess>
        <id>90e72e713a94e0ab013aae76618e0e39</id>
        <catalogItem>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </approvalProcess>
    <approvalProcess>
        <id>90e2a4133a75430b013a7a1328560377</id>
        <catalogItem>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </approvalProcess>
</ApprovalProcessList>
```

The following XML was returned in the response. The count value indicates the number of approval requests successfully deleted. An ApprovalProcess element is included for each deleted approval request.

```
<ApprovalProcessList>
    <count>2</count>
    <limit>0</limit>
    <ApprovalProcess>
        <id>90e72e713a94e0ab013aae76618e0e39</id>
        ...
    </ApprovalProcess>
    <ApprovalProcess>
        <id>90e2a4133a75430b013a7a1328560377</id>
        ...
    </ApprovalProcess>
</ServiceSubscriptionList>
```

List subscriptions for user

Details

URI	`/user/mysubscription`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; this user must be in the same organization as requestor, and must have the necessary permissions for the data you want to work with.See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|view]`
	Optional; default is *base*.
	`detail=basic`
	Optional; The only valid value is *basic*.
	`requestor=<user_name>`
	Required; user name must be valid, and is the user whose subscription list will be returned by this call. *requestor* must be in the same organization as the user specified by *userIdentifier*.
	`returnRetired=[true|false]`
	Optional; default is *false*.
	`creationStartDate=<yyyy-MM-ddTHH:mm:ss>`

URI	`/user/mysubscription`

	Optional; subscriptions created **on or after** start date and time will be included in the return.
	
	`creationEndDate=<yyyy-MM-ddTHH:mm:ss>`
	
	Optional; subscriptions created **before** end date and time will be included in the return. Note that creationStartDate must also be specified.
	
	`modificationStartDate=<yyyy-MM-ddTHH:mm:ss>`
	
	Optional; subscriptions updated **on or after** specified start date and time will be included in the return.
	
	`modificationEndDate=<yyyy-MM-ddTHH:mm:ss>`
	
	Optional; subscriptions updated **before** specified end date and time will be included in the return. Note that modificationStartDate must also be specified.
	
	Note that in all date parameters:
	• `T` serves as a separator between date and time.
	• Time will default to 00:00:00 if not specified.
	• Date and time are assumed to be in the time zone of the CSA server.
	
	`restrict=[true|false]`
	
	Optional; default is *true*. If the value is *true*, then the output fields of the REST response are restricted. By default, the following fields are not displayed: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType. If the value is *false*, then the output fields are displayed.
	
	See "Values for the restrict parameter" on page 190 for more information.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/user/mysubscription?userIdentifier=90d9652b67ss6a930
135f35b327e00a0 &requestor=RnDUser
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceSubscriptionList>
    <count>6</count>
    <limit>0</limit>
    <ServiceSubscription>
        <id>90d957ea3806fa7e013807acc79000b3</id>
        <iconUrl>
            /csa/images/library/serviceOfferingDefault58.png
        </iconUrl>
        <name>MY SR</name>
        <displayName>MY SR</displayName>
        <state>...</state>
        <artifactType>
            <name>SUBSCRIPTION</name>
            ...
        </artifactType>
        <disabled>false</disabled>
        <serviceOffering>...</serviceOffering>
        <subscriptionStatus>...</subscriptionStatus>
        <initiatingServiceRequest>...</initiatingServiceRequest>
        ...
    </ServiceSubscription>
     ...
</ServiceSubscriptionList>
```

Get count of subscriptions for user

Details

URI	`/user/subscription/count` Gets the number of subscriptions for the user associated with userIdentifier. The resutls are grouped by subscription status.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized

URI	`/user/subscription/count` Gets the number of subscriptions for the user associated with userIdentifier. The resutls are grouped by subscription status.
	404 - Not found 500 - Server exception

Get list of recent or expiring soon subscriptions for user

Details

URI	`/user/subscription` Returns a list of subscriptions for the user associated with userIdentifier.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`queryType=[expiringSoon|recent]`
	Optional; *expiringSoon* returns the user's subscriptions that will expire within the next 30 days, and *recent* returns the last five subscriptions initiated by the user.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Get all components of a specific type for a specific user

