CumuLogic Partner Single Sign-on Guide

August 2013

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CumuLogic User Provisioning API

The CumuLogic platform implements SAML-based single sign-on with cloud provider partners. CumuLogic partners can use this document as a reference for the user provisioning API.

CumuLogic Partner API end point

https://<cumulogic-server-instance>/cumulogic/REST/

Example:

https://demo.cumulogic.com/cumulogic/REST/

Please contact your administrator for details on your server end point URL.

Partner Credentials

CumuLogic will provide its partners with the following information:

- partnerID: Unique ID# associated with each cloud partner

- username: User Name for partner's account

- password: Password

You must be authenticated before making User Provisioning API calls.

Partner Authentication

Authenticates partner request for provisioning users in CumuLogic Console. Upon successful authentication, this call returns a token, which is required for the User provisioning API requests.

https://<cumulogic-server-instance>/cumulogic/REST/partner/token/get

Request parameters:

Parameter	Description
partnered*	Partner ID# provided by CumuLogic
Username*	Cloud provider partner user name
Password*	Password

Response parameters:

Parameter	Description
token	Authentication token returned after successful authentication. This token is used for further API calls to provision users in CumuLogic Console. Token is valid for 24 hours.

Sample Request:
{"validationParams":{}, "inputParams":[{"userName":"sso@idp.com", "password":"secretPassword"}]}

Success Response:
{"response":[{"userID":1,"userRoleType":"partner","userLoginToken":"0c6871ab-bfd9-40b3-b043-ccf93a5a3549", "active":1,"userName":"sso@idp.com","type":1, "password":""}],"errors":{},"success":true}

Error Response:
{"response":[],"errors":{"code":507,"msg":"Unauthorized User"},"success":false}

Creating A User

This command creates a new user in CumuLogic Console. This is typically initiated by the cloud provider when a CumuLogic service is activated by the user.

https://<cumulogic-server-instance>/cumulogic/REST/partner/user/create

Request parameters:

Parameter	Description
username*	Must be email address for the user
firstname*	User's first name
lastName*	User's last name
company*	User's company name

Response Parameters:

Parameter	Description
userId	Unique ID for new user
username	User Name
firstname	First name
lastName	Last Name
companyName	Name of company

Sample Request:

{"validationParams":{"userID":"1.0", "userName":"sso@idp.com",
"userLoginToken":"d4c56070-c0c0-4be9-b909-bd94d56073bc"},
"inputParams":[{"lastName":"Smith", "email":"John.Smith@Acme.com",
"companyName":"Acme, Inc", "firstName":"John"}]}

Success Response:

{"response":[{"valid":false,"accessKey":"","modifiedBy":"","newPassword":"","totalUserCount": 0,"UUID":"","type":9,"password":"autoGenratedPasswd","roleList":null,"activeUser":0,"userId": 30,"userName":"","firstName":"Shardul","accountTypeId":0,"createdDate":"","roleId":0,"lastNa me":"Smith","iaasProvider":0,"captchaResponse":"","status":0,"companyName":"Acme","curre ntPassword":"","isActive":0,"confirmPassword":"","secretKey":"","paasName":"","email":"john. smith@acme.com","loginStatusId":0,"accountType":"","userDeployedApplication":false,"captc haChallenge":"","LOG_STATUS":0}],"errors":{},"success":true}

Error Response:

{"response":[],"errors":{"code":523,"msg":"Username already Exist"},"success":false}
{"response":[],"errors":{"code":405,"msg":"Invalid input parameters"},"success":false}

Adding Target IaaS Cloud

Once a user is provisioned, the cloud provider must call this API to provide the endpoint URL and the user credentials such as access and secret keys, or the user name and password required to login to the IaaS cloud.

https://<cumulogic-server-instance>/cumulogic/REST/partner/targetcloud/add

Request Parameters:

Parameter	Description
userEmail*	User email address
iaasProviderName	IaaS cloud provider
iaasProviderId*	Please refer to Appendix A
targetCloudName*	IaaS Cloud Name. Any string is an acceptable name.
accessKey*	User access key from IaaS cloud
secretKey*	User secret key on IaaS cloud
Username	Username if required on IaaS cloud
Password	User password if required for IaaS cloud

endpointUri*	API end point URL for IaaS target cloud

IaaS Providers

Response Parameters:
Details of the target IaaS cloud.

