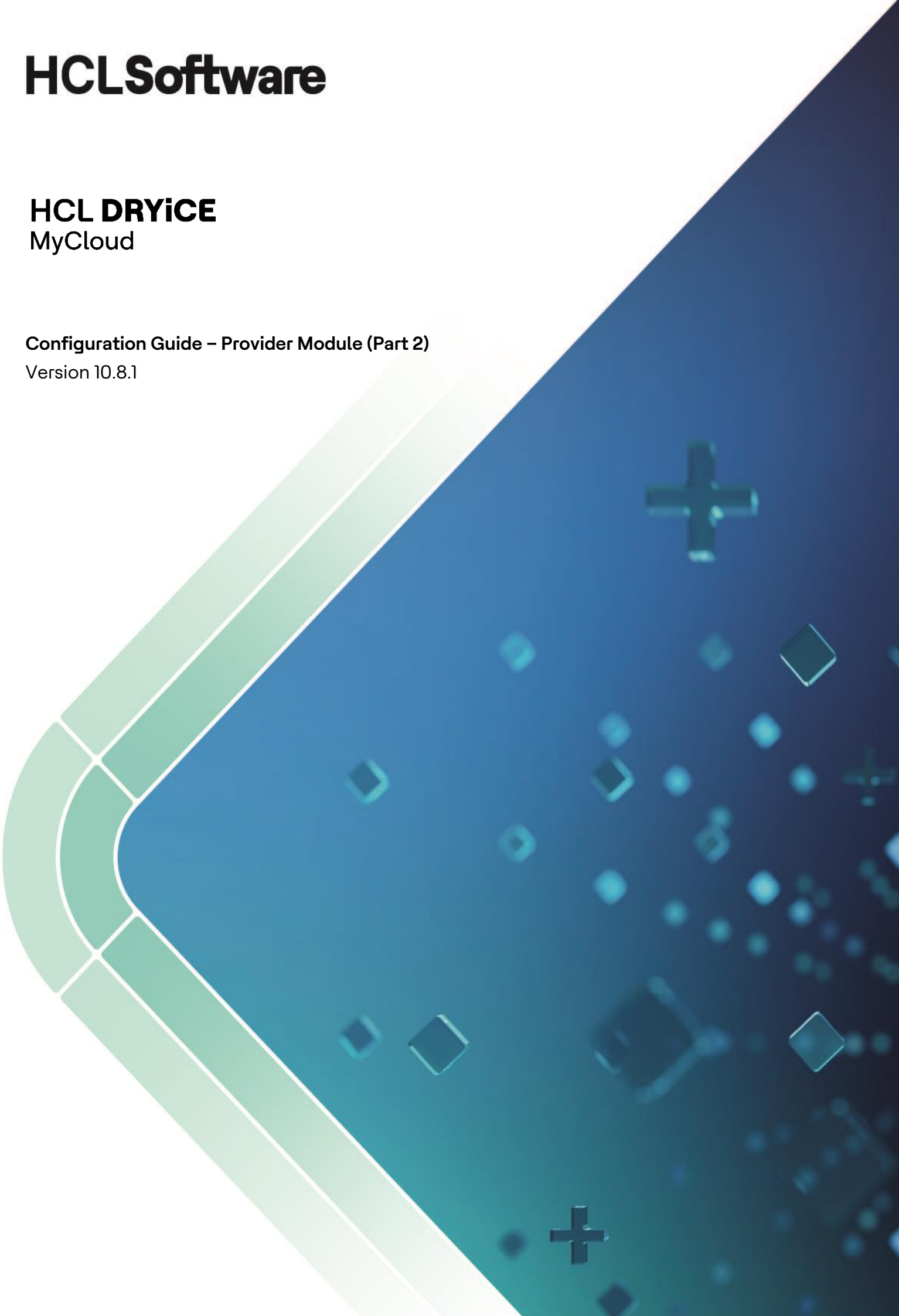
HCLSoftware

HCL DRYiCE MyCloud

Configuration Guide – Provider Module (Part 2)

Version 10.8.1



HCL has more than 200 offices worldwide. Addresses, phone numbers, and fax numbers are listed on the HCL website at www.hcltechsw.com.

Contents

Table of Figures

List of Tables

Document Revision History

This guide is updated with each release of the product or when necessary.

This table provides the revision history of this Configuration Guide.

Version Date	Description
May, 2020	DRYiCE MyCloud V9.2 Configuration Guide – Provider Module (Part 2)
August, 2020	DRYiCE MyCloud V10.0 Configuration Guide – Provider Module (Part 2)
November, 2020	DRYiCE MyCloud V10.1 Configuration Guide – Provider Module (Part 2)
February, 2021	DRYiCE MyCloud V10.2 Configuration Guide – Provider Module (Part 2)
April, 2021	DRYiCE MyCloud V10.4 Configuration Guide – Provider Module (Part 2)
October, 2021	DRYiCE MyCloud V10.5 Configuration Guide – Provider Module (Part 2)
September, 2022	DRYiCE MyCloud V10.6 Configuration Guide – Provider Module (Part 2)
August, 2023	HCL_DRYiCE_MyCloud_10.7_Configuration_Provider_Guide_Part2
April, 2024	HCL_DRYiCE_MyCloud_10.8_Configuration_Provider_Guide_Part2
September, 2024	HCL_DRYiCE_MyCloud_10.8.1_Configuration_Provider_Guide_Part2

1. Preface

This section provides information about the MyCloud configuration guide and includes the following topics.

- Intended Audience
- About This Guide
- Related Documents
- Conventions

1.1 Intended Audience

This document is intended for its administrator's/business administrators those are responsible for configuring MyCloud (provider module) and enabling end-users to consume MyCloud services.

1.2 About This Guide

This guide provides instructions to configure MyCloud. This includes the post-installation and configuration procedures for the product. This document is in continuation to the **MyCloud Configuration Guide – Provider Module (Part 1).**

1.3 Related Documents

The following documents can be referenced in addition to this guide for further information on MyCloud.

- MyCloud Introduction Guide
- MyCloud Installation Guide
- MyCloud User Guide
- MyCloud Troubleshooting Guide
- MyCloud API Guide
- MyCloud V3 API Guide
- MyCloud Developer Guide
- MyCloud Configuration Guide - Admin Module
- MyCloud Configuration Guide - Provider Module - Part 1

1.4 Conventions

The following typographic conventions are used in this document:

Table 1 – Conventions

Convention	Element
Boldface	Indicates graphical user interface elements associated with an action, or terms defined in text or the glossary
Underlined Blue Face	Indicates cross-reference and links
Courier New (Font)	Indicates commands within a paragraph, URLs, code in examples, and paths

	including onscreen text and text input from users
Italic	Indicates document titles, occasional emphasis, or glossary terms
Numbered Lists	Indicates steps in a procedure to be followed in a sequence
Bulleted Lists	Indicates a list of items that is not necessarily meant to be followed in a sequence

2. MyCloud Configuration and Management

MyCloud environment is an extensive open distributed system that stores the data and protects the privacy of users. A user's role determines the tasks that the user will be able to perform. Each role is associated with permissions or rules that define the degree to access the features in MyCloud.

The following lists five fundamental built-in roles.

Table 2 – Built-In Roles

Section Name	Description
MyCloud Admin	MyCloud admin has the rights to manage providers, admin level jobs and other component related configurations
Provider Admin	Provider admin is a business manager or an administrator responsible for configuring MyCloud as per the organization requirements. The primary responsibilities are: • Manages and configures the organization • Manages the users and groups (within the organization) • Manages UI template • Manages services catalog • Creates approval groups and workflows • Manage organization resources • Manage domains/AD users in organizations • Request status tracking • Onboard tennat in system
Organization Admin	Organization admin has the rights to manage the users, roles, and groups assigned to them (organization-specific)
Requester	Requester has the rights to request for infrastructure resources (IaaS & PaaS services) view or manage reports related to the resources.
Approver	Approver has the rights to approve the requests raised by the requesters

1.5 MyCloud Provider Module

This document continues from the last step (Publish Service Catalog) covered in MyCloud Configuration Guide – Provider Guide (Part 1) Module. The Rest of the configuration steps will be covered in the following sections.

1.5.1 Role Based Access Control (RBAC)

Role Based Access Control (RBAC) is an important component of MyCloud. This module details out the steps to manage RBAC model within an environment to implement several important security principles such as least privilege, separation of duties, and data abstraction.

This model includes two kinds of role management: Manage Group and Manage User. Different users of this platform communicate with service providers and get permissions to access resources and these permissions are given based on mapping of the users to system-based groups.

1. On the main menu bar, click **RBAC**.
2. The drop-down appears with the following options:
   - Manage Group
   - Manage User
   - Role Management
   - Transfer Object Ownership

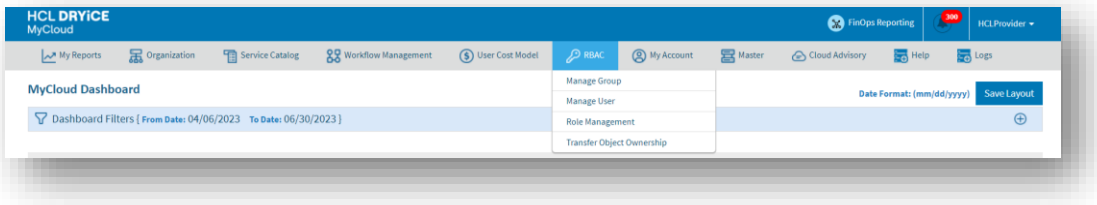


Figure 1 – RBAC

Provider gets to access both Manage User and Manage Group.

1.5.1.1 Role Management

Through this module, provider user can manage roles in an organization through following actions:

- **Add Role** : To add roles in an organization
- **View Role**: To view the existing roles in an organization

Figure 2 - RBAC Role Management

1.5.1.1.1 View Role

Through this module, provider user can view existing roles in an organization.

1. Select **Organization** from the drop-down.
2. Click **Go.**

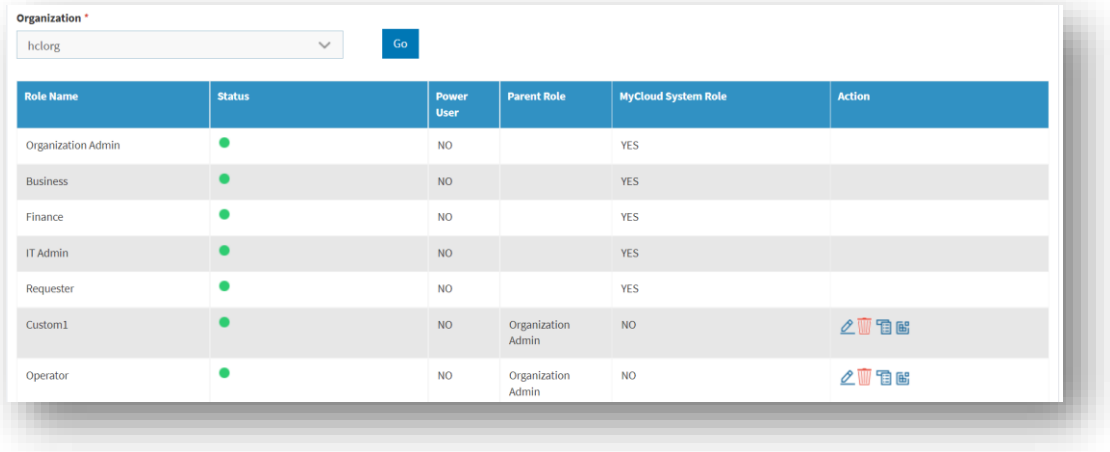


Figure 3 - View Roles

3. Refer the below table to understand the fields mentioned in the above figure:

Table 3 - Role Management

Fields	Description
Role Name	Name of the MyCloud user's role
Status	Whether role is active or in active
Parent Role	MyCloud system created role that will act as a parent role for the newly added role
MyCloud System Role	**Yes**: default system roles created by MyCloud **No**: role created by provider

4. Through this, provider user can perform below actions on the role:
   - **Edit** ( ) : To edit the roles
   - **Delete**( ) : To delete the roles
   - **Configure Menus**( ) : To assign menu to this role
   - **Configure Widgest**( ): To assign widgets to this role

1.5.1.1.2 Edit Role

To edit/ modify the information of an existing role management, provider user needs to follow the below steps:

1. On the Role Management screen, click View Role.
2. Select Organization.
3. Click Go.
4. Available roles list down in a tabular view.
5. Click Edit ( ) corresponding the role to be edited.
6. Below screen appears.

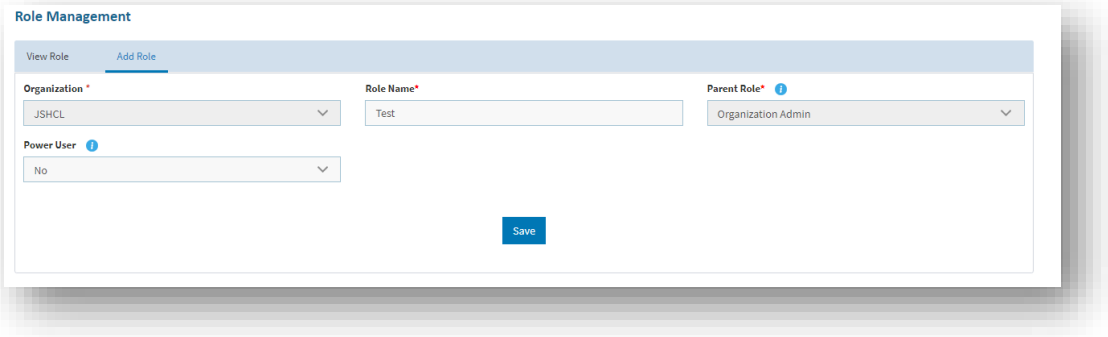


Figure 4 - Edit Role

7. User can modify the appropriate fields and click on **Save**.
8. A success message appears.

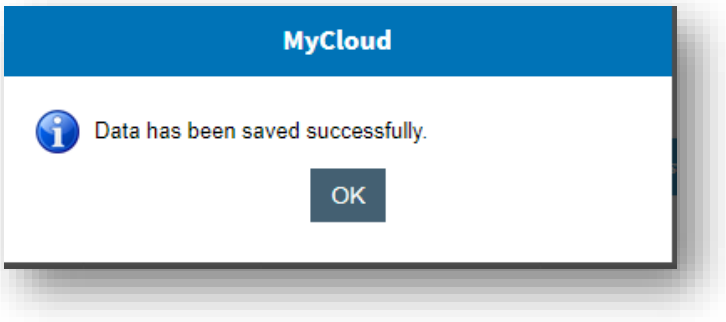


Figure 5 - Success Message Role Management

1.5.1.1.3 Delete Role

To delete an existing role, provider user needs to follow the below steps:

1. On the Role Management screen, click View Role.
2. Select Organization.
3. Click **Go**.
4. Available role lists down in a tabular view.
5. Click **Delete** ( ) against the role to be deleted.
6. A confirmation message appears.

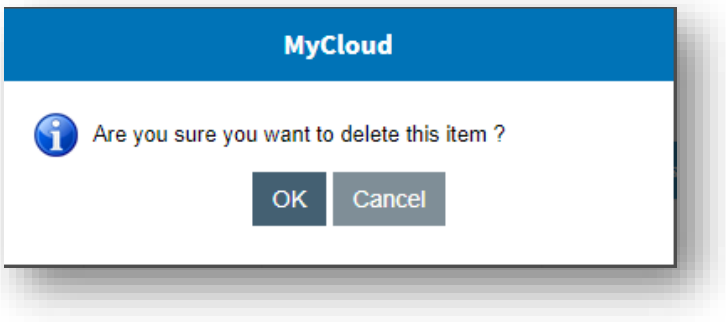


Figure 6 - Confirm Message

7. Click **OK** to confirm. A success message appears.

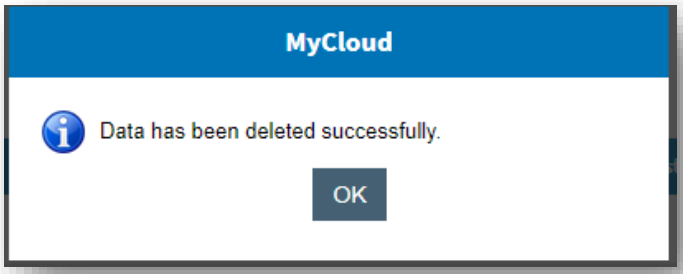


Figure 7 - Success Message

1.5.1.1.4 Configure Menu

To configure the menus in existing role, provider user needs to follow the below steps:

1. On the Role Management screen, click View Role.
2. Select Organization.
3. Click **Go**.
4. Available role lists down in a tabular view.
5. Click **Configure Menu** ( ) corresponding to the role for which the user want to configure menu.
6. The below screen appears.

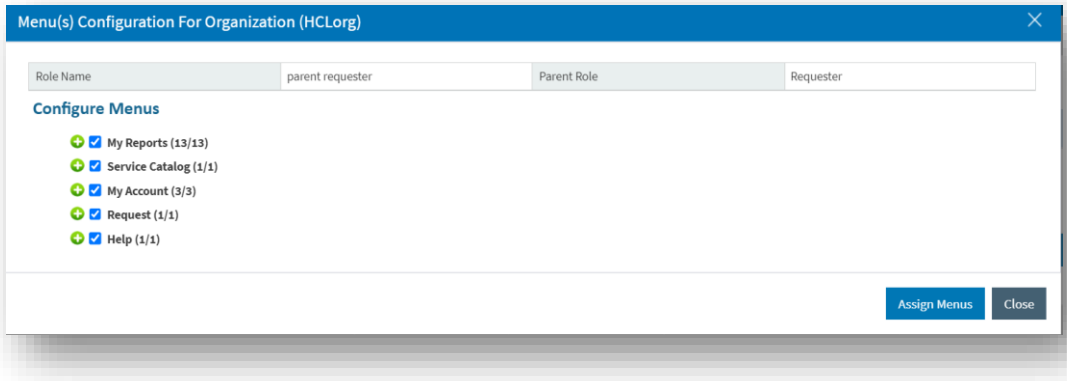


Figure 8 - Configure Menu

7. Click on checkbox to select the menu items and click on **Assign Menu** to save the selection.

1.5.1.1.5 Configure Widgets

To configure the widgets for an existing role, provider user needs to follow the below steps:

1. On the Role Management screen, click View Role.
2. Select Organization.
3. Click **Go**.
4. Available role lists down in a tabular view.
5. Click **Configure Widgets** ( ) corresponding to the role for which you want to configure widget.
6. The below screen appears.
7. Click on the **checkbox** to configure the appropriate widgets and click on **Assign Widgets** to assign.

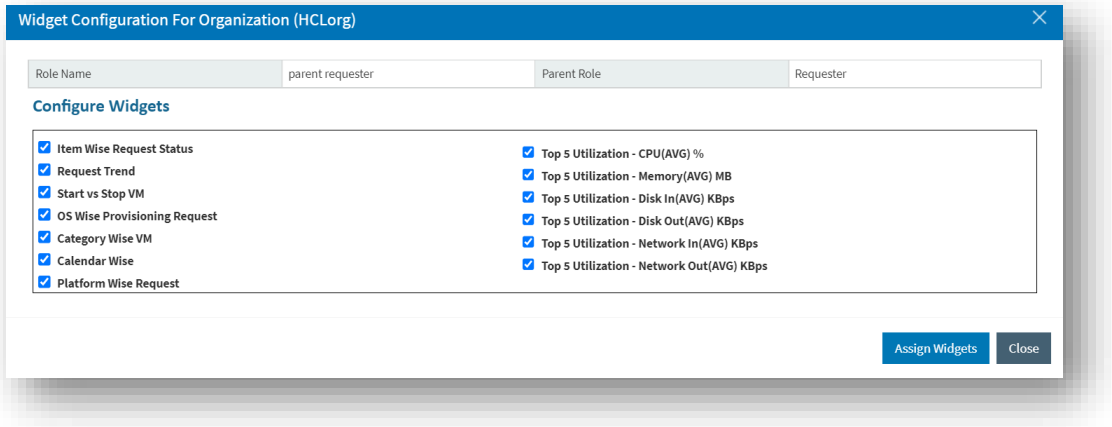


Figure 9 - Configure Widgets

1.5.1.1.6 Add Role

Through this module, provider user can **Add** new roles in an organization.

1. Click on **Add Role**, the **Role Management** screen appears.

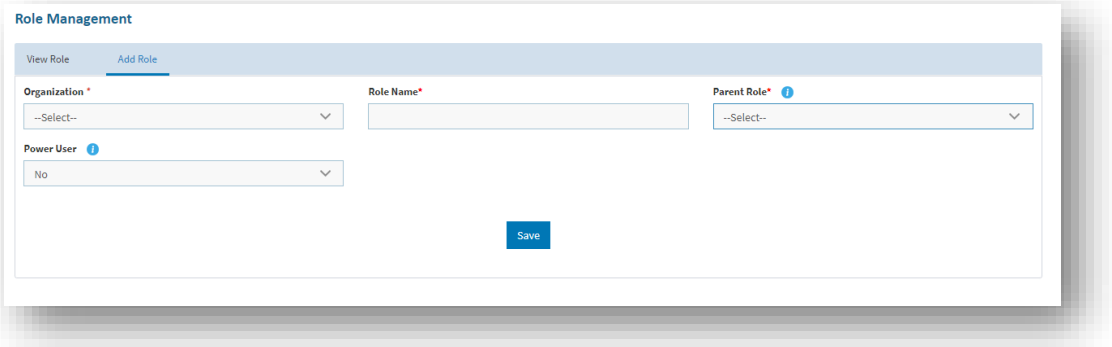


Figure 10 - Add Role

2. Refer the below table to understand the fields mentioned in the above figure:

Table 4 – Add Role

Fields	Description
Organization	The name of the organization (business units/ divisions in organizations)
Role Name	The name of MyCloud role
Parent Role	MyCloud system created role that will act as a parent role for the newly added role.
Power User	Power user will be able to see request and object belongs to another user in same role.

3. Select Organization, Role Name, and Power User.
4. Enter Role Name.
5. Click **Go**. A success message appears.

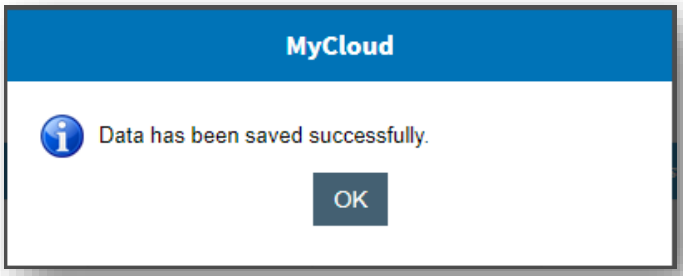


Figure 11 - Success Message

1.5.1.2 Manage User

Through this module, provider users can manage users in an organization. It has following options:

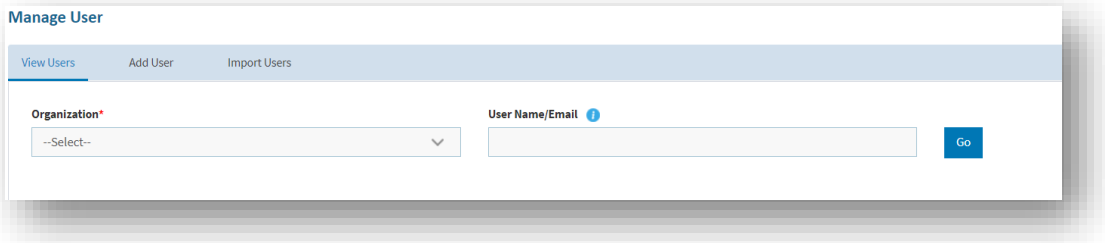


Figure 12 - Manage User

- **Add Users**: To add users in an organization
- **Import Users**: To add bulk users in an organization
- **View Users**: To view the list of users in an organization

1.5.1.2.1 Add User

To add an end user in an organization, provider user needs to follow the below steps:

1. Click on the **Manage User** screen and then click **Add User**.

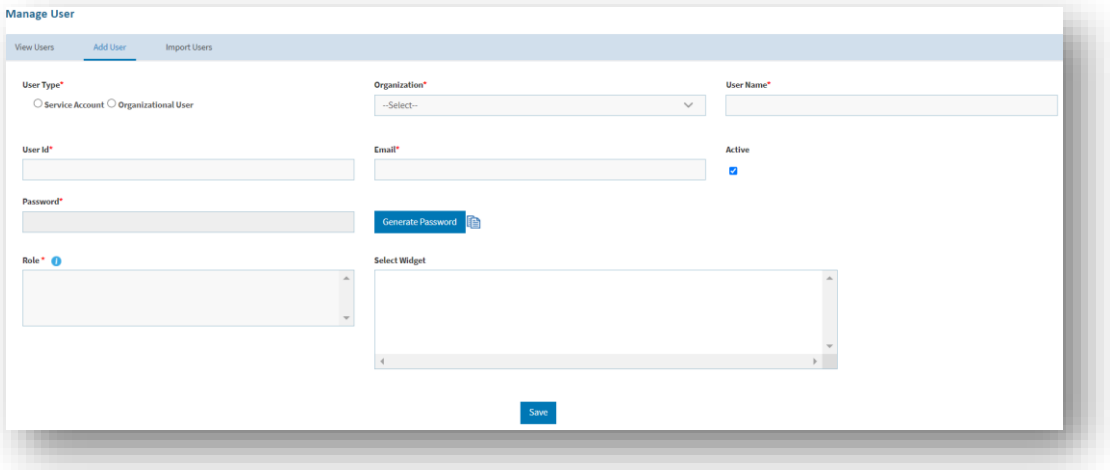


Figure 13 - Add User

2. Refer the below table to understand the fields mentioned in the above figure:

Table 5 – Add User

Fields	Description
API User	This type of user used for API integration with MyCloud
Organizational User	User for request and manage resources
Password	MyCloud generated password
Generate Password	The option that helps to generate a password in MyCloud
Role	Provider-user needs to provide a role to a user while adding it in MyCloud
Select Widget	MyCloud dashboard widgets are listed. System defined widgets appear

3. Select **Organization** to add user.
4. Select **User Type**. MyCloud supports two types of users:
   - **API User**: has access to MyCloud apis and used for integration with MyCloud.
   - **Organizational User**: has access to MyCloud web portal and used to request services.
5. Enter the **Username** and then enter the **User ID**.
6. Enter Email ID.
7. Click **Generate Password** to generate new password.
8. Select **Role**.
9. Once the role is selected, the widgets appear in the widget box.
10. Select **Widget**. Provider selects the dashboard widgets according to the role to be assigned to an end user.
11. Click **Save**.

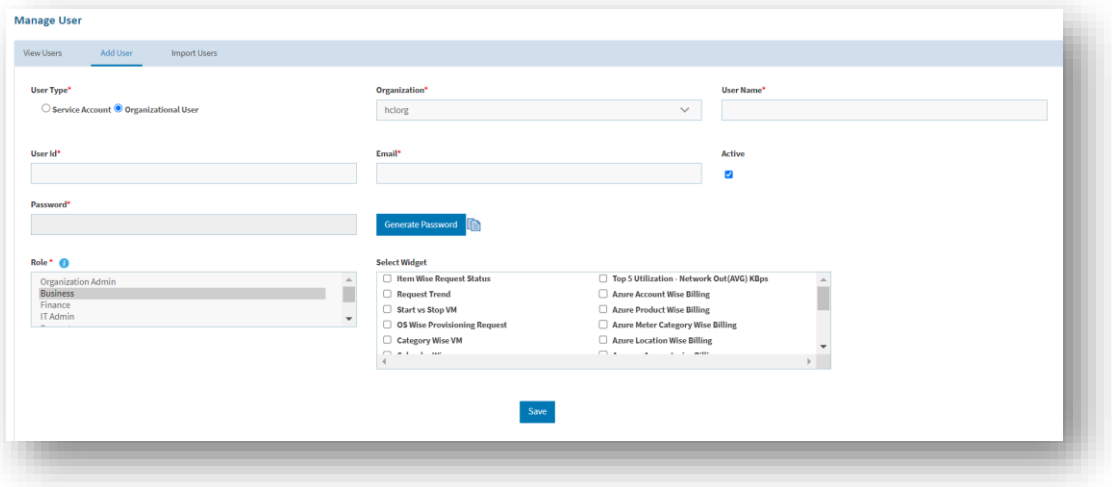


Figure 14 - Add User (Cont.)

Change the password frequently, at least once a month, to keep hackers out of the system. When the application is not being used then log off for security purposes. All the fields marked with asterisk (*) are mandatory.

12. A success message box appears.

Figure 15 – Success Message

1.5.1.2.2 View Users

This section lists out all the users that have been created by provider users in an organization.

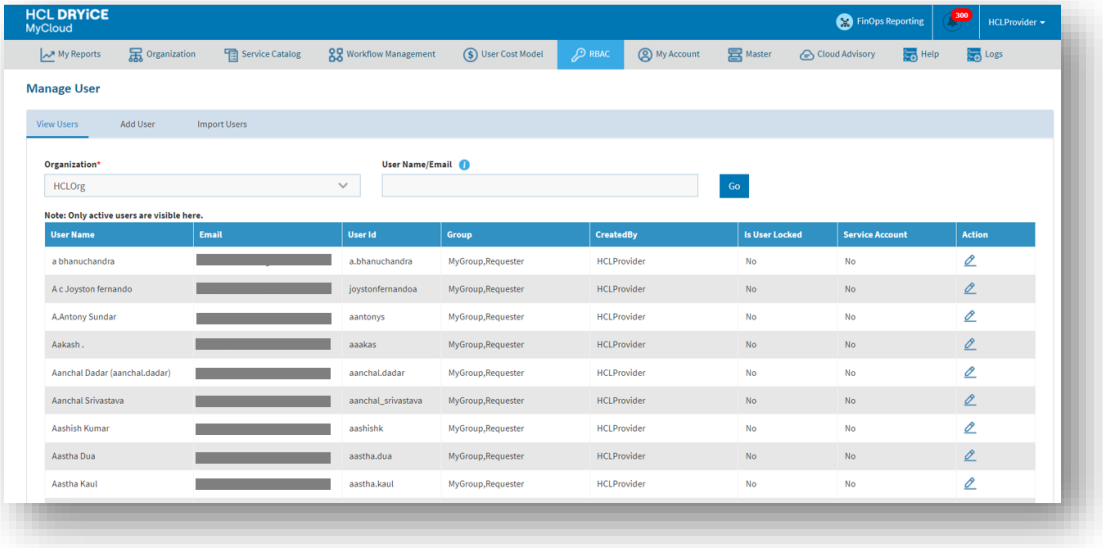


Figure 16 – View Users

Refer the below table to understand the fields mentioned in the above figure:

Table 6 - View Users

Fields	Description
Organization	Select the name of the organization (business units/ divisions in organizations)
Username	Username of the user that has been added
Email	Email of the user that has been added
User ID	User ID of the user that has been added
Role/Group	Role of the user that has been provided while adding the user
Is User Locked	Displays whether the user has been locked by MyCloud, post multiple failed login attempts
Is API User	**Yes**: user is API user

	No: user is organization user
Action	Provider user to take actions like edit and delete against the listed users

It also comprises of following actions:

- **Edit** ( ): To modify the details of existing users.

1.5.1.2.3 Edit User

To edit/ modify user details, provider user needs to follow the below steps:

1. On the **Manage User** screen, click **View Users**.

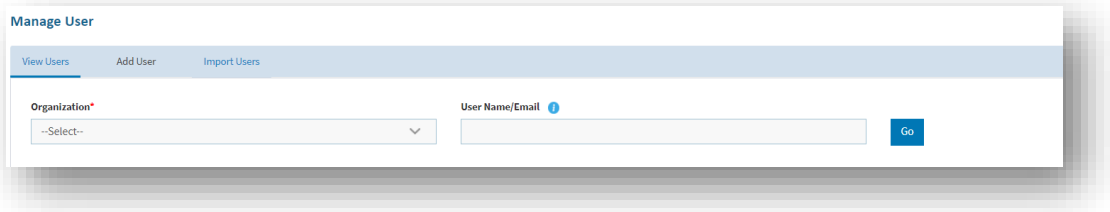


Figure 17 - Edit User

2. Select an **Organization** and then click **Go**. Available users appear in a tabular view.
3. Click **Edit** ( ).
4. Modify the details as desired and click **Update**.

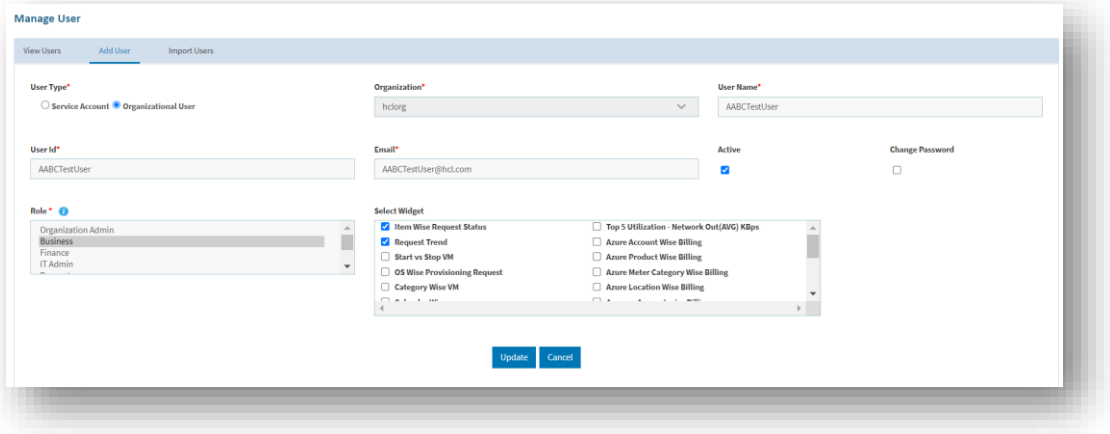


Figure 18 - Edit User (Cont.)

5. A success message box appears.

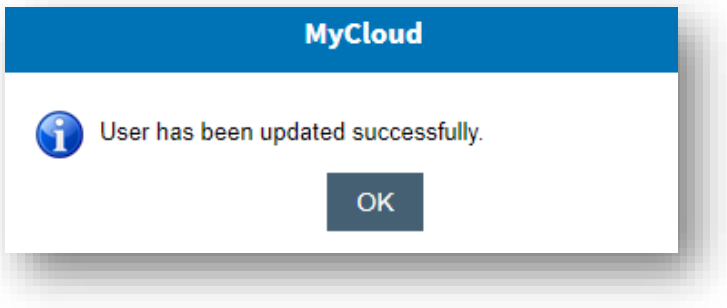


Figure 19 - User Updated Successfully

1.5.1.2.4 Import Users

To Import end users in an organization, provider user needs to follow the below steps:

1. On the Import Users pane, select the Organization Name.
2. Click **Choose File** to select the csv file that has the user details.
3. Click on Import Button.

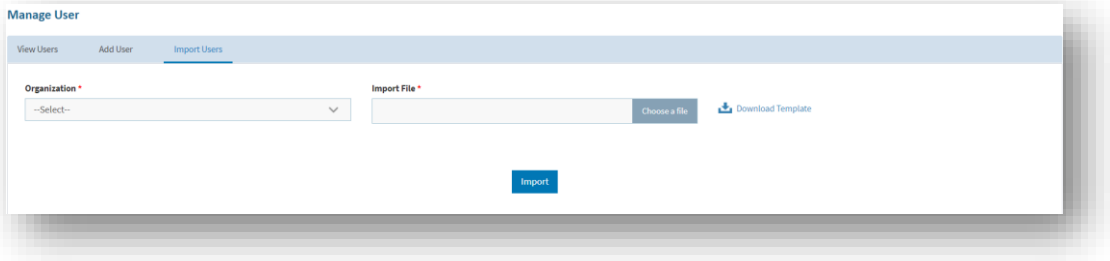


Figure 20 - Import User

4. A success message box appears.

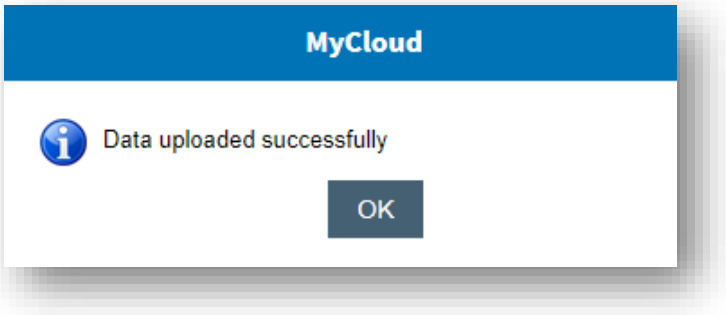


Figure 21 - Upload User Confirmation

To download the csv template for users, click on **Download Template** hyperlink.

1.5.1.3 Manage Group

To create a system group in an organization and map users to it, provider user needs to follow the below steps:

1. On the main menu bar, click **RBAC**, and then click **Manage Group**.
2. The **Manage Group** screen appears. It lists down the available groups in a tabular view that helps to see available groups and map users/assign group user and assign actions to them.

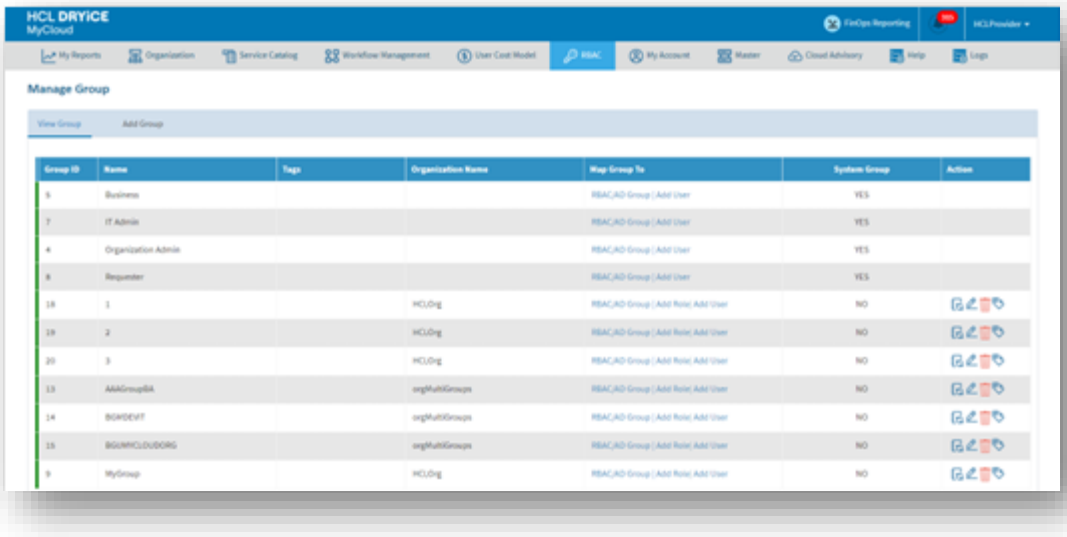


Figure 22 - Group Management

1.5.1.3.1 View Group

To view a group, provider user needs to follow the below steps:

1. On the **Manage Group** screen, click **View Group** against the selected group.

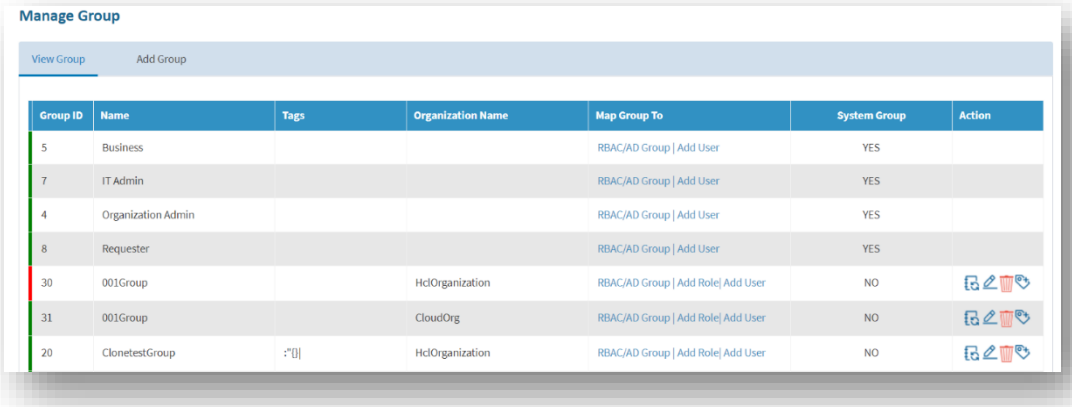


Figure 23 - View Group

2. Below actions are available on the screen.
   - **Change Status** ( ) : to change status of an existing group
   - **Edit Group**( ): to edit an existing group
   - **Delete Group**( ): to delete an existing group
   - **Add Tags** ( ): to add tags in an existing group

1.5.1.3.2 Manage RBAC/AD Group Mapping

To add RBAC /AD group to the group, perform the below steps:

1. Click on **RBAC/AD Group** link under the **Map Group to** column on the grid.
2. A pop-up window prompts to map AD group to the selected RBAC group.
3. Select **Organization** to filter group specific to organization.

4. Enter Group Name.
5. Click **Search** and available AD groups appear in the available groups box.
6. Select **AD Groups** and then click on >> to move selected AD groups to selected RBAC groups box or vice-versa, to unselect the ad groups from a RBAC group.

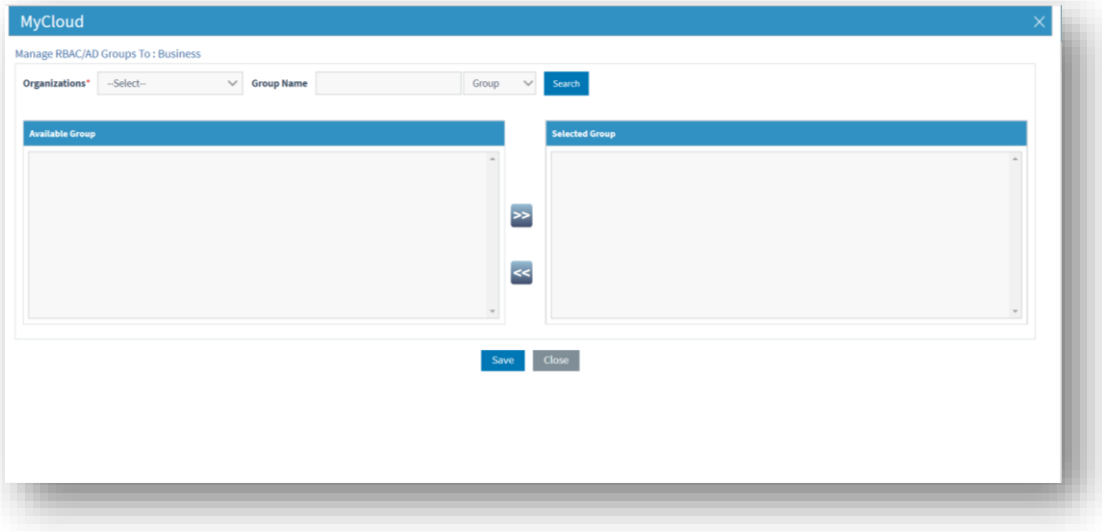


Figure 24 - Manage Group User Mapping (Cont.)