Details

URI	`/user/mycomponents?userIdentifier=<userId>&componentType=<`*`comma-separated values of a componentType`*`>&componentTypeWildcard=<`*`comma-separated values of type that are treated with wild card`*`>&creationDateBegin=<creationDateBegin>&creationDateEnd=<creationDateEnd>&updatedDateBegin=< updatedDateBegin>&updatedDateEnd=< updatedDateEnd>&returnActiveOnly=<true|false>&GMT=<true/false>`
Method	GET

Parameters	`userIdentifier=<user_id>`
	
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user with the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122" for the steps required to retrieve the *userIdentifier* value.
	
	`componentType=<`*`comma-separated values`*`>`
	
	Optional; Specify the component name to retrieve. This parameter takes comma-separated values such as SERVER,INFRASTRUCTURE.
	
	`componentTypeWildCard=<comma-separated values>`
	
	Optional; use this parameter to specify the component name to retrieve.
	
	This parameter takes comma-separated values. The names are appended with wildcard characters and should not be specified. For example, the value Server retrieves all components of type SERVER, SERVER_GROUP, or Server.
	
	Using this parameter may affect the performance of the API. You should use the `componentType` parameter whenever possible.
	
	`creationDateBegin: <yyyy-MM-ddTHH:mm:ss>`
	
	Optional; subscriptions created on or after the start date and time are included in the return.
	
	`creationDateEnd: <yyyy-MM-ddTHH:mm:ss>`
	
	Optional; subscriptions created before the end date and time are included in the return. Note that the `creationStartDate` parameter must also be specified.

URI	/user/mycomponents?userIdentifier=<userId>&componentType=<*comma-separated values of a componentType*>&componentTypeWildcard=<*comma-separated values of type that are treated with wild card*>&creationDateBegin=<creationDateBegin>&creationDateEnd=<creationDateEnd>&updatedDateBegin=< updatedDateBegin>&updatedDateEnd=< updatedDateEnd>&returnActiveOnly=<true|false>&GMT=<true/false>
	updatedDateBegin: <yyyy-MM-ddTHH:mm:ss> Optional; subscriptions updated on or after the specified start date and time are included in the return. updatedDateEnd: <yyyy-MM-ddTHH:mm:ss> Optional; subscriptions updated before the specified end date and time are included in the return. Note that the modificationStartDate parameter must also be specified. returnActiveOnly: true/false Optional; specifying true for this parameter returns only subscriptions that are not in retired state. GMT : true/false Optional; specifying true for this parameter configures CSA to interpret date-related parameters in GMT. This is important if the application communicating to CSA is not in the same time zone. **Note:** In all date parameters, T serves as a separator between date and time and time defaults to 00:00:00:00 if not specified.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/user/mycomponents?userIdentifier=90s96588670da0c701360da0f1d540a1&componentType=Server
```

The following XML was returned:

```
<UserSubscriptionComponentsList>
 <ServiceSubscription>
  <serviceInstanceId>9038afc8476159bc0147626081c01291</serviceInstanceId>
  <serviceInstanceState>ACTIVE</serviceInstanceState>
  <serviceOfferingName>TestOffering2</serviceOfferingName>
  <subscriberUserOrg>RND</subscriberUserOrg>
```

```
  <subscriptionId>9038afc8476159bc014762606e621232</subscriptionId>
  <subscriptionState>ACTIVE</subscriptionState>
  <subscriptionStatus>ACTIVE</subscriptionStatus>
  <subsriptionDisplayName>
Subscription 0 for 9038afc8465b3f9801465b56ad5e001b
</subsriptionDisplayName>
 <ServiceComponent>
  <componentId>9038afc8476159bc0147626081c51316</componentId>
  <componentLifecycleState>DEPLOYED</componentLifecycleState>
  <componentType>SERVER</componentType>
  <isVisible>true</isVisible>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>memory</propertyName>
   <valueType>Integer</valueType>
   <values>
    <value>1024</value>
   </values>
  </Property>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>datacenterName</propertyName>
   <valueType>String</valueType>
   <values />
  </Property>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>customSpec</propertyName>
   <valueType>String</valueType>
   <values />
  </Property>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>nCPU</propertyName>
   <valueType>Integer</valueType>
   <values>
   <value>2</value>
```