Sample Request:
{"validationParams":{"userID":"1", "userName":"sso@idp.com", "userLoginToken":"48b8cd87-0c81-44b4-8838-cd987b7711f2"}, "inputParams":[{"targetCloudName":"CL_Datapipe", "endpointUri":"https://cloud.datapipe.com/api/compute/v1", "password":"Password", "userEmail":"John.Smith@Acme.com", "secretKey":"HLiwqMeNeKqz3r4B8V_tRUP05rD5wG2R8IYiP8f-gp30lAQA7sJGte2JEMTLF0VmeznvnZgV7qB901xsdpQ0tg", "accessKey":"T4q2YErODWTzjj6rWwN4scYo0AwsNH2mAbLNiIKBnsbdKq9v3MX8RshygfWsLbRz D2fBj-WG1w0FKV21eA-pRw", "iaasProviderId":"3", "iaasProviderName":"Datapipe", "cloudType":"CloudStack", "isDefault":"0"}]}

Success Response:
{"response":[{"tenantId":"","accessKey":"T4q2YErODWTzjj6rWwN4scYo0AwsNH2mAbLNiIKBns bdKq9v3MX8RshygfWsLbRzD2fBj-WG1w0FKV21eA-pRw","organizationName":"","authToken":"","iaasProviderName":"CloudStack","datacenter":"" ,"datastore":"","type":4,"targetCloudName":"CL_Datapipe","password":"Password","assignedT oUserList":[],"serverManagementUrl":"","keypairFileLocation":"","username":"","accountNumb er":"","keypairValue":"","secretKey":"HLiwqMeNeKqz3r4B8V_tRUP05rD5wG2R8IYiP8f-gp30lAQA7sJGte2JEMTLF0VmeznvnZgV7qB901xsdpQ0tg","createdBy":1,"isDefault":0,"keypair Name":"","iaasProviderId":3,"targetCloudId":8,"createdDate":"","endpointUri":"https://cloud.d atapipe.com/api/compute/v1"}],"errors":{},"success":true}

Error Response:
User already exists: {"response":[],"errors":{"code":702,"msg":"Target Cloud Name already Exist for this user"},"success":false}
Master Image not configured in Target Cloud:
{"response":[],"errors":{"code":508,"msg":"Image not available"},"success":false}
Failed to create Keypair on the target cloud: {"response":[],"errors":{"code":506,"msg":"Failed

to Create Key pair "},"success":false}
Invalid input parameters: {"response":[],"errors":{"code":405,"msg":"Invalid input parameters"},"success":false}

Editing Target IaaS Cloud

This command edits the target cloud in the user account. If the IaaS cloud endpoint URL changes for a given user, this call must be used to update user target cloud credentials.

https://<cumulogic-server-instance>/cumulogic/REST/partner/targetcloud/update/

Request Parameters:

Parameter	Description
targetCloudId*	Unique ID of User Target Cloud
targetCloudName*	Name of User Target Cloud
isDefault*	Mark default target cloud if there are more than one available. Possible values are 1 and 0 for default and non-default respectively.
tenantId	Tenant ID
accessKey	User access key on IaaS Cloud
secretKey	User secret key on IaaS Cloud
endpointUri	API End point URL for IaaS Target Cloud

Response Parameters:

The HTTPS 200 response confirms that the request execution was successful.