7. Click **Save**.
8. A success message box appears.

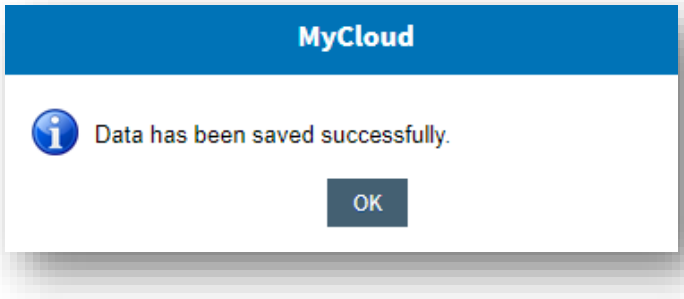


Figure 25 - Confirmation Message

1.5.1.3.3 Group User Mapping

To add user to the existing group.

1. Click on **Add User** link on the **Map Group To** column on the grid.
2. A pop-up window prompts to map users to the selected RBAC group.
3. Select **Organization** to filter user specific to organization.
4. Enter Email/ Group Name
5. Click **Search** and available users will appear in the available user box.
6. Select **Users** and then click on >> to move selected users to selected user box or vice-versa, to unselect the user from a RBAC group.

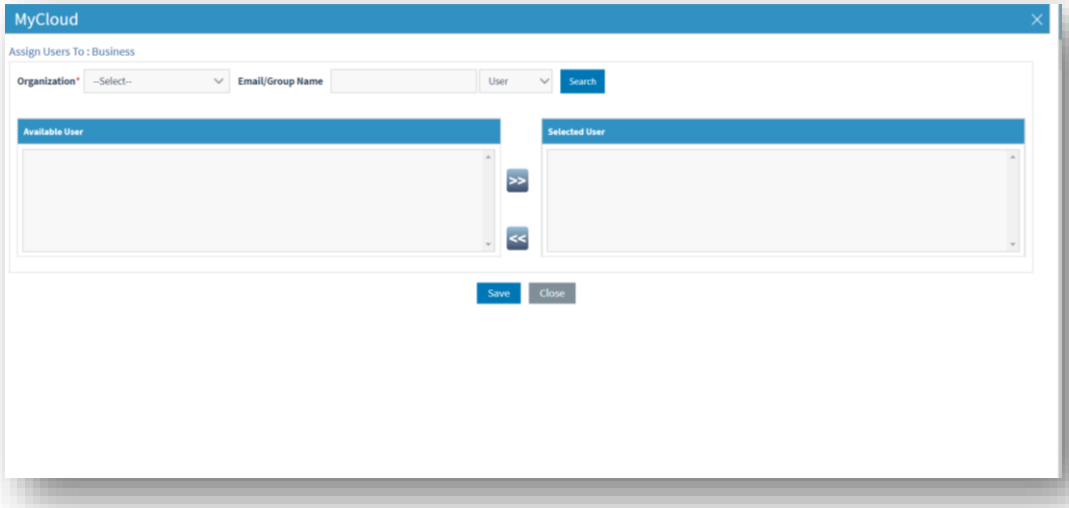


Figure 26 - Group User Mapping

1.5.1.3.4 Group Role Mapping

To map role to the existing group:

1. Click on **Add Role** link on the **Map Group To** column on the grid.
2. A pop-up window prompts map role to the selected RBAC group.
3. Select **Available Roles** and then click on >> to move selected roles to selected roles box or vice-versa, to unselect the roles from a RBAC group.

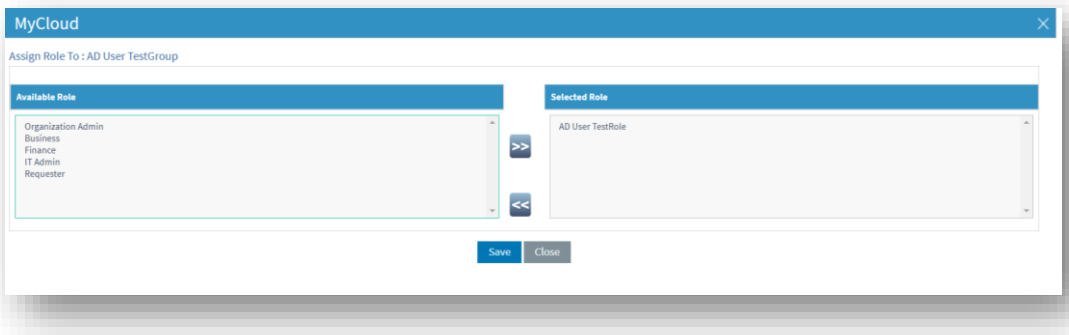


Figure 27 - Group Role Mapping

4. Click **Save**.
5. A success message box appears.

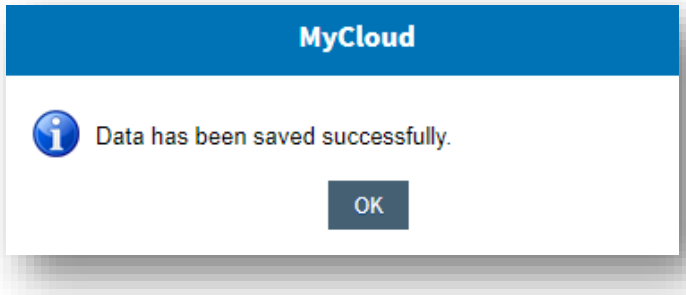


Figure 28 - Success Message

1.5.1.3.5 Delete Group

To delete existing RBAC group,

1. Click **Delete** from the **View Group** screen.
2. A confirmation message appears on the screen.
3. Click **OK** to proceed.

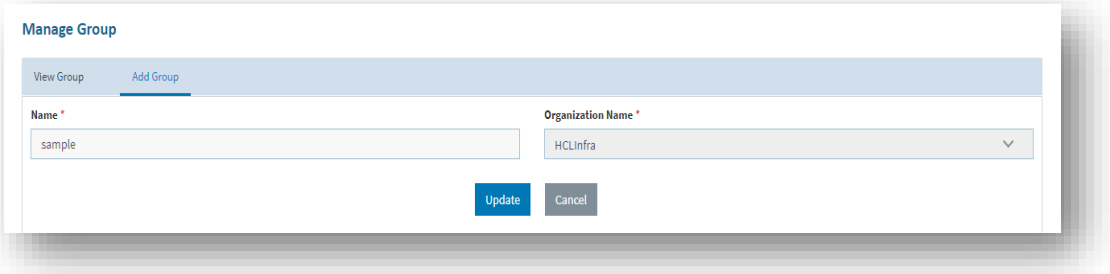


Figure 29 – View Group

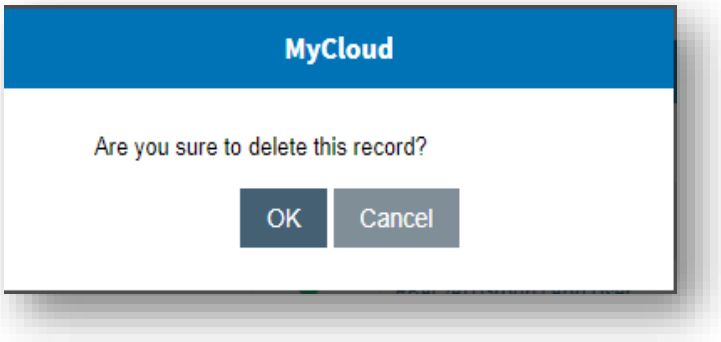


Figure 30 - Confirmation Message

1.5.1.3.6 Edit Group

To edit existing RBAC group.

1. Click **Edit** from the view group screen.
2. The below screen appears.
3. Enter **Name** to update and click **Update**.

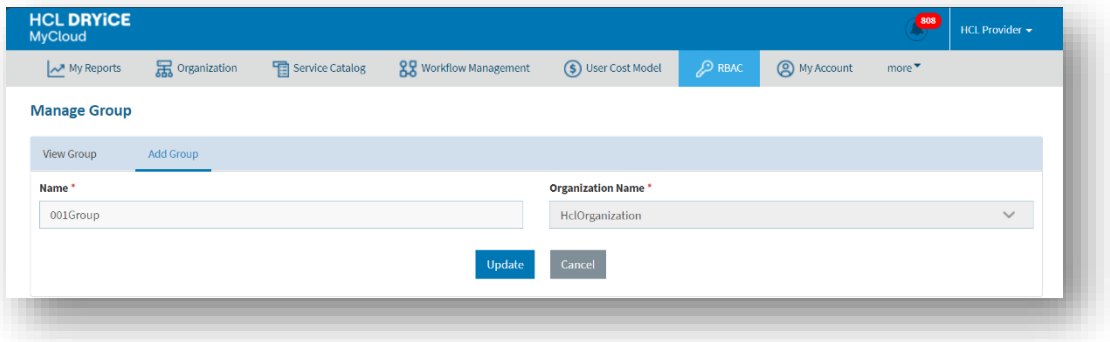


Figure 31 - Edit Group

4. A success message appears on the screen.

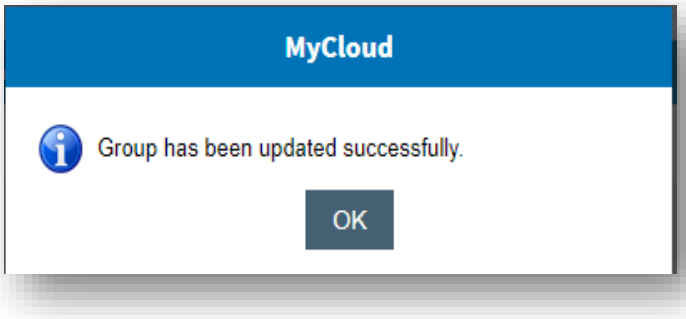


Figure 32 - Success Message

1.5.1.3.7 Change Status

To change status of existing RBAC group.

1. Click **Change Status** from the **View Group** screen.
2. A confirmation message appears on the screen.

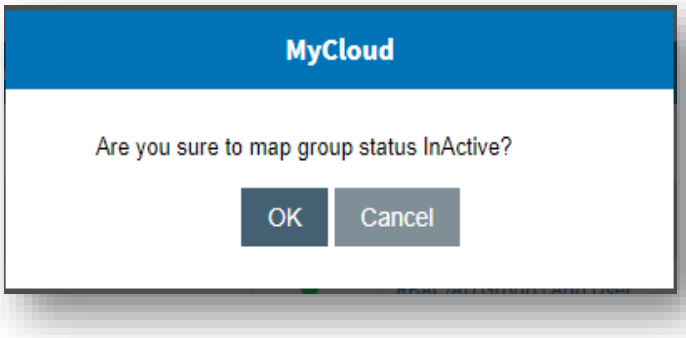


Figure 33 - Confirmation Message

3. Click **OK** to confirm.

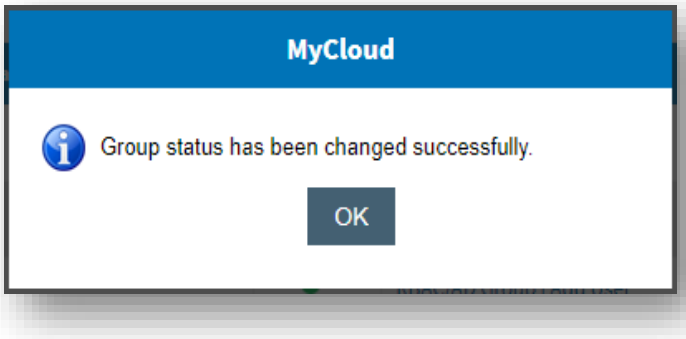


Figure 34 - Success Message

1.5.1.3.8 Add Tag

To add tags to existing RBAC group,

1. Click **Add Tags** from the **View Group** screen.
2. The below screen appears.

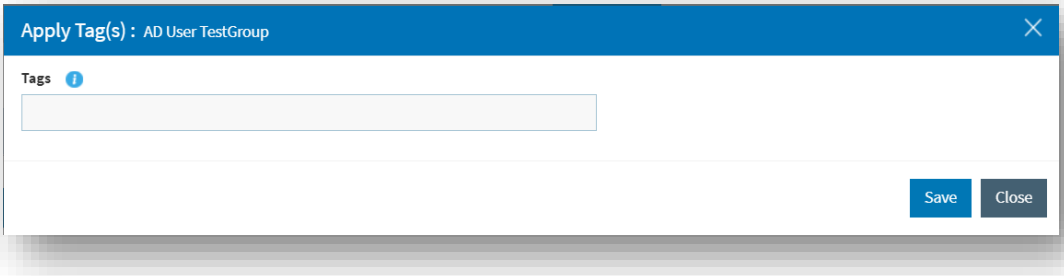


Figure 35 - Apply Tag(S)

3. Enter comma separated character string inside the **Tag**.
4. Click **Save**.
5. A success message appears.

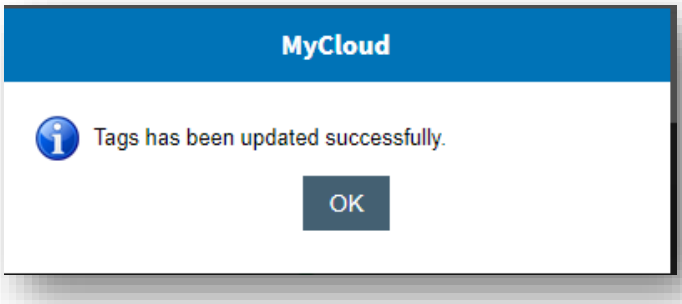


Figure 36 - Success Message

1.5.1.3.9 Add Group

1. To create new group on the **Manage Group** screen, click **View Group** tab.
2. The below screen appears.

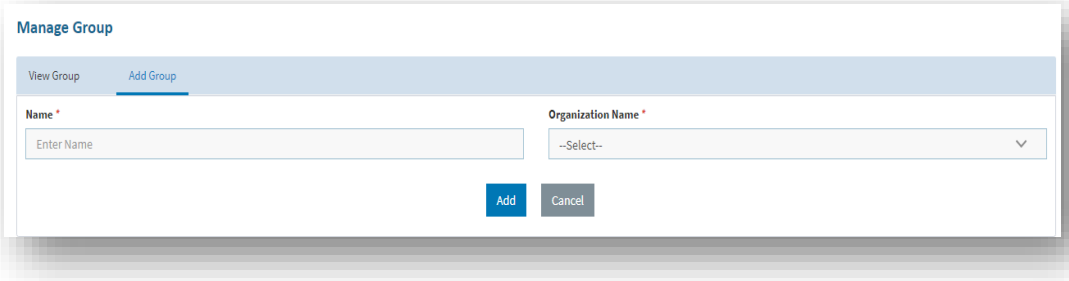


Figure 37 - Add Group

3. Enter Name and Organization
4. Click Enter Name and Select Organization
5. Click **Add**

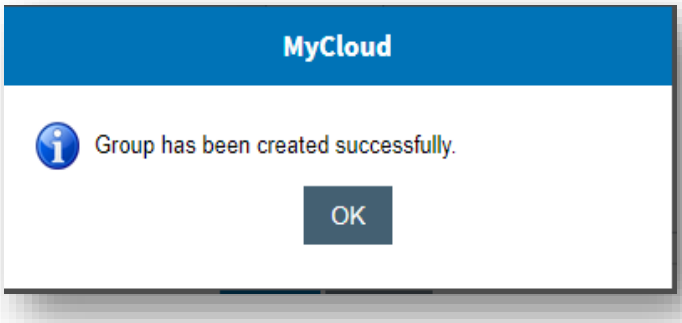


Figure 38 - Success Message

6. Click **OK**. User will get the option to map RBAC/AD group from this screen

1.5.1.4 Transfer Object Ownership

This section explains how provider user manages transfer object ownership in MyCloud.

1. On the main menu bar, click **RBAC** and then click **Transfer Object Ownership**.
2. The below screen appears:

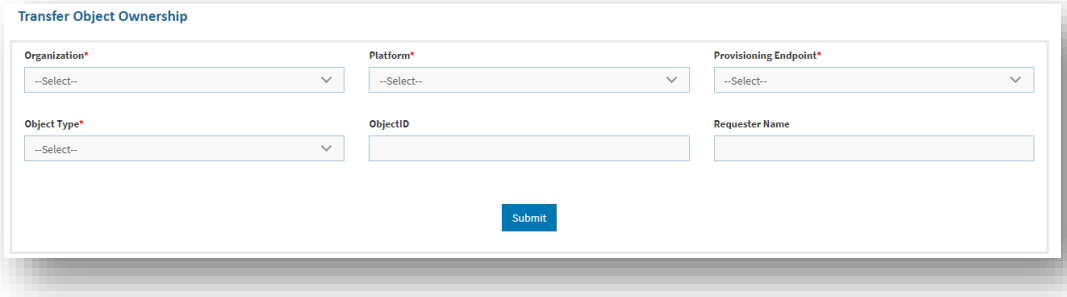


Figure 39 - Transfer Object Ownership

3. Select Organization, Platform, and Provisioning Endpoint.
4. Select Object Type.
5. Enter Object ID and Requester Name.
6. Click **Submit**.
7. Below screen will appear.

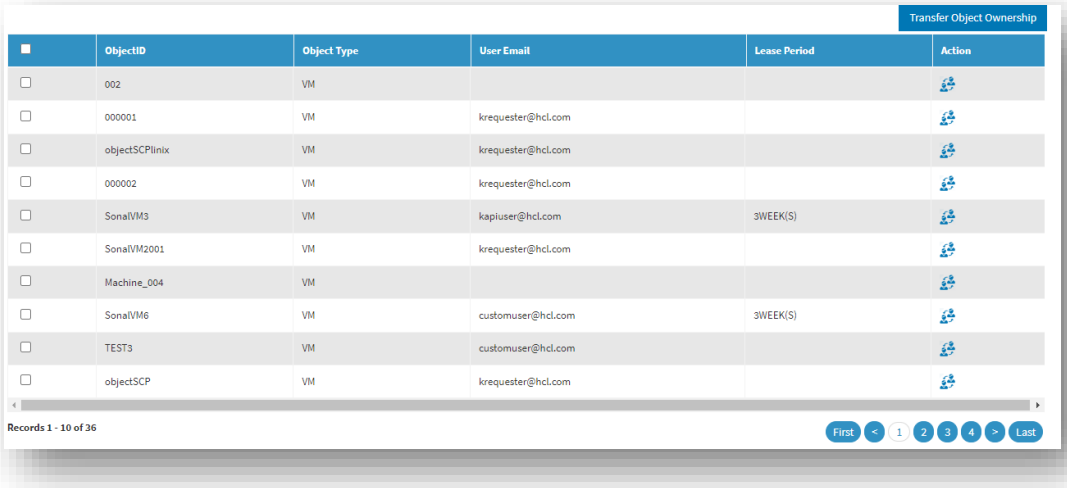


Figure 40 - List of Objects

8. Provider user can either transfer the multiple objects by clicking on checkbox or by individual object.
9. To change multiple object owner ship user can click on "**Transfer Object Ownership**" and for single object user can click on "**Transfer Object Ownership**" action ( )
10. The following pop-up appears.

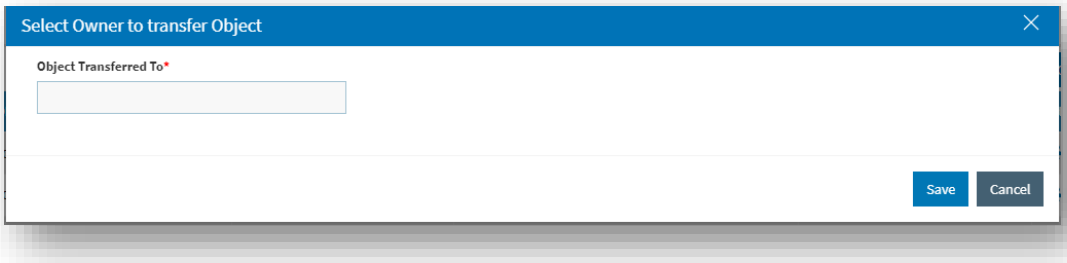


Figure 41 - Select Owner to Transfer Object

11. Enter **Requester Name** to whom object will be transferred (auto-populated list).
12. Click **Save**.
13. The success message appears.

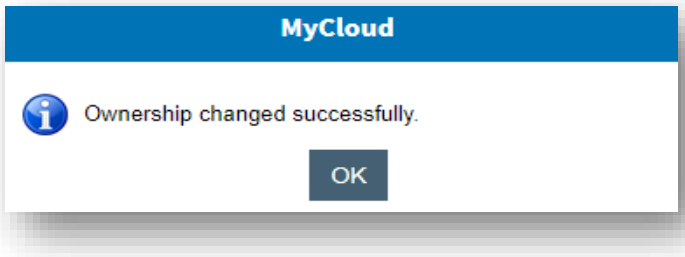


Figure 42 - Success Message

1.5.2 User Cost Model

This section explains how provider user manages user cost model in MyCloud.

1. On the main menu bar, click **User Cost Model**. Below screen appears.

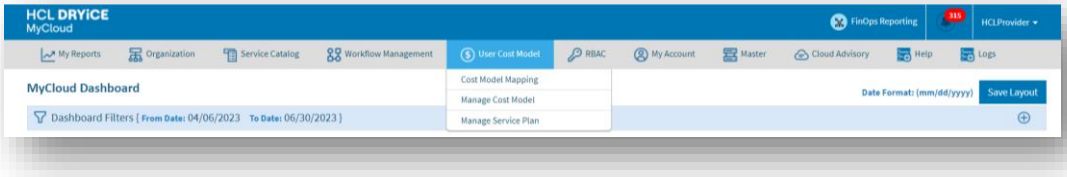


Figure 43 - User Cost Model

1.5.2.1 Manage Service Plan

Using this interface, provider user creates service plans like platinum, gold, silver, and bronze etc. And while creating the plan, it defines services that are free of cost.

While requesting service catalog, end user needs to specify the service plan that needs to be continued.

It has following options:

- View Service Plan
- Create Service Plan
- Manage Services

1.5.2.1.1 Create Service Plan

To create new service plan, provider user needs to follow the below steps:

1. Click on **Create Service Plan** tab.
2. Enter Service Plan Name and Description.
3. Click **Add**.

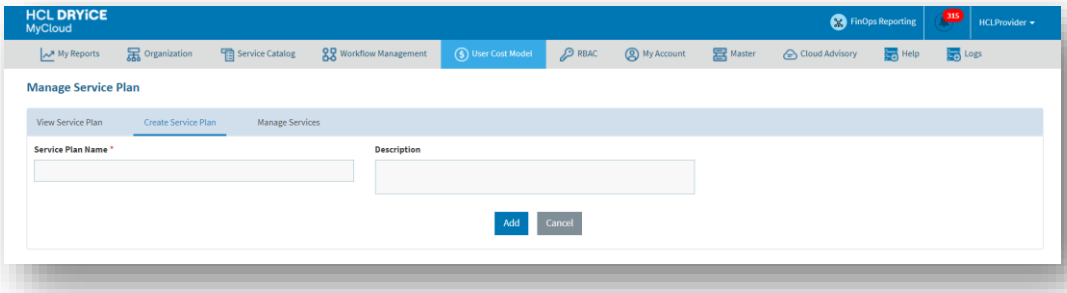


Figure 44 - Create Service Plan

4. A success message box appears.

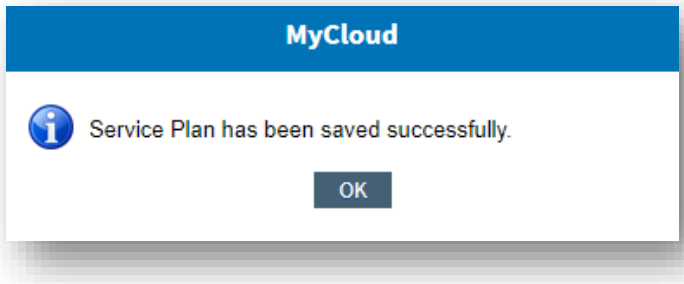


Figure 45 - Confirmation Message

1.5.2.1.2 View Service Plan

This section lists out all the service plans that have been created by a provider user.

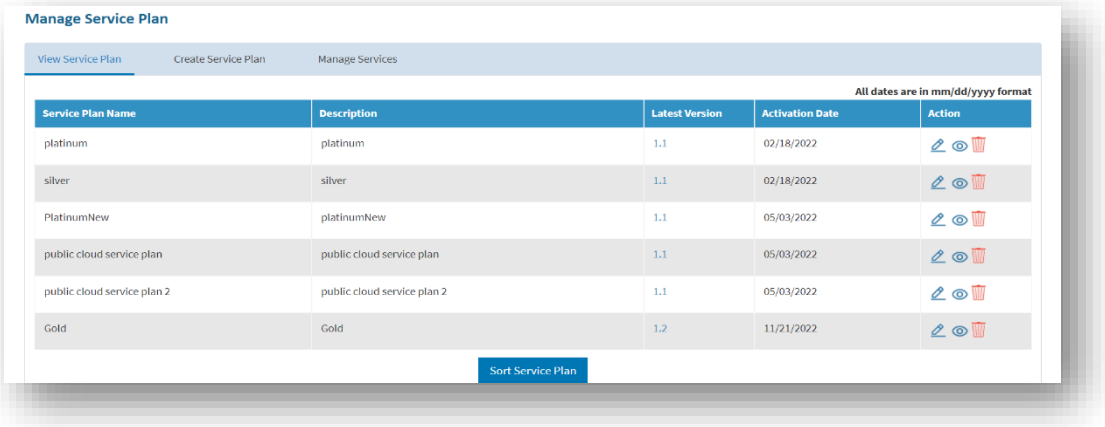


Figure 46 - Service Plan

It also comprises of following actions:

- **Edit** ( ): To modify/update the details of existing service plans
- **View** ( ): To view the details of existing service plans
- **Delete** ( ): To delete the details of existing service plans

1.5.2.1.3 Edit Service Plan

To create a new version of a service plan, provider needs to follow the below steps:

1. Click on **Edit** ( ).
2. Click on **Create New Version** after changes.

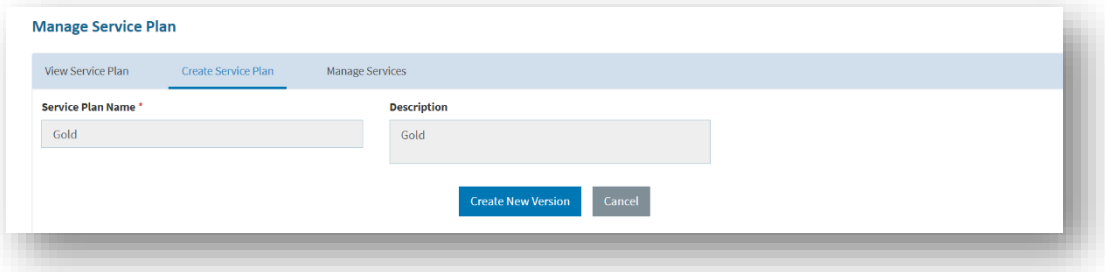


Figure 47 - Edit Service Plan (Cont.)

3. A success message box appears.

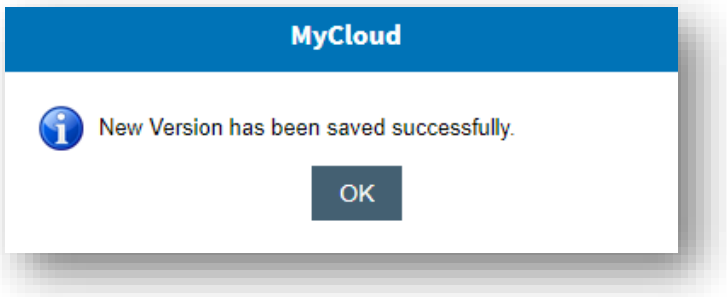


Figure 48 - Confirmation Message

1.5.2.1.4 Delete Service Plan

To delete service plan, provider needs to follow the below steps:

1. Click on **Delete** ( ).
2. A confirmation appears:

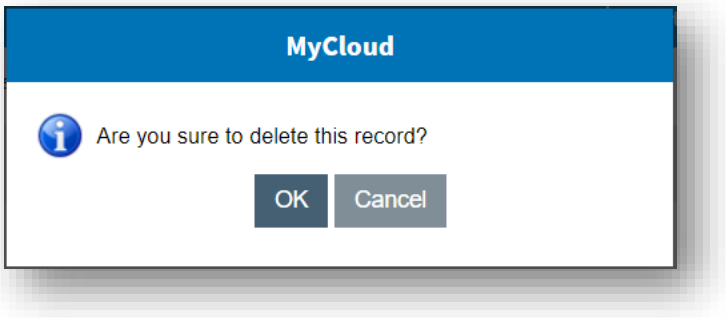


Figure 49 – Confirmation Query

3. Click **OK** to continue.
4. A success message box appears.

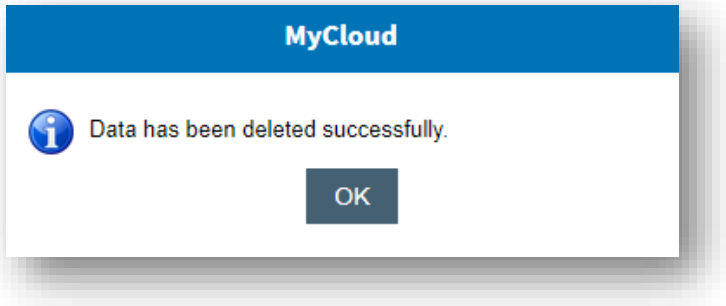


Figure 50 - Confirmation Message

1.5.2.1.5 View Service Plan Details

1. To view the details of an existing service plan, click on **View** ( ). A screen appears as below.

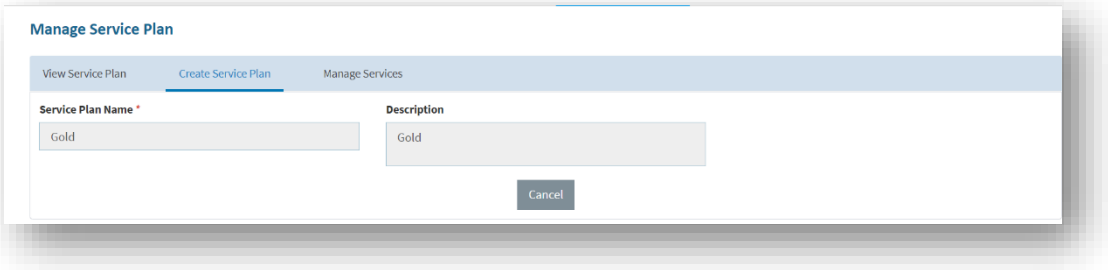


Figure 51 – View Service Plan

1.5.2.1.6 Manage Services

The **Manage Services** tab lists all the configured services. Provider user can edit the service description or can delete the service from this screen.

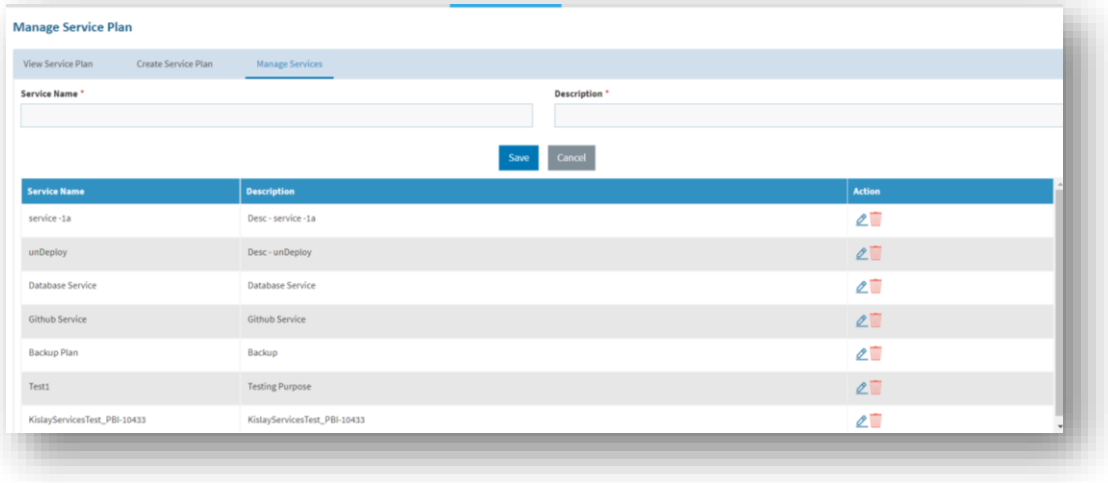


Figure 52 - Manage Services

Manage services have edit and delete actions. These actions have similar workflow as described above in-service plan actions.

1.5.2.2 Manage Cost Model

This section explains the steps to manage cost model of an organization which is mapped to a service plan, data center, location, and organization. Cost model is categorized, as follows:

- **Allocation Based Cost**: in this type of model, the instance is reserved for the user, and the whole cost for that infra resource is being charged on the first month's bill.
- **Time Based Cost**: under such model, user is charged for the time that the infra resource is on, but storage cost is charged for the whole period i.e., 24 hours.

Along with the above cost models, provider user can also configure additional cost through in-built options like,

- **One-Time Cost**: it is the amount which is paid on a one-time basis (like amc) post availing of services (associated with either allocation or time-based cost model). This option is not mandatory and depends on organizational policies.
- **Recurring Cost**: the cost, which is occurring periodically over a time like daily, weekly, monthly, half-yearly etc. Till the services are availed (associated with either allocation or time-based cost model). This option is not mandatory and depends on organizational policies.

On the main menu bar, click **User Cost Model**, and then click **Manage Cost Model**. The section has following options:

- Add Cost Model
- View Cost Model

1.5.2.2.1 Add Cost Model

To add cost model for an organization, provider user needs to follow the below steps:

1. On the Manage Cost Model screen, click **Add Cost Model**.

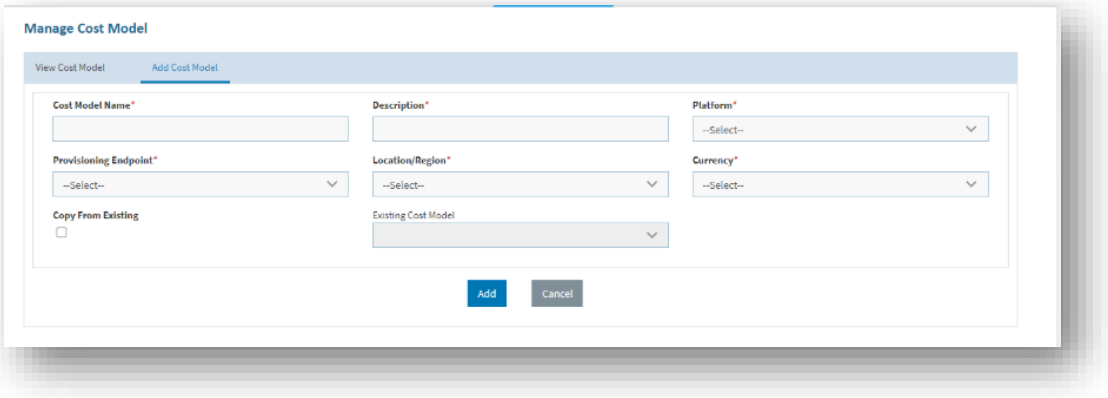


Figure 53 - Add Cost Model

2. Refer the below table to understand the fields mentioned in the above figure:

Table 7 - Add Cost Model

Fields	Description
Cost Model Name	Field to add the name of a cost model
Description	Describe the cost model and how it is used
Platform	Select Platform from the drop down
Provisioning Endpoint	The cloud endpoint that has been created in MyCloud
Activation Date	The day that will activate the cost model/ billing will start against an organization
Existing Cost Model	Lists of existing cost model that were added before

3. Enter Cost Model Name and then enter the Cost Model Description.
4. Select the Environment, Platform, and Location.
5. Select **Currency** and then enter the **Plan Activation Date**.
6. Select the check box **Copy from Existing** if provider user wants to copy the cost plan from the existing cost plan.
7. Select Cost Model Plan from Existing Cost Model drop-down.
8. Click **Add**.

All the fields marked with asterisk (*) are mandatory.

9. A success message box appears.

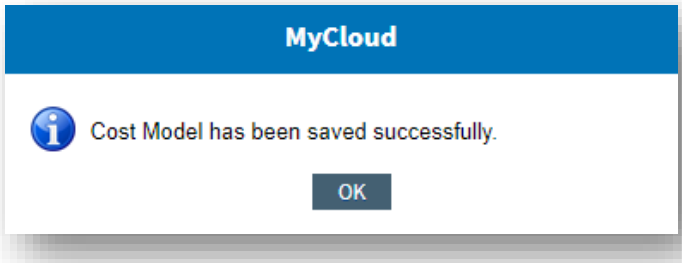


Figure 54 - Add Cost Model (Cont.)

1.5.2.2.2 Assign Cost

Cost assignation in each category is done as steps below:

1. In the Assign Cost pane, click Define Cost against the Cost Item Category.

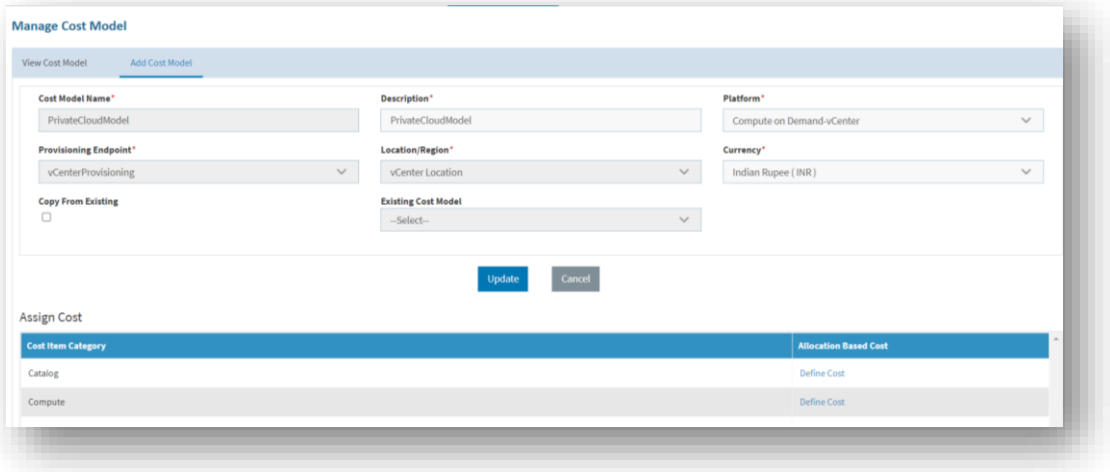


Figure 55 - Assign Cost to The Cost Model

2. Refer the below table to understand the fields mentioned in the above figure:

Table 8 - Assign Cost to The Cost Model

Fields	Description
Cost Item Category	Signifies resource Category. This can be Catalog, Disk, and Network etc.

In case of allocation-based cost assignation,

- Click **Define Cost** and a pop-up appears.
- Fill the required details in **Compute Pane** and click **Save**.

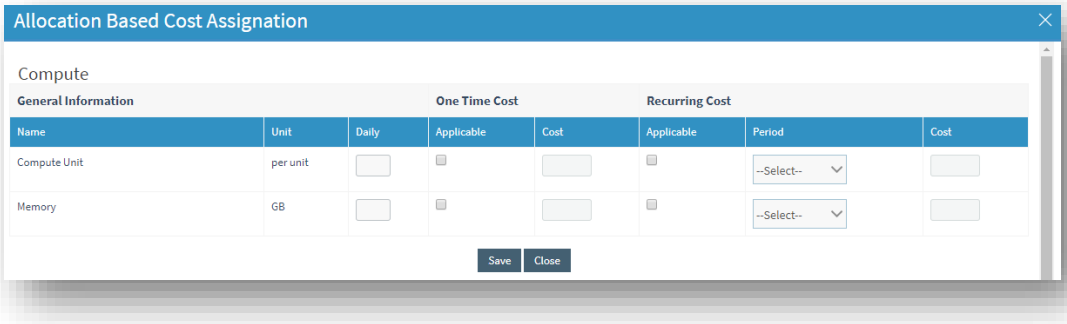


Figure 56 - Assign Cost to The Cost Model (Cont.)

3. A success message box appears.

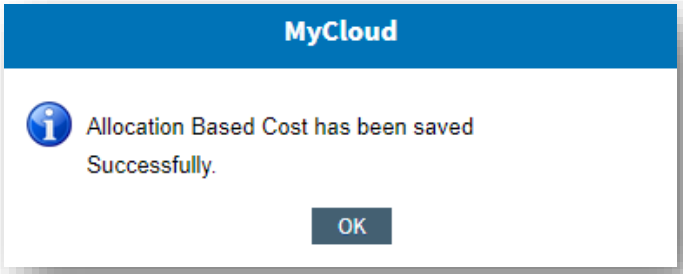


Figure 57 - Assign Cost to The Cost Model (Cont.)

In case of time-based cost assignation,

- Click **Define Cost** and a pop-up appears.
- Fill the required details in **Compute Pane** and click **Save**.

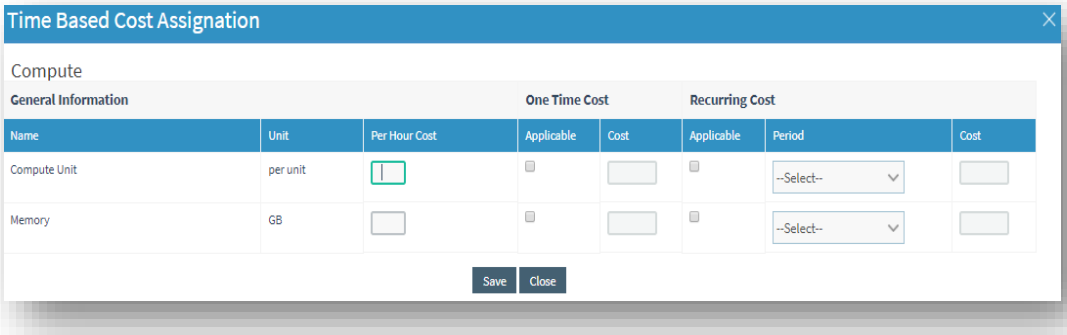


Figure 58 - Assign Cost to The Cost Model (Cont.)

4. A success message box appears.

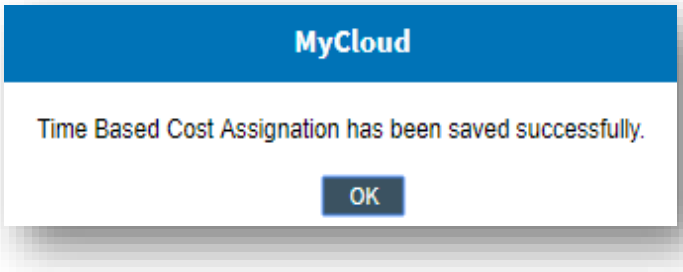


Figure 59 - Assign Cost to The Cost Model (Cont.)