```
   </values>
  </Property>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>HostName</propertyName>
   <valueType>String</valueType>
   <values>
   <value>CentOS6.4_x64-Less-3601</value>
   </values>
  </Property>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>HostName</propertyName>
   <valueType>String</valueType>
   <values>
   <value>CentOS6.4_x64-Less-3601</value>
   </values>
  </Property>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>osType</propertyName>
   <valueType>String</valueType>
   <values>
   <value>Linux</value>
   </values>
  </Property>
 </ServiceComponent>
 <ServiceComponent>
  <componentId>9038afc8476159bc0147626081c51317</componentId>
  <componentLifecycleState>DEPLOYED</componentLifecycleState>
  <componentType>INFRASTRUCTURE_SERVICE</componentType>
  <isVisible>true</isVisible>
  <Property>
   <confidential>false</confidential>
   <consumerReadOnly>false</consumerReadOnly>
   <consumerVisible>false</consumerVisible>
   <encrypted>false</encrypted>
   <propertyName>templateReference</propertyName>
   <valueType>String</valueType>
   </Property>
```

```
  </ServiceComponent>
  <ServiceComponent>
   <componentId>9038afc8476159bc0147626081c51318</componentId>
   <componentLifecycleState>DEPLOYED</componentLifecycleState>
   <componentType>SERVICE_COMPOSITE</componentType>
   <isVisible>true</isVisible>
  </ServiceComponent>
  <ServiceComponent>
   <componentId>9038afc8476159bc0147626081c51319</componentId>
   <componentLifecycleState>DEPLOYED</componentLifecycleState>
   <componentType>SERVER_GROUP</componentType>
   <isVisible>true</isVisible>
   <Property>
    <confidential>false</confidential>
    <consumerReadOnly>false</consumerReadOnly>
    <consumerVisible>false</consumerVisible>
    <encrypted>false</encrypted>
    <propertyName>serverCount</propertyName>
    <valueType>Integer</valueType>
    <values>
     <value>1</value>
    </values>
   </Property>
   <Property>
    <confidential>false</confidential>
    <consumerReadOnly>false</consumerReadOnly>
    <consumerVisible>false</consumerVisible>
    <encrypted>false</encrypted>
    <propertyName>VCENTER_PROVIDER</propertyName>
    <valueType>String</valueType>
    <values>
     <value>90cd93d9439a378501439b1d000b1b02</value>
    </values>
   </Property>
   <Property>
    <confidential>false</confidential>
    <consumerReadOnly>false</consumerReadOnly>
    <consumerVisible>false</consumerVisible>
    <encrypted>false</encrypted>
    <propertyName>HostName</propertyName>
    <valueType>String</valueType>
    <values />
   </Property>
  </ServiceComponent>
 </ServiceSubscription>
<ServiceSubscription>
       :
       :
</ ServiceSubscription>
```

```
</UserSubscriptionComponentsList>
```

Delete multiple subscriptions

Details

URI	`/user/multipleSubscription/delete`
Method	POST
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok (Indicates the REST call executed without error. See XML return content for whether all specified subscriptions were deleted.) 401 - Not authorized 404 - Object not found 500 - Server exception

Example

Use the following URL:

```
https://<host>:<port>/csa/rest/user/multipleSubscription/delete
?userIdentifier=90d965c0379fd06601379fd192b30ee6 Â
```

The following XML was sent in the request:

```
<ServiceSubscriptionList>
    <ServiceSubscription>
        <id>90e72e283b05aff1013b0b2c015103a4</id>
        <catalogItem>
               <id>90cef5de3c63429f013c6489245b09a2</id>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </ServiceSubscription>
    <ServiceSubscription>
        <id>90e72e283b05aff1013b0b2b43fc0356</id>
```