Sample Request:

{"validationParams":{"userID":"1", "userName":" sso@idp.com ",

"userLoginToken":"4712d12a-95f8-4196-bf7b-191731b1f448"},
"inputParams":[{"targetCloudId":"8","targetCloudName":"SsoCloud","isDefault":"0",
"endpointUri":"https://cloud.datapipe.com/api/Dummy"}]}

Success Response:

{"response":[{"tenantId":"","accessKey":"","organizationName":"","datacenter":"","iaasProviderName":"","userEmail":"","type":4,"datastore":"","password":"","assignedToUserList":
[],"keypairFileLocation":"","accountNumber":"","username":"","keypairValue":"","isDefault":0,"iaasProviderId":0,"createdDate":"","endpointUri":"https://cloud.datapipe.com/api/
Dummy","authToken":"","targetCloudName":"KCloud","virtualMachinePoolId":0,"serverManagementUrl":"","secretKey":"","createdBy":47,"keypairName":"","targetCloudId":56}
],"errors":{},"success":true}

Error Response:

{"response":[],"errors":{"code":506,"msg":"Failed to Create Key pair "},"success":false}
{"response":[],"errors":{"code":405,"msg":"Invalid input parameters"},"success":false}

Activating a User

This command activates a user in CumuLogic Console at

https://<cumulogic-server-instance>/cumulogic/REST/partner/user/activate

Request Parameters:

Parameter	Description
userName	User email address

Response Parameters:

The HTTP 200 response confirms that the request execution was successful.

Sample Request:

{"validationParams":{"userID":"1.0", "userName":"sso@idp.com",

"userLoginToken":"82524796-ba0a-4f04-a1b8-
77a55a5282c7"},"inputParams":[{"userName":"John.Smith@Acme.com" }]}

Success Response:

{"response":[{"valid":false,"accessKey":"","modifiedBy":"","newPassword":"","totalUserCount":
0,"UUID":"","type":9,"password":"password","roleList":null,"activeUser":0,"userId":33,"zipCod
e":"","userName":"","firstName":"John","accountTypeId":0,"createdDate":"2013-03-14
11:39:25.0","roleId":0,"lastName":"Smith","iaasProvider":0,
"captchaResponse":"","status":1,"companyName":"AcmeInc","currentPassword":"",
"isActive":1,"confirmPassword":"","secretKey":"","paasName":"","email":"John.Smith@Acme.c
om","loginStatusId":0,"accountType":"","userDeployedApplication":false,"captchaChallenge":""
,"LOG_STATUS":0}],"errors":{},"success":true}

Error Response:

{"response":[],"errors":{"code":405,"msg":"Invalid input parameter. "},"success":false}
{"response":[],"errors":{"code":524,"msg":"Invalid access to update this user. "},"success":false}

De-activating a User

This command de-activates a user in CumuLogic Console.

https://<cumulogic-server-instance>/cumulogic/REST/partner/user/deactivate

Request Parameters:

Parameter	Description
userName	User email address

Response Parameters:

The HTTP 200 response confirms that the request execution was successful.

Sample Request:

{"validationParams":{"userID":"1.0", "userName":"sso@idp.com",

"userLoginToken":"82524796-ba0a-4f04-a1b8-77a55a5282c7"},"inputParams":[{"userName":"John.Smith@Acme.com", }]}

Success Response:
{"response":[{"valid":false,"accessKey":"","modifiedBy":"","newPassword":"","totalUserCount": 0,"UUID":"","type":9,"password":"password","roleList":null,"activeUser":0,"userId":33,"userName":"","firstName":"john","accountTypeId":0,"createdDate":"2013-03-14 11:39:25.0","roleId":0,"lastName":"Smith","iaasProvider":0,"captchaResponse":"","status":1,"companyName":"Acme Inc","currentPassword":"","isActive":0,"confirmPassword":"","secretKey":"","paasName":"","email":"John.Smith@Acme.com","loginStatusId":0,"accountType":"","userDeployedApplication": false,"captchaChallenge":"","LOG_STATUS":0}],"errors":{},"success":true}

Error Response:
{"response":[],"errors":{"code":405,"msg":"Invalid input parameter. "},"success":false}
{"response":[],"errors":{"code":524,"msg":"Invalid access to update this user. "},"success":false}