1.5.2.2.3 View Cost Model

This section lists out all the cost models that have been created by provider user. It also comprises of following actions:

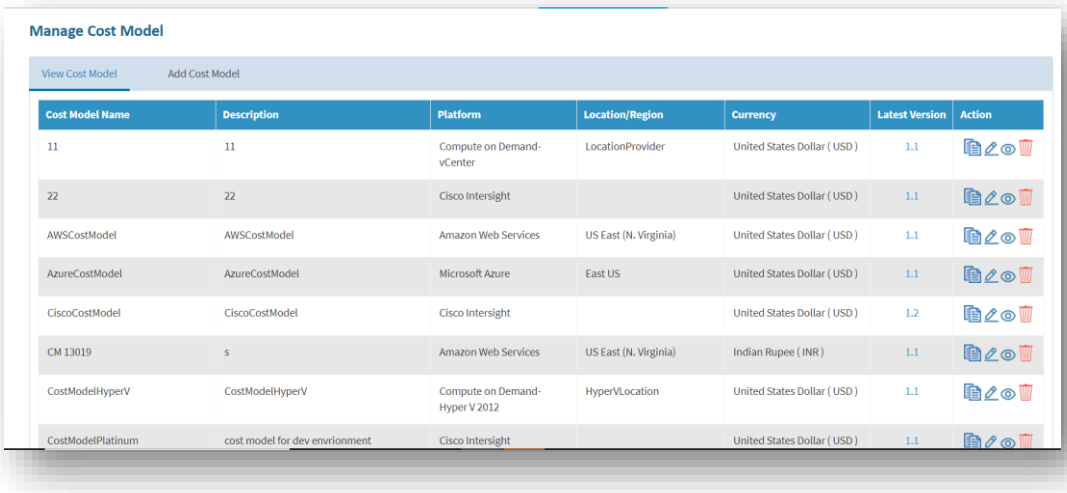


Figure 60 - View Cost Model

- **Copy Costmodel** ( ): To Copy existing cost models into another platform and Region/Location
- **Edit** ( ): To modify the details of existing cost models
- **View** ( ): To view the details of existing cost models
- **Delete** ( ): To delete existing cost model.

1.5.2.2.4 Copy Cost Model

1. Provider admin user can copy existing cost model for another provisioning endpoint and location within the same organization.
2. On the Manage Cost Model screen, click Copy Cost Model.
3. Click **Copy Cost Model** ( ) against the cost model.

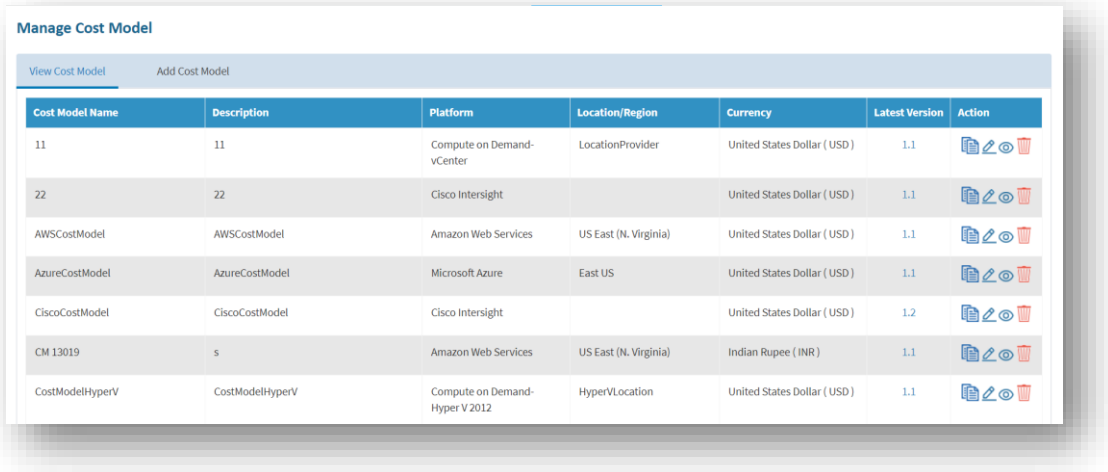


Figure 61 - Copy Cost Model

While copy cost model provider admin user can create new cost model with following information

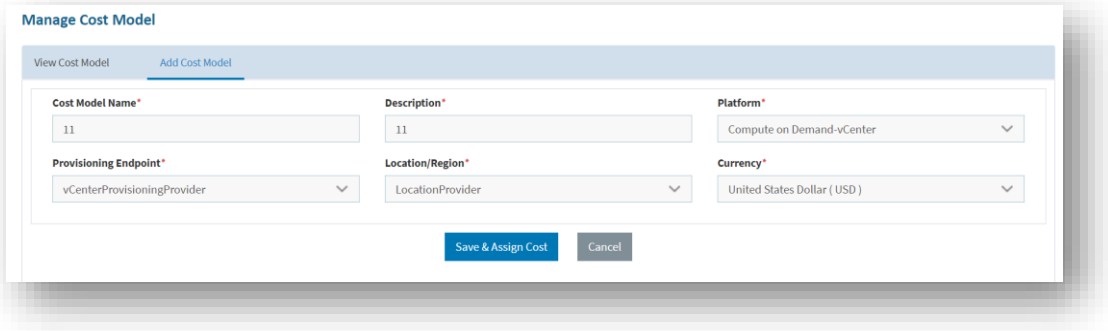


Figure 62 - Copy Cost Model (Cont.)

Table 9 – List of Fields

Fields	Description
Cost Model Name	Field to add the name of a cost model
Description	Describe the cost model and how it is used
Platform	User can copy cost model to any platform
Provisioning Endpoint	User can select provisioning endpoint of selected platform
Location/Region	User can select Location/region of selected provisioning endpoint
Currency	User Can select currency supports by MyCloud

4. A confirmation message appears as below.

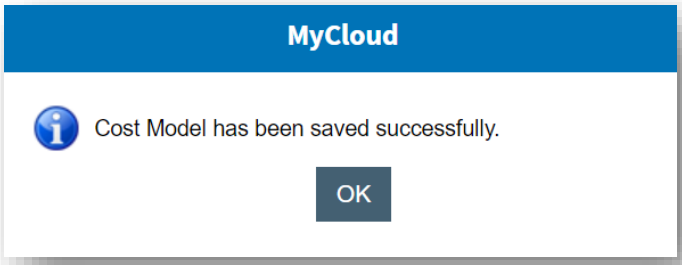


Figure 63 – Confirmation Message

5. To view information of existing cost models, click **View** ( )

Cost of applicable catalog, compute, service and storage will copy for new cost model.

In case of service, compute and storage exist defined cost will populate to save as new cost model and in case of catalog if catalog name will same for current endpoint then cost will pre populate to save as new cost model.

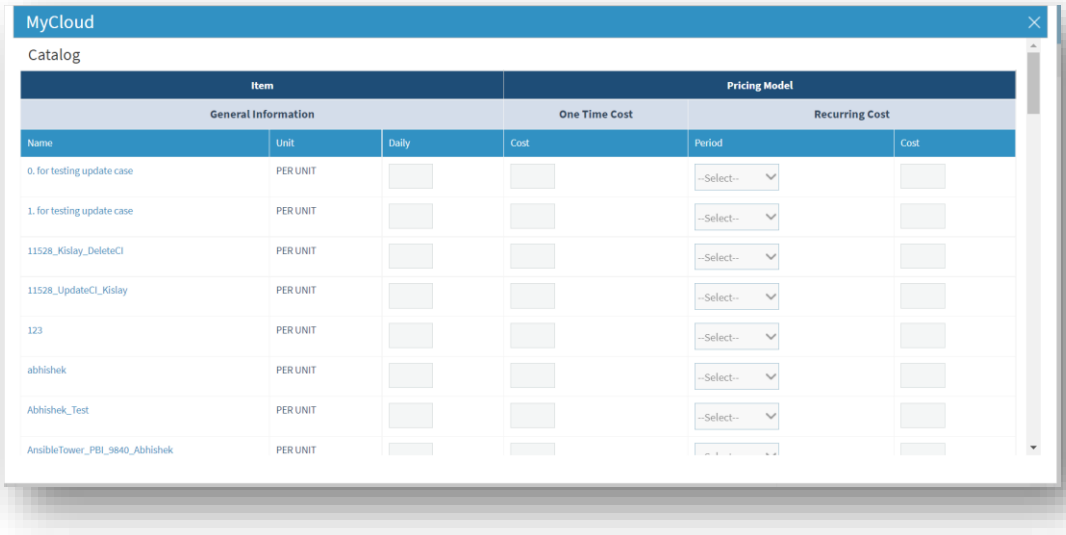


Figure 64 – Catalog

1.5.2.2.5 Edit Cost Model

To edit/ modify cost models, provider user needs to follow the below steps:

1. On the Manage Cost Model screen, click View Cost Model.
2. Click **Edit** ( ) against the cost model which requires modifications.

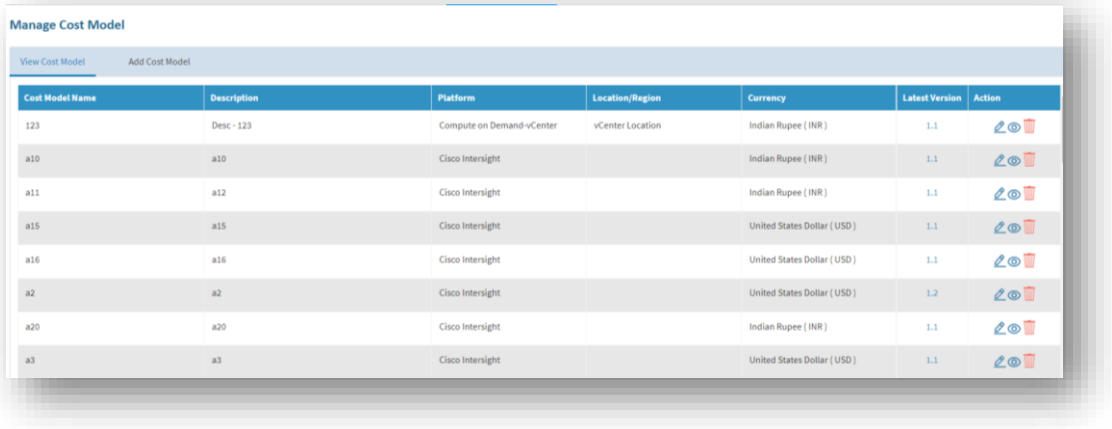


Figure 65 - Edit Cost Model

3. Modify the details as required and then click **New Version**.

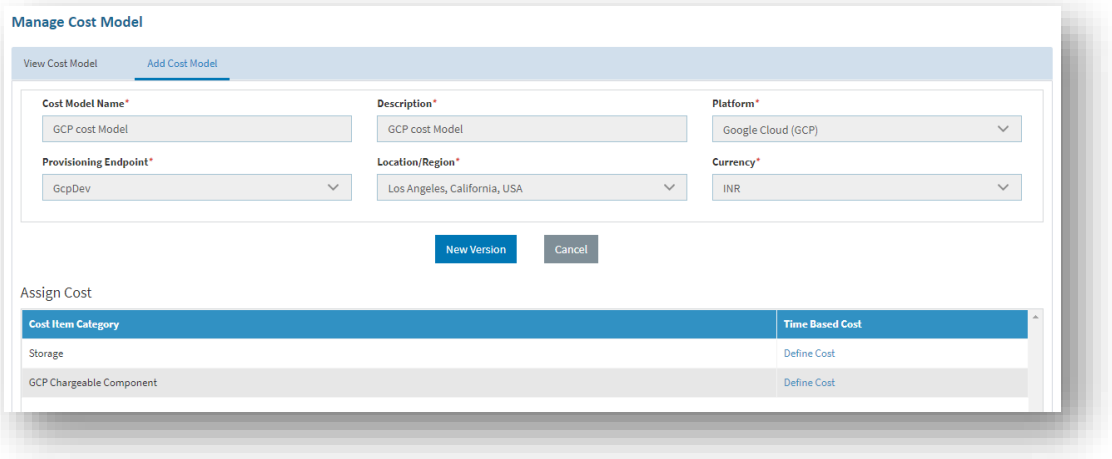


Figure 66 - Edit Cost Model (Cont.)

4. A confirmation message appears as below.

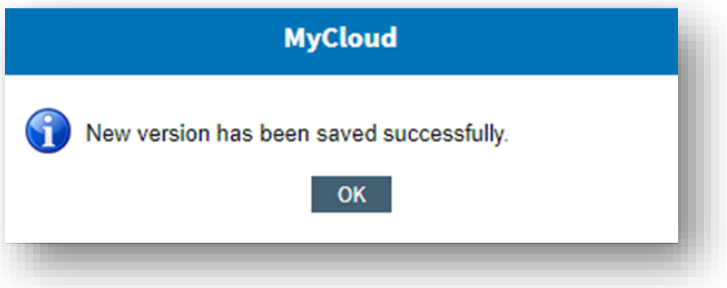


Figure 67 – Confirmation Message

To view information of existing cost models, click **View** ( )

1.5.2.2.6 Delete Cost Model

1. To delete Existing Cost Model, click on Delete Action ( ).
2. A confirmation message appears.

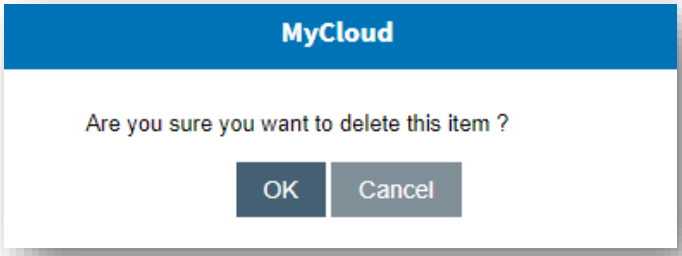


Figure 68 - Confirmation Cost Model

1.5.2.3 Cost Model Mapping

To map a cost model with service plan, platform, environment, location, and organization, provider user needs to follow the below steps:

1. On the main menu bar, click **User Cost Model** and then click **Cost Model Mapping**.
2. To map a cost model with an organization, follow the steps below:
3. On the Map Cost Model screen, click Add Cost Mapping.
4. Select the Organization, Platform, Provisioning Endpoint, Location/Region, Cost Model and Service Plan.
5. Click **Save** to map a cost model and click **Cancel** to discard changes.

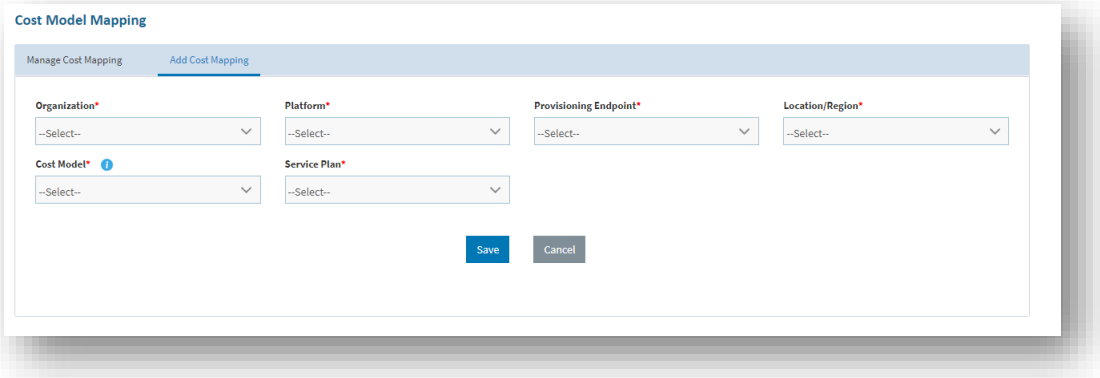


Figure 69 - Cost Model Mapping

6. A success message box appears.

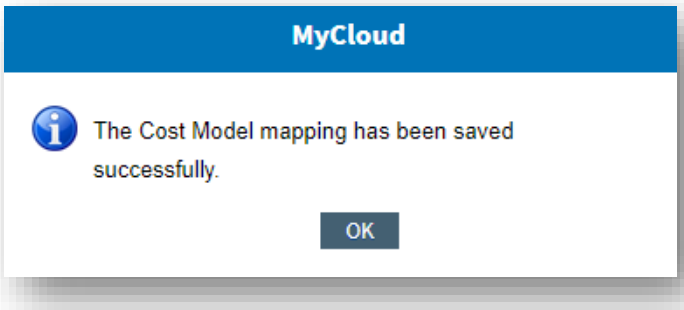


Figure 70 - Cost Model Mapping (Cont.)

All the fields marked with asterisk (*) are mandatory.

1.5.2.3.1 View Mapping

This section lists out all the cost models that have been created by provider user.

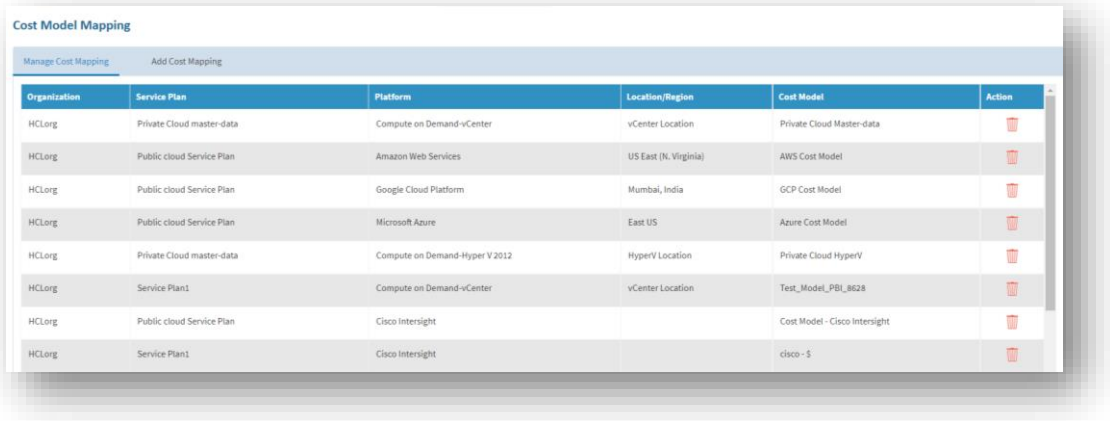


Figure 71 - Delete Cost Model Mapping

It also comprises of following action:

- **Delete** (🗑): To delete the existing cost model

1.5.2.3.2 Delete Cost Model Mapping

To delete the mapped cost model, provider user needs to follow the below steps:

1. On the Manage Cost Mapping tab, click Delete (🗑).
2. When prompted to confirm, click **Ok**.

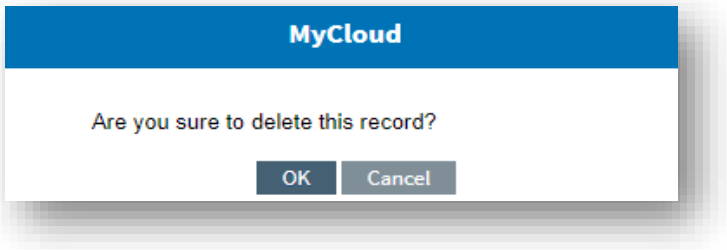


Figure 72 - Delete Cost Model Mapping (Cont.)

1.5.3 Service Catalog

Service catalog allows the provider to centrally manage commonly deployed MyCloud services and contains a set of cloud services that an end user requests. It helps MyCloud to meet compliance requirements, while helping providers to quickly deploy only the approved services that end users require.

1. On the main menu bar, click **Service Catalog**.
2. The drop-down appears with the following options:
   - **Manage Action**
   - **Manage Blueprint**
   - **Manage Catalog**
   - **Publish Action**
   - **Publish Service Catalog**

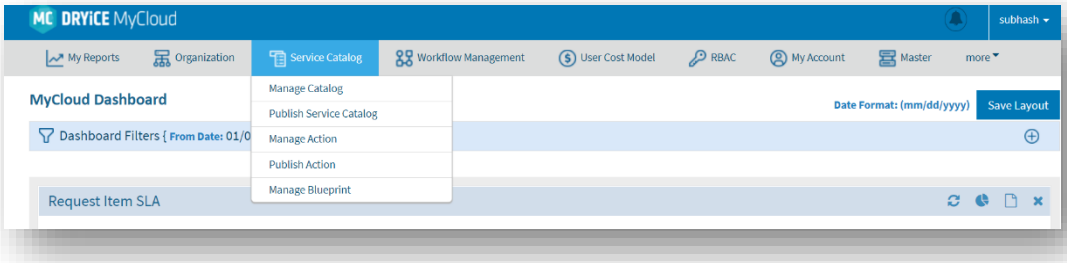


Figure 73 - Service Catalog

1.5.3.1 Manage Catalog

This section details out the process of managing a catalog.

It has following sections:

- Create Catalog
- View Catalog

1.5.3.1.1 Create Catalog

To create a catalog, provider user needs to follow below steps:

1. On The Manage Catalog screen, click Create Catalog.

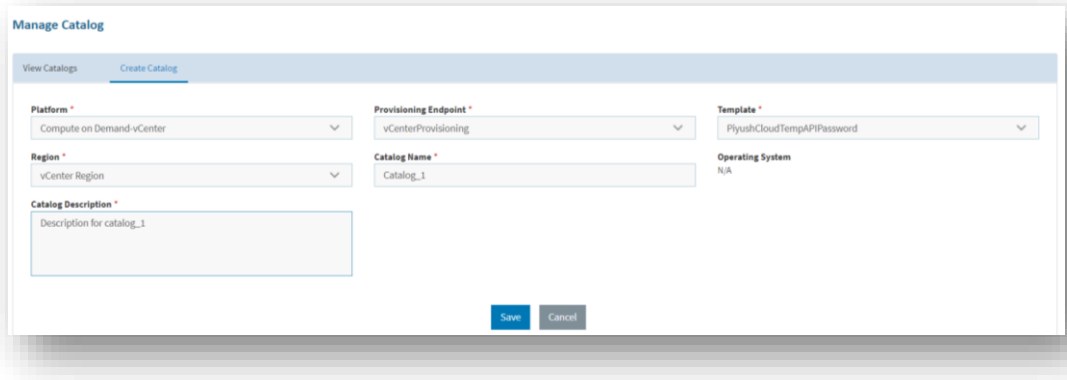


Figure 74 - Create Catalog

2. Select Platform and Provisioning Endpoint.
3. Select **Template**.
4. Select **Region**.
5. Enter Catalog Name and Catalog Description.
6. To add a catalog, click **Save**.

Click **Cancel** to discard changes and all the fields marked with asterisk (*) are mandatory.

7. A success message box appears:

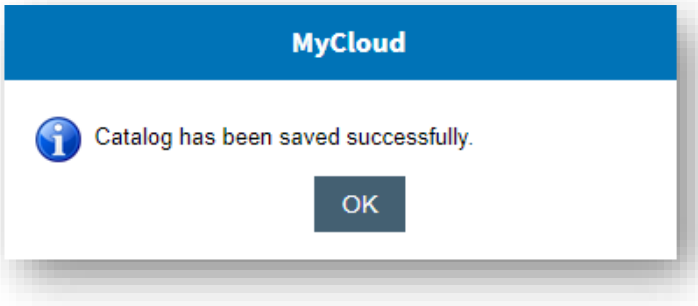


Figure 75 - Create Catalog Success Message

8. The new catalog is created and appears in the list of catalogs.

All the fields marked with asterisk (*) are mandatory.

1.5.3.1.2 View Catalog

This section lists out all the catalogs that have been created by provider user.

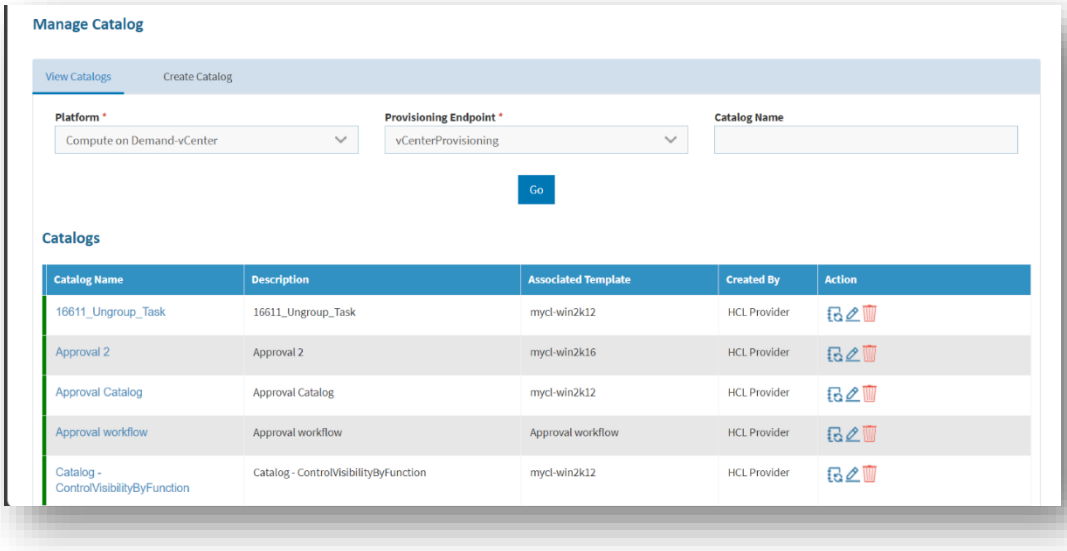


Figure 76 - View Catalog

It also comprises of following actions:

- **Change Status** ( ): To change the status (**Active**/**Inactive**) of an existing catalog.
- **Edit** ( ): To modify the details of an existing catalog.
- **Delete** ( ): To delete a catalog.

1.5.3.1.3 Edit Catalog

To edit/ modify an information of an existing catalog, provider user needs to follow the below steps:

1. On the Manage Catalog screen, click View Catalog.
2. Select Platform and Provisioning Endpoint.
3. Select Catalog Name.
4. Click **Go**.

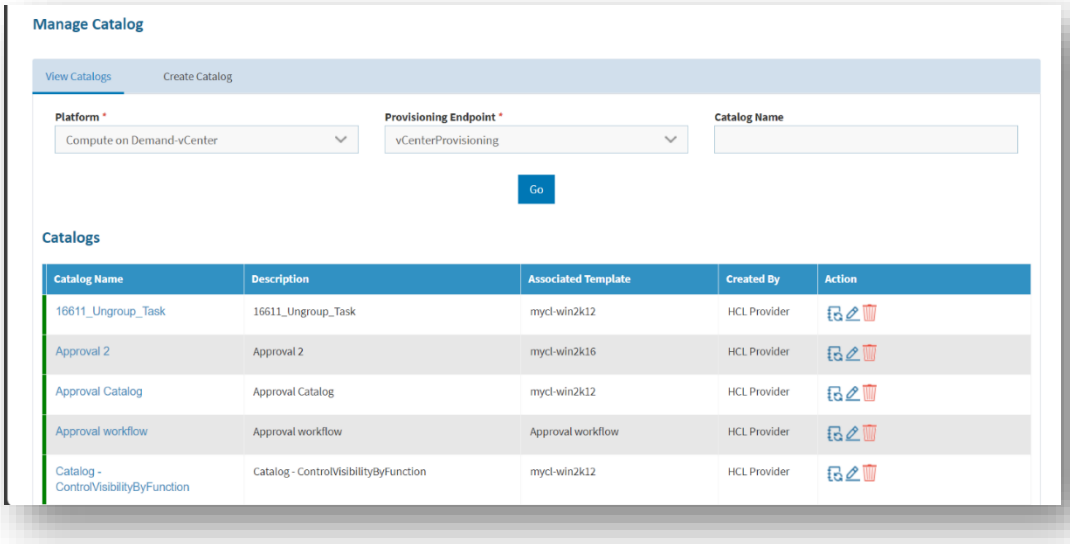


Figure 77 - Edit Catalog

5. Available catalogs list down in a tabular view.
6. Click **Edit** ( ).
7. Modify the details as desired and click **Update**.
8. Click **Cancel** to discard all changes.

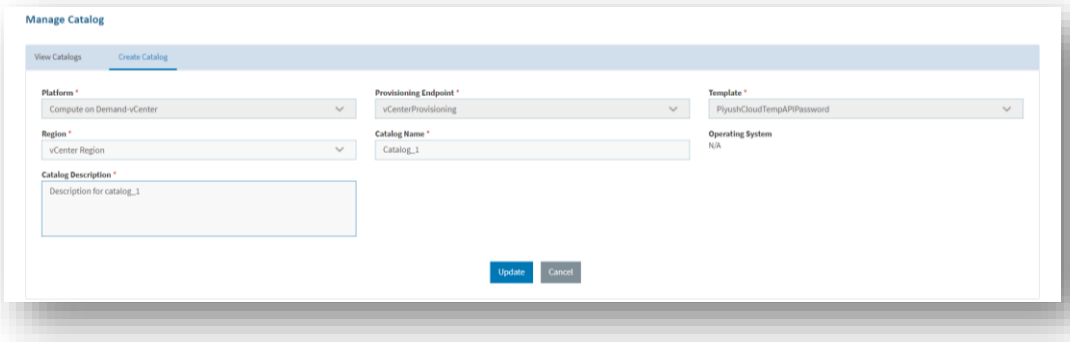


Figure 78 - Edit Catalog (Cont.)

9. A success message box appears:

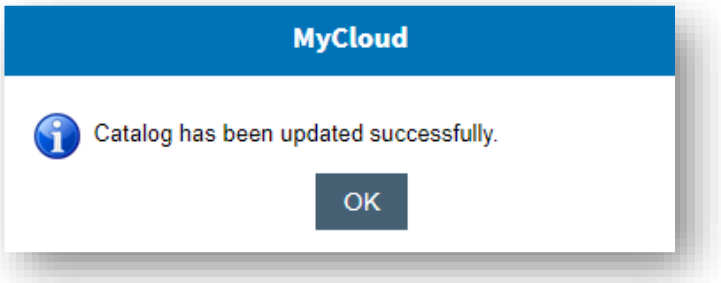


Figure 79 - Edit Catalog Success Message

1.5.3.1.4 Delete Catalog

To delete a catalog from the platform, provider user needs to follow the below steps:

1. On the **Catalog** pane, click **Delete** ( ).

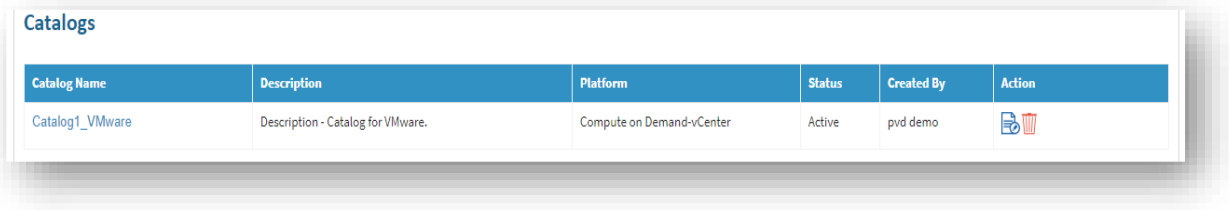


Figure 80 - Delete Catalog

2. When prompted to confirm, click **OK**.

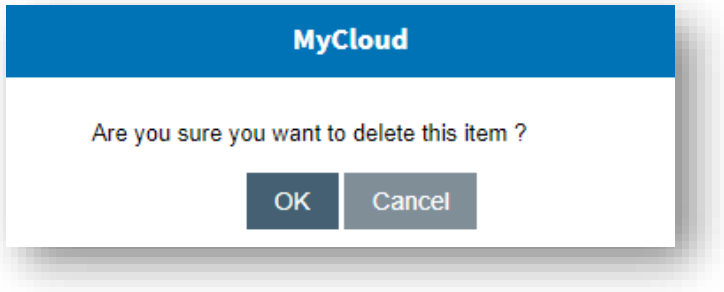


Figure 81 - Delete Catalog (Cont.)

3. A success message box appears:

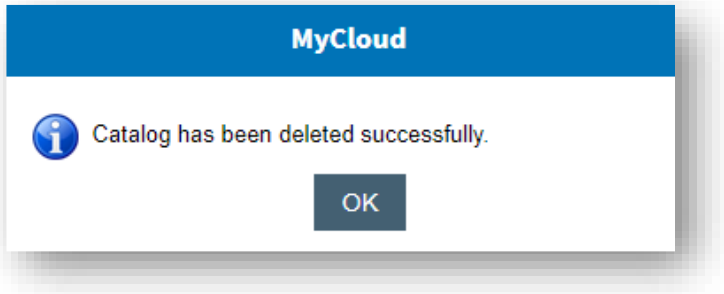


Figure 82 - Delete Catalog Success Message

1.5.3.2 Publish Service Catalog

This section emphasizes how to publish service catalog for end-user of an organization and align dynamic UI fields that are mentioned in **Manage Cloud Templates**. Provider user adds a custom image to service catalogs.

It has following Options:

- Create Service Catalog
- View Service Catalog

1.5.3.2.1 Create Service Catalog

To publish new service catalog from imported template of an organization, provider user needs to follow the below steps:

1. On the Publish Service Catalog screen, click Create Service Catalog tab.

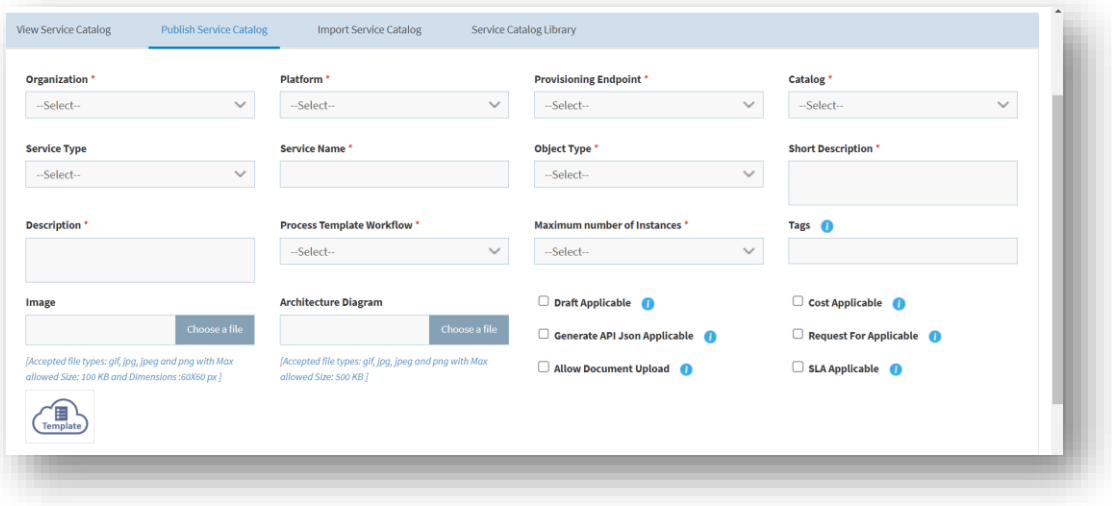


Figure 83 - Create Service Catalog

2. Refer the below table to understand the fields mentioned in the above figure:

Table 10 - Create Service Catalog Fields

Fields	Description
Organization	The name of the organization (business units/ divisions in organizations)
Platform	The name of cloud service providers
Environment	The cloud endpoints that have been created in MyCloud
Catalog Type	This lists the different types of catalogs
Catalog	Name of the catalog
Service Type	Lists all service types that are created
Service Name	Name of service
Object Type	Type of object that will be provisioned
Process Template Workflow	This is the template for orchestrating tasks sequence
Max. Number Of Instances	This template has max no. of instances.
Draft Applicable	To enable draft button on service request.
Cost Applicable	To enable cost button, user must ensure that UI template must defined JavaScript function showcost ().
Request For Applicable	To enable "request for" option, this will help user to create request on behalf of another user.
Generate API Json Applicable	To enable generate API JSON button on service request. It helps user to generate API JSON.

SLA Applicable	To enable "SLA (in mins)" option.
Allow Document Upload	This will enable the document upload functionality on requester form.
Architecture Diagram	After saving the image from Publish Service Catalog, same image will display on requester side in first tab when dynamic form will open for requester. If requester will place a request, then this diagram will applicable for that request, and if provider delete or change the image at service catalog it will not impact on placed request.

3. Select Organization.
4. Select **Platform**.
5. Select Provisioning Endpoint.
6. Select **Catalog**.
7. Select Service Type and Service Name.
8. Select Object Type.
9. Enter **Short Description** and **Description** of the catalog.
10. Select Process Template Workflow.
11. Select Maximum number of Instances.
12. Upload image file for **Catalog Logo**.
13. To publish a catalog, click **Create**.

Click cancel to discard changes. All the fields marked with asterisk (*) are mandatory.

14. A success message box appears:

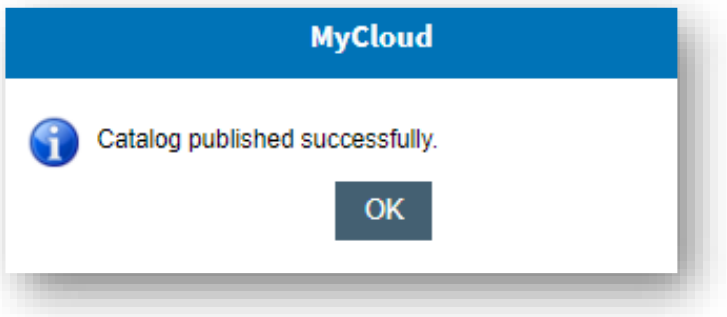


Figure 84 - Publish Service Catalog Confirmation Message

15. The new service catalog is published and appears in list of service catalogs.

1.5.3.2.2 View Service Catalog

This section lists out all service catalogs that have been created by provider user.

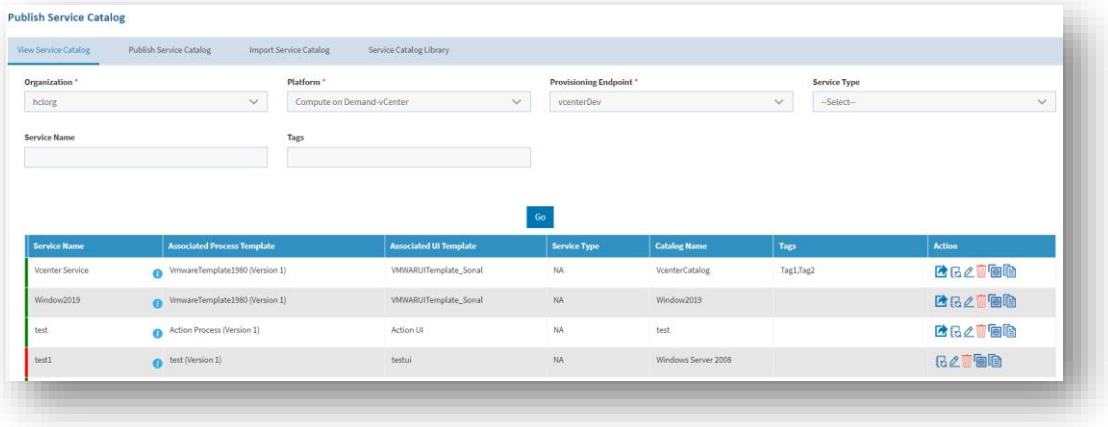


Figure 85 - View Published Service Catalog

It also comprises of following actions:

- **Edit** ( ): To modify the details of existing Service Catalogs.
- **Delete** ( ): To delete the Service Catalogs.
- **Change Status** ( ): To Change Status the Service Catalogs.
- **Copy to other region** ( ): To copy to other region the Service Catalogs.
- **Copy to other endpoint** ( ): To copy to other endpoint the Service Catalogs.
- **Export service catalog** ( ): To export the Service Catalogs.

1.5.3.2.3 Edit Service Catalog

To edit/ modify the information of an existing service catalog, provider user needs to follow the below steps:

1. On the Publish Service Catalog screen, click View Service Catalog pane.
2. Select Organization.
3. Select Platform and Provisioning Endpoint.
4. Select Service Type.
5. Click **Go**.
6. Available catalogs list down in a tabular view.
7. Click **Edit** ( ) against the Published Service Catalog to be edited.

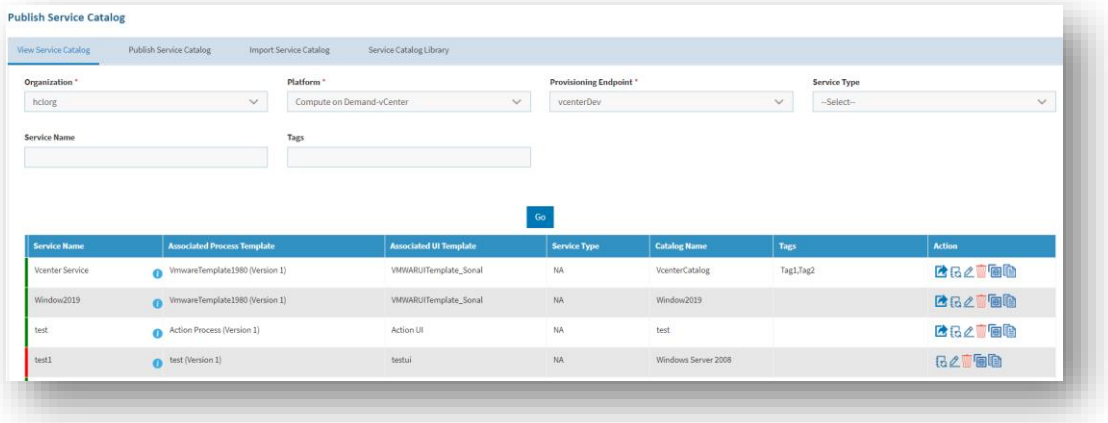


Figure 86 - Edit Published Service Catalog

8. Modify the details as desired and click **Update**.
9. Click **Cancel** to discard all changes.

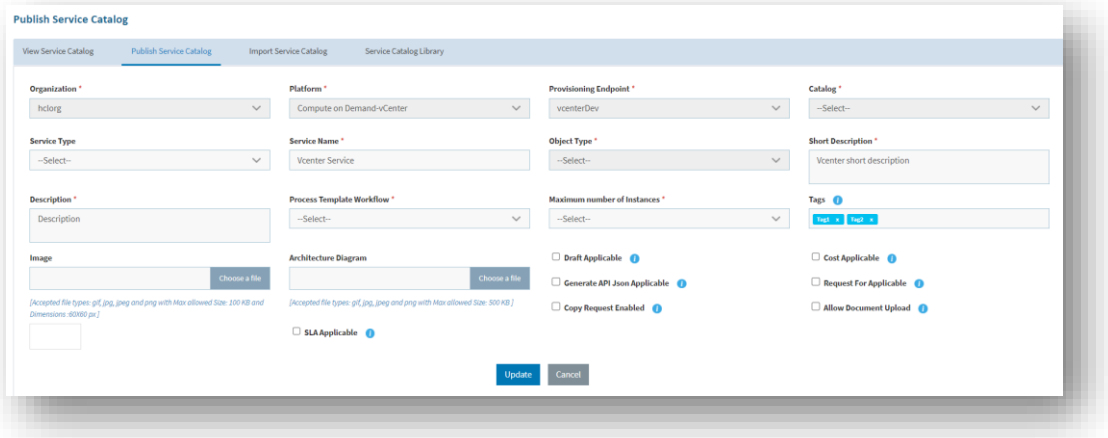


Figure 87 - Edit Public Service Catalog (Cont.)