```
        <catalogItem>
      <id>90cef5de3c63429f013c648924bf09b4</id>
            <catalog>
                <id>90d965c0379fd06601379fd1936a0f05</id>
            </catalog>
        </catalogItem>
    </ServiceSubscription>
</ServiceSubscriptionList>
```

The following XML was returned. count indicates the number of subscriptions successfully deleted. A ServiceSubscription element is included for each deleted subscription.

To make this example more informative, note in the following return information that the first subscription is not deleted. A subscription will not be deleted during this call if the subscription was already deleted, it is not in the canceled state, permission is denied, or there is an authorization failure

```
<ServiceSubscriptionList>
    <count>1</count>
    <limit>0</limit>
    <ServiceSubscription>
        <id>90e72e283b05aff1013b0b2b43fc0356</id>
  <isCriticalSystemObject>false</isCriticalSystemObject>
  <disabled>false</disabled>
</ServiceSubscription>
</ServiceSubscriptionList>
```

List instances for user

Details

URI	`/user/myinstance`
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; this user must be in the same organization as requestor, and must have the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=base`
	Optional; the only valid value is *base*.
	
	`detail=basic`
	Optional; The only valid value is *basic*.

URI	`/user/myinstance`

	`requestor=<user_name>`
	Required; user name must be valid, and is the user whose subscription list will be returned by this call. *requestor* must be in the same organization as the user specified by *userIdentifier*.
	
	`creationStartDate=<yyyy-MM-ddTHH:mm:ss>`
	Optional; instances for subscriptions created on or after start date and time will be included in the return. *T* serves as a separator between data and time. Time will default to 00:00:00 if not specified. Date and time are assumed to be in the time zone of the CSA server.
	
	`creationEndDate=<yyyy-MM-ddTHH:mm:ss>`
	Optional; instances for subscriptions created before end date and time will be included in the return. *T* serves as a separator between data and time. Time will default to 00:00:00 if not specified. Date and time are assumed to be in the time zone of the CSA server.

Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/user/myinstance?userIdentifier=90d9652b67ss6a930135f
35b327e00a0 &requestor=johnsmith
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceInstanceList>
     <count>6</count>
     <limit>0</limit>
     <ServiceInstance>
        <id>90d957ea3806fa7e01380f957d11070a</id>
        <name>MYSD_June 5, 2012 5:19:51 PM UTC</name>
        <displayName>MYSD</displayName>
        <state></state>
        <serviceInstanceState>...</serviceInstanceState>
        ...
     </ServiceInstance>
     ...
<ServiceInstanceList>
```

Utilization API

Use this API to retrieve a list of resource utilization objects for the specified subscription.

> This REST API can only be used with sequenced designs. It is not supported for use with topology designs.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/utilization/<subscription_id>` See "List subscriptions for user" on page 175for information on obtaining subscription IDs.
Method	GET
Parameters	`userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
Returns	200 - Ok 401 - Not authorized 404 - Not found 500 - Server exception

Example use context

An organization's policy is to do resource provider selection based on available capacity for all providers. The information returned by this API can be used to determine what resources are already in use.

Example

The following URL was sent:

```
https://<host>:<port>/csa/rest/utilization/90cec3a03a667c69013a6d7f0eea2cb3
```