Adding Customer

This command adds a customer in CumuLogic Console. A "customer" is a tenant comprised by one or more users. All the users that belong to same customer share all the services and resources on CumuLogic's platform.

https://<cumulogic-server-instance>/cumulogic/REST/customer/addCustomer

Request Parameters:

Parameter	Description
customerName*	Customer name
description	Optional customer description

Response Parameters:

Parameter	Description

customerName	Name of customer
description	Customer description
customerID	Unique ID of newly created customer

Sample Request:
{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"bb764dd0-c16c-47fc-b7b8-e53d4840df8d"}, "inputParams": [{"customerName":"customer1", "description":"test customer 1"}]}

Success Response:
{"response":[{"customerName":"customer1","description":"test customer 1","userName":"","userList":null,"customerID":6,"type":102}],"errors":{},"success":true}

Error Response:
{"response":[],"errors":{"code":729,"msg":"Customer name already exists "},"success":false}

Updating Customer

This command updates a customer details.

https://<cumulogic-server-instance>/cumulogic/REST/customer/updateCustomer

Request Parameters:

Parameter	Description
customerName	Customer name
description	Optional customer description
customerID*	Unique ID of created customer

Response Parameters:

Parameter	Description
customerName	Customer name
Description	Customer description
customerID	Unique ID of created customer

Sample Request:
{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"c3d34abb-19ff-4800-b700-76afebdab1c4"}, "inputParams":[{"customerId":6, "description":"newDescription"}]}

Success Response:
{"response":[{"customerName":"customer1","description":"newDescription","userName":"","userList":null,"customerID":6,"type":102}],"errors":{},"success":true}

Error Response:
{"response":[],"errors":{"code":405,"msg":"Invalid customer ID "},"success":false}
{"response":[],"errors":{"code":729,"msg":"Customer name already exist "},"success":false}

Deleting Customer

This command deletes the customer record from CumuLogic Console.

https://<cumulogic-server-instance>/cumulogic/REST/customer/deleteCustomer

Request Parameters:

Parameter	Description
customerID*	Unique ID of created customer

Response Parameters:

The HTTP 200 response confirms that the request execution was successful.

Sample Request:

{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"c3d34abb-19ff-4800-b700-76afebdab1c4"}, "inputParams":[{"customerId":6}]}

Success Response:

{"response":[],"errors":{},"success":true}

Error Response:

{"response":[],"errors":{"code":405,"msg":"Invalid customer ID "},"success":false}

Getting Customer

This command lists customer details.

https://<cumulogic-server-instance>/cumulogic/REST/customer/getCustomer

Request Parameters:

Parameter	Description
customerID*	Unique ID of created customer

Response Parameters:

Parameter	Description
customerName	Name of customer
description	Customer description
customerID	Unique ID of created customer
userList	List of users assigned to given customer
userId	Unique ID for new user
username	User name
firstname	First name

lastName	Last name
companyName	Name of the company company

Sample Request:
{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"c3d34abb-19ff-4800-b700-76afebdab1c4"}, "inputParams":[{"customerId":6}]}

Success Response:
{"response":[{"customerName":"Customer1","description":"newDescription","userName":"","userList":[{"valid":false,"accessKey":"","phone":"","modifiedBy":"","newPassword":"","totalUserCount":0,"UUID":"","state":"","type":9,"password":"","city":"","roleList":null,"activeUser":0,"userId":37,"zipCode":"","userName":"g1u1@gmail.com","firstName":"g1","websiteUrl":"","accountTypeId":0,"createdDate":"2013-08-01 15:26:53.0","addrLineTwo":"","roleId":0,"lastName":"u1","iaasProvider":0,"captchaResponse":"","status":0,"companyName":"IncCorp","currentPassword":"","country":"","isActive":1,"confirmPassword":"","secretKey":"","paasName":"","email":"g1u1@gmail.com","loginStatusId":0,"accountType":"","userDeployedApplication":false,"captchaChallenge":"","addrLineOne":"","LOG_STATUS":0}],"customerID":6,"type":102}],"errors":{},"success":true}