10. A success message appears:

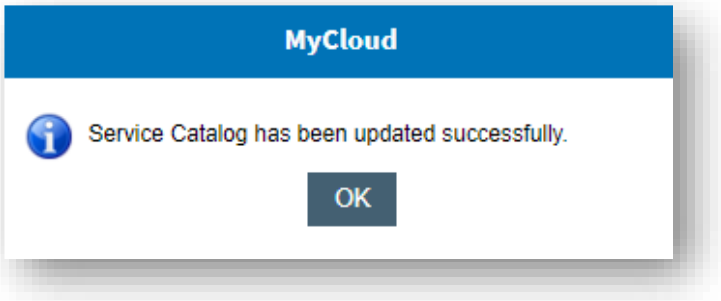


Figure 88 - Edit Catalog Confirmation Message

1.5.3.2.4 Publish Service Catalog Export/Import

Export:

To export a service catalog, provider needs to go select **Organization**, **Platform**, and **Endpoint** as per the mandatory check and click on export icon under the **Action** column.

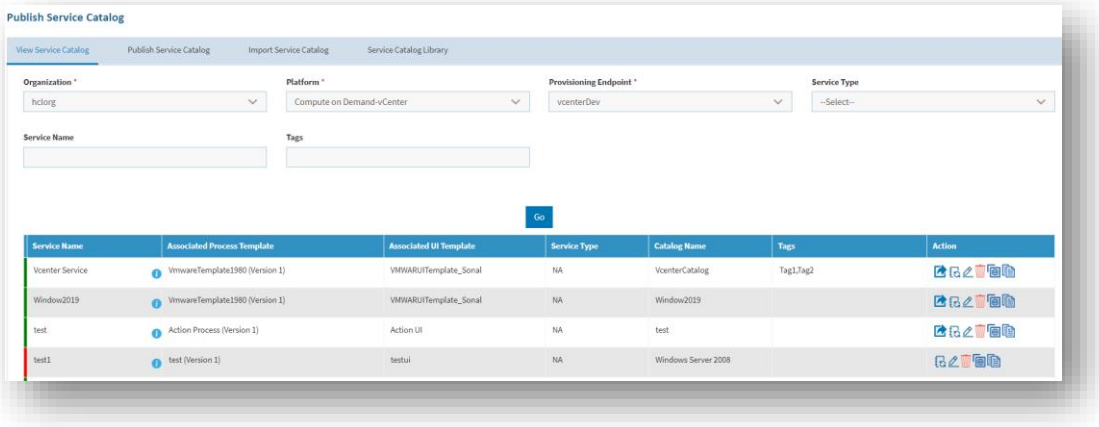


Figure 89 – Publish Service Catalog Export

Import:

To import a service catalog, select the **Import Service Catalog** tab in the **Publish Service Catalog** screen and perform the following steps:

1. Upload File
    - Provide the preliminary information (**Organization**, **Platform**, **Provisioning Endpoint**, and **Upload File**) that is mandatory. If not provided, then it would trigger a validation message.

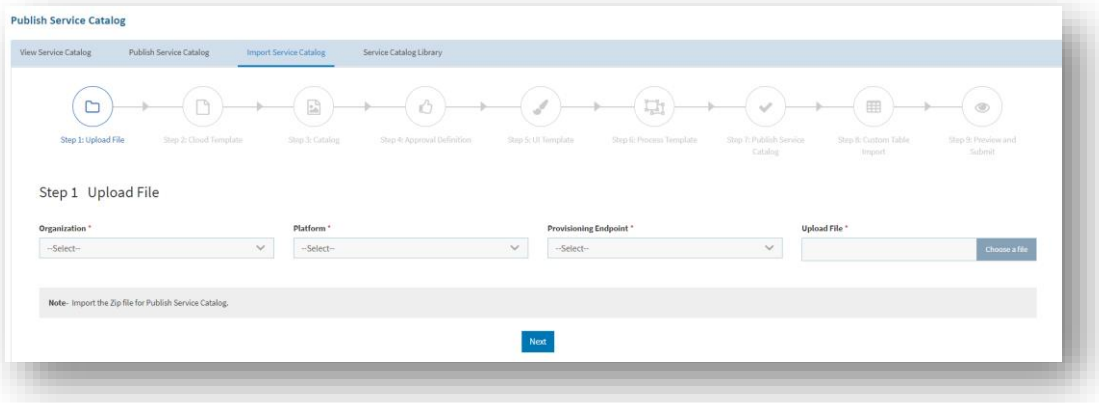
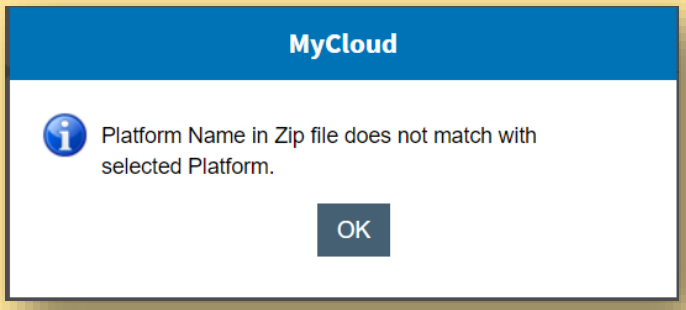


Figure 90 – Publish Service Catalog Import

While Importing JSON template, region must be mapped with the selected end point region. Failing this, results to a validation message as shown in the figure below:



If Object Type does not exist in current environment as per the imported Zip File, then it will show the validation message as Object Type does exist.

When we import the zip for all the steps then it checks inactive Resources for all the steps and if it is inactive they will show the validation message for the same to active or delete the element to proceed with import.

2. Cloud Template
   - **Public Cloud** – In the case of public cloud, if user selects the **Map & Overwrite** option as **Import Type**, it will overwrite the existing information from the selected zip file and map with same. But if the user selects the **Map Only** option, it only maps the template with existing information and do not overwrite to existing one.

     If no matches occur, then only '**NEW'** option appears, and it creates a new template as per the imported information.
   - **Private Cloud** – In the case of private cloud, the **NEW** option never appears and **Map & Overwrite** and **Map Only** options work similarly as in the case of Public Cloud.

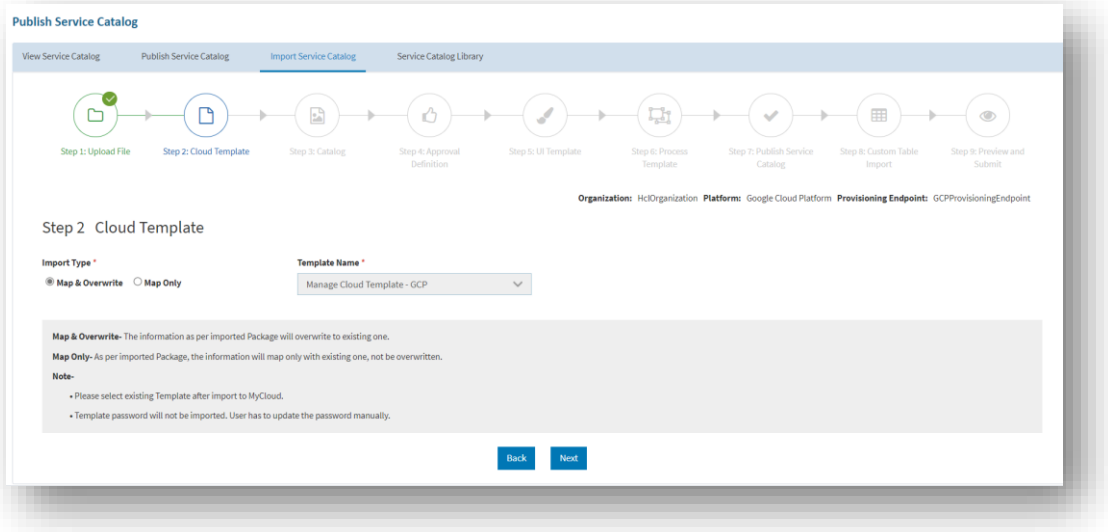


Figure 91 – Publish Service Catalog Import

3. Once the **Import Type** is specified, click **Next**.

4. **Catalog**: In the case of **Public Cloud,** it works as per previous. In the case of **Private Cloud,** it comes as per the cloud template selected in **step 1**. If the selected template is not mapped with catalog, it shows a validation message.
   - **Catalog Exists in the Current Environment** - It works as **step 1**. If the user selects a cloud template which is mapped with the catalog to be imported, then it comes as auto selected or is available in the dropdown to select the mapped catalog.
   - **Catalog does not exist in the Current Environment** - If catalog does not exist in the current environment, then it will be available for 'New' creation.

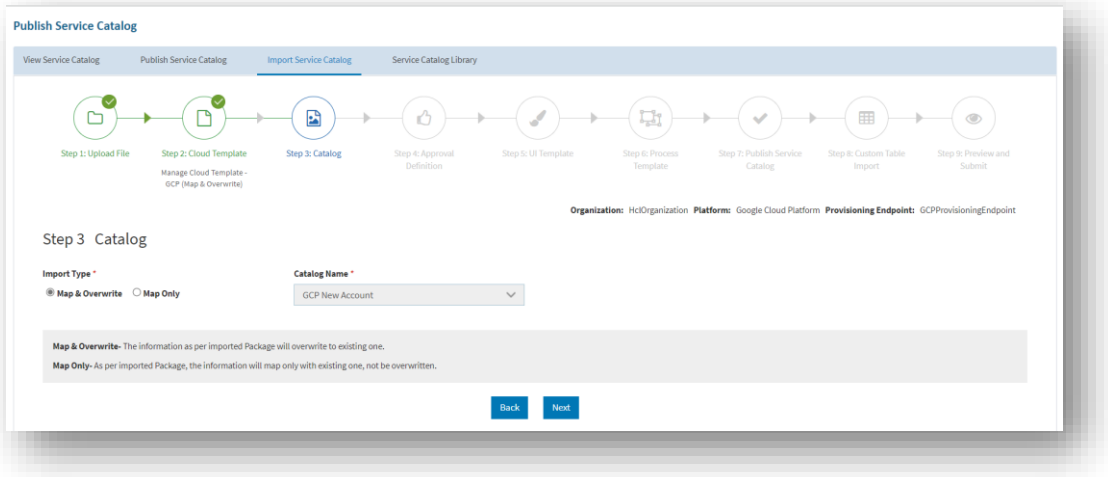


Figure 92 – Publish Service Catalog Import

5. Click **Next**.
6. Approval Definition
   - **Static Approval** – If static approval is mapped with the Imported info, then it follows the same process as for Public Cloud explained in **step 2** for **NEW**, **Map & Overwrite** and **Map Only** options.
   - **Dynamic Approval** – If user has imported the dynamic rule, the drop down works as static but there will be a list of static templates which are tagged to dynamic rule and appear with same action as **New**, **Map & Overwrite** and **Map only** options.

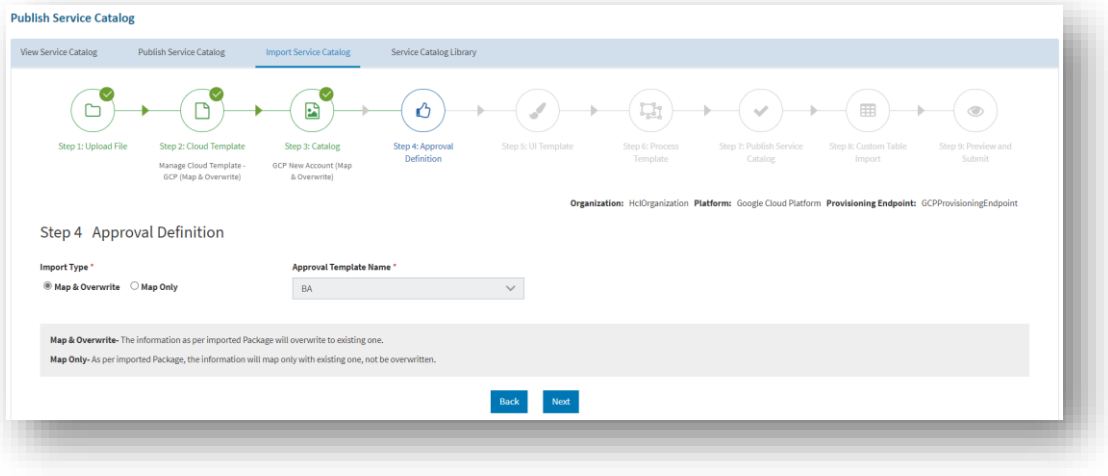


Figure 93 – Publish Service Catalog Import

7. Click **Next**.
8. **UI Template**: The UI Template Import works similarly as for Public Cloud explained in ***step-2*** as per the given action.

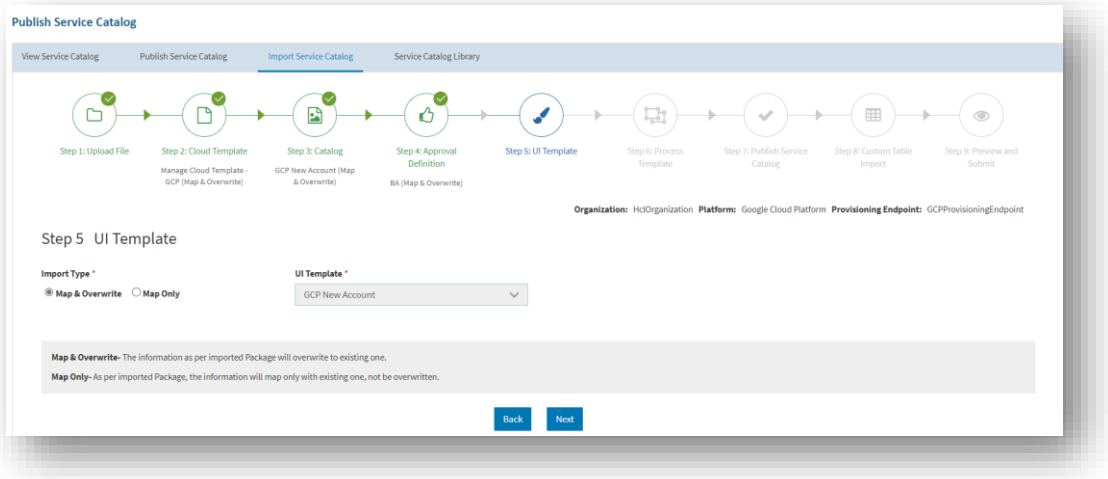


Figure 94 – Publish Service Catalog Import

If provider user exports any publish service catalog, then all existing custom JS functions using in the ui should also be export with existing UI JSON (manageuitemplate.json). Similarly, if provider user imports any publish service catalog, then all custom JS functions (using in the mapped UI) should also be import.

9. Process Template
    - **Process templates** – It works similarly as for Public Cloud explained in **step-2** for the imported information.
    - This screen also contains the ITSM information which has been imported in **step 1** with the same action as **NEW**, **Map & Overwrite** and **Map Only**.

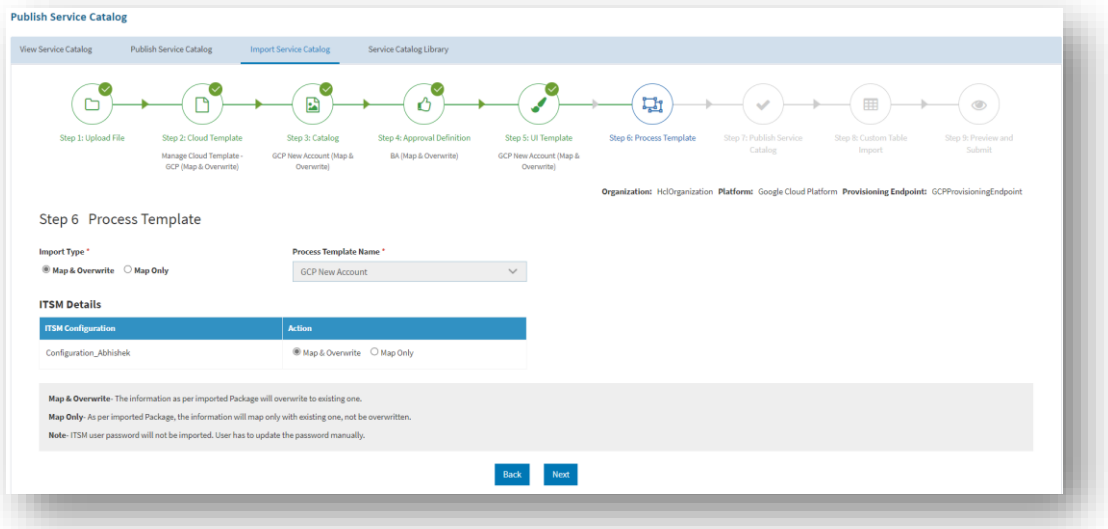


Figure 95 – Publish Service Catalog Import

10. Click **Next**.
11. Publish Service Catalog
    - It publishes the service catalog information for the imported information and works as for public cloud explained in **Step-2**.

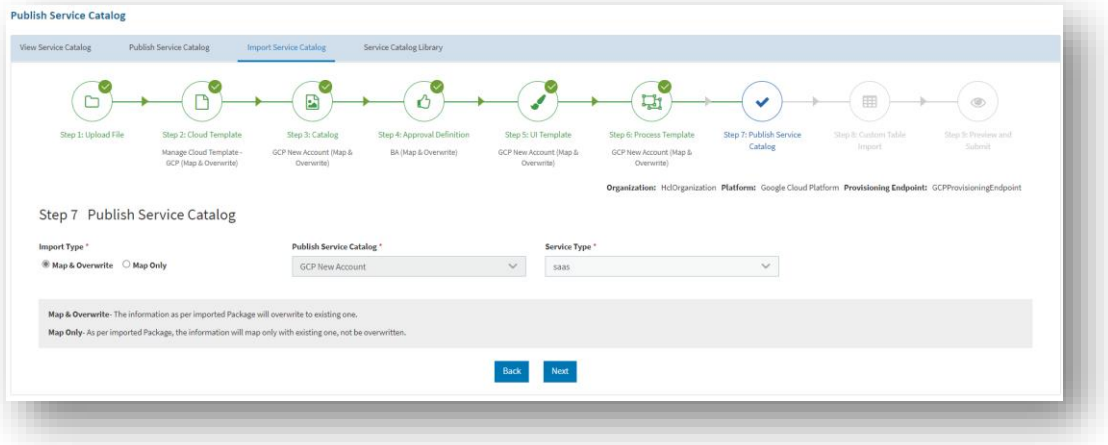


Figure 96 – Publish Service Catalog Import

12. Click **Next**.

13. Preview and Submit

- This screen displays the summary of all the steps which the user have selected. There is a **Submit** button to process all the information related to Imported and Selected information.
- If any error occurs while processing, it shows an error message on the same **Summary** page.

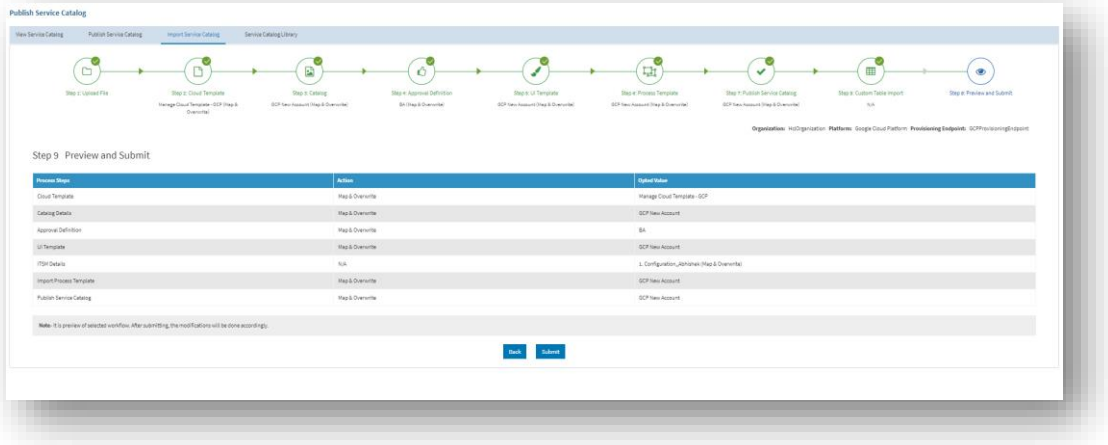


Figure 97 – Preview and Submit

14. Click **Submit**. The system confirms the action. Click **OK** to confirm.

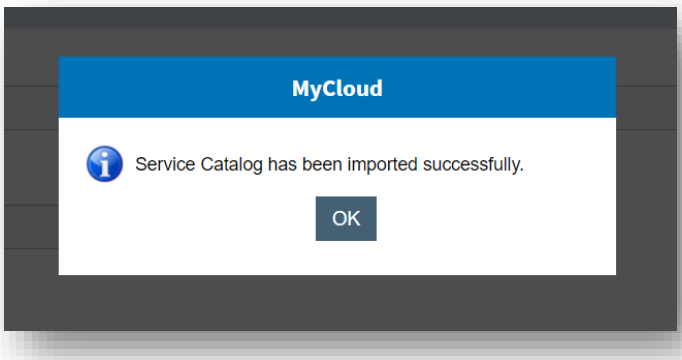


Figure 98 – Confirmation Message

1.5.3.2.5 Delete Published Catalog

To delete a service catalog, provider needs to follow the below steps:

1. On **View Service Catalog** pane, click Delete ( ).

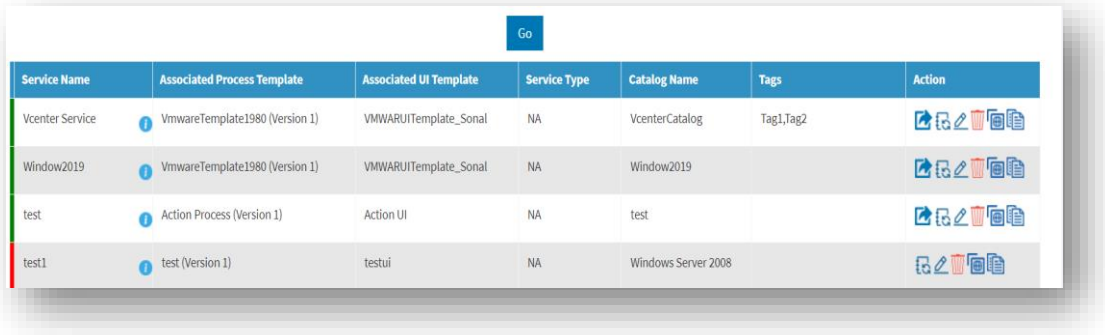


Figure 99 - Delete Published Service Catalog

2. When prompted to confirm, click **OK**.

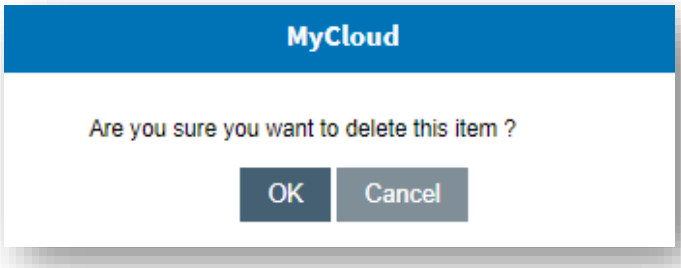


Figure 100 - Delete Published Service Catalog

3. A success message box appears:

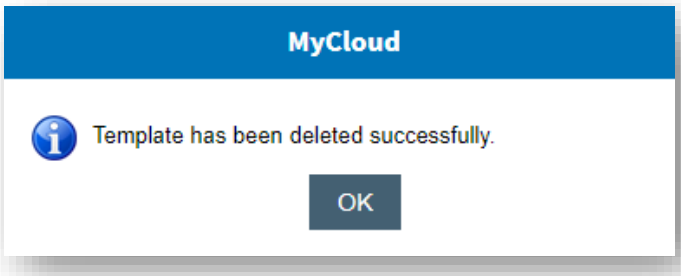


Figure 101 - Confirmation Message

1.5.3.2.6 Copy Service Catalog To Other Region

To Copy a service catalog for Other Region, provider needs to follow the below steps:

1. On **View Service Catalog** pane, click Copy to Other Region ( ).

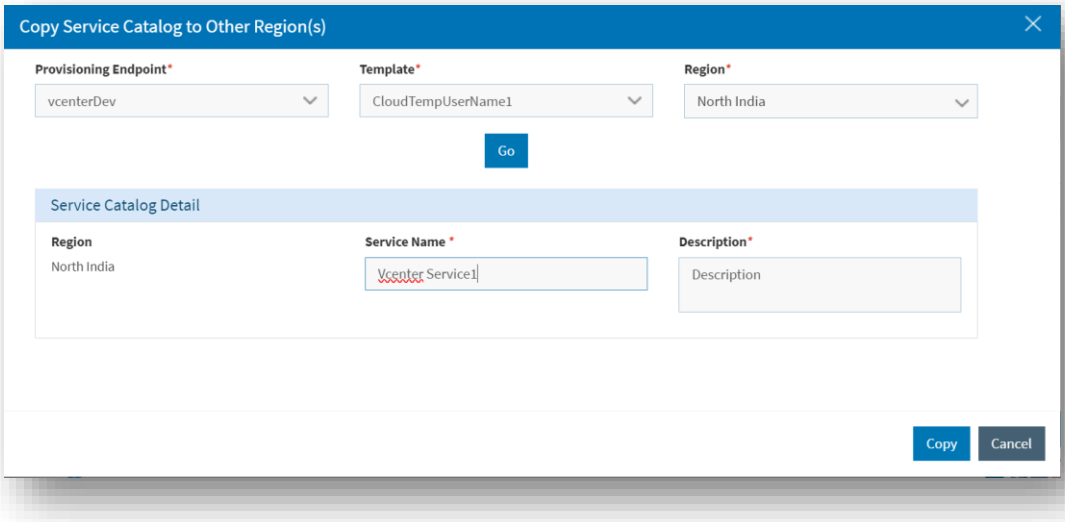


Figure 102 – Copy Service Catalog to Other Region

2. When prompted to confirm, click **OK**.

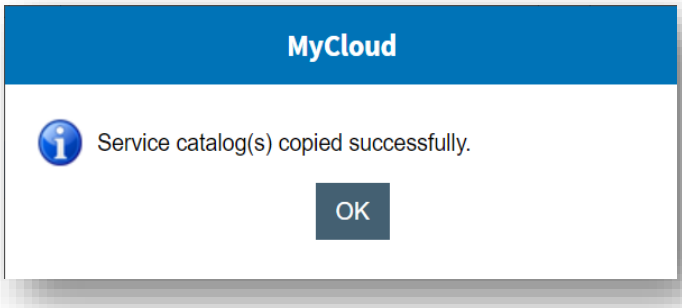


Figure 103 – Success Message

1.5.3.2.7 Copy Service Catalog to Other Endpoint

To copy a service catalog, provider needs to follow the below steps:

1. On **View Service Catalog** pane, click Copy to Other Endpoint ( ).

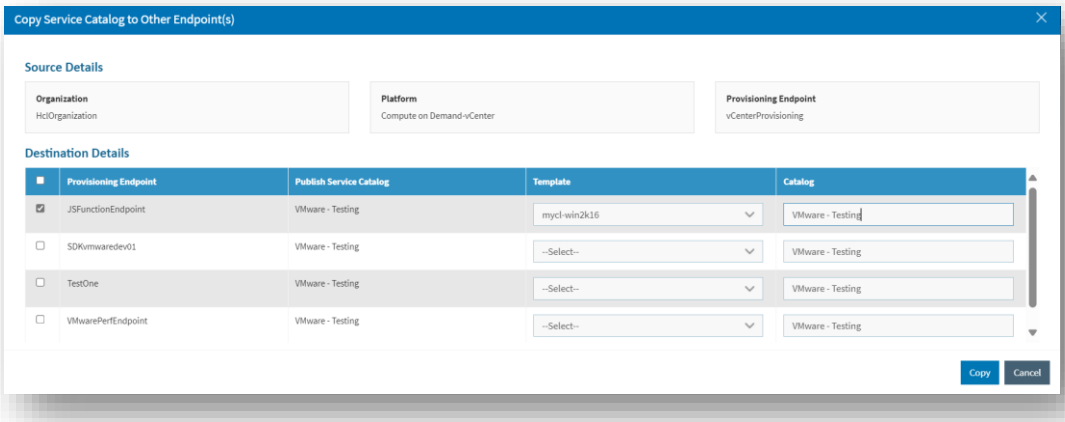


Figure 104 - Copy Published Service Catalog to Other Endpoint

2. When prompted to confirm, click **OK**.

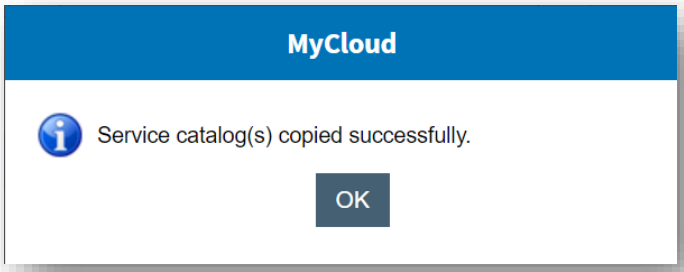


Figure 105 – Success Message

1.5.3.2.8 Service Catalog Library

This section lists out of box catalog library to import.

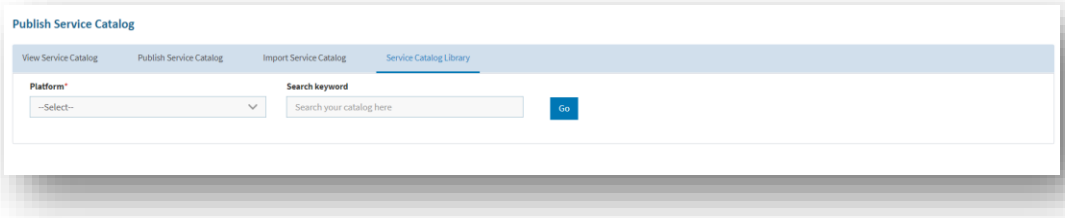


Figure 106 - Service Catalog Library

Select a platform and click GO button. List of existing Service Catalog Library show in bellow :-

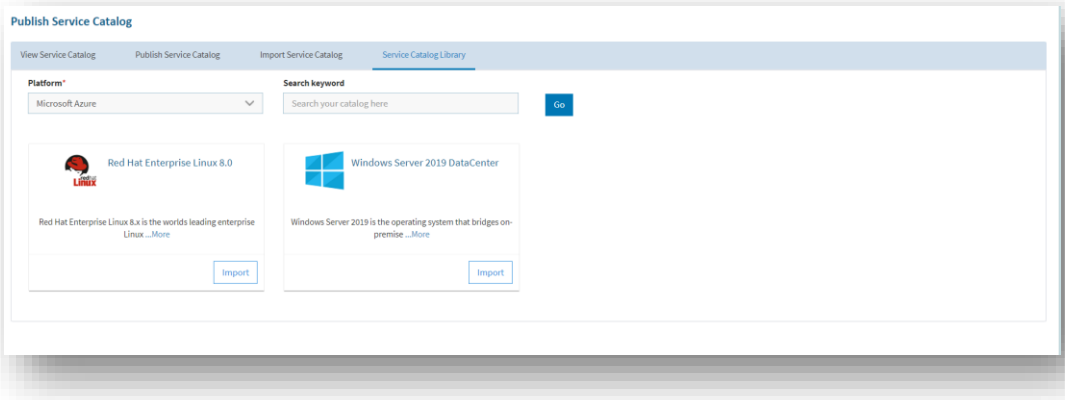


Figure 107 – List of Existing Service Catalog Library

Select a Service Catalog Library and click on Import Button the page redirect to Import Service Catalog Tab.

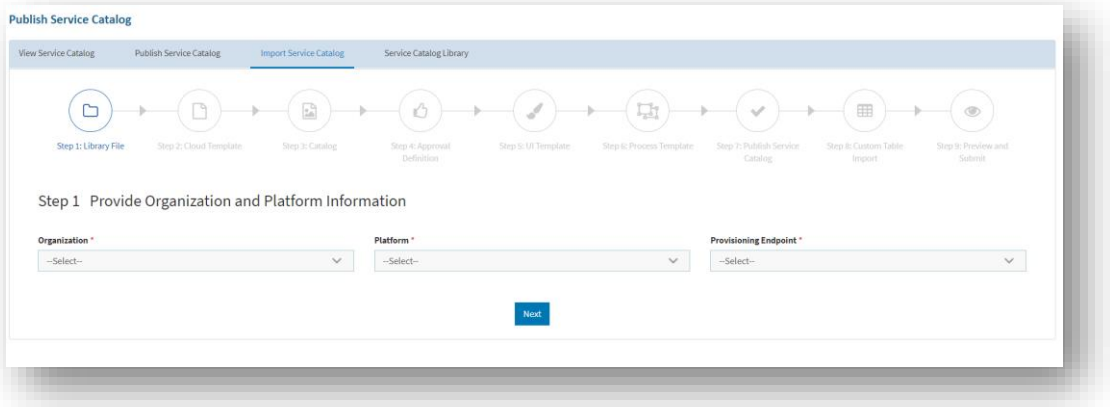


Figure 108 – Import Service Catalog by Existing Service Catalog Library

Select an Organization, Platform automatic selected as per existing Service Catalog Library and Select a Provisioning Endpoint then click **Next** button.

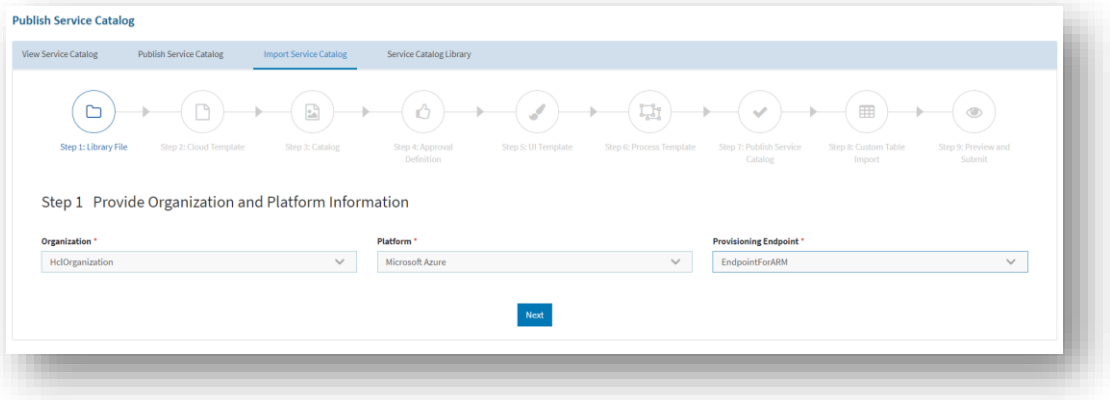


Figure 109 – Import Service Catalog by Existing Service Catalog Library

After that Refer to 1.5.3.2.4 Section for Import Service Catalog.

1.5.3.3 Publish Action

Through this module, a provider user can map action and respective process workflow templates to an object type like Virtual Machine (VM), load balancer, RDS etc. For an organization. The workflow will be triggered or executed after an action request is placed on an object (once it gets provisioned).

1.5.3.3.1 Create Publish Action

To add a publish action in MyCloud, provider user needs to follow the below steps:

1. Click **Publish Action** under Service Catalog menu and then click Create Publish Action.

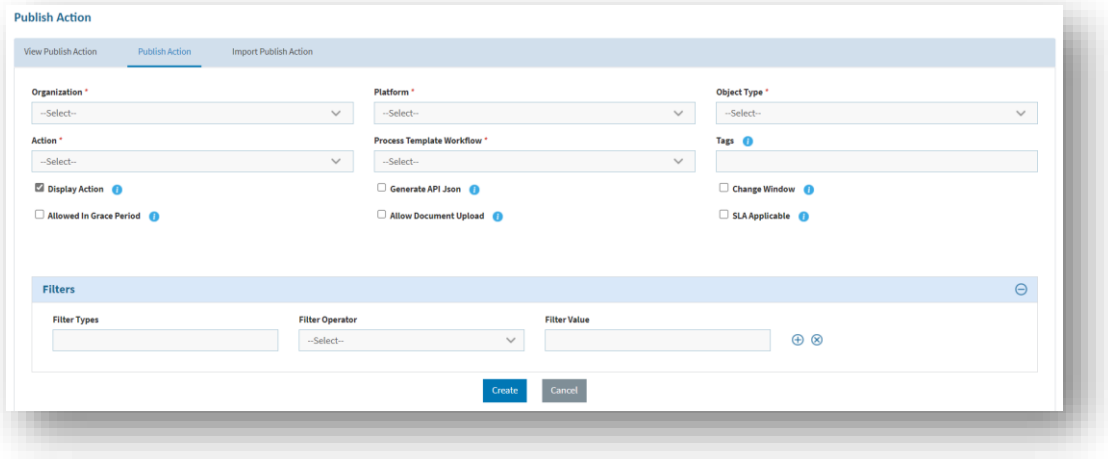


Figure 110 - Publish Action

2. Select Organization.
3. Select **Platform**.
4. Select Object Type.
5. Select **Action**.
6. Select Process Template Workflow.
7. Enter **Tags**.
8. Select Filter Type, Filter Operators, Filter Value for rule filters.
9. To map the publish action to selected object type, click **Create**.
10. A success message box appears.

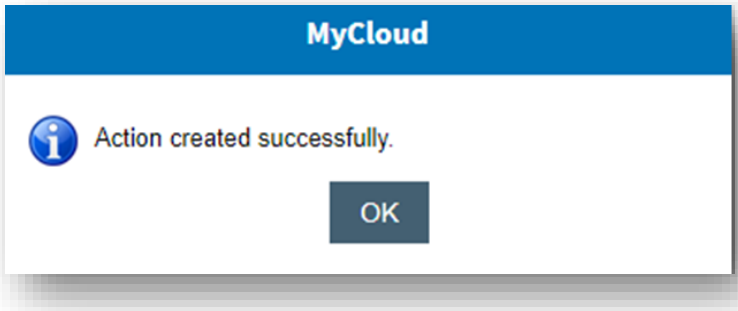


Figure 111 - Add Publish Action (Cont.)

All the fields marked with asterisk (*) are mandatory. Click reset to discard changes.

11. The **Publish Action** is created and appears.

1.5.3.3.2 View Publish Action

This section lists out all the object actions that have been created by provider user.

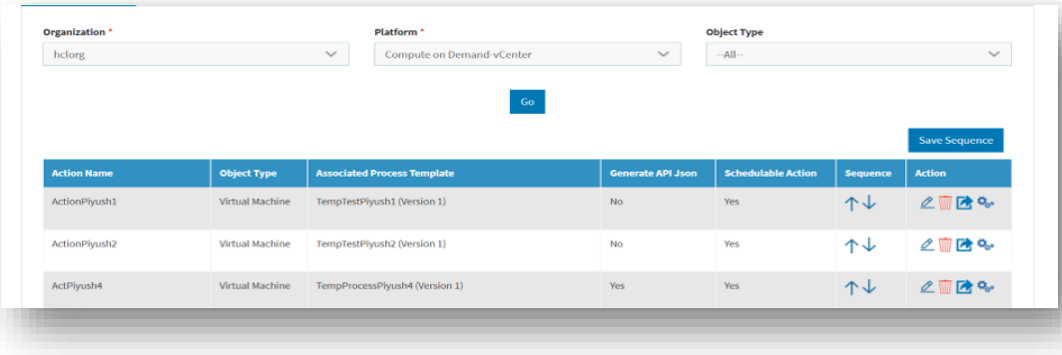


Figure 112 - View Action

It also comprises of following actions:

- **Edit** ( ): To modify the details of existing object actions
- **Delete** ( ): To delete the actions of existing objects
- **Configure Conflict Action** ( ): To configure the conflict action setttings.
- **Configure Export Action** ( ): To Export the Publish action with all depended resources .

1.5.3.3.3 Edit Published Action

To edit/ modify an assigned publish action in MyCloud, provider user needs to follow the below steps:

1. On the Publish Action screen, click View Publish Action.
2. The Edit Pane appears as shown In **Figure 113 – Edit Action (Cont.).**
3. Click **Edit** ( ) against the **Publish Action** to be edited. It redirects the user to **Create Publish Action** pane.
4. Modify the details as desired and click **Update**.

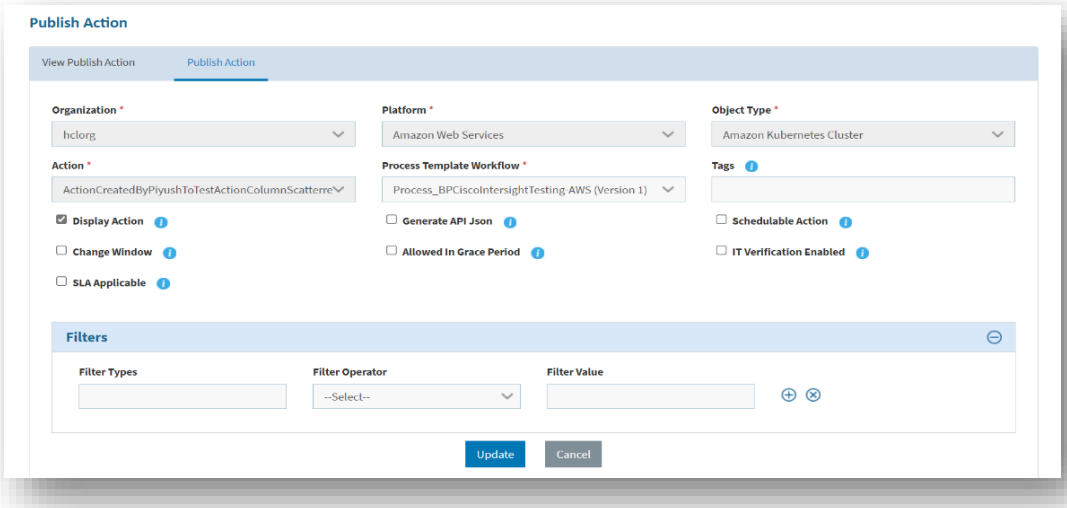


Figure 113 - Edit Action (Cont.)