The following XML was returned in the response:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<UtilizationList
  <utilization>
    <resourceBindingId>90e72d913d936a9a013d937bdb570161</resourceBindingId>
    <resourcePool>
      <id>90e72d913d936a9a013d936c74040006</id>
      <objectId>90e72d913d936a9a013d936c74040006</objectId>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>Pool_1_March 22, 2013 6:46:31 PM UTC</name>
      <displayName>Pool 1</displayName>
      <disabled>false</disabled>
      <poolReference>poolref</poolReference>
    </resourcePool>
    <resourceProvider>
      <id>90e72d913d936a9a013d936c262b0004</id>
      <objectId>90e72d913d936a9a013d936c262b0004</objectId>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <name>Provider_1_March 22, 2013 6:46:11 PM UTC</name>
      <displayName>Provider 1</displayName>
      <disabled>false</disabled>
    </resourceProvider>
    <resourceType>
      <id>6A883A543D1248DDBB6045AD6A06BEA2</id>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Megabytes of memory</description>
      <name>MEMORY</name>
      <displayName>Memory</displayName>
      <disabled>false</disabled>
    </resourceType>
    <serviceComponentId>90e72d913d936a9a013d937bdb56015a</serviceComponentId>
    <serviceInstanceId>90e72d913d936a9a013d937bdb530138</serviceInstanceId>
    <unit>
      <id>ED2CE3264F764F55877EE0CDFEE0EFB4</id>
      <isCriticalSystemObject>true</isCriticalSystemObject>
      <description>Megabytes</description>
      <name>MB</name>
      <displayName>MB</displayName>
      <disabled>false</disabled
```