Error Response:
{"response":[],"errors":{"code":405,"msg":"Invalid customer ID "},"success":false}

Getting All Customers

This command generates a list of all customers.

https://<cumulogic-server-instance>/cumulogic/REST/customer/getAllCustomers

Request Parameters:

NA

Response Parameters:

List of Customers

Customer

Parameter	Description
customerName	Name of customer
description	Customer Description
customerID	Unique ID of created customer

Sample Request:

{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"c3d34abb-19ff-4800-b700-76afebdab1c4"}, "inputParams":[]}

Success Response:

{"response":[{"customerName":"test1","description":"testdesc","userName":"","userList":null,"customerID":2,"type":102},{"customerName":"test2","description":"testdesc","userName":"","userList":null,"customerID":3,"type":102},{"customerName":"cust1","description":"testdesc","userName":"","userList":null,"customerID":4,"type":102},{"customerName":"test3","description":"testdesc","userName":"","userList":null,"customerID":5,"type":102},{"customerName":"Customer1","description":"group one","userName":"","userList":null,"customerID":6,"type":102}],"errors":{},"success":true}

Error Response:
NA

Attaching User

This command adds a user to an existing customer.

https://<cumulogic-server-instance>/cumulogic/REST/customer/attachUser

Request Parameters:

Parameter	Description
customerID*	Unique ID of created customer
username*	User Name

Response Parameters:

The HTTP 200 response confirms that the request execution was successful.

Sample Request:

{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"c3d34abb-19ff-4800-b700-76afebdab1c4"}, "inputParams":[{"userName":"g1u2@gmail.com", "customerId": 6}]]}

Success Response:

{"response":[],"errors":{},"success":true}

Error Response:

{"response":[],"errors":{"code":405,"msg":"Invalid customer ID "},"success":false}
{"response":[],"errors":{"code":405,"msg":"Invalid user name "},"success":false}
{"response":[],"errors":{"code":405,"msg":"User already assigned to a customer "},"success":false}

De-Attaching User

This command de-attaches a user from a customer.

https://<cumulogic-server-instance>/cumulogic/REST/customer/deattachUser

Request Parameters:

Parameter	Description
customerID*	Unique ID of created customer
username*	User Name

Response Parameters:

The HTTP 200 response confirms that the request execution was successful.

Sample Request:

{"validationParams":{"userID":"2", "userName":"sso@idp.com", "userLoginToken":"c3d34abb-

19ff-4800-b700-76afebdab1c4"}, "inputParams":[{"userName":"g1u2@gmail.com", "customerId": 6}]}

Success Response:
{"response":[],"errors":{},"success":true}

Error Response:
{"response":[],"errors":{"code":405,"msg":"Invalid customer ID "},"success":false}
{"response":[],"errors":{"code":405,"msg":"Invalid user name "},"success":false}

Logout

Logout called by partners to de-activate the authentication token.

https://<cumulogic-server-instance>/cumulogic/REST/partner/token/invalidate

Request Parameters:

Parameter	Description
userLoginToken*	Currently valid token
partnered*	Partner ID#

Response Parameters:

The HTTP 200 response confirms that the request execution was successful.

Sample Request:
{"validationParams":{"userID":"1.0", "userName":"sso@idp.com", "userLoginToken":"82524796-ba0a-4f04-a1b8-77a55a5282c7"}, "inputParams":[{"userID":"1.0", "userLoginToken":"82524796-ba0a-4f04-a1b8-77a55a5282c7"}]}

Success Response:
{"response":[],"errors":{},"success":true}

Appendix A: Iaas Providers

Iaas Provider ID	Iaas provider name
2	Eucalyptus
3	Citrix Cloud Platform
4	VMware
6	OpenStack
7	CloudStack_2.X