5. A success message box appears.

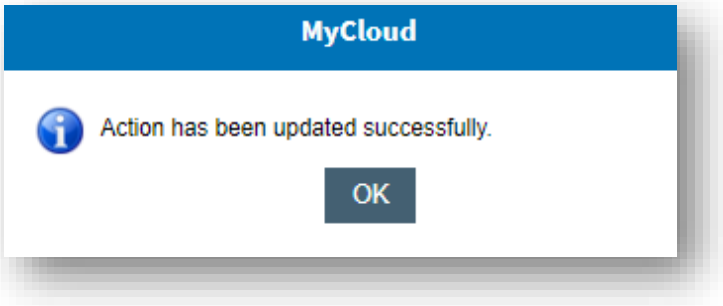


Figure 114 - Confirmation Message

1.5.3.3.4 Delete Action

To delete a publish action from MyCloud, provider user needs to follow the below steps:

1. On the **View Publish Action** pane, click **Delete** ( ).

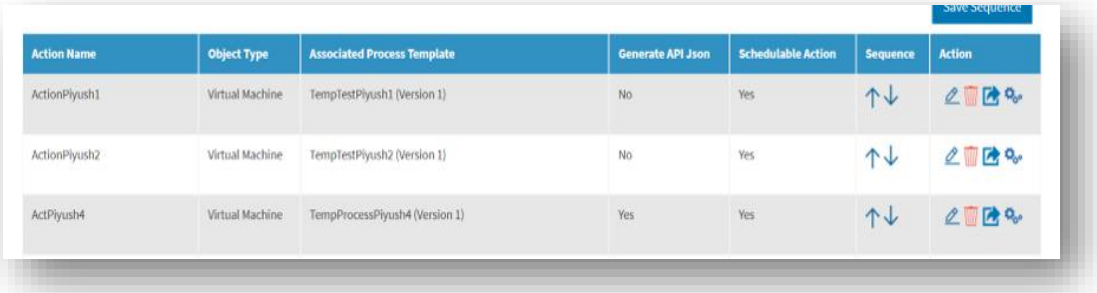


Figure 115 - Delete Object Action

2. When prompted to confirm, click **OK**.

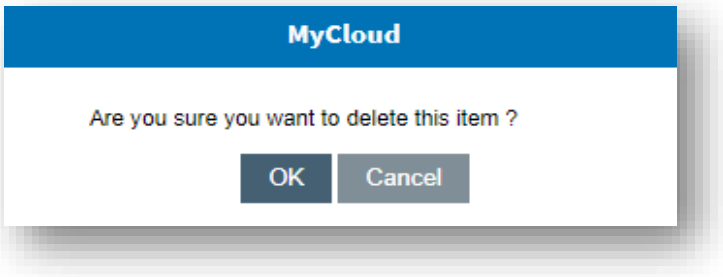


Figure 116 - Delete Object Action

3. A success message box appears.

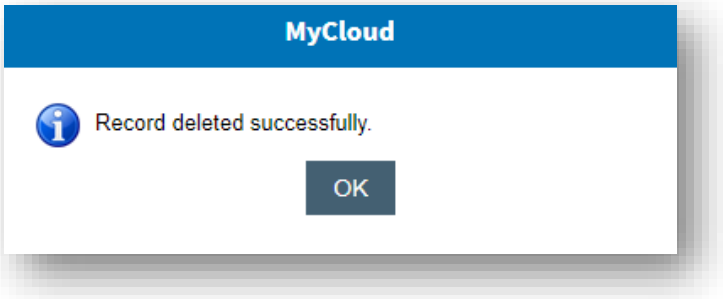


Figure 117 - Confirmation Message

4. Click **OK**.

1.5.3.3.5 Export Publish Action

To Export a published action from MyCloud, provider user needs to follow the below steps:

1. On the **View Publish Action** pane, select organization and platform click Export **Action** ( ).

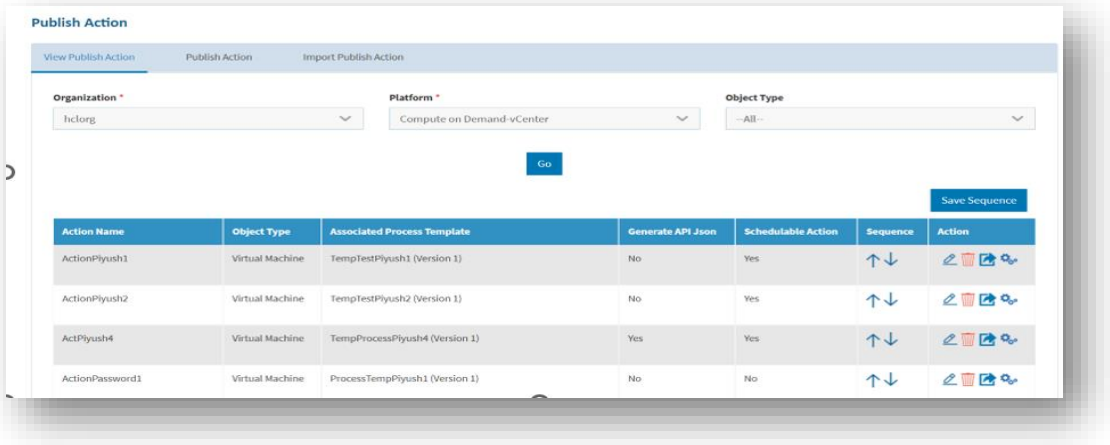


Figure 118 – Publish Action

2. After clicking the export button open custom table export window.

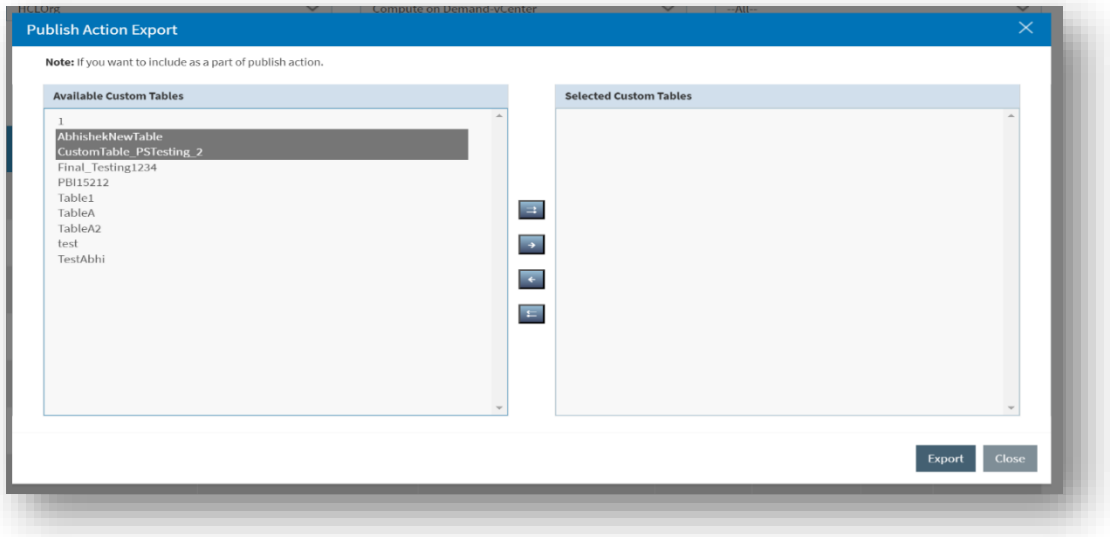


Figure 119 – Publish Action Export

3. In the Export Window If you need to select the table name available in the custom table section, move to the selected custom tables section, and after that, click the export button to export a JSON zip folder.

1.5.3.3.6 Configure Conflict Action

To configure an object action from MyCloud, provider user needs to follow the below steps:

1. On the View Publish Action pane, click Configure Conflict Action ( ).

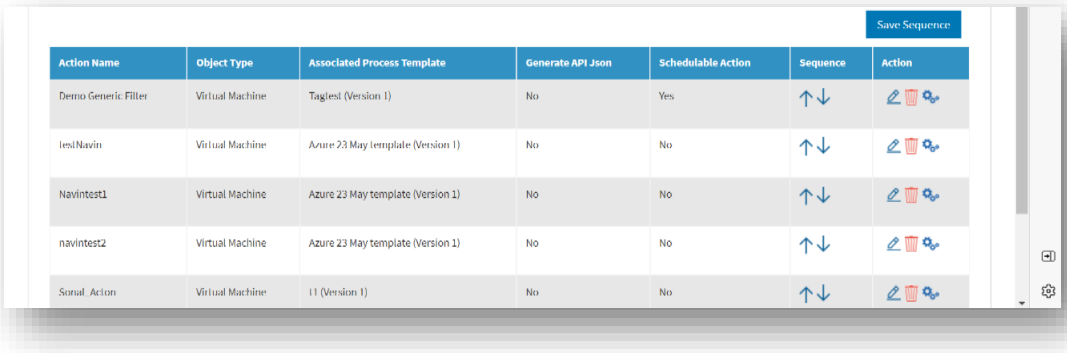


Figure 120 - Configure Conflict Action

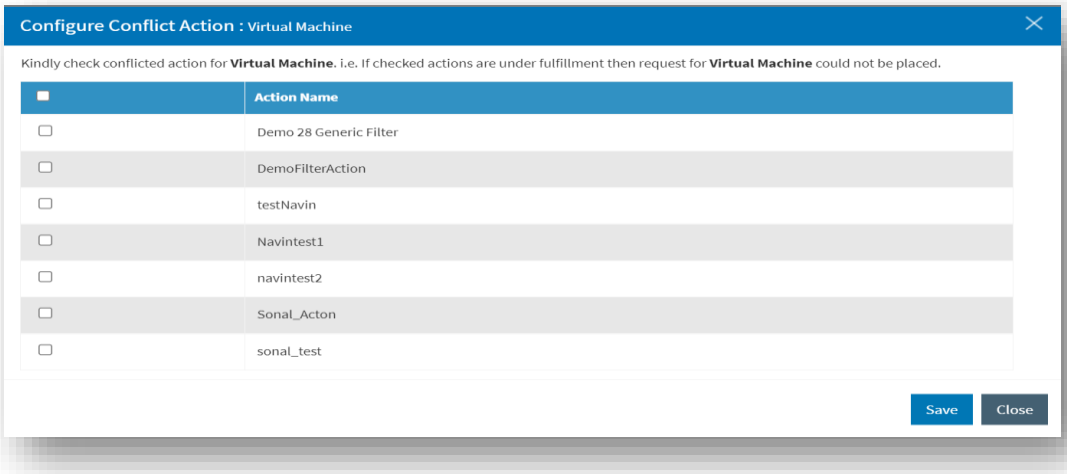


Figure 121 - Configure Conflict Action (Cont.)

2. Click on the checkbox and **Save** to configure the **Conflict Action**.

1.5.3.3.7 Import Publish Action

- **New**: When imported, key information does not exist in the current environment based on required parameters such as platform, provider, object type, etc. It will create a new entry for the ongoing step as per the selected Zip file.
- **Map & Overwrite**: When imported information already exists in the current environment, it will appear, and on selection, it will overwrite the existing information from the selected Zip file.
- **Map Only**: When imported information already exists in the current environment, it will appear, and on selection, it will map with the existing information and not overwrite the existing one.

To Import a published action from MyCloud, provider user needs to follow the below steps:

Step- 1 - Upload File: User need to select preliminary information that is mandatory if not then it would trigger a validation message. As mentioned below:

a. Organization: Select the organization where you need to import the published action.
b. Platform: Select the platform where you need to import the published action.
c. Upload: Click the upload file button and choose import zip file for import.

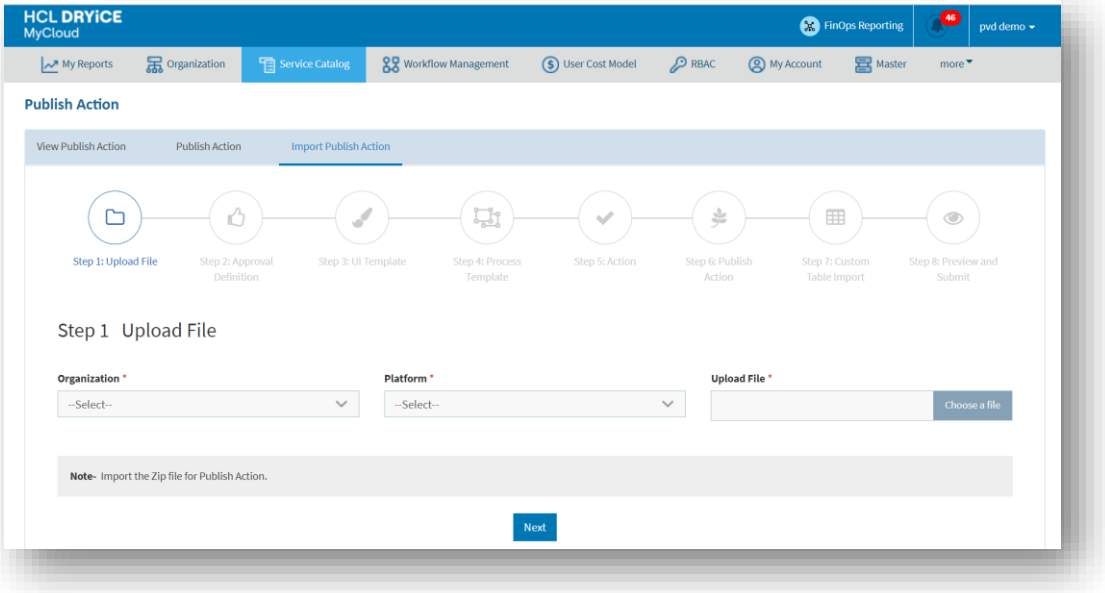


Figure 122 – Upload File

If a user does not select an organization or platform, and clicks the next button. then the below alert message will be shown.

- **When organization is not selected**

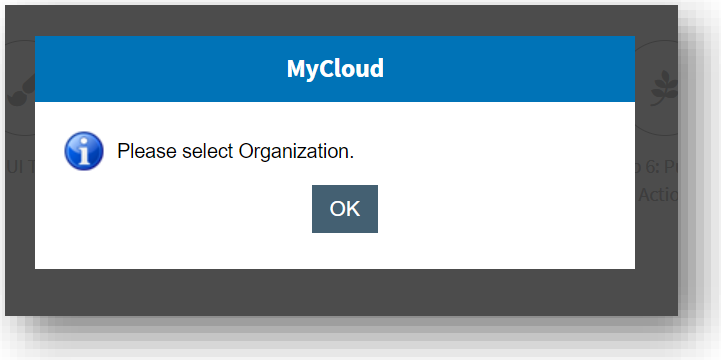


Figure 123 - Organization Not Selected

- **When Platform is not selected**

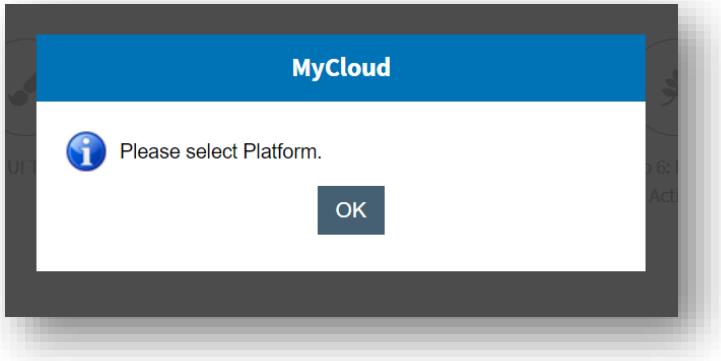


Figure 124 - Platform Not Selected

- **When uploaded file is not a Zip folder**

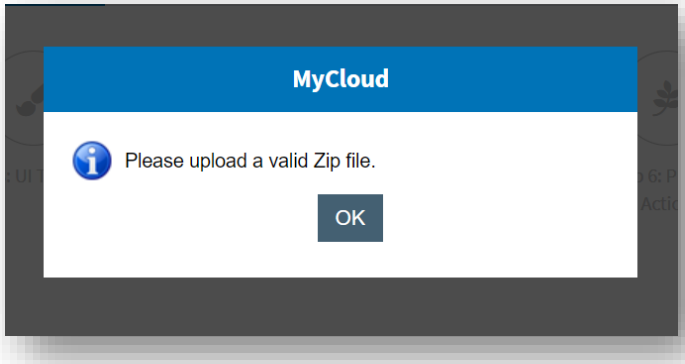


Figure 125 – Invalid Zip File

When an invalid zip file that is imported and is not mapped to the correct platform, the alert message shown below appears.

- **When a zip file without valid content is uploaded**.

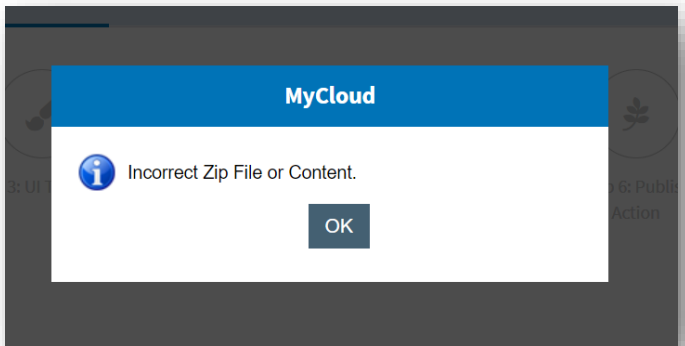


Figure 126 – Incorrect Zip File/Content

- **When selected platform and uploading zip file platform are not the same.**

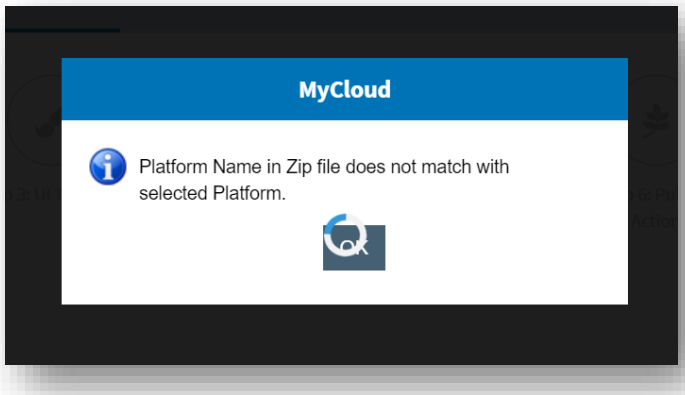


Figure 127 – Platform Name does Not Match

Click on **Next** to validate that the object type exists for which the publish action import is being processed and it will show the validation message for the same.

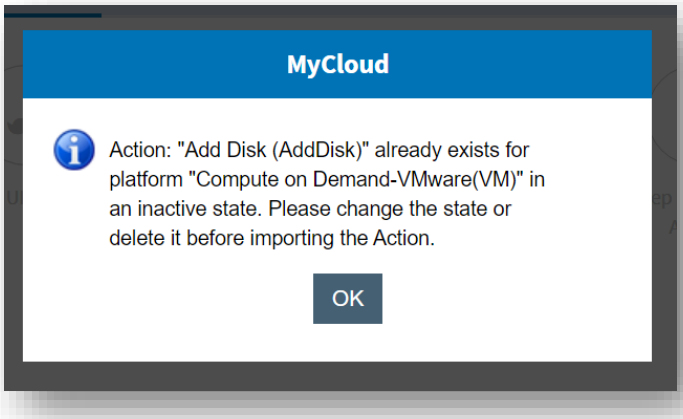


Figure 128 – Validation Message

Step 2 – Approval Definition

- **Approval Exists in the Current Environment**: If Approval exists in the current environment, Map Only and Map & Overwrite options will available.
- **Approval does not Exist in the Current Environment:** If Approval does not exist in the current environment, then it will be available for "NEW" creation.
- **Approval does not Exist in the Current Environment:** If approval does not exists in the imported file then it will skip the approval definition step and it goes to UI template step.

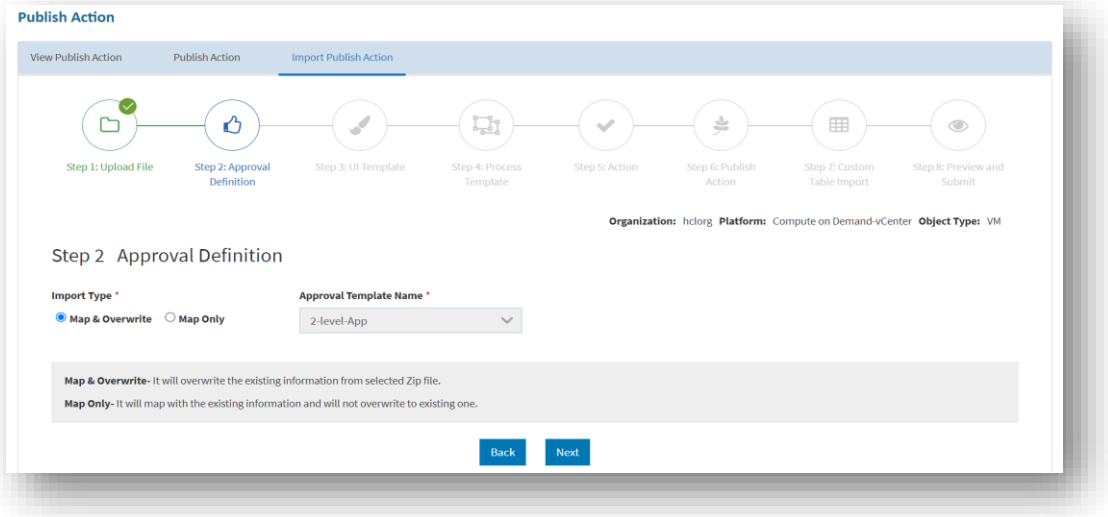


Figure 129 - Approval Definition

Step 3 – UI Template

- **UI Template Exists in the Current Environment:** If UI Template exists in the current environment, Map Only and Map & Overwrite only options are available.
- **UI Template does not Exist in the Current Environment**: If Approval does not exist in the current environment, then it will be available for "NEW" creation.

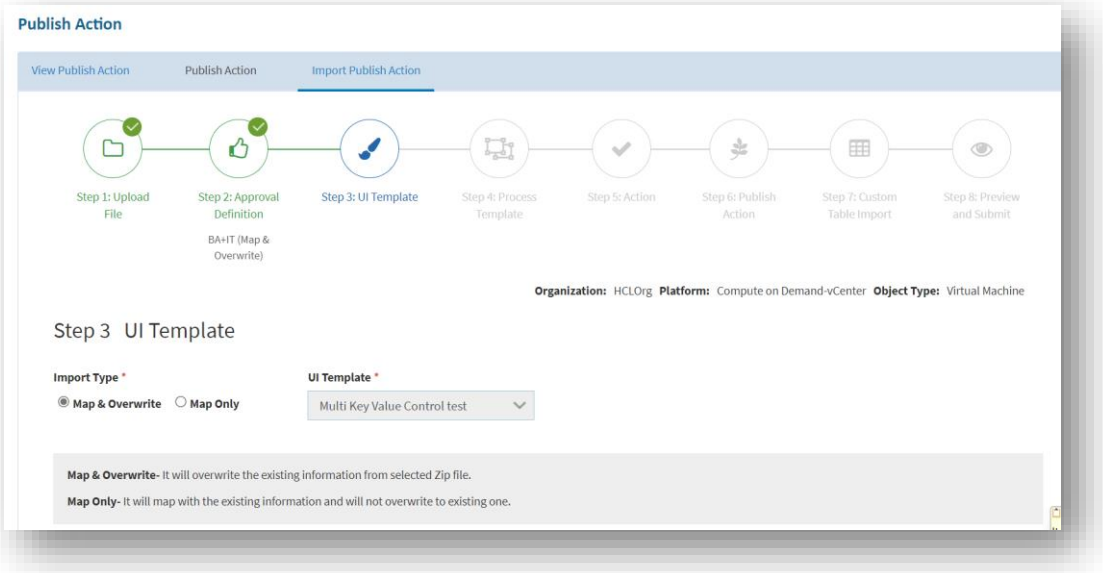


Figure 130 – UI Template

Step 4 – Process Template

- **Process Template Exists in the Current Environment**: If Process template exists in the current environment, map and Map & Overwrite only are options.
- **Process Template does not Exist in the Current Environment**: If Process template does not exist in the current environment, then it will be available for "NEW" creation.
- Process Template map ITSM information that has been imported with the same actions as NEW, Map & Overwrite, and Map Only option.

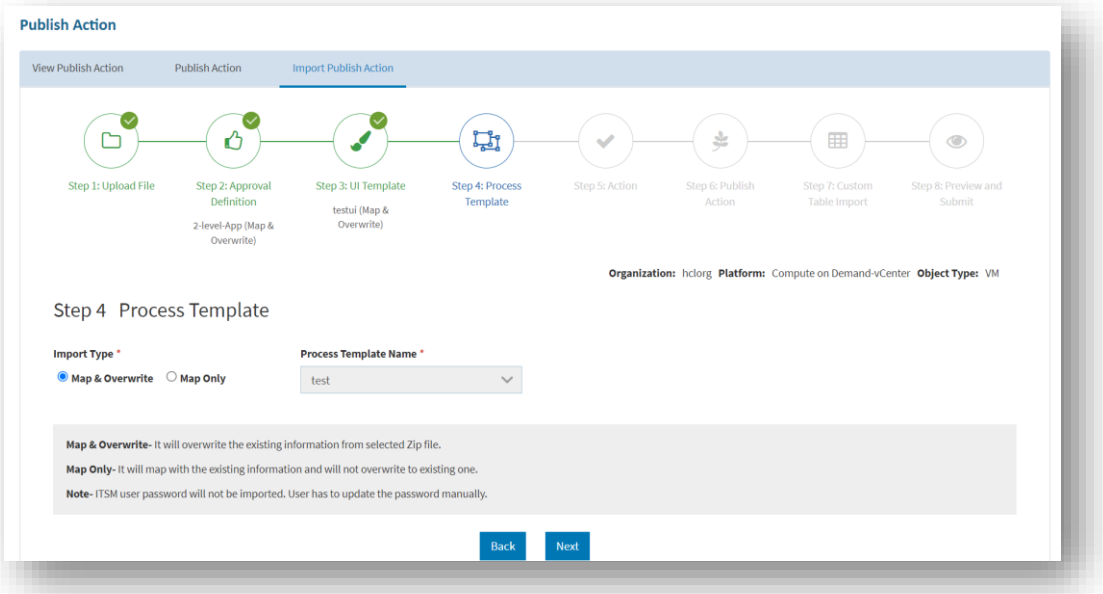


Figure 131 – Process Template

Step 5 – Action

- **Action Exists in the Current Environment**: If Action exists in the current environment, Map Only Option will appear.

- **Action does not Exist in the Current Environment**: If Action does not exist in the current environment, then it will be available for "NEW" creation.

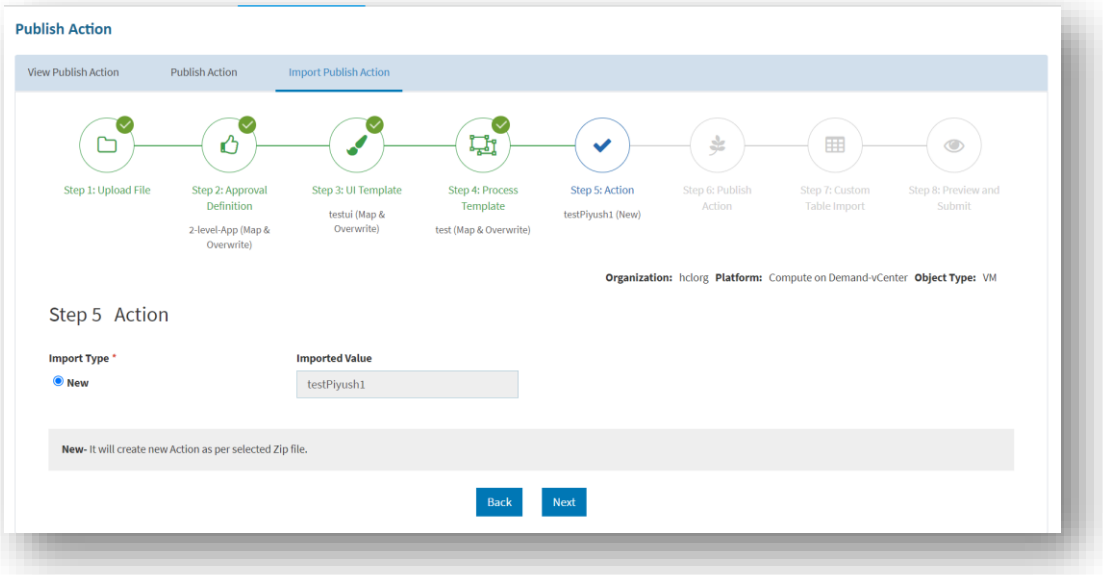


Figure 132 - Action

Step 6 - Publish Action

- **Publish Action Exists in the Current Environment**: If Publish Action exists in the current environment, Map Only and Map & Overwrite only are options.
- **Publish Action does not Exist in the Current Environment**: If Publish Action does not exist in the current environment, then it will be available for "NEW" creation.

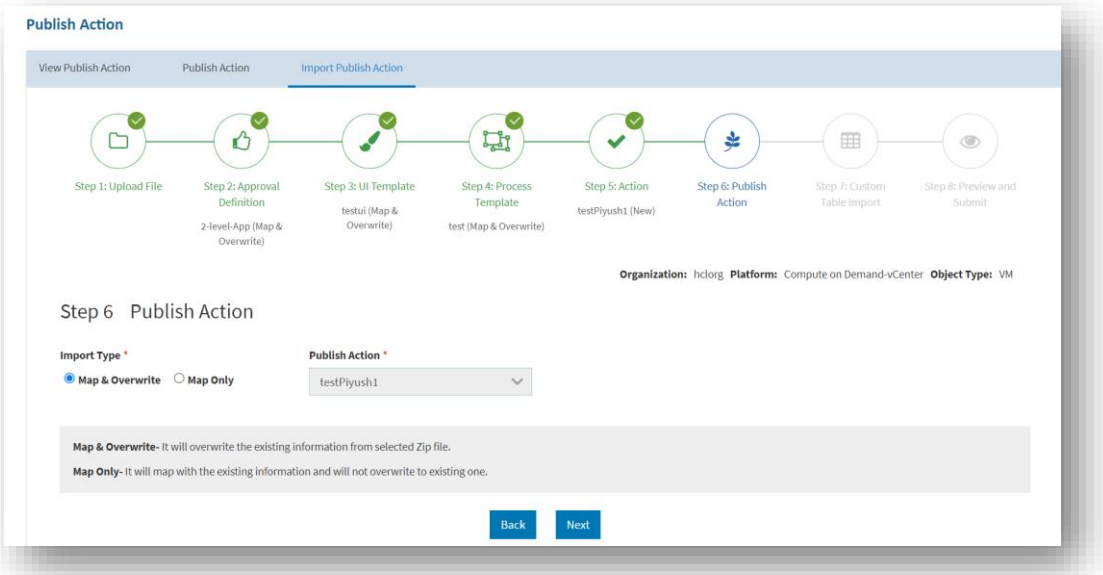


Figure 133 – Publish Action

Step 7 - Upload Custom Table

Upload custom table is being populated with the table name which has been imported and it checks the existence in current environment.

- New – It does not exist in the current environment

- Existing – Already exists in the current environment

Once user will click upload table and next it will upload the selected row only one by one and update the status.

- Not Initiated – Initial sate once no action has performed
- Success – It will process successfully
- Fail – when error occurred

Every time it will drop the existing table from current environment and recreate the table.

If Imported Zip does not have table or it has been exported without custom table, then in this case it will automatically skip the upload custom table step and goes to summary page of the import screen.

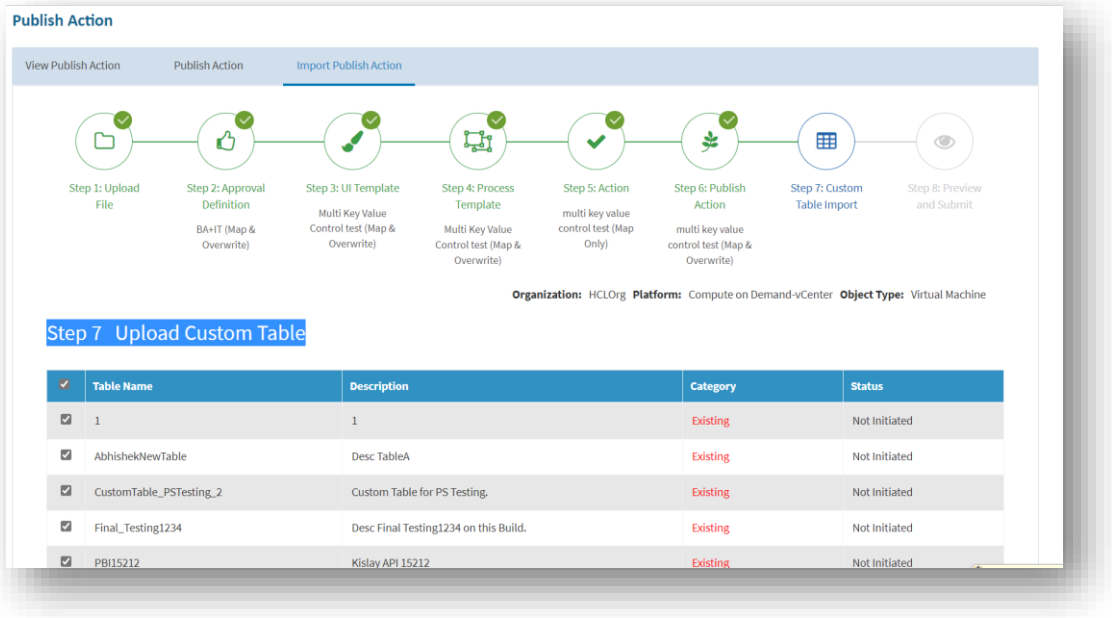


Figure 134 – Upload Custom Table

Step 8 – Preview and Summary

- This will be a summary of all the steps that you have selected. There will be a submit button to process all the information related to Imported and Selected information.
- If any error occurs while processing, it will show an error message and be on the same summary page.

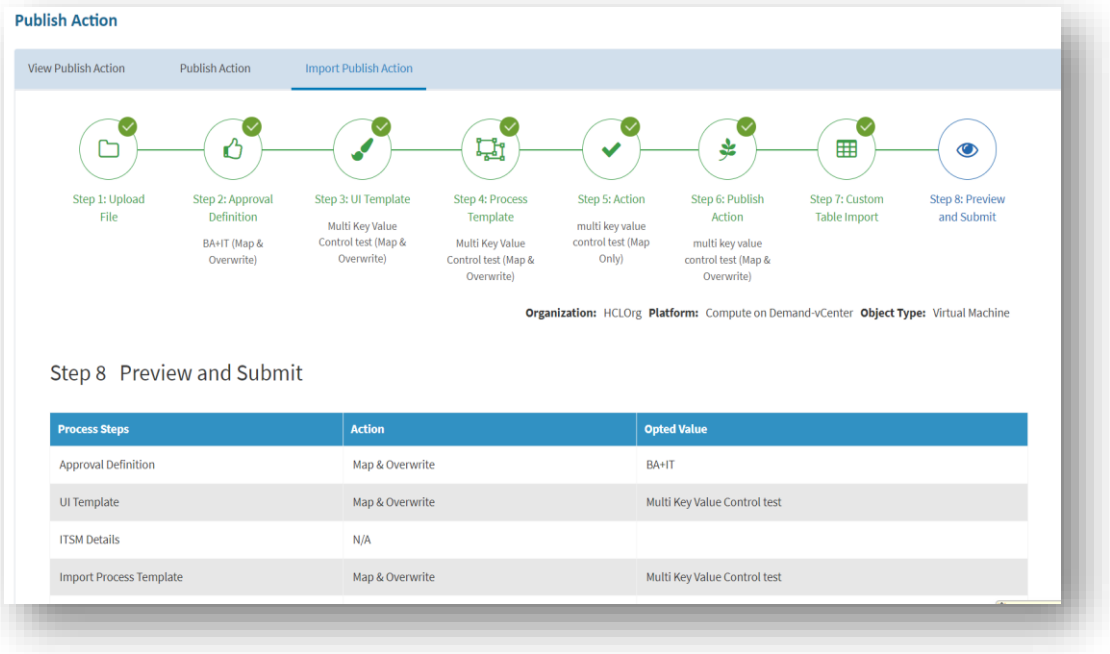


Figure 135 – Preview and Summary

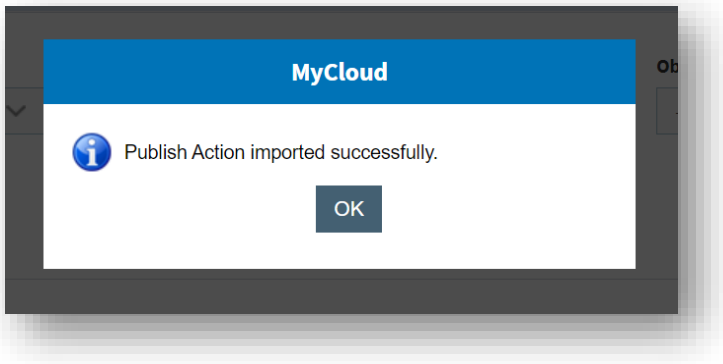


Figure 136 – Success Message

1.5.3.4 Manage Action

This section explains that how actions that are assigned to an object type in an organization, are managed through this module. This section has following options:

- Create Action
- View Action

1.5.3.4.1 Create Action

To create object actions in an organization, provider needs to follow the steps below:

1. On the Manage Action screen, click Create Action.

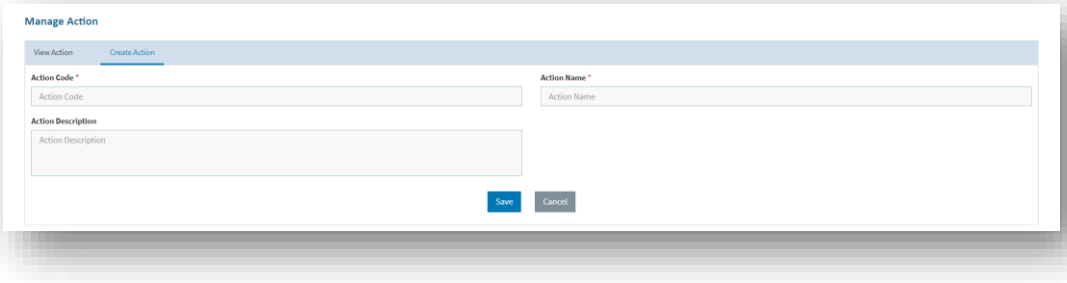


Figure 137 - Add Action

2. Refer the below table to understand the fields mentioned in the above figure:

Table 11 – Add Action

Fields	Description
Action Code	It is a code to initiate an action against the infrastructure resources
Action Name	Name the action as per the user
Action Description	Highlight the purpose of the action

3. Enter Action Code and Action Name.
4. Enter Action Description.
5. To add object action, click **Save**.
6. A success message box appears.

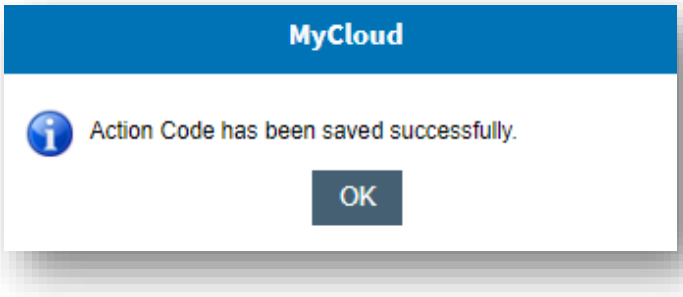


Figure 138 - Confirmation Message

All the fields given with asterisk (*) mark are mandatory.

1.5.3.4.2 View Action

This section lists out all the provider users that have been created by MyCloud Admin.

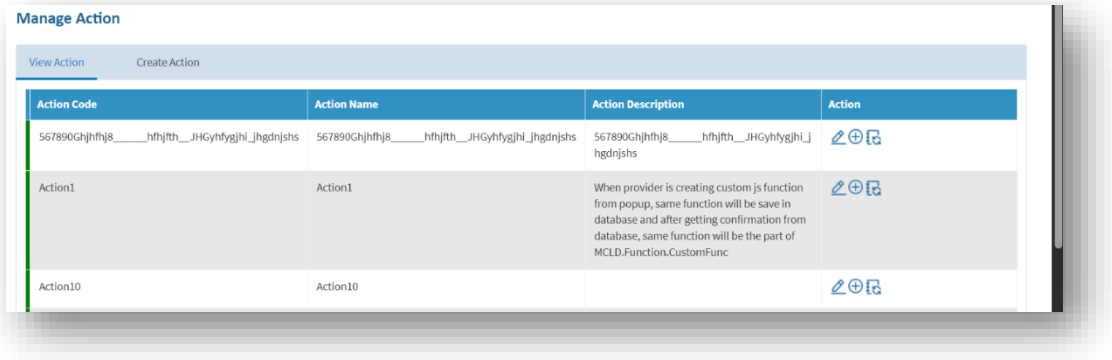


Figure 139 - Edit Action

It also comprises of following actions:

- **Edit** ( ): To edit/ modify the details of existing actions
- **Add** ( ): To add the actions
- **Change Status** ( ): To change the status of the action as active / inactive.

1.5.3.4.3 Edit Action

To edit/ modify existing actions in an organization, provider user needs to follow the below steps:

1. On the Action Master screen, click **View Action**.
2. Click **Edit** ( ).
3. Modify the details as desired and click **Update**.

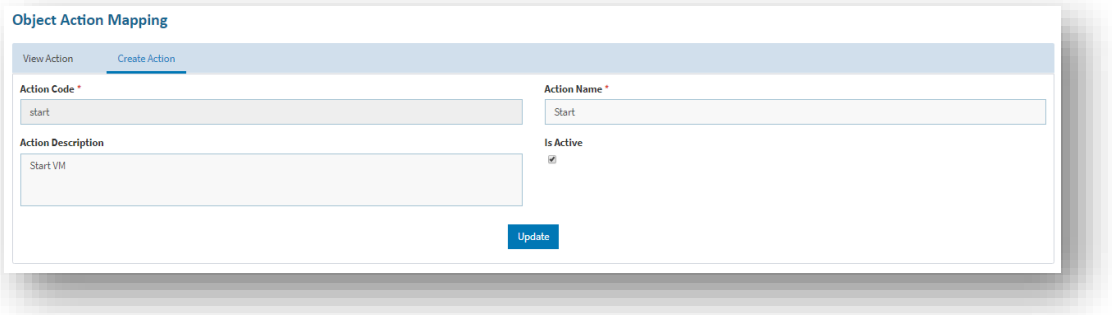


Figure 140 - Edit Action (Cont.)

All the fields marked with asterisk (*) are mandatory.