```
    </unit>
    <usage>1024</usage>
  </utilization>
  <utilization> … </utilization>
  <utilization> … </utilization>
  …
</UtilizationList>
```

Values for the detail parameter

The detail parameter has the following values:

- **Required**: Retrieves all the non-null and non-optional fields of an artifact. This includes fields with Java primitive types – byte, short, int, long, float, double, boolean and char.
- **Basic**: In addition to the Required fields of an artifact, retrieves nullable primitive types (Java wrapper classes) and Date, Time, TimeStamp and BigDecimal.
- **Standard**: In addition to the Basic fields of an artifact, retrieves all non-CSA type fields.
- **Template**: Retrieves all fields of an artifact except for artifact collection references and artifacts that are part of a containment relationship. This is same as the Full option without artifact collection references. This option is mainly used for performance reasons, because you could end up retrieving a large amount of data. For example, you can use this option if you do not want to load the base service instances when retrieving its service blueprint. Service instances are artifacts and are associated through a collection reference with its blueprint.
- **Full**: All fields except for artifacts that are part of a containment relationship. Retrieval of the internal artifacts is controlled by the scope parameter. Using this option has a performance impact (See Template option) because this option also returns artifact collection references.

> **Note:** Some API calls do not support all possible values for this parameter.

Values for the excludedoc parameter

The `rest.excludedoc` property in the `csa.properties` file (<CSA>/jboss-as/standalone/deployments/csa.war/WEB-INF/classes) indicates if the document field should be included in the output of the REST response.

You can overwrite the default value (`excludedoc=true`) by adding the `excludedoc` parameter to the REST request URL. For example:

https://<host>:<port>/

csa/rest/catalog/4028caf84bd9cc4a014bd9d802b801c2/offering/4028caf84bd9cc4a014bd9d802b801c2?userIdentifier=90d96588360da0c701360da0f1d600a1&excludedoc=false

Values for the scope parameter

The scope parameter has the following values:

- **Base**: Retrieves the root entity of the artifact including all required attributes.
- **Baseplusone**: In addition to Base, retrieves all first level child artifacts.
- **Subtree**: In addition to Base, retrieves all its descendants. Using this option could have a performance impact because the information being retrieved can be very large.
- **View**: Retrieves only those attributes defined for the view specified in the *detail* parameter.

Values for the restrict parameter

The `rest.restrict` property in the `csa.properties` file (<CSA>/jboss-as/standalone/deployments/csa.war/WEB-INF/classes) indicates if the fields specified in the `rest.restrict.fields` property should be included in the output of the REST response.

The `rest.restrict.fields` property in the `csa.properties` file includes a comma separated list of the fields that are not included in the REST response. By default the rest.restrict.fields property includes these fields: createdBy, updatedBy, createdOn, updatedOn, description, iconUrl, and categoryType.

> The exclusion of primitive types such as booleans (isCriticalSystemObject or disabled) is not supported.

The createdBy, updatedBy, createdOn and updatedOn fields are always displayed for service instance, service request, and service subscription regardless of the configuration.

The restrict parameter has the following values:

- True: Fields included in the `rest.restrict.fields` property are not included in the REST response. This is the default.
- False: Fields included in the `rest.restrict.fields` property are included in the REST response.

You can overwrite the default value (`restrict=true`) by adding the restrict parameter to the REST request URL. For example:

https://<host>:<port>/csa/rest/artifact/4028caf84bd9cc4a014bd9d802b801c2?userIdentifier=90d96588360da0c701360da0f1d600a1&restrict=false

Primitive values reset to default if no value is provided

When you make a PUT request from the REST API, if you do not provide values for primitive properties, these properties are set to their default values.

Some properties of an artifact are modeled in Java using primitive types. This can cause certain issues when using the PUT requests via REST API. When a PUT request is sent to the CSA instance using a REST API, the data that represents an artifact or a part of an artifact is converted to a java object. All properties with primitive types in a Java object always need to have values. When you do not provide values for these properties, the default values are used to satisfy the requirement.

The following are the primitive types in Java:

- byte
- short
- int
- long
- float
- double
- char
- boolean

Workaround: Invoke a GET call first, and then modify only the necessary properties from the GET response. This modified response should be sent as part of the PUT request.

Deprecated APIs

The following API calls are deprecated from CSA:

- Importzip
- List approvals in the catalog
- List instances in the catalog
- List requests in the catalog
- List subscriptions in the catalog

Importzip API

> The GET /importzip API has been deprecated. Use /import instead as using the deprecated API will not include new functionality.

Use this API to import an artifact from an artifact archive. Archives are created via the export REST API, the content archive tool, or the Cloud Service Management Console. The import operation imports the primary artifact and all associated artifacts.

Base URL

https://<host>:<port>/csa/rest

Details

URI	`/importzip`
Method	POST
Parameters	• `userIdentifier=<user_id>` Required; the user ID you want to use as credentials for this API call. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.

	• `file=<file_name>` Required; multipart archive zip to be imported. Note that the directory the file will be imported from is defined by the REST client or browser in use. Typically the file parameter will not include a directory path. • `forceCreation=[true|false]` Optional; default is false. If true, any existing artifacts of the same type with the same name will be preserved (not overwritten) and renamed. Existing references to these artifacts will automatically use the renamed artifacts. New artifacts are created from the archive. Cannot be used with *update* parameter. **Caution:** Produces same results as *updatePreserveExisting*. Allows for backward compatibility. • `update=[true|false]` Optional; default is false. If true, any existing artifacts of the same type and with the same name will be overwritten; otherwise the artifacts are created. Cannot be used with *updatePreserveExisting* parameter. • `updatePreserveExisting=[true|false]` Optional; default is false. If true, any existing artifacts of the same type with the same name will be preserved (not overwritten) and renamed. Existing references to these artifacts will automatically use the renamed artifacts. New artifacts are created from the archive. Cannot be used with *update* parameter. • `orgForCatalogImport=<organization_name>` Required for import of catalog archive; the name of the organization to be used when creating the imported catalog. • `associateProviders=[true|false]` Optional; default is false. If true, resource providers in the archive are bound to existing resource offerings and resource environments of the same provider type and display name in the database. • `validateType=[COMPONENT_PALETTE | CATALOG | SERVICE_OFFERING | SERVICE_DESIGN | RESOURCE_OFFERING | RESOURCE_ENVIRONMENT]` Optional; if specified, content archive is verified to be of the specified type.
Returns	200 - Updated 400 - Bad request 404 - Not found 500 - Server exception

Caution: Component palette import is an update operation, and so associateProviders and updatePreserveExisting parameters will be ignored.

The following headers must be set when using this API to upload the content archive:

- Content-type: multipart/form-data
- Content-Disposition: form-data; name="file"
- Content-Type: application/octet-stream

Example

The following URL was sent:

```
https://localhost:8444/csa/rest/importzip
?userIdentifier=90d96588360da0c701360da0f1d5f483&file= SERVICE_DESIGN_Simple_
Compute_Linux_90cec2023cc75f8a013cc7643ad00034.zip
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<importMessageList>
<messages>Service design Simple Compute Linux imported successfully.
(Id=90cec2ff3dd11298013dd1139eb7004f)</messages>
<messages>Resource offering SA Offering imported successfully.
(Id=90cec2ff3dd11298013dd113992d000d)</messages>
 <messages>Resource offering uCMDB Offering imported successfully.
(Id=90cec2ff3dd11298013dd113977d0008)</messages>
 <messages>Resource offering vCenter Offering imported successfully.
(Id=90cec2ff3dd11298013dd1139a4f0016)</messages>
</importMessageList>
```

List approvals in the catalog

Deprecation Notice

The GET /catalog/<catalog_id>/approval URI has been deprecated. Use URI /user/myapproval instead as using the deprecated URI will not allow access to new functionality including the ability to list all approvals from all catalogs for a specified approver.

Details

URI	`/catalog/<catalog_id>/approval` Use "List catalogs" on page 82 to get the catalog ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|baseplusone|subtree|view]`
	Optional; default is *base*. If value is *base*, then the object is returned. If value is *baseplusone*, then the object and its first level children are returned. If value is *subtree*, then the object and all of its descendants are returned. If the value is *view*, then the view parameter is required.
	
	`detail=[required|basic|standard|template|full]`
	Optional; default is *basic*. See "Values for the detail parameter" on page 189. Some API calls do not support all possible values for this parameter.
	
	`approver=<user_name>`
	Optional; the name of the approver.
	
	`returnRetired=[true|false]`
	Optional; default is *false*.
	
	Caution: The users specified by `userIdentifier`and `approver`must be in the same organization.

Returns	200 - Ok

URI	`/catalog/<catalog_id>/approval` Use "List catalogs" on page 82 to get the catalog ID.
	401 - Not authorized 500 - Server exception

List instances in the catalog

Deprecation Notice

The GET /catalog/<catalog_id>/instance URI has been deprecated. Use URI /user/myinstance instead as using the deprecated URI will not allow viewing instances created by users who previously had access to the catalog, but no longer have access.

Details

URI	`/catalog/<catalog_id>/instance` Use "List catalogs" on page 82 to get the catalog ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|view]`
	Optional; default is *base*.
	`detail=basic`
	Optional; The only valid value is *basic*.
	`requestor=<user_name>`
	Optional; user name must be valid and must be authorized to view the request.

Returns	200 - Ok 401 - Not authorized 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/catalog/402895e33732af18013732b6f435006b/
instance?userIdentifier=90d9652b67ss6a930135f35b327e00a0
```

The following XML was returned:

```
<ServiceInstanceList>
     <count>6</count>
     <limit>0</limit>
     <ServiceInstance>
        <id>90d957ea3806fa7e01380f957d11070a</id>
        <name>MYSD_June 5, 2012 5:19:51 PM UTC</name>
        <displayName>MYSD</displayName>
        <state></state>
        <serviceInstanceState>...</serviceInstanceState>
        ...
     </ServiceInstance>
     ...
<ServiceInstanceList>
```

List requests in the catalog

Deprecation Notice

The GET /catalog/<catalog_id>/request URI has been deprecated. Use URI /user/myrequest instead as using the deprecated URI will not allow viewing requests created by users who previously had access to the catalog, but no longer have access.

Details

URI	`/catalog/<catalog_id>/request` Use "List catalogs" on page 82 to get the catalog ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	
	`scope=[base|view]`
	Optional; default is *base*.
	
	`detail=basic`
	Optional; The only valid value is *basic*.
	
	`submitter=<user_name>`
	Required; user name must be valid and must be authorized to view the request.
	
	`returnRetired=[true|false]`
	Optional; default is *false*.