4. A success message box appears.

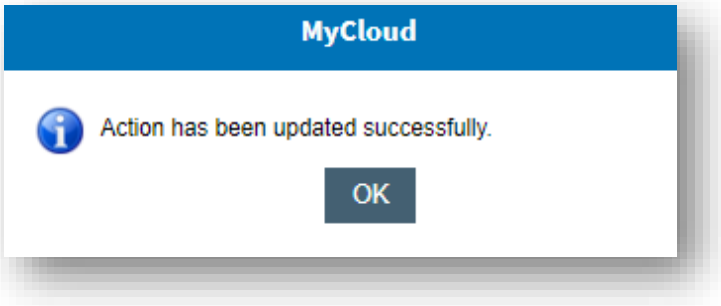


Figure 141 - Edit Action (Cont.)

1.5.3.4.4 Action Mapping

To map the actions to an object type in MyCloud, provider user needs to follow the below steps:

1. On the Object Action Mapping screen, click View Action.
2. Click **Add** (⊕) against the action code to be mapped to an object type.
3. It prompts the following window:

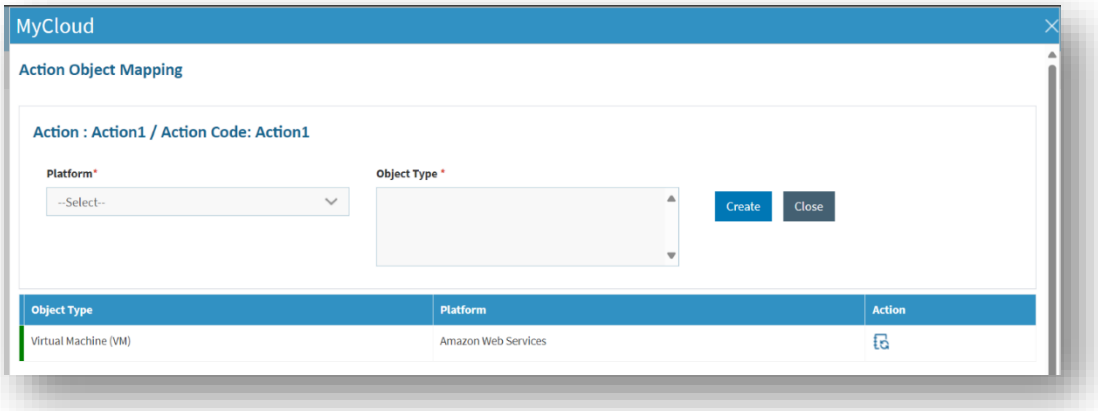


Figure 142 - Action Object Mapping (Cont.)

4. Select **Platform**.
5. The object type configured in a selected platform appears in the **Object Type** text box.
6. Select the **Object Type**.
7. Click **Create**.

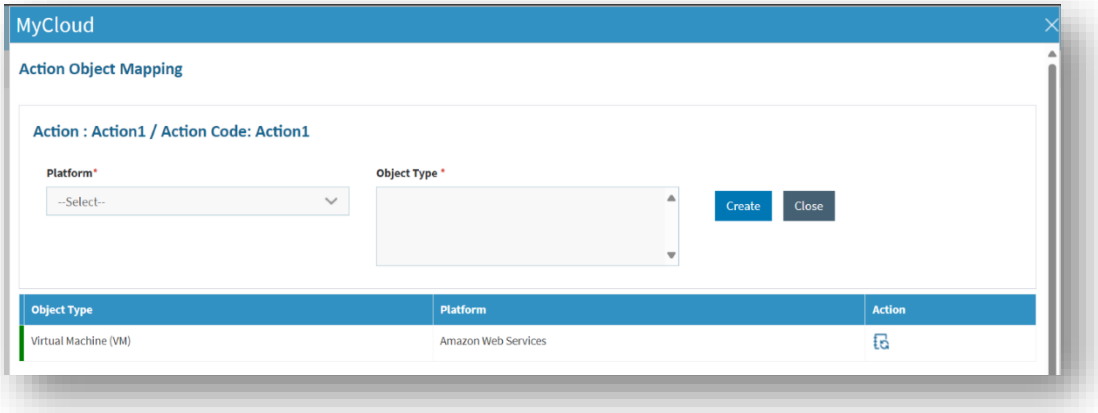


Figure 143 - Action Mapping (Cont.)

All the fields marked with asterisk (*) are mandatory.

8. A success message box appears.

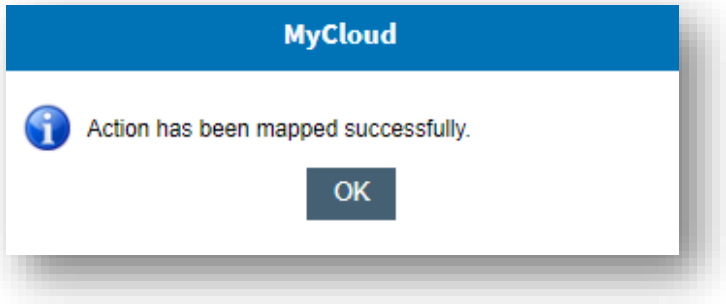


Figure 144 - Action Mapping (Cont.)

9. The action is mapped to an object type and appears in list of mapped action.

1.5.3.4.5 Change Status

To change the status of an action, provider user needs to follow the below steps:

1. On the Object Action Mapping screen, click View Action.
2. Click **Change Status** () against the action code to change the status from active to inactive and vice versa.

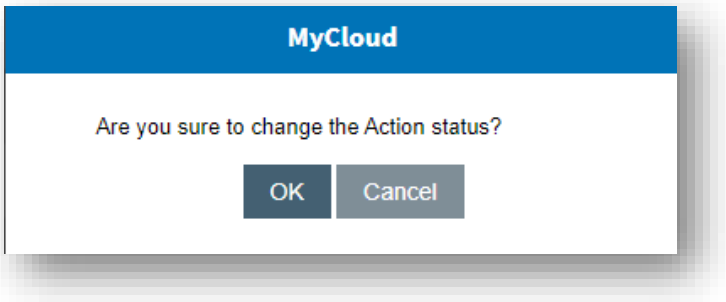


Figure 145 – Change Action Status

3. Click **OK** to change the status. A success message box appears.

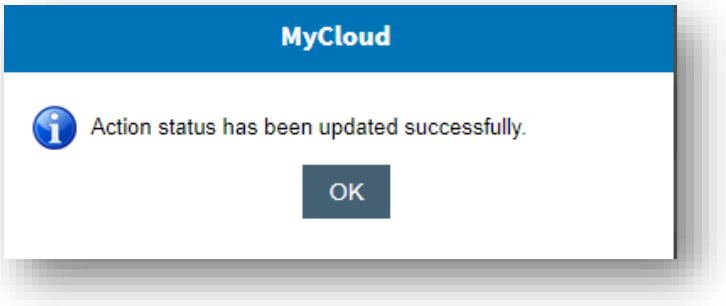


Figure 146 – Confirmation Message

1.5.4 Manage Billing Configuration

This section details out the steps to manage cloud billings.

1. On the main menu bar, click **Master** and then click **Manage Billing Configuration**.
2. The section has following options:

- Add Mapping
- View Mapping

1.5.4.1 Add Mapping

To add configuration of billing, provider user needs to follow the below steps:

1. On the Manage Billing Configuration screen, click Add Mapping.

Figure 147 - Add Mapping

2. Refer the below table to understand the fields mentioned in the above figure:

Table 12 - Add Mapping (Azure)

Fields	Description
Platform	The field lists down the cloud service providers
Enrolment ID	Signifies unique enrolment ID provided by Microsoft
Secret Key	To access account secret key is required associated with account
Currency	The field list down the available currencies i.e., INR, USD, EUR etc.

3. Select **Platform**. Enter details based on the platform selected.
4. Select **Subscriptions** (Endpoints).
5. Click **Save**.
6. A success message box appears as below:

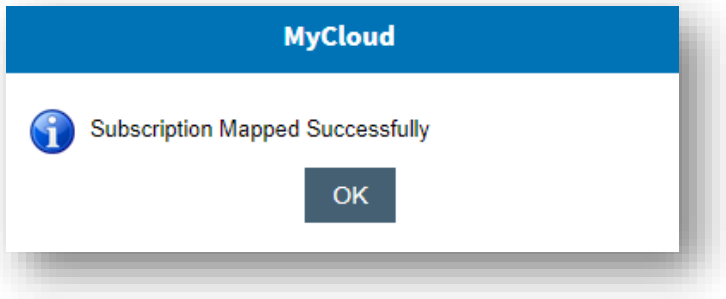


Figure 148 - Add Mapping(Cont.)

All the fields given with asterisk (*) mark are mandatory.

The mapping for the subscriptions is created and appears in the **View Mapping**.

1.5.4.2 View Mapping

This section lists out all the configurations that have been created by provider user.

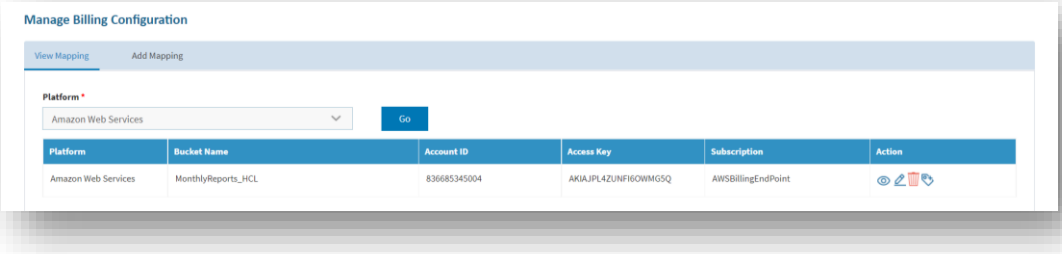


Figure 149 - View Mapping

It also comprises of following actions:

- **Edit** ( ): To Modify the details of Existing Mapping
- **View** ( ): To View the Details of Existing Mapping
- **Delete** ( ): To delete the Mappings
- **Map Tags** ( ): To do tags & column mapping (applicable only for amazon)

1.5.4.3 Edit Mapping

To edit/ modify the assigned mapping of subscription or configuration of billing access key, provider user needs to follow the below steps:

1. On Mange Billing Configuration screen, select View Mapping.
2. Select the Platform Type.
3. Click **Edit** ( ). Modify the desired details.
4. Click **Update** to save the changes.

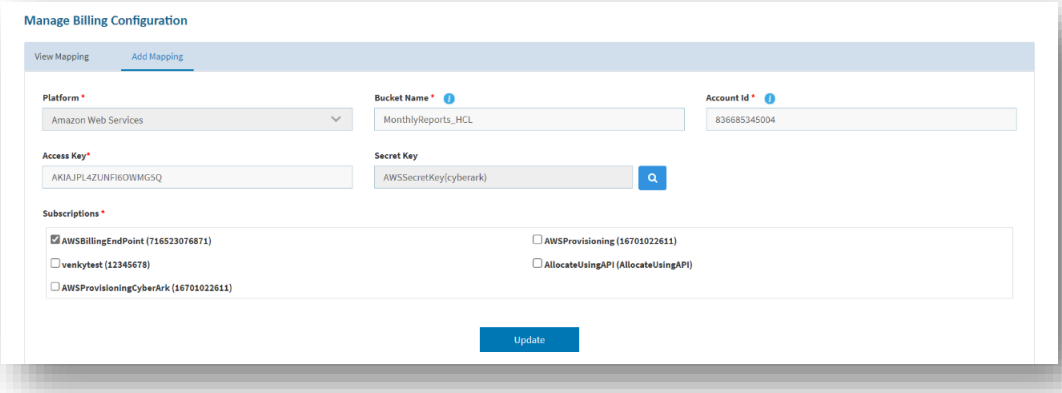


Figure 150 - Edit Mapping

5. A success message box appears.

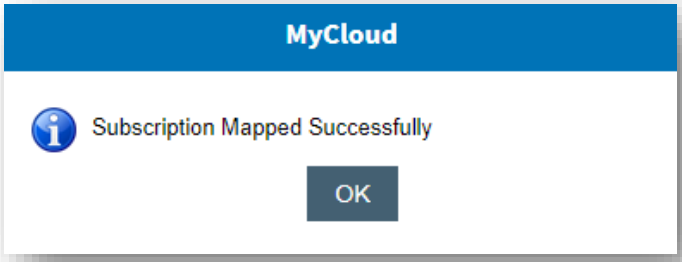


Figure 151 – Edit Mapping (Cont.)

All the fields marked with asterisk (*) are mandatory.

1.5.4.4 Delete Configuration

To delete a configuration from MyCloud environment, provider user needs to follow the below steps:

1. On View Mapping pane, select the Platform Type.
2. Click **Delete** ( ) against desired configuration.

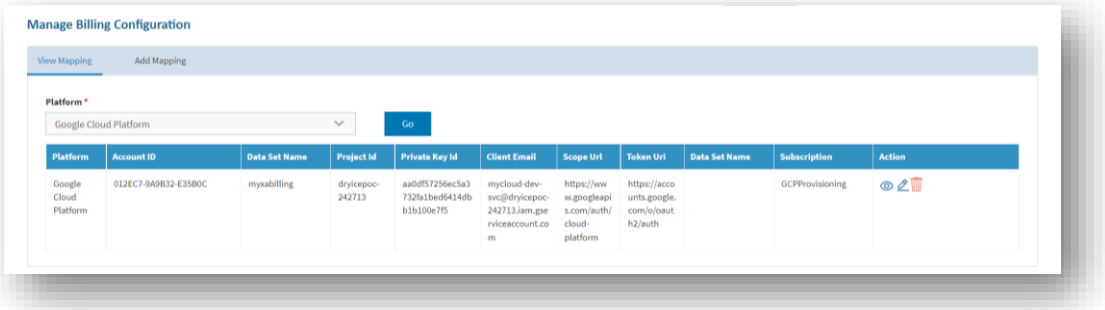


Figure 152 – Delete Mapping

3. When prompted to confirm, click **OK**.

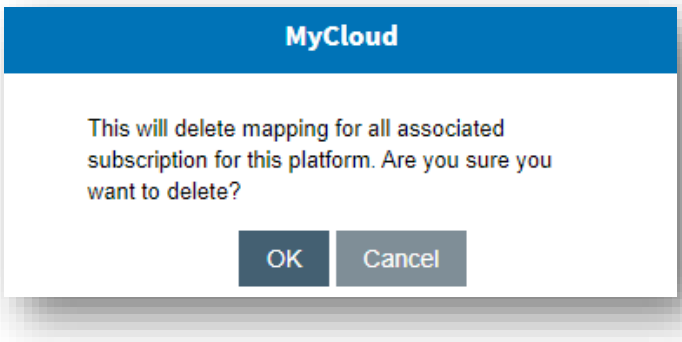


Figure 153 – Delete Mapping (Cont.)

4. A success message box appears.

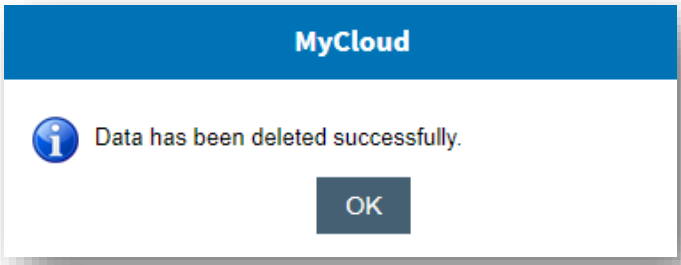


Figure 154 - Delete Mapping (Cont.)

1.5.4.5 View Configuration

To view the configuration of amazon cloud, follow the steps below:

1. On View Mapping pane, under Action, click on View Configuration.

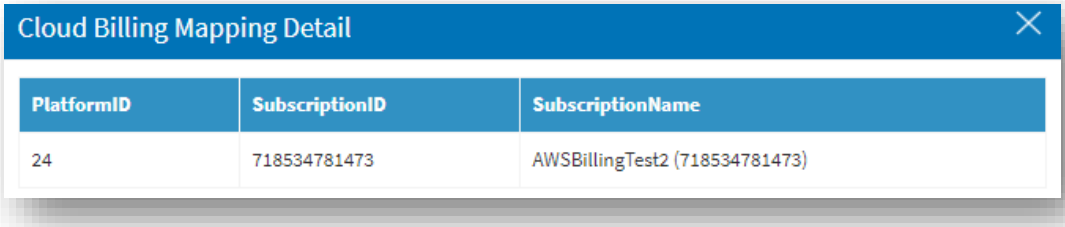


Figure 155 - View Mapping

2. A pop-up window with **Configuration** details like **PlatformID**, **SubscriptionID** & **SubscriptionName** appears as above.

1.5.4.6 View Tag Mapping

To edit/modify the mapping of Amazon cloud, follow the steps below:

1. On **View Mapping** pane, under **Action**, click on **Tag Mapping**.

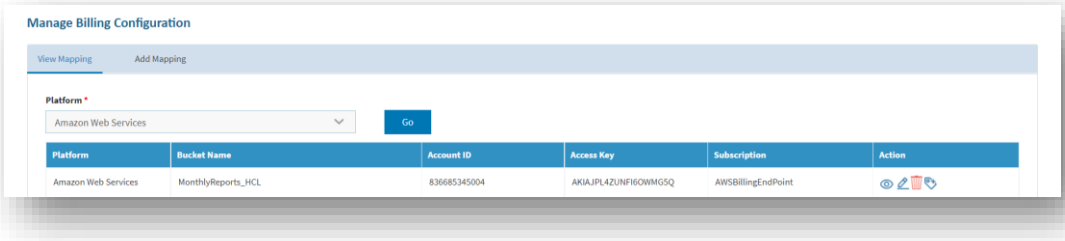


Figure 156 - Tag Mapping

2. A pop-up window with **Tag** and **Column** mapping appears as below:

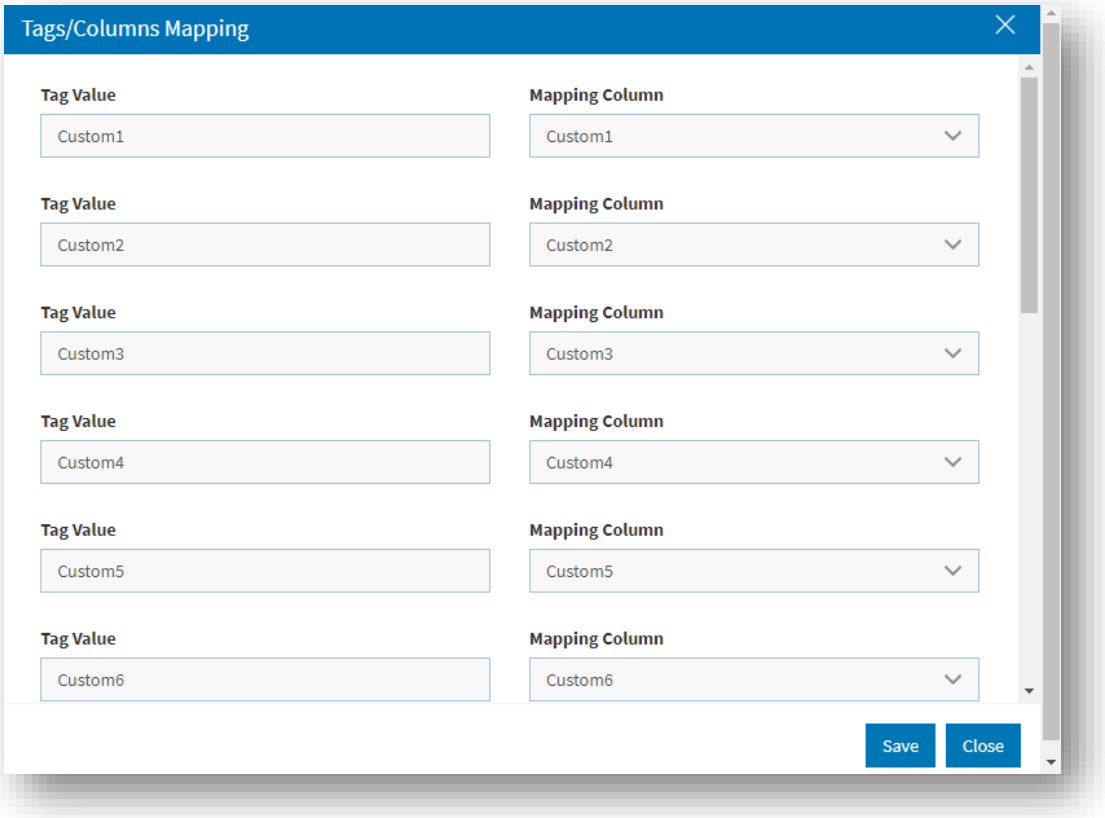


Figure 157 - Tag Mapping (Cont.)

3. Modify the desired details.
4. Click **Save**.
5. A success message box appears.

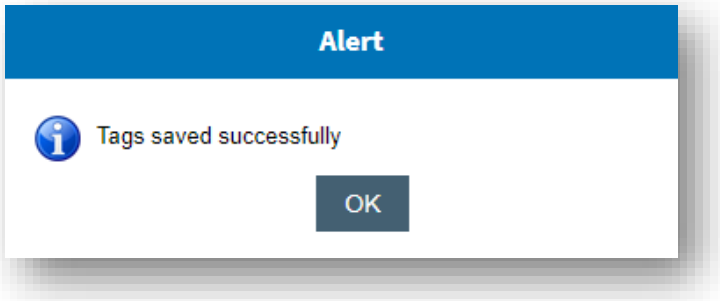


Figure 158 - Tag Mapping (Cont.)

Tag Mapping is only available for AWS. To View any of the Listed Mappings, click View.

1.5.5 Release /Reserve IP

This section details out the steps to releaseIPs which remained unutilized in private cloud environment. To release IP, provider user needs to follow the below steps:

1. On the **Release/Reserve IP** screen fill the below information:
2. Select Organization, Platform and Provisioning Endpoint.
3. Lastly, select **Cluster** and **Network**.

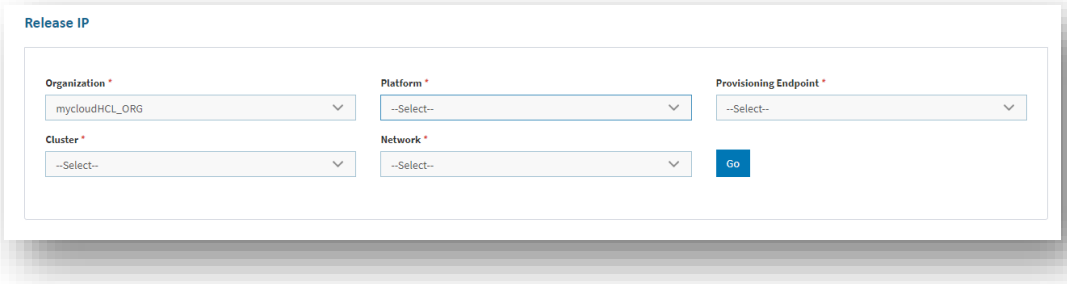


Figure 159 - Release IP Home Screen

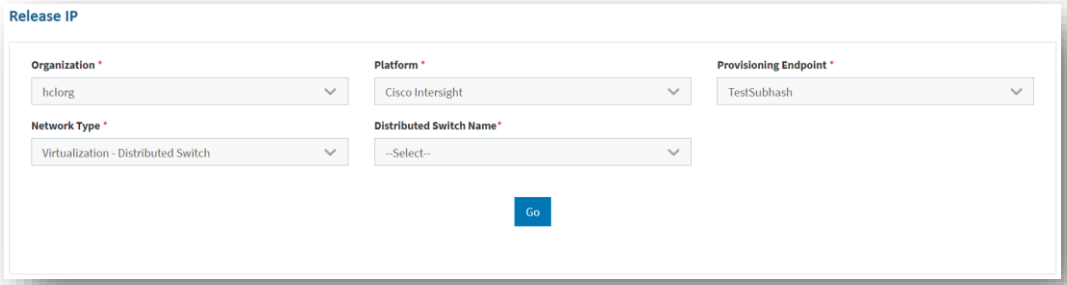


Figure 160 - Release IP Home Screen for Cisco Intersight

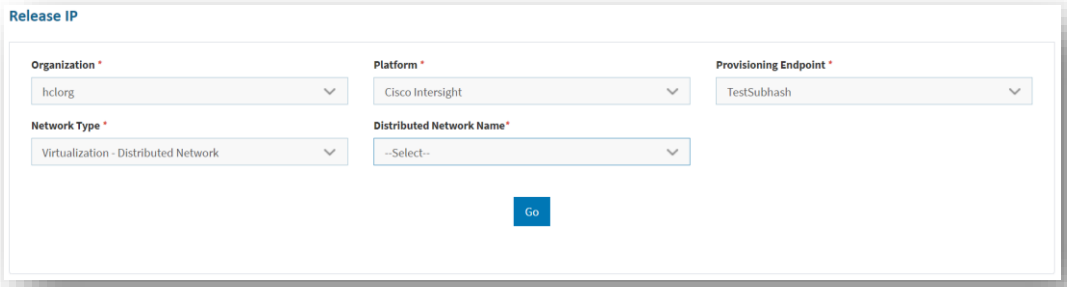


Figure 161 - Release IP Home Screen for Cisco Intersight (Cont.)

4. Refer the below table to understand the fields mentioned in the above figure:

Table 13 – Release IP

Table Field	Description
Organization	Name Of the Organization (Business Units/Divisions in Organizations)
Platform	Name of the cloud service providers
Provisioning Endpoint	The cloud endpoints that have been created in MyCloud
Cluster	It lists the clusters associate with cloud platform.
Network	It lists the network associate with cloud platform
Network Type	It is the network type applicable for Cisco Intersight, possible values could be distributed switch or distributed network

Distributed Switch Name	It lists the distributed switch name for Cisco Intersight
Distributed Network Name	It lists the distributed network name for Cisco Intersight

All fields marked with (*) are required.

5. Click **Go**.

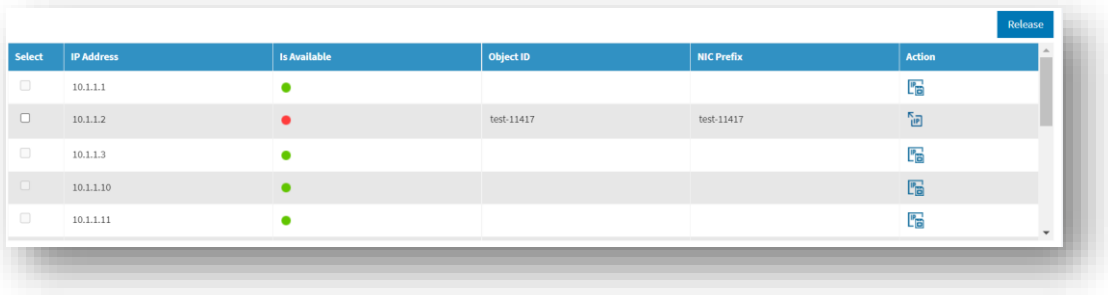


Figure 162 - Release IP Details

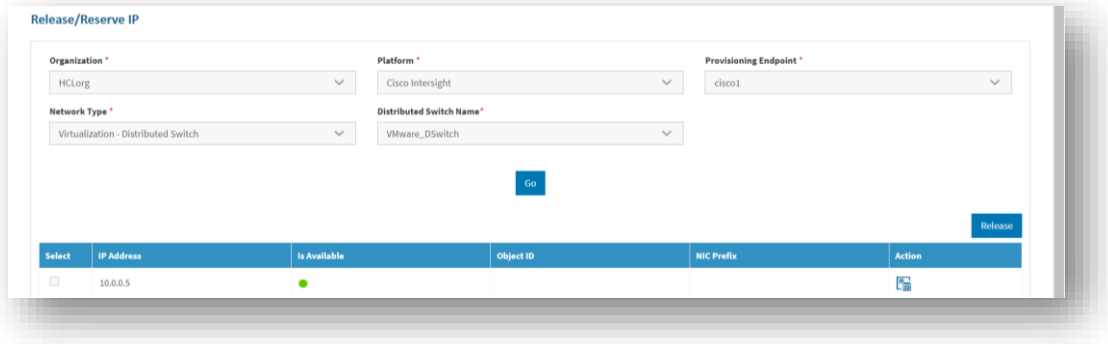


Figure 163 - Release IP Details for Cisco Intersight

6. Refer the below table to understand the fields mentioned in the above figure:

Table 14 - Release IP Details

Field	Description
IP	List of IP
Is Used	Whether IP is in use or not
Active	Whether IP is in active state
Action	To release the allocated IP, release IP action is available. And to reserve the released IP, reserve IP action is available.
Select	To select multiple IP address for bulk IP release

7. Click **Release** ( ).
8. A confirmation message appears as below.

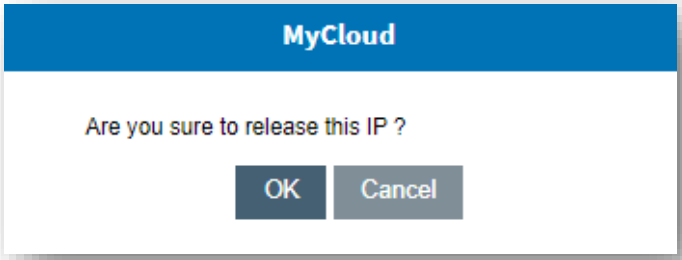


Figure 164 - Confirmation of Release IP

9. Click **Ok** to **Release** or **Cancel** to **Discard** the action.
10. Click **OK**.
11. A success message box appears as below.

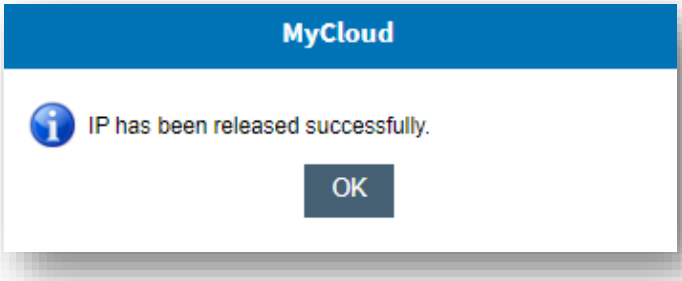


Figure 165 - Success Message

12. Click **Reserve** ( ).
13. A popup box appears as below.

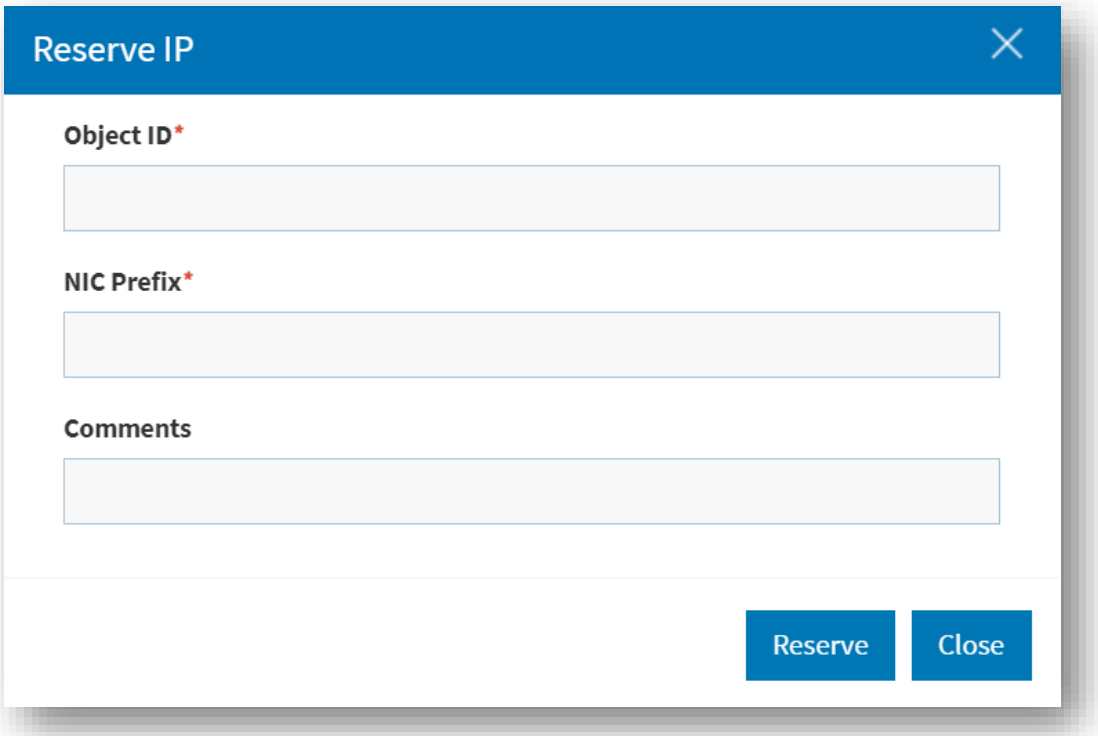


Figure 166 - Popup Box For Reserve IP

14. Enter Object ID, NIC Prefix, and Comments.

15. Click **Reserve** to Reserve the IP or **Close** to close the popup.
16. On clicking **Reserve**, a confirmation message appears as below:

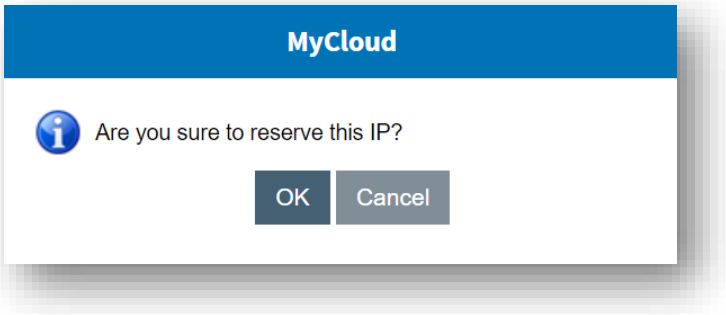


Figure 167 - Confirmation for Reserve IP

17. Click **Ok** to reserve or **Cancel** to discard the action.
18. Click **OK**.
19. A success message box appears as below.

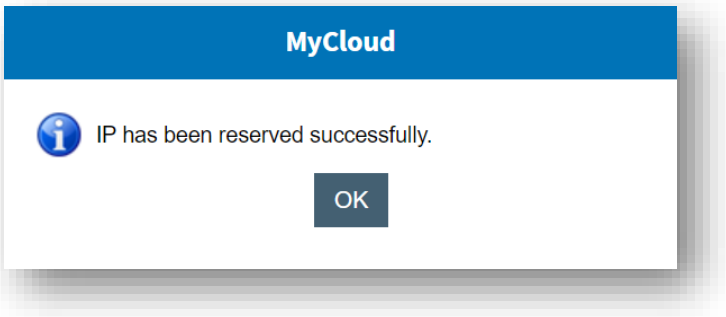


Figure 168 - Success Message For Reserve IP

20. Select multiple IP address for bulk IP release.

Figure 169 - Success Message for Bulk IP Release

21. Click on **Release** button.
22. A success message box appears as below:

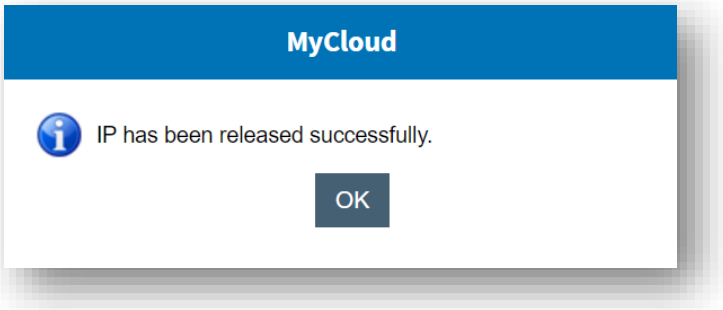


Figure 170 - Success Message For Bulk IP Release

1.5.6 Manage Public Cloud Advisory

This section details out the steps to manage public cloud advisory module.

1. On the main menu bar, click **Master** and then click **Manage Public Cloud Advisory**. It has following options:
   - Add New Configuration
   - View Configuration

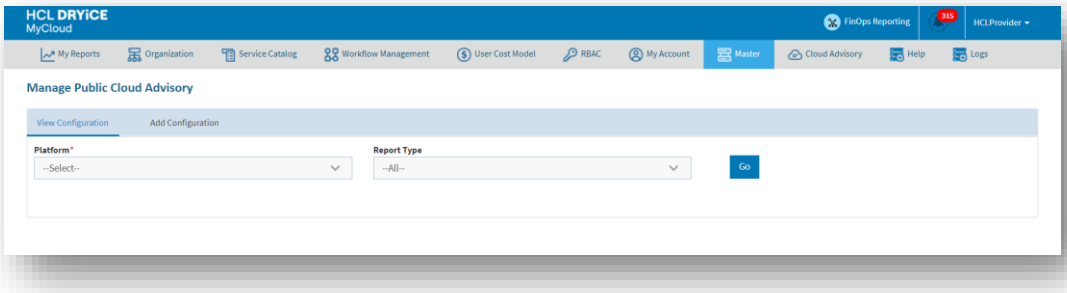


Figure 171 - Manage Public Cloud Advisory

1.5.6.1 Add New Configuration

To add a public cloud advisory configuration, provider user needs to follow the below steps:

1. On Manage Public Cloud Advisory screen, click Add New Configuration.

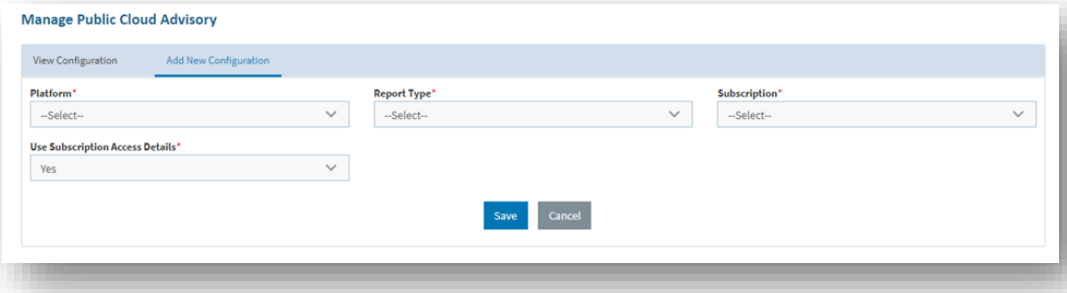


Figure 172 - Add New Configuration

2. Select **Platform**.
3. Select Subscription.
4. Select Use Subscription Access Details.
5. Click **Save**.

6. A success message box appears.

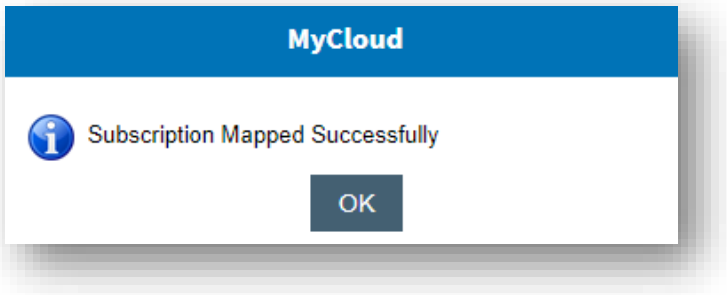


Figure 173 - Confirmation Message

All the fields marked with asterisk (*) are mandatory.

1.5.6.2 View Configuration

This section lists out all the subscriptions that have been created by provider user. It has following actions:

- **Edit** ( ): To modify the details of existing configurations

1.5.6.3 Edit Configuration

To edit/modify the assigned mapping of subscription or configuration of public cloud advisory, provider user needs to follow the below steps:

Screenshot below is in reference to AWS:

1. Select **View Configuration** and then click **Edit** ( ).

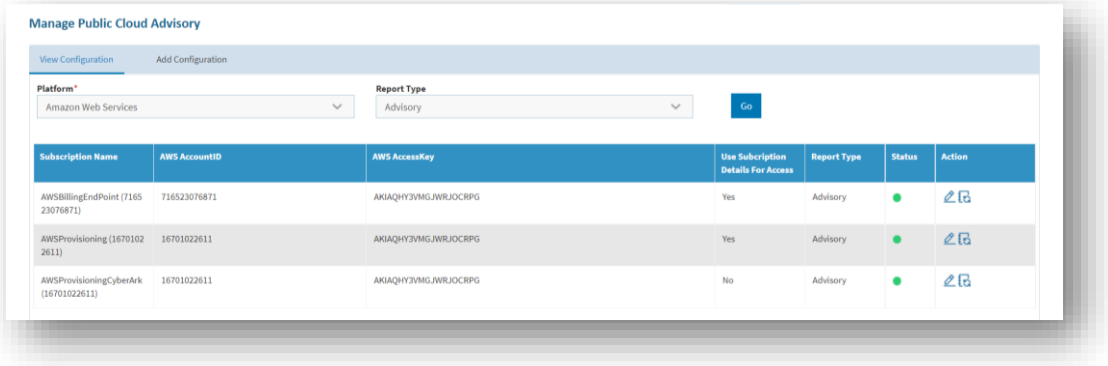


Figure 174 - Edit Configuration

2. Refer the below table to understand the fields mentioned in the above figure:

Table 15 – Edit Configuration

Fields	Description
Subscription Name	Highlights the endpoint subscription of a cloud service provider
AWS Account ID	Signifies unique identity of AWS account generated by AWS
AWS Access Key	Access key is key to access subscription programmatically
Is Same as Platform	Signifies whether MyCloud uses same configuration of endpoint or different

Action	Provider user to take actions like edit against listed configurations

3. Modify the desired details.

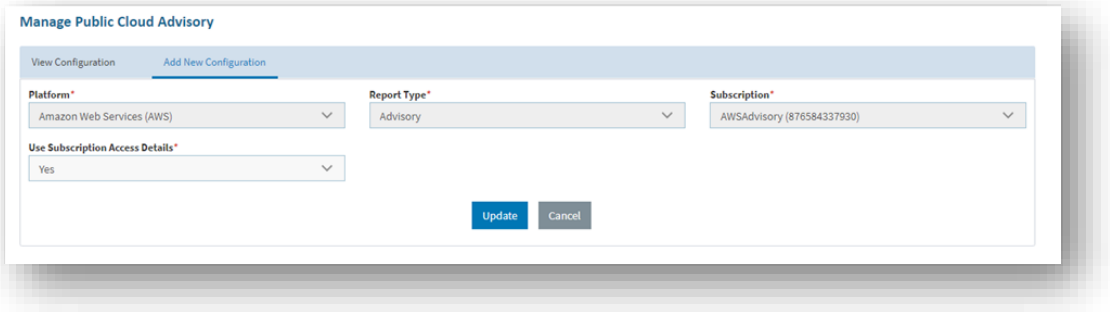


Figure 175 - Edit Configuration Cont.

4. Click **Update** to save the settings.
5. A success message box appears.

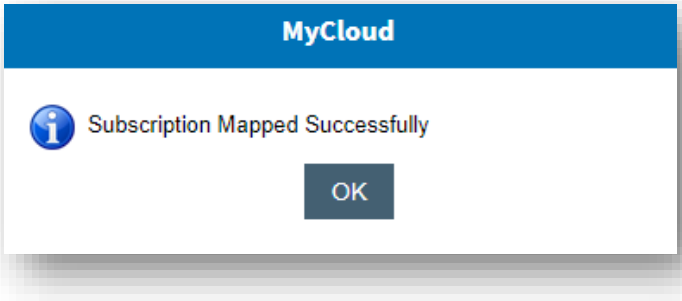


Figure 176 - Confirmation Message

All the fields marked with asterisk (*) are mandatory.