Returns	200 - Ok 401 - Not authorized 500 - Server exception

Examples

The following URL was sent:

```
https://localhost:8444/csa/rest/catalog/8a8181853810699a0138106dcebc0011/request/
?userIdentifier=8a8181853810699a01381076be5400a0
```

The following XML was returned in the response:

```
<ServiceRequestList>
   <count>21</count>
   <limit>0</limit>
   <ServiceRequest>
      <id>8a8181853810699a01381079190800a7</id>
      <objectId>8a8181853810699a01381079190800a7</objectId>
      <createdOn>2012-06-21T12:16:08.073-07:00</createdOn>
```

```
      <updatedOn>2012-06-21T12:16:50.787-07:00</updatedOn>
      <isCriticalSystemObject>false</isCriticalSystemObject>
      <description>SD2 Offering</description>
      <detailedDescription>desc - SD2 offering</detailedDescription>
      <iconUrl>/csa/images/library/application.png</iconUrl>
      <name>request 1</name>
      <displayName>request 1</displayName>
      <state>
         <id>90d96588360da0c701360da0ef470038</id>
         <objectId>90d96588360da0c701360da0ef470038</objectId>
         <createdOn>2012-06-21T11:51:43.267-07:00</createdOn>
         <isCriticalSystemObject>true</isCriticalSystemObject>
         <description>Active</description>
         <iconUrl>/csa/images/categories/artifact_state/active.png</iconUrl>
         <name>ACTIVE</name>
         <displayName>Active</displayName>
         <disabled>false</disabled>
         <categoryType>
            <id>90d96588360da0c701360da0ef420037</id>
            <objectId>90d96588360da0c701360da0ef420037</objectId>
            <isCriticalSystemObject>true</isCriticalSystemObject>
            <name>ARTIFACT_STATE</name>
            <displayName>Artifact State</displayName>
            <extensible>false</extensible>
         </categoryType>
      </state>
      ...
   </ServiceRequest>
</ServiceRequestList>
```

List subscriptions in the catalog

Deprecation Notice

The GET /catalog/<catalog_id>/subscription URI has been deprecated. Use URI /user/mysubscription instead as using the deprecated URI will not allow viewing subscriptions created by users who previously had access to the catalog, but no longer have access.

Details

URI	`/catalog/<catalog_id>/subscription` Use "List catalogs" on page 82 to get the catalog ID.
Method	GET

Parameters	`userIdentifier=<user_id>`
	Required; the user ID you want to use as credentials for this API call. This user should be a consumer user who has the necessary permissions for the data you want to work with. See "Get userIdentifier" on page 122 for the steps required to get the userIdentifier value.
	`scope=[base|view]`
	Optional; default is *base*.
	`detail=basic`
	Optional; The only valid value is *basic*.
	`requestor=<user_name>`
	Optional; user name must be valid and must be authorized to view the request.

Returns	200 - Ok 401 - Not authorized 500 - Server exception

Examples

The following URL was sent:

```
https://<host>:<port>/csa/rest/catalog/402895e33732af18013732b6f435006b/
subscription?userIdentifier=90d9652b67ss6a930135f35b327e00a0
```

The following XML was returned:

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<ServiceSubscriptionList>
    <count>6</count>
    <limit>0</limit>
    <ServiceSubscription>
        <id>90d957ea3806fa7e013807acc79000b3</id>
        <iconUrl>/csa/images/library/serviceOfferingDefault58.png</iconUrl>
        <name>MY SR</name>
        <displayName>MY SR</displayName>
```

```
        <state>...</state>
        <artifactType>
            <name>SUBSCRIPTION</name>
            ...
        </artifactType>
        <disabled>false</disabled>
        <serviceOffering>...</serviceOffering>
        <subscriptionStatus>...</subscriptionStatus>
        <initiatingServiceRequest>...</initiatingServiceRequest>
        ...
    </ServiceSubscription>
     ...
</ServiceSubscriptionList>
```

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Feedback on Application Programming Interface (API) Guide (Cloud Service Automation 4.80)

Just add your feedback to the email and click send.

If no email client is available, copy the information above to a new message in a web mail client, and send your feedback to clouddocs@hpe.com.

We appreciate your feedback!