1.5.7 Performance Configuration

This section details out the steps to configure the performance parameters like CPU utilization, memory utilization, and many more from an endpoint/ cloud platform.

1. On the main menu bar, click **Master** and then click **Performance Configuration**.
2. It has following options:
   - Add Mapping
   - View Mapping

1.5.7.1 Add Configuration

To add configuration, provider user needs to follow the below steps:

1. On the Performance Configuration screen, click Add Mapping.
2. Screenshot below is with reference to azure.

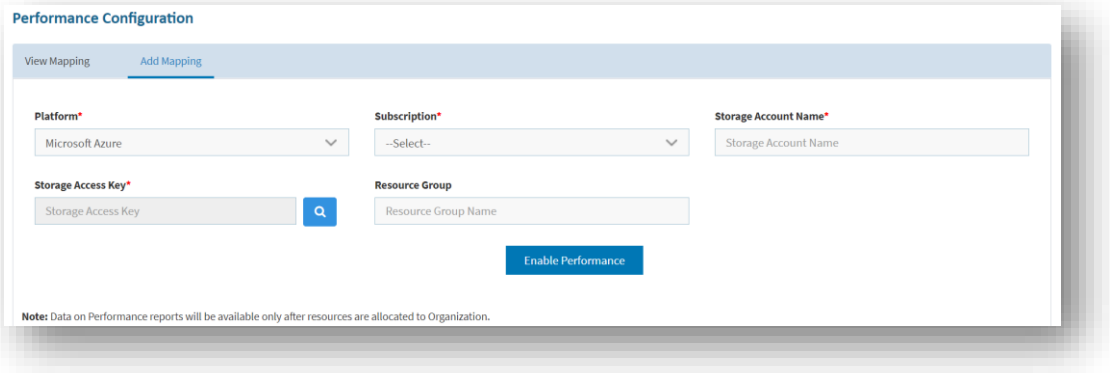


Figure 177 - Add Mapping

3. Refer the below table to understand the fields mentioned in the above figure:

Table 16 - Add Mapping

Field	Description
Platform	The field lists down the cloud service providers
Subscription	List the endpoints created
Storage Account Name	Name of storage account where performance data needs to be picked
Storage Access Key	Required to access storage account programmatically
Resource Group	Name of the resource group where storage account exists. This is a logical boundary created to manage resources as per their usage

4. Select **Platform**.
5. Select Subscription.
6. Provide Storage Account Name and Storage Access Key.
7. Click Enable Performance.
8. A success message box appears as below:

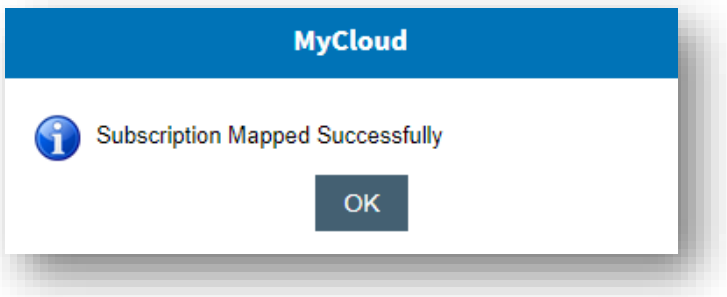


Figure 178 - Add Mapping (Cont.)

All the fields marked with asterisk (*) are mandatory.

The mapping is added and gets listed.

1.5.7.2 View Mapping

This section lists out all the configurations that have been created by the provider user.

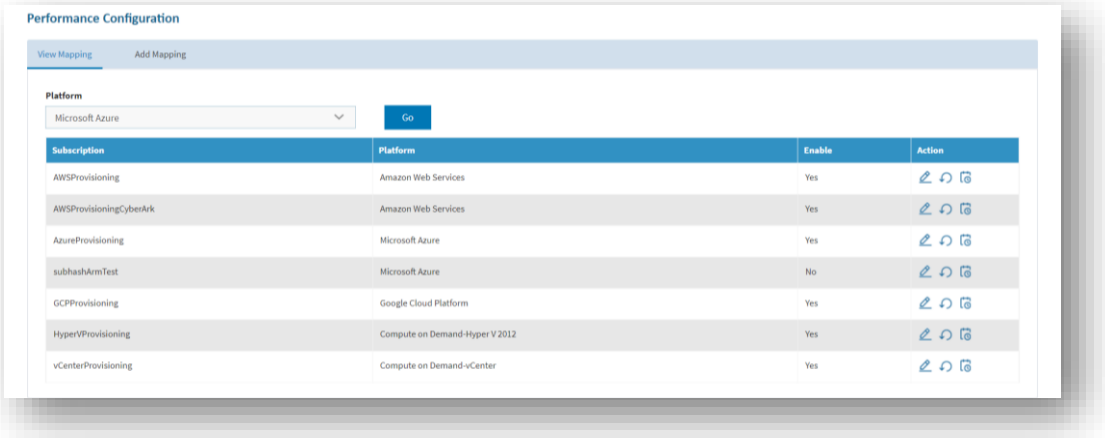


Figure 179 - View Mapping

It also comprises of following actions:

- **Edit** ( ): To modify the details of existing configurations
- **Reinitiate** ( ): To reinitiate the configurations
- **Schedule** ( ): To schedule data frequency and max retry count of an existing configuration.

1.5.7.3 Edit Mapping

To edit/modify the assigned mapping of subscription or configuration of performance access key, provider user needs to follow the below steps:

1. On the Performance Configuration screen, select View Mapping.
2. Click **Edit** ( ) against the configuration that needs to be edited.

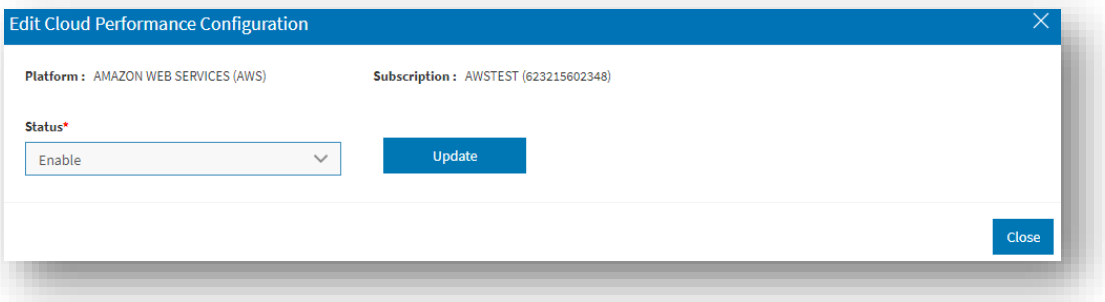


Figure 180 - Edit Mapping

3. Select Status as Enable/Disable.
4. Click **Update** to save the changes.

1.5.7.4 Reinitiate Mapping

To reinitiate the performance job. Provider user needs to follow below steps:

1. On The Performance Configuration Screen, Select View Mapping.
2. Click **Reinitiate** ( ) against the configuration that needs to be reinitiated.

3. A success message appears.

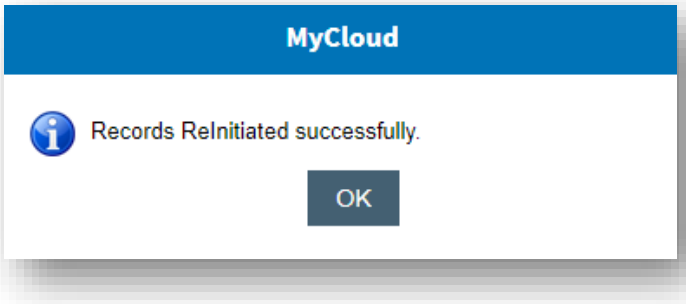


Figure 181 - Reinitiate Mapping

4. Selected configuration reinitiated successfully.

1.5.7.5 Schedule Mapping

To schedule the performance job, provider user needs to follow below steps:

1. On the Performance Configuration screen, select View Mapping.
2. Click **Schedule** ( ) against the configuration that needs to be scheduled.

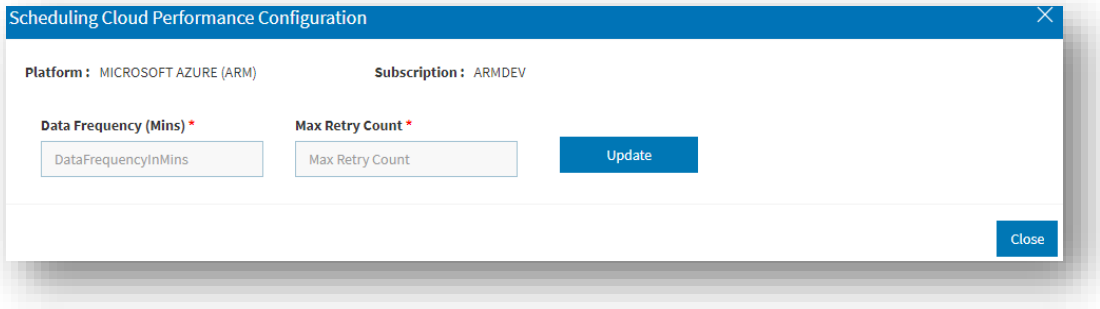


Figure 182 - Schedule Mapping

3. Enter Data Frequency (Mins) and Max Retry Count.
4. Click **Update**.
5. A success message appears.

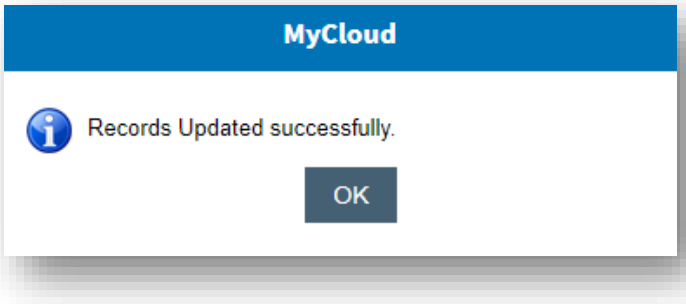


Figure 183 - Success Message

1.5.8 Manage Email

This module helps provider user to manage emails that get triggered as notification for various events like VM Provisioning, VM Customization (Change Size, Disk, Start, Stop), Decommission, Custom Task Execution.

1. On the main menu bar, click **Master** and then click **Manage Email**.

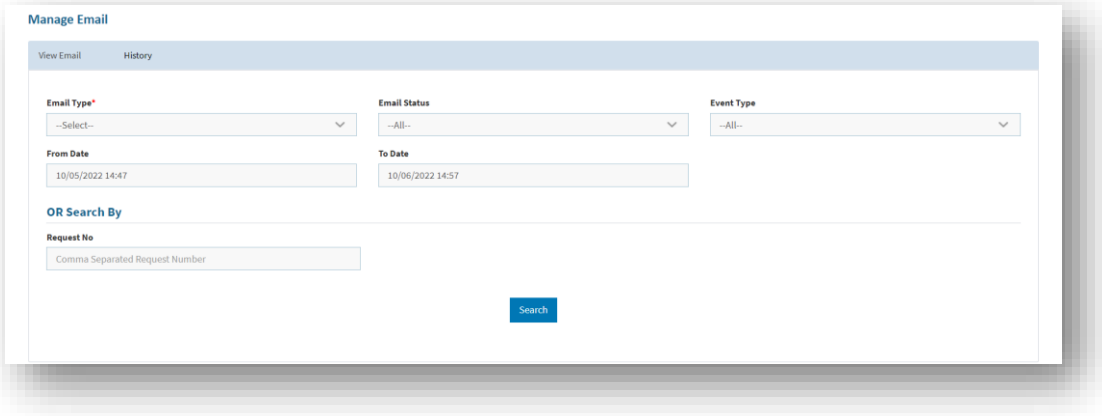


Figure 184 - Manage Email

2. Refer the below table to understand the fields mentioned in the above figure:

Table 17 – Manage Email

Field	Description
Email Type	Type Of Email - Either Approval, Final Intimation or Other
Email Status	Current Status of The Email.
Event Type	Activity Done Under MyCloud Areas Like Approval, Cancel Etc.
From Date	Start Date Range
To Date	End Date Range
Request No.	MyCloud Request No., To View Email Status.

3. This has following sections:
   - View Email
   - History

1.5.8.1 View Email

Through this tab, provider user can view mails which have been triggered by MyCloud for various events. To view, provider user needs to follow the below steps,

1. Click View Email.

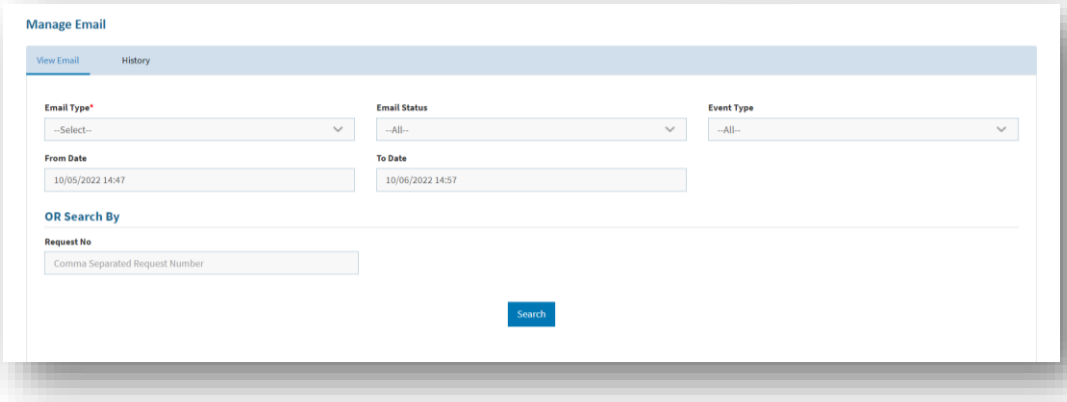


Figure 185 - View Email

2. Refer the below table to understand the fields mentioned in the above figure:

Table 18 - View Email

Field	Description
Email Type	Type Of Email - Either Approval, Final Intimation or Other
Email Status	Current Status of The Email
Event Type	Activity Done Under MyCloud Areas Like Approval, Cancel Etc.
From Date	Start Date Range
To Date	End Date Range
Request No	MyCloud Request No., To View Email Status

3. Select Email Type, Email Status, and Email Type.
4. Choose From Date and To Date.
5. Or Search By (Request No).
6. Click **Go**.

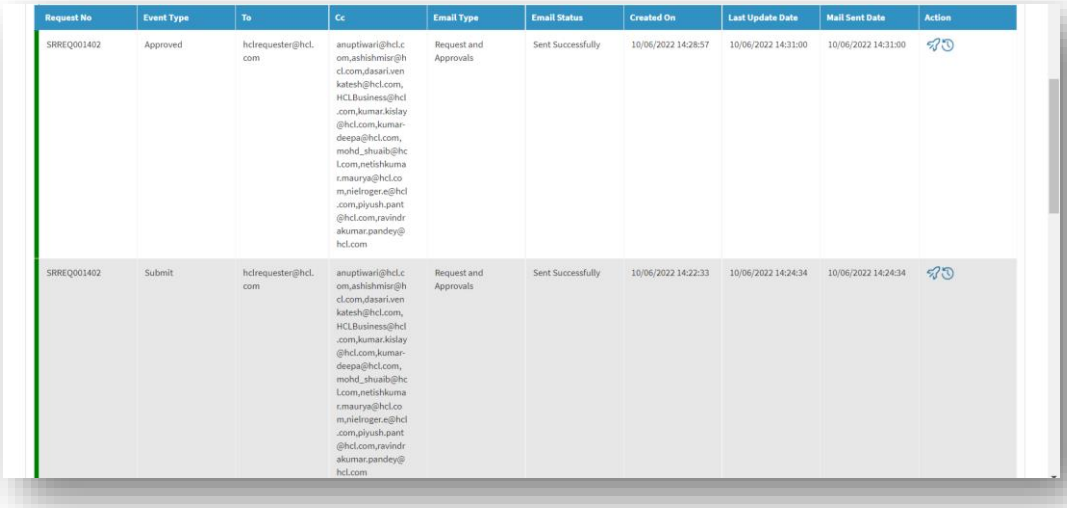


Figure 186 - View Email (Cont.)

7. Refer the below table to understand the fields mentioned in the above figure:

Table 19 - View Email Grid

Field	Description
Request No	Type of Email Either Approval, Final Intimation or Other
Email State	Current Status of The Email.
Event Type	Activity Done Under MyCloud Areas Like Approval, Cancel Etc.
Last Updated Date	Last Updated Status of Email
Mail Sent Date	The Date on which Email Sent.
To/CC	Email Recipients
Action	Action On the Email Sent.

8. It also comprises of following actions:
   - **Mail Resend** ( ): To resend an already sent email.
   - **History** ( ): To check the history of an email.

1.5.8.2 Mail Resend

To resend an already sent email, in case of failure or to get another copy of an already sent email, provider user needs to follow the below steps:

1. Click **Mail Resend** ( ).
2. A confirmation message screen appears.

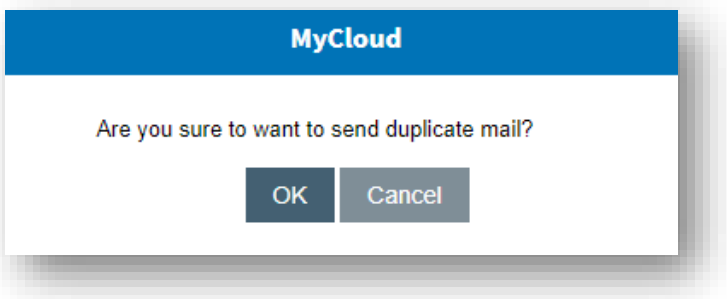


Figure 187 - Confirmation Message (Resend Mail)

3. Click **OK** to resend and **Cancel** to close the screen.
4. A success message appears.

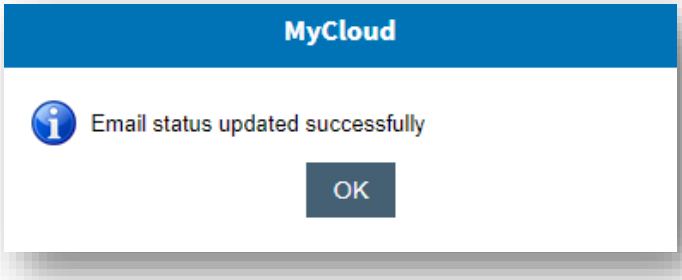


Figure 188 - Success Message (Resend Mail)

1.5.8.3 History

To view the history of an email, provider user needs to follow the below steps:

1. Click **History** ( ).

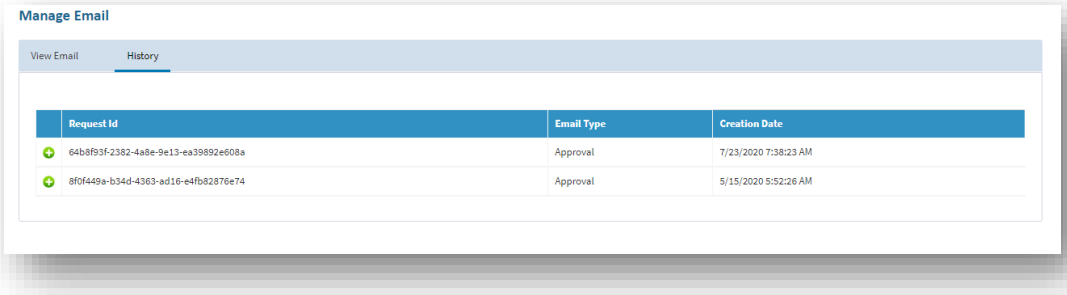


Figure 189 - History Manage Email

2. Click **Expand icon**( ) to view the detailed logs.

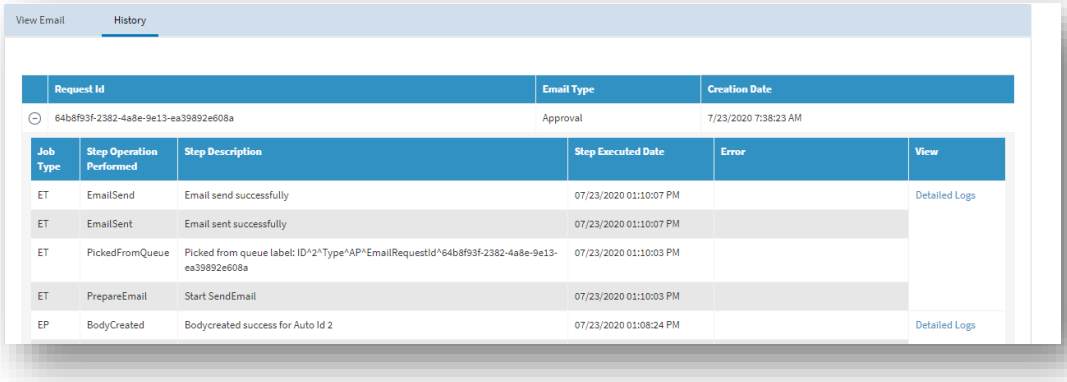


Figure 190 - History Manage Email (Cont.)

3. Refer the below table to understand the fields mentioned in the above figure:

Table 20 - View Email History

Field	Description
Job Type	Type of the Job
Step Operation Performed	Steps /operations performed to send an email
Step Executed Date	Date at the time of steps executed
Error	Error details
View	To view detailed log

4. Click on **Detailed Log Link** (Detailed Logs) to check the log in detail.

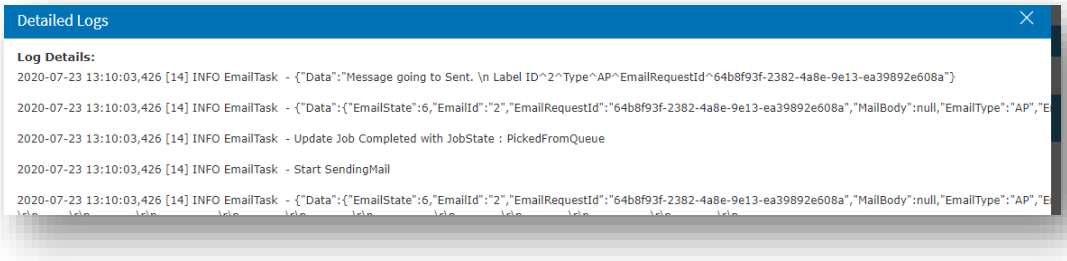


Figure 191 - Detailed Log History (Cont.)

1.5.9 Manage Custom Script

This module helps provider user to manage user defined (custom) scripts in MyCloud.

1. In Master menu, click on Manage Custom Script.
2. Below screen appears.

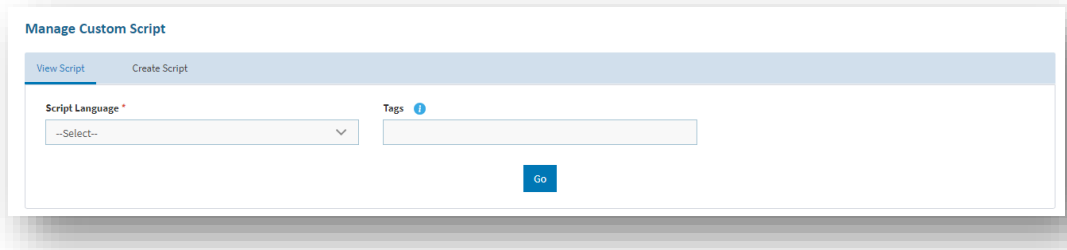


Figure 192 - Manage Custom Script

3. This has following actions:
   - View Script
   - Create Script

1.5.9.1 View Script

To view the existing Custom Scripts, provider user needs to follow the below steps:

1. Click **View Script** Tab.
2. Below screen appears:

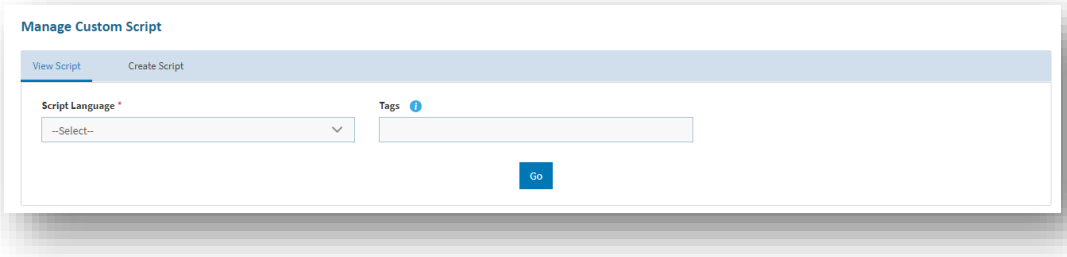


Figure 193 - Manage Custom Script

3. Select Organization and Language.
4. Click **Go**.

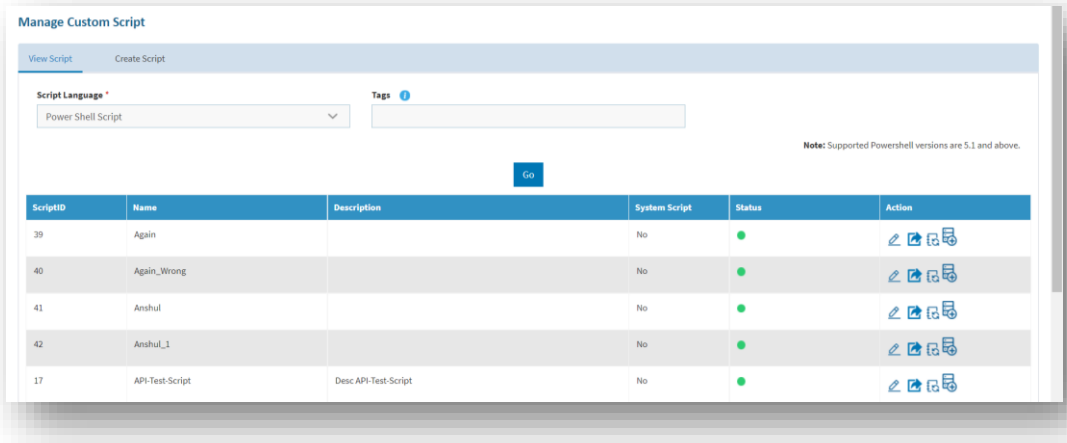


Figure 194 - Manage Custom Script (Cont.)

5. View Script Has Following Actions:
   - **Edit** ( ): This Helps To Modify The Existing Custom Scripts
   - **Export JSON** ( ): This Helps To Export The Existing Custom Scripts
   - **Change Status** ( ): This Helps To Toggle The Existing Custom Script Status
   - **Add To Repository** ( ): This Helps To Add The Script In The Master Data

1.5.9.2 Edit Script

To modify /update existing custom scripts, provider user needs to follow the below steps:

1. Click **Edit** ( ).
2. It will route the provider user to **Create Script** tab, where user can update **Description** and **Script**.

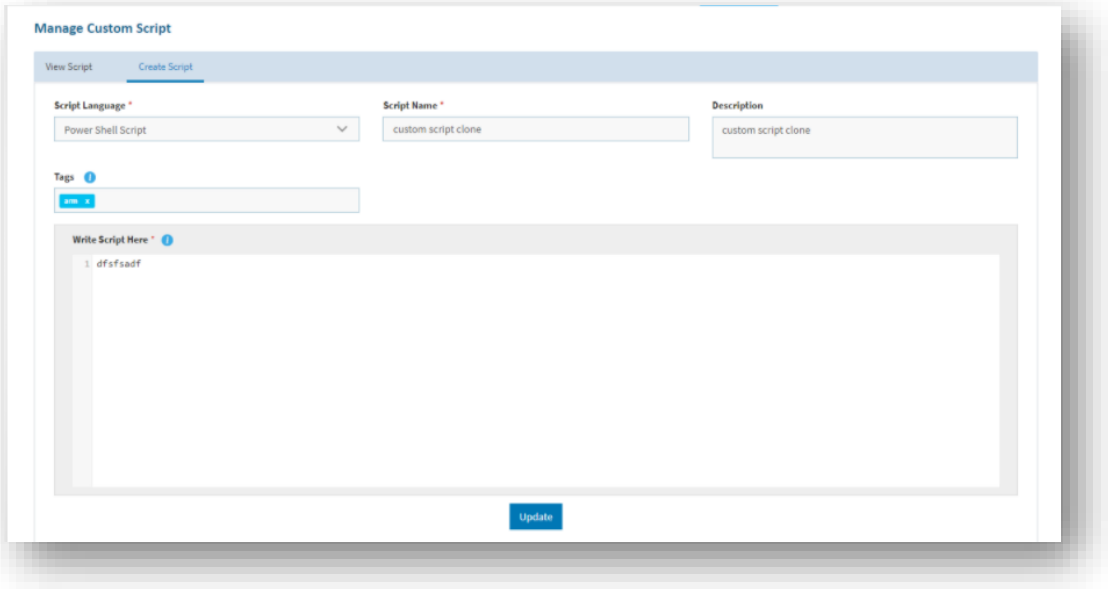


Figure 195 - Edit Manage Custom Script

3. Click **Update**

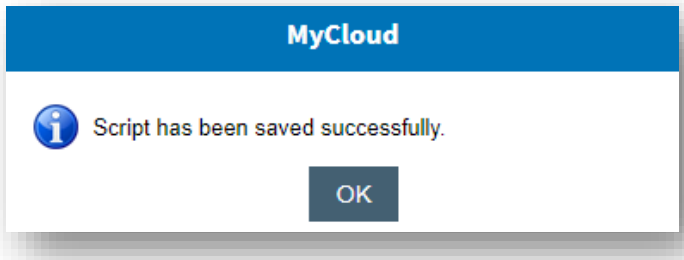


Figure 196 - Success Message Manage Custom Script

1.5.9.3 Change Status

To modify /update existing custom scripts status, provider user needs to follow the below steps:

1. Click **Change Status** ( ).
2. A confirmation message appears on the screen.

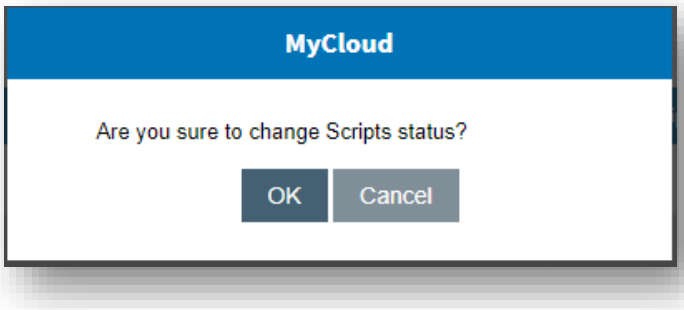


Figure 197 - Confirmation Message

3. Click **OK** to confirm.
4. A success message appears on the screen.

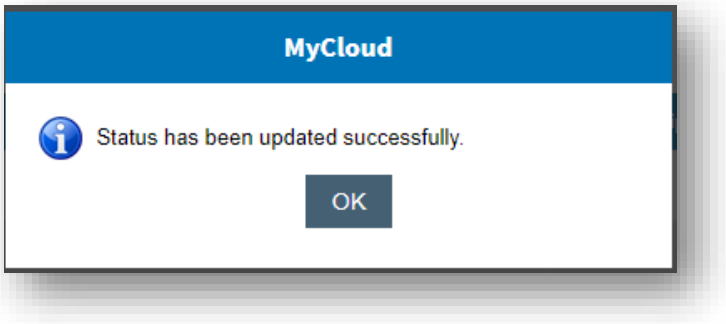


Figure 198 - Success Message

1.5.9.4 Add Repository

To add existing custom scripts in repository, perform the below steps. This action is applicable only for system scripts.

1. Click on the **Add Repository** ( ).
2. A confirmation message appears.

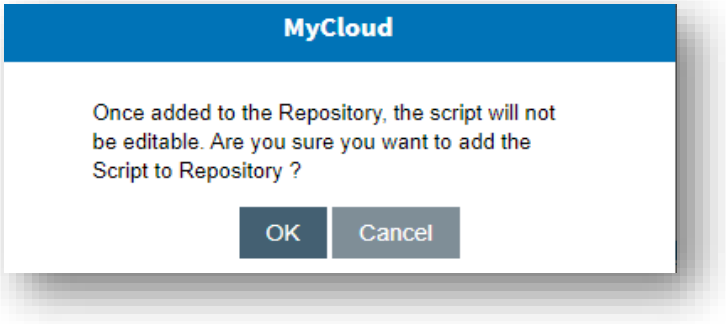


Figure 199 - Confirmation Message

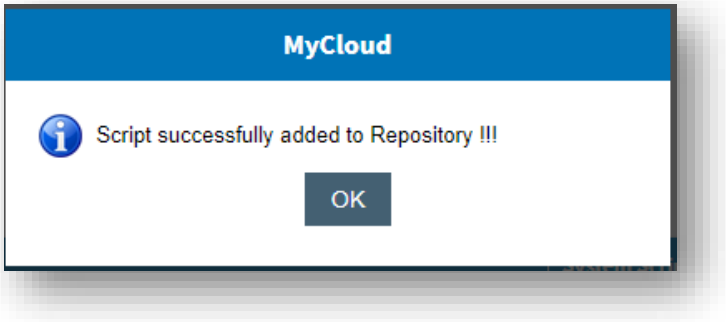


Figure 200 - Success Message

1.5.9.5 Export Script JSON

To export existing JSON Custom Scripts, the provider user needs to follow the below steps. This action is applicable only for system scripts.

1. Click on the **Export JSON** icon ( ).

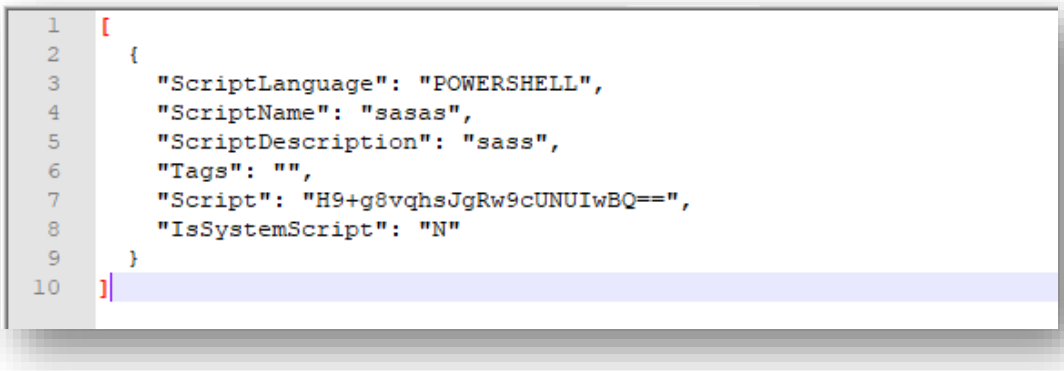


Figure 201 - Export JSON

1.5.9.6 Create Script

To create a new custom script, provider user needs to follow the below steps:

1. Click on the **Create Script** tab.
2. The below screen appears:

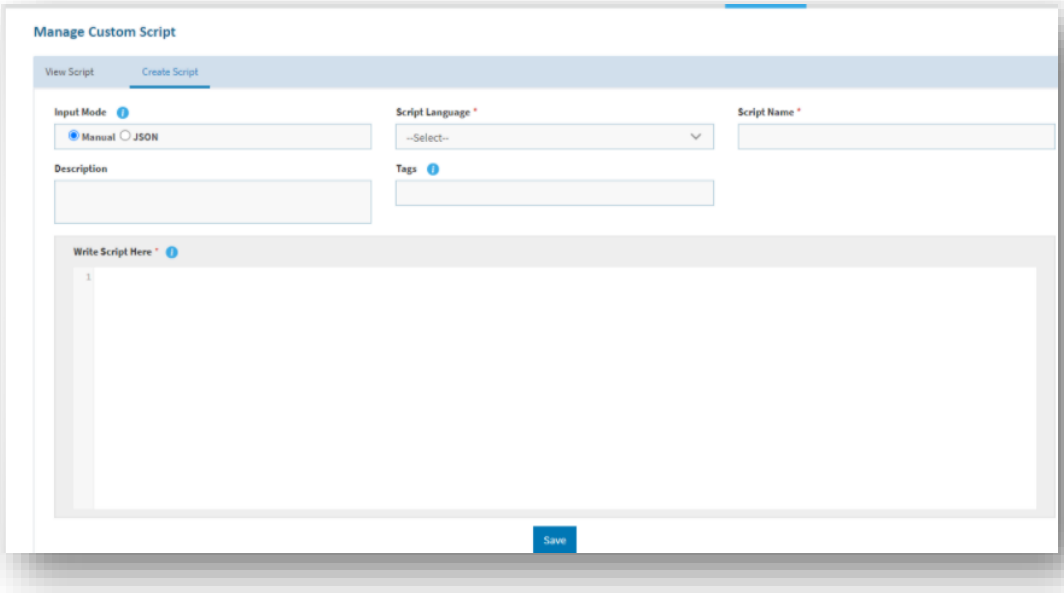


Figure 202 - Create Custom Script

3. Refer the below table to understand the fields mentioned in the above figure:

Table 21 - View Email History

Field	Description
Input Mode	**Manual**: Create script using MyCloud. **JSON**: Import existing JSON.
Tags	A Tag is simply a character string added to a **Tags** field in a resource, such as RBAC subscription. Tags will be used to define scope of permission. Objects with same tag will be able to access same tagged resources.

Script Language	Supported Languages MyCloud (Powershell and Python)
Script Name	Unique Name of The Script
Description	Description of the Script
Write Script Here	Write User Defined Script

4. Select Input Mode and Language.
5. Enter Name, Description, Tags, and Script.
6. Click **Save**.

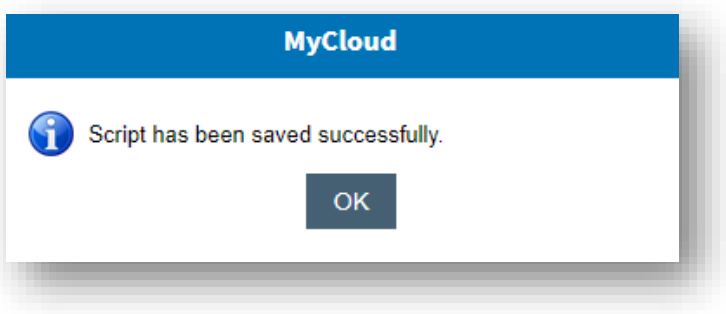


Figure 203 - Success Message Create Script

1.5.10 Manage Script Schedule

This module helps provider users to schedule the custom scripts. The module will have scripts which were already created in MyCloud under manage custom script section.

1. On the main menu Master, click Manage Script Schedule.
2. The below screen appears.

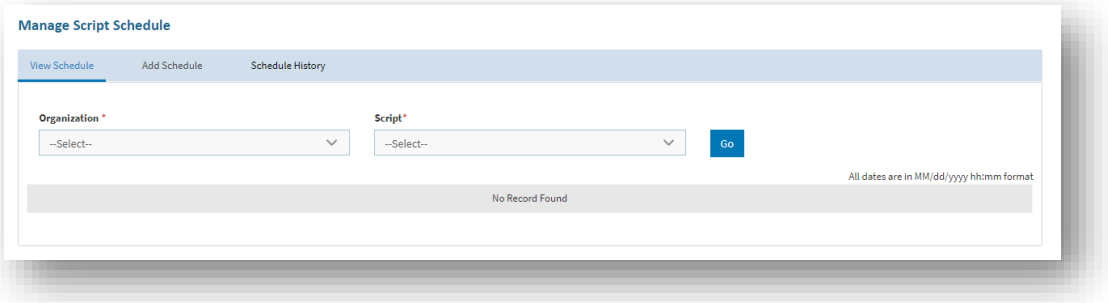


Figure 204 - Manage Script Schedule

3. It has following tabs:
   - View Schedule
   - Add Schedule
   - Schedule History (Not Direct Clickable)

1.5.10.1 View Schedule

To view the schedule of existing scripts, provider user needs to follow the below steps:

1. Click View Schedule tab.

2. Below screen appears.

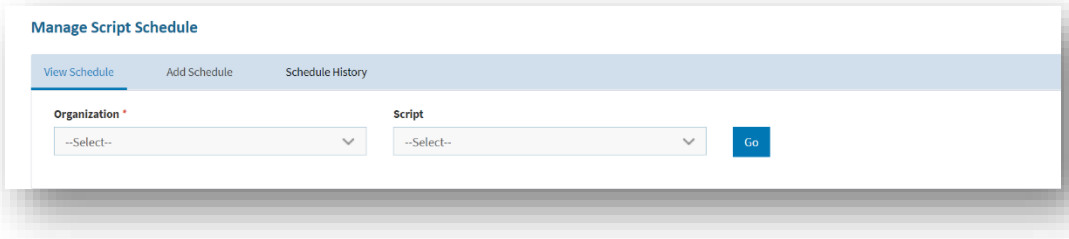


Figure 205 - Manage Script Schedule

3. Select Organization & Script.
4. Click **Go**.

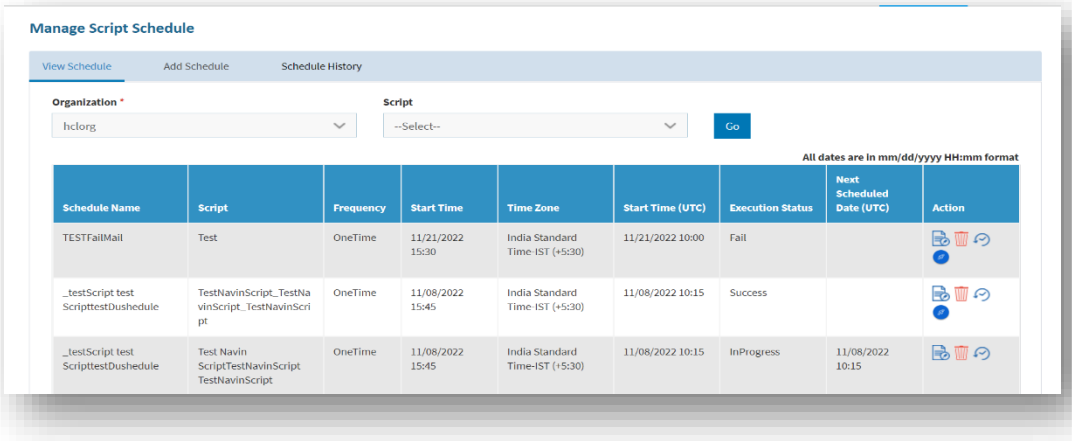


Figure 206 - Manage Script Schedule (Cont.)

5. Refer the below table to understand the fields mentioned in the above figure:

Table 22 - Manage Scripts Schedule

Field	Description
Script	Name of the Script
Name	Unique name of the Scheduled Script
Description	Description of the Script
Frequency	Intervals at which the script can be scheduled
Start Time and Time Zone	From when the script to start and on which time zone
Action	User can take actions like Edit, Delete, and View History
Execution Status	Current Status of the Scheduled Script
Next Scheduled Date	The Date and Time when the schedule will execute in future

6. View Script has following actions:
   - **Edit** ( ) : To update /modify the schedule of existing scripts.
   - **Delete** ( ) :To delete any schedule of existing scripts.

- **History** ( ) : To view the execution history of a script.
- **Execute Now**( ) : To execute the schedule immediately.

1.5.10.2 Edit Schedule

To update/ modify any schedule of an existing script, provider user needs to follow the below steps:

1. Click **Edit** ( ).
2. It will route the provider user to **Add Schedule** tab.

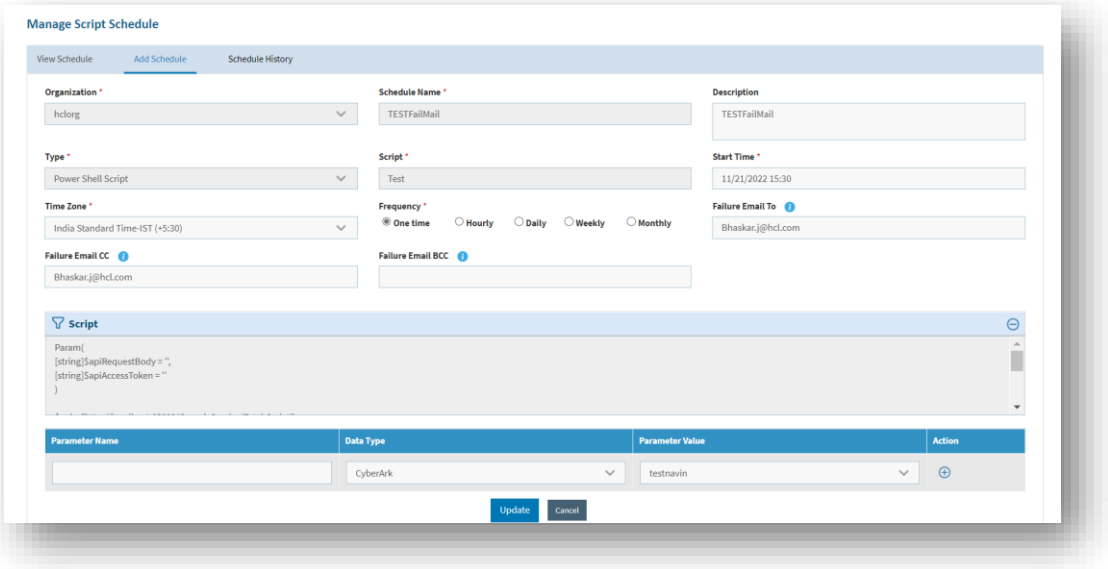


Figure 207 - Manage Script Schedule (Edit.)

3. Modify the fields as per requirements.
4. Click **Update** or **Cancel** to discard the changes. Confirmation message appears (in case of daily jobs)
5. Click **OK**. A success message appears.

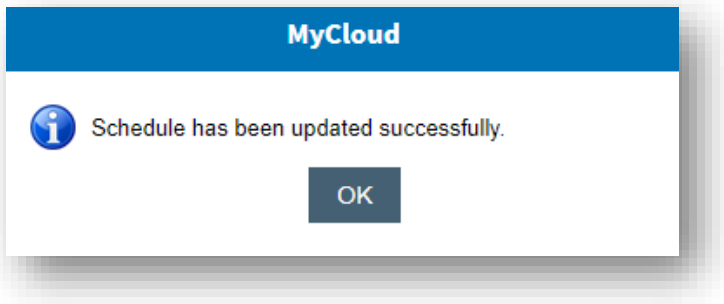


Figure 208 - Success Message Script Schedule (Edit.)

1.5.10.3 Delete Schedule

To delete a schedule, provider user needs to follow the below steps:

1. Click **Delete** ( ).
2. A confirmation message appears.

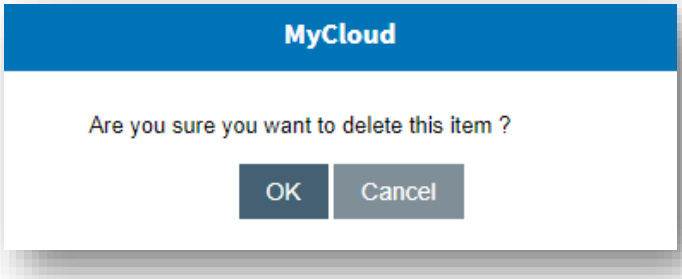


Figure 209 - Confirmation Message Script Schedule (Delete.)

3. Click **OK** to confirm.

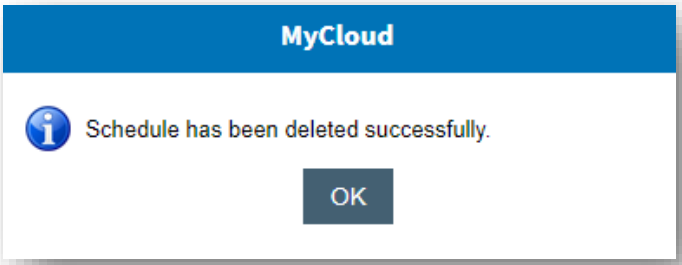


Figure 210 - Success Message Script Schedule (Delete.)

1.5.10.4 Schedule History

To view the execution history of a script, provider user needs to follow the below steps:

1. Click **History** ( ).
2. The below screen appears.

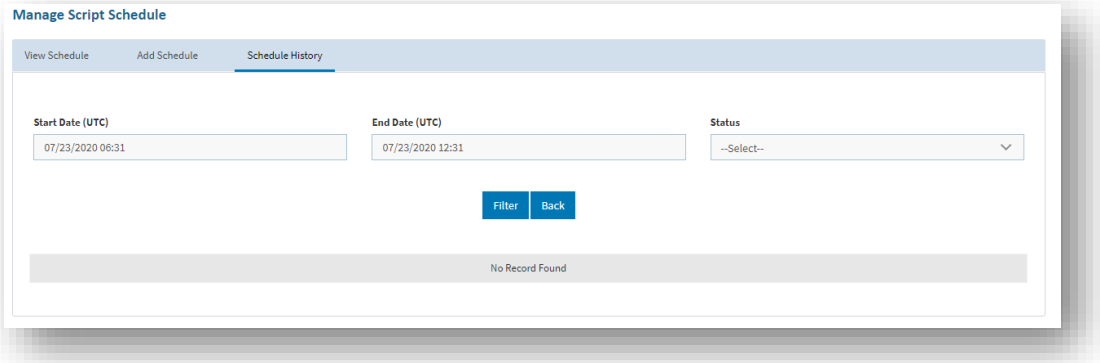
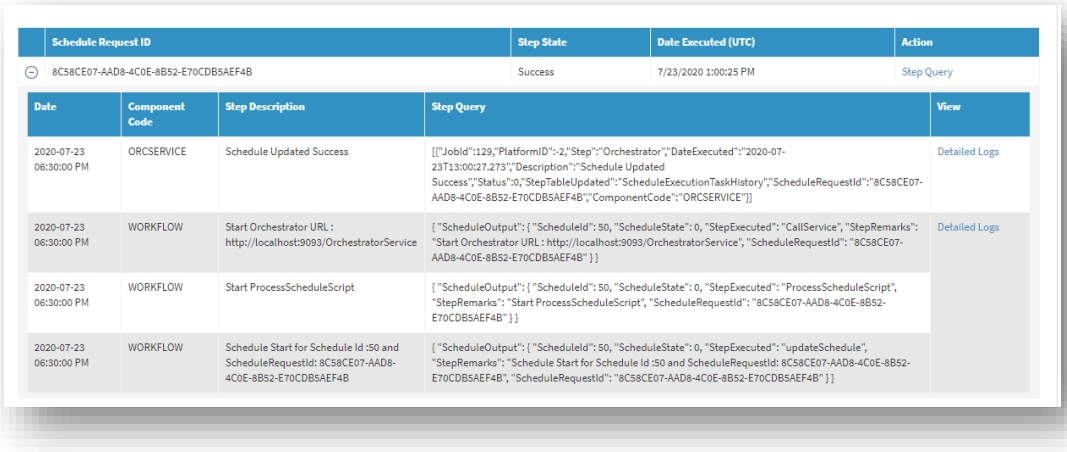


Figure 211 - History

3. Choose the Start Date (UTC).
4. Choose the End Date (UTC).
5. Choose the **Status**.
6. Click **Filter**.
7. The below screen will appear with detailed execution history of a script.



Schedule Request ID	Step State	Date Executed (UTC)	Action
8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B	Success	7/23/2020 1:00:25 PM	Step Query

Date	Component Code	Step Description	Step Query	View
2020-07-23 06:30:00 PM	ORCSERVICE	Schedule Updated Success	[{"JobId":129,"PlatformID":-2,"Step":"Orchestrator","DateExecuted":"2020-07-23T13:00:27.273","Description":"Schedule Updated Success","Status":0,"StepTableUpdated":"ScheduleExecutionTaskHistory","ScheduleRequestId":"8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B","ComponentCode":"ORCSERVICE"}]	Detailed Logs
2020-07-23 06:30:00 PM	WORKFLOW	Start Orchestrator URL : http://localhost:9093/OrchestratorService	{ "ScheduleOutput": { "ScheduleId": 50, "ScheduleState": 0, "StepExecuted": "CallService", "StepRemarks": "Start Orchestrator URL : http://localhost:9093/OrchestratorService", "ScheduleRequestId": "8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B" } }	Detailed Logs
2020-07-23 06:30:00 PM	WORKFLOW	Start ProcessScheduleScript	{ "ScheduleOutput": { "ScheduleId": 50, "ScheduleState": 0, "StepExecuted": "ProcessScheduleScript", "StepRemarks": "Start ProcessScheduleScript", "ScheduleRequestId": "8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B" } }	
2020-07-23 06:30:00 PM	WORKFLOW	Schedule Start for Schedule Id :50 and ScheduleRequestId: 8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B	{ "ScheduleOutput": { "ScheduleId": 50, "ScheduleState": 0, "StepExecuted": "updateSchedule", "StepRemarks": "Schedule Start for Schedule Id :50 and ScheduleRequestId: 8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B", "ScheduleRequestId": "8C58CE07-AAD8-4C0E-8B52-E70CDB5AEF4B" } }	

Figure 212 - History

1.5.10.5 Execute Now

To execute schedule now for a script, provider user needs to follow the below steps.

1. Click on the **Execute Now** action.
2. The below message appears.

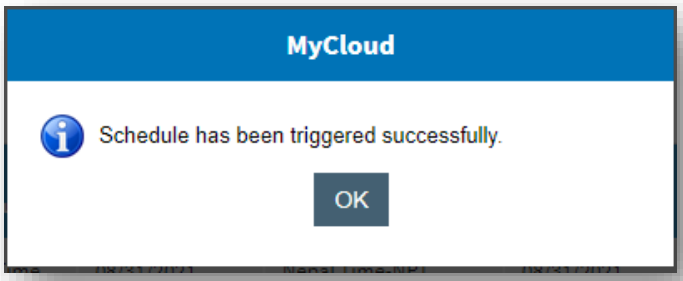


Figure 213 - Manage Script Schedule

1.5.10.6 Add Schedule

To add a new schedule for a script, provider user needs to follow the below steps.

1. Click the **Add Schedule** tab.
2. The below screen appears.

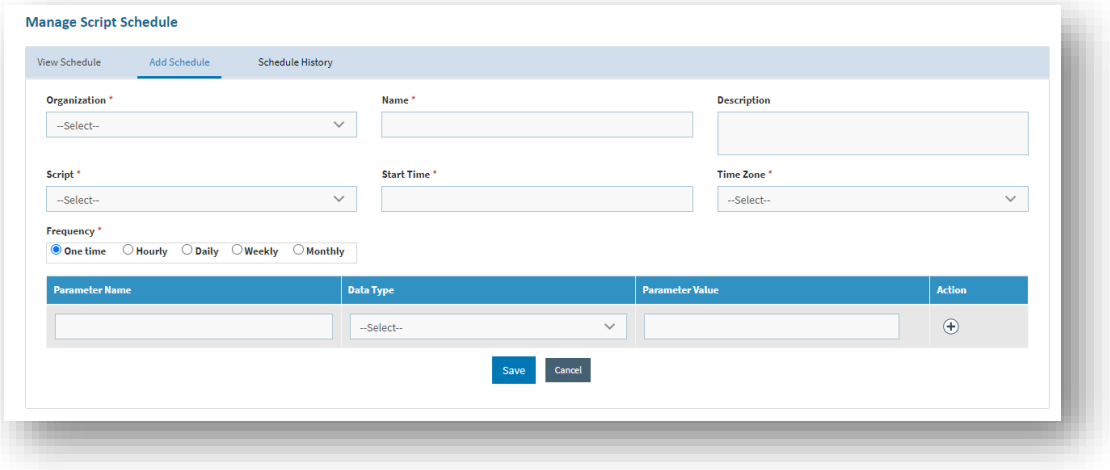


Figure 214 - Create Schedule

3. Refer the below table to understand the fields mentioned in the above figure:

Table 23 -Add Schedule

Field	Description
Organization	Name of the MyCloud organization
Name	Unique name of the scheduled script
Description	Description of the script
Script	Custom script name.
Frequency	Interval at which the script needs to be scheduled
Start Time and Time Zone	Time from when the script needs to be executed and in which time zone.
Parameter Name	To add dynamic parameter in the script, user can add the name of the parameter through this option.
Data Type	Type of value to that parameter. It can be SQL function, secret key, or static.
Parameter Value	Value of the respected parameter name.
Failure Email To	This field will be used to send "To" Email notification, in case of Task Failure. Please use comma (,) to add multiple emails in this fields.
Failure Email CC	This field will be used to send "CC" Email notification, in case of Task Failure. Please use comma (,) to add multiple emails in this fields.
Failure Email BCC	This field will be used to send "BCC" Email notification, in case of Task Failure. Please use comma (,) to add multiple emails in this fields.

4. Choose Organization, Script & Time Zone.
5. Enter Name & Description.
6. Choose Active, Frequency.

7. Enter **Parameter Name**, **Data Type**, and **Value**. Click **Add** to add in the script.
8. Click **Save**.
9. A success message appears.

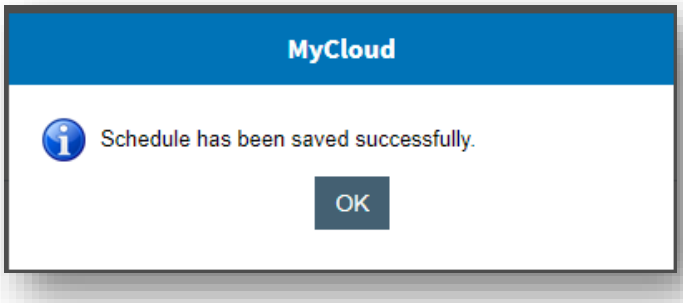


Figure 215 - Success Schedule

1.5.11 AWS Cost Explorer Configuration

This section details out the steps to configure the AWS cost explorer.

1. On the main menu bar, click **Master** and then click **AWS Cost Explorer Configuration**.
2. It has following options:
   - Add Configuration
   - View Configuration

1.5.11.1 Add Configuration

To add configuration, provider user needs to follow the below steps:

1. On the AWS Cost Explorer Configuration screen, click Add Configuration tab.

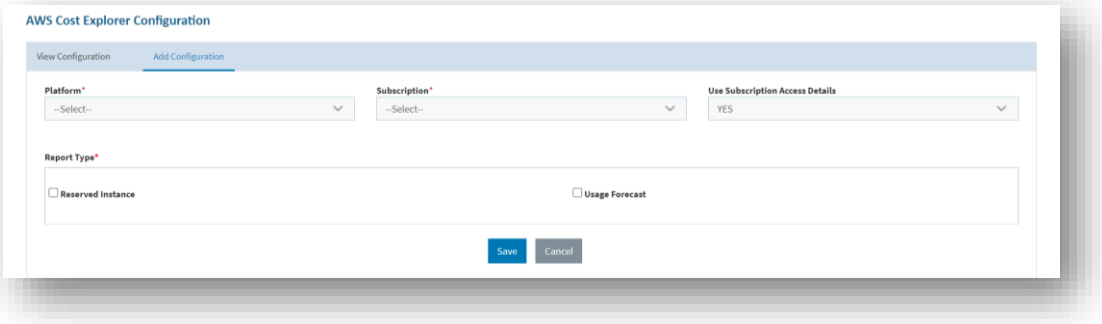


Figure 216 - Add Configuration

2. Refer to the below table to understand the fields mentioned in the above figure:

Table 24 - Add Mapping

Field	Description
Platform	The field lists down the cloud service provider
Subscription	Lists down the endpoints that were created
Use Subscription Access Details	Select this dropdown as:

	- **Yes**, if you want to use the same access details as of the subscription, instead of adding new. - **No**, if you want to enter new account access details like account ID, access key & secret key.
Report Type	Type of the report, which the user wants for this configuration

3. Select **Platform**.
4. Select Subscription.
5. Select **Use Subscription Access Details** (By default, it is Yes).
6. Select Report Type.
7. Click **Save**.
8. A success message box appears as below:

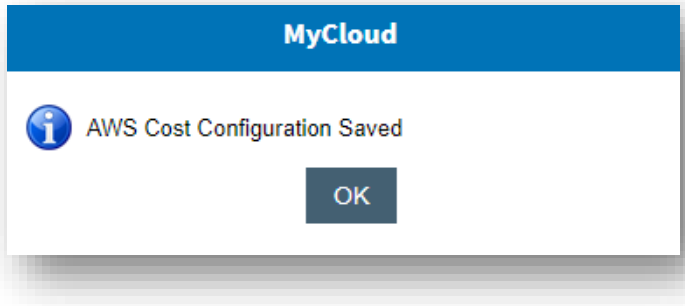


Figure 217 - Add Configuration (Cont.)

All the fields marked with asterisk (*) are mandatory.

9. The configuration is added successfully.

1.5.11.2 View Configuration

This section lists out all the configurations that have been created by the provider user.

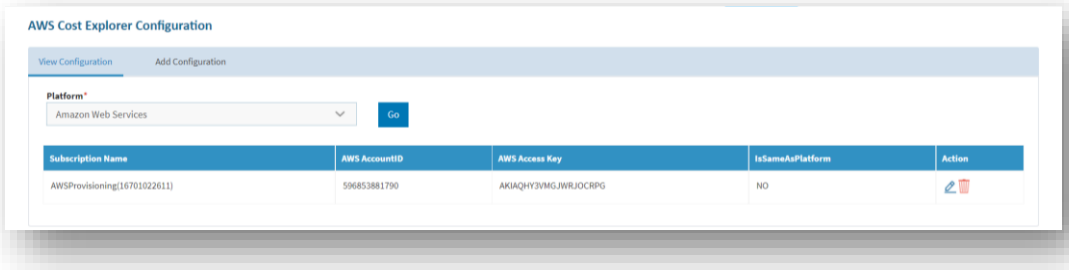


Figure 218 - View Mapping

It also comprises of following actions:

- **Edit** ( ): To modify the details of existing configurations.

1.5.11.3 Edit Configuration

To edit/ modify the existing configuration, provider user needs to follow the below steps:

1. Click **Edit** ( ) against the configuration that needs to be edited.

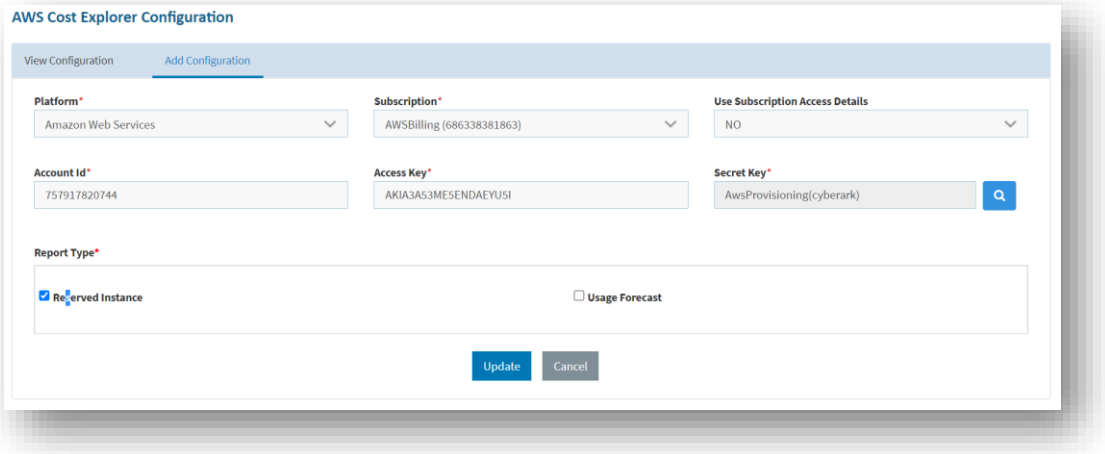


Figure 219 - Edit Configuration

2. Select **Platform**.
3. Select Subscription.
4. Select Use Subscription Access Details as Yes/No.
   - **Yes** – The access details of subscription will be used.
   - **No** – The user can edit Account ID, Access Key & Secret Key
5. Select Report Type.
6. Click **Update** to save the changes.
7. A success message box shown as below:

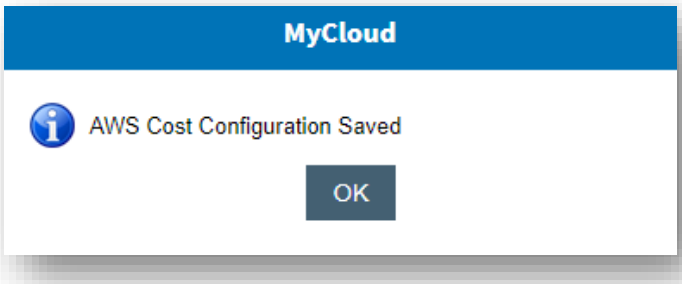


Figure 220 - Edit Configuration

1.5.11.4 Delete Configuration

To delete the existing configuration, provider user needs to follow the below steps:

1. Click **Delete** ( ) against the configuration that needs to be deleted.
2. A confirmation message appears.

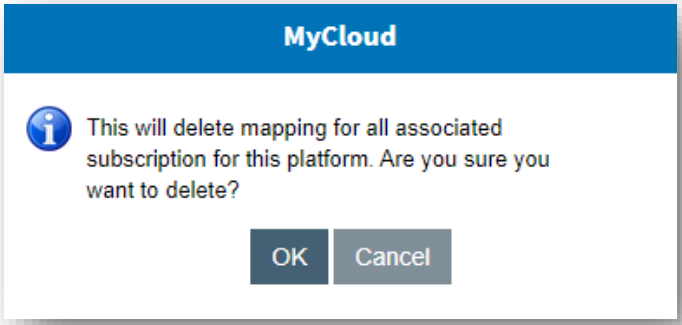


Figure 221 - Confirmation Message

3. A success message appears.

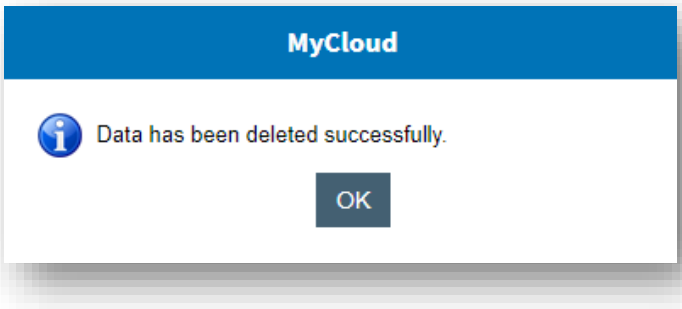


Figure 222 - Success Message

1.5.12 Import Objects

Objects are native resources that are managed through MyCloud and synced from underlying infrastructure which get assigned to end users by provider user.

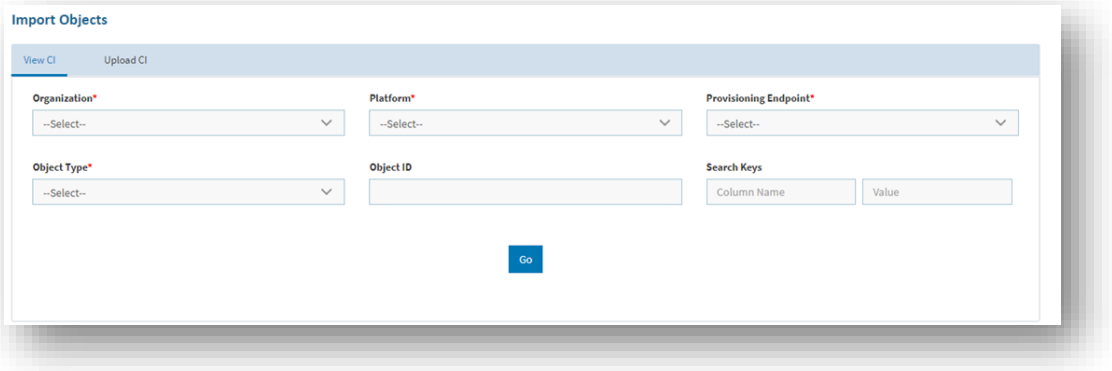


Figure 223 - Import Objects

1.5.12.1 View CI

To import objects for specific customers, provider needs to follow the steps below:

1. On the main menu bar, click **Master** and then click **Import Objects**.
2. Select Organization and Platform.
3. Select Provisioning Endpoint and Object Type.

4. Enter **Object ID** for specific object search (optional)
5. Enter **Search Keys** and **Value** (optional)
6. Click **Go**.

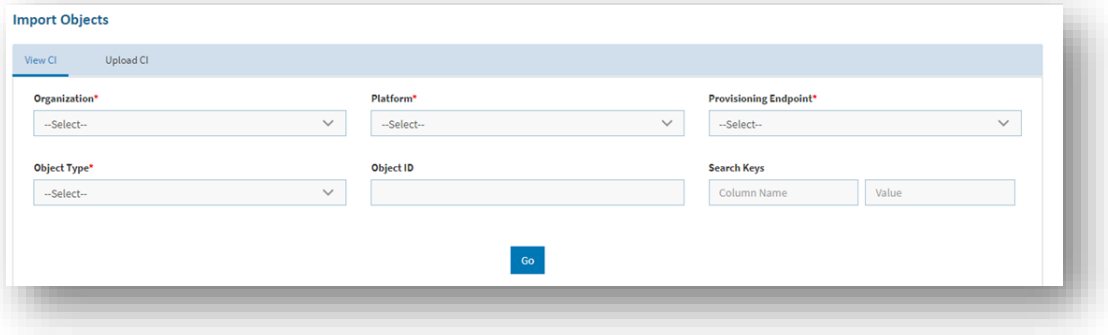


Figure 224 - Import Objects

7. The below screen appears.

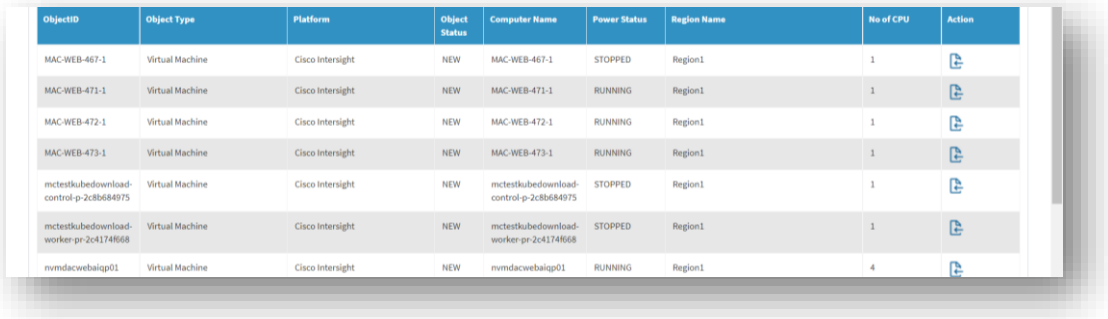


Figure 225 - Import Objects (Cont.)

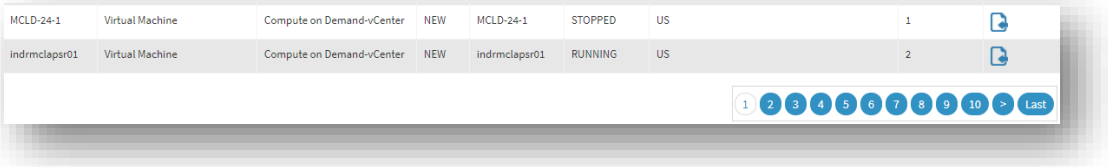


Figure 226 - Import Objects (Cont.)

All the fields marked with asterisk (*) are mandatory.

1.5.12.2 Import CI

To import any CI, provider user needs to follow the below steps:

1. Click **Import** ( ).
2. The below pop-up will appear on the screen.

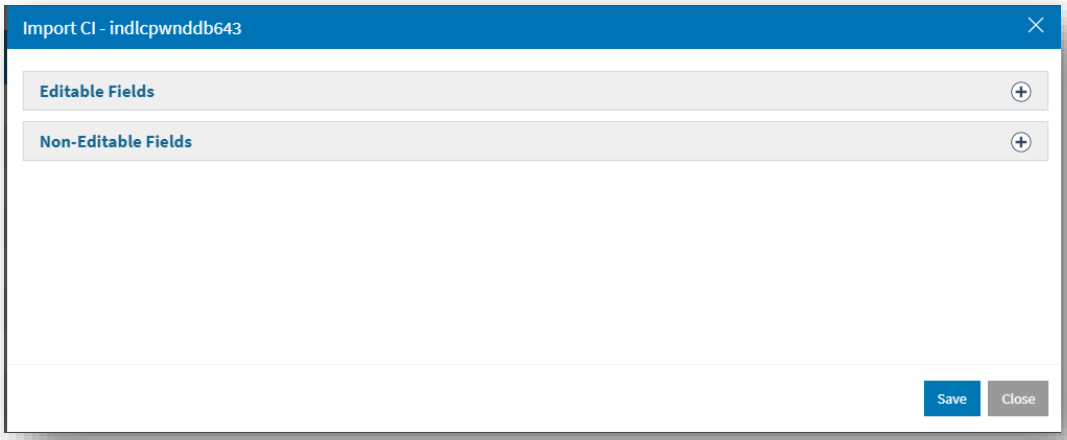


Figure 227 - Import CI

3. Click **Expand icon** ( )to expand to enter all the mandatory fields to import CI.
4. Master configuration of CI columns has been done from **CI Columns Configuration** screen.

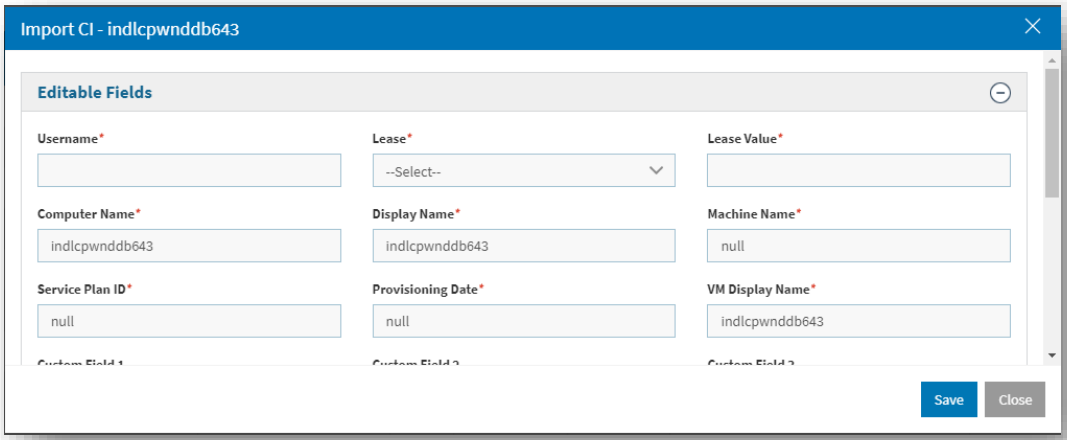


Figure 228 - Import CI

5. Click **Save.**

1.5.12.3 Upload CI

1. To upload the CI from MyCloud screen, click on **Upload CI** tab.

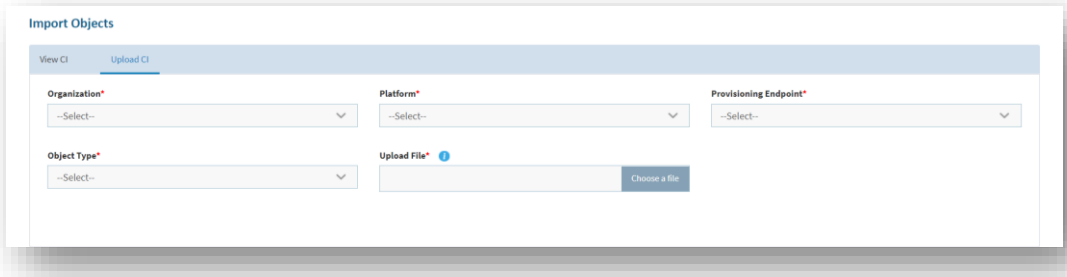


Figure 229 - Import Objects

2. Select Organization, Platform, Provisioning Endpoint, and Object Type.

3. Enter **Search Keys** (Optional)
4. Choose Upload File.

1.5.13 My Reports

1. On the main menu bar, click **My Reports**.
2. The drop-down appears with the following options:

- **Public Cloud Billing:** Displays the resource usage and consumption report associated with cost. User can further drill down the reports, extending from subscription level to resource level.
- **Resource Detail**: Shows the data of underlying infrastructure resources synced with MyCloud.
- **Request Task Management**: Provide the detailed task wise execution status of requests placed by an end-user.
- **ITSM Request Tracking:** Displays the ITSM task execution status associated with each request.
- **Request Tracking**: To track request and its tasks status associate with each request.
- **Amazon Monthly Billing Analysis**: Displays AWS resource usage and consumption report based on months.
- **Public Cloud Annual Billing Analysis**: Displays annual consumption of public cloud resources.
- **Azure Service Usage Report**: This report displays the usage of various Azure services.
- **Amazon Service Billing:** This report displays the usage of various Amazon services.
- **CI Report**: Provider User can track CI object using this report.
- **SLA Report**: This report displays the SLA status associated with each task and the time frame in which it is completed.
- **vCenter Dashboard Report**: This report displays vCenter related Cluster, Host, Data Store, VM and Resource Pool Information in graphical, textual and numerical format.
- **vCenter Performance Report**: This report of vCenter which shows hierarchal data in textual and graphical format.
- **Public Cloud Billing Analyzer:** This report displays billing information for specific cloud platform and subscription based on months.
- **Forecasting And RI Recommendation:** Enables cost optimization and resource utilization by analyzing the past usage patterns & recommending the most optimal resource types on AWS and Azure.

1.5.13.1 Public Cloud Annual Billing Analysis

This report gives comparison of expenses of cloud subscription of last 12 months. Tag filters can be used to narrow down search.

To view the public cloud billing analysis report, provider user needs to follow the below steps:

1. Click Public Cloud Billing Analysis from the My Reports drop-down menu.
2. Select Provider, Platform, Subscription, Tag Name, and Tag Value from drop-down.
3. Click Show Report.

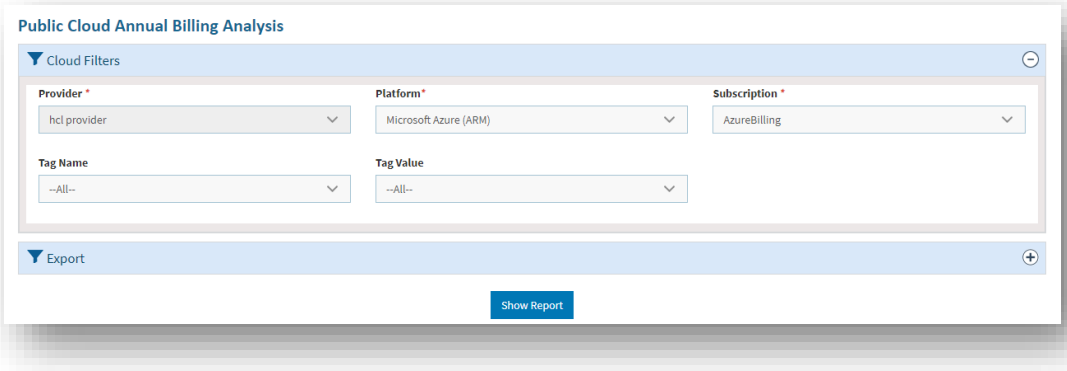


Figure 230 - Public Cloud Annual Billing Analysis

4. The following screen appears:

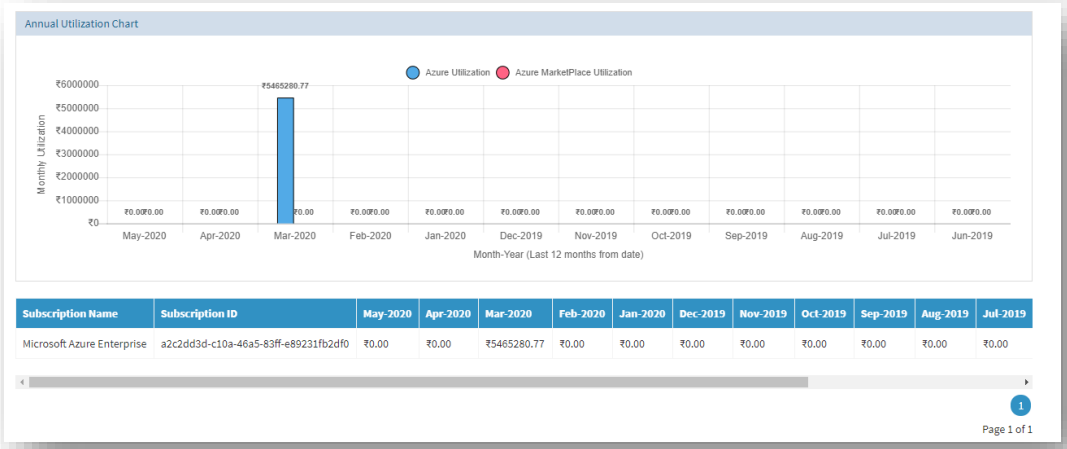


Figure 231 - Public Cloud Annual Billing Analysis (Cont.)

1.5.13.2 Azure Service Usage Report

This report gives service wise billing for all Azure accounts or specific Azure account for specific months' range. Filters can be used to narrow down search.

To view the Azure service usage report, provider user needs to follow the below steps:

1. Click Azure Service Usage Report from the My Reports dropdown menu.
2. Select Provider, Platform & Subscription.
3. Select From Months and To Months.
4. Click Show Report.

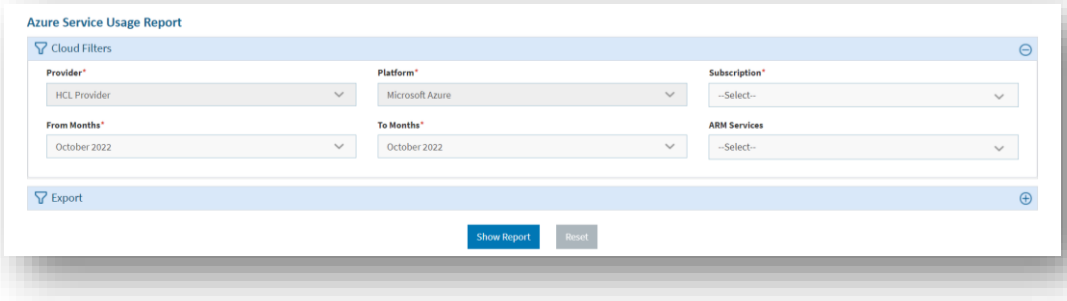


Figure 232 - Azure Service Usage Report

5. The following screen appears:

Figure 233 - Azure Service Usage Report (Cont.)

1.5.13.3 Amazon Service Report

This report gives service wise billing for all AWS accounts or specific AWS account. Filters can be used to narrow down search.

To view the amazon service report, provider user needs to follow the below steps:

1. Click on **Amazon Service Report** from the **My Reports** dropdown menu.
2. Select Provider, Platform & Subscription.
3. Select **Months** and **Year**.
4. Select **Tags**.
5. Click Show Report.

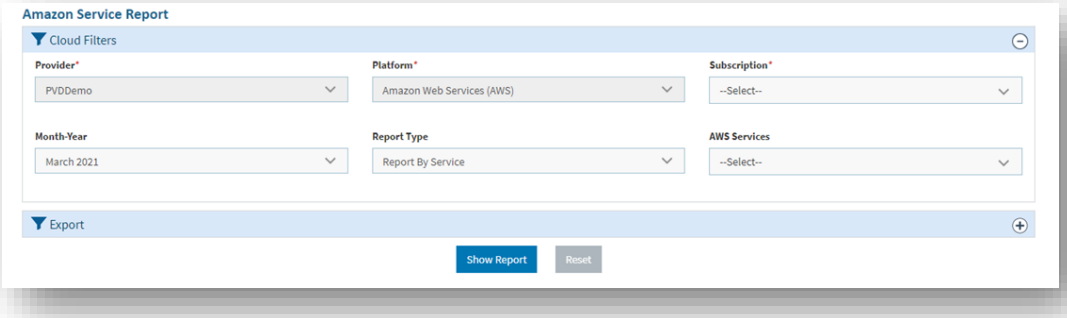


Figure 234 - Amazon Service Report

6. The following screen will appear:

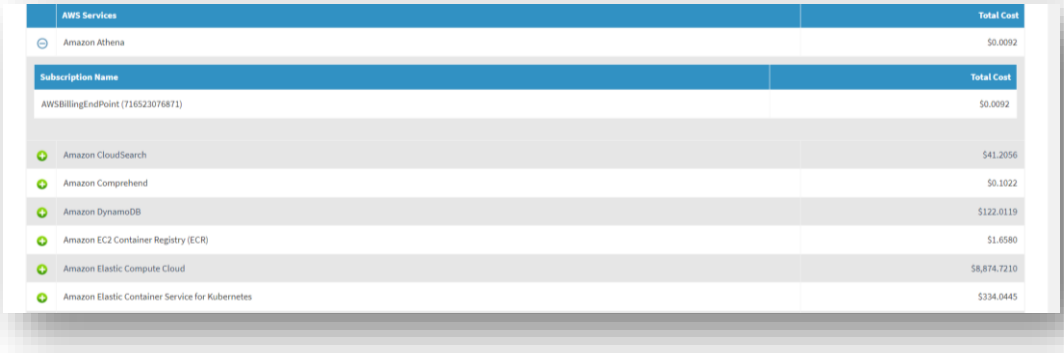


Figure 235 - Amazon Service Report (Cont.)

7. Click **Expand icon** ( ) to expand the selection.
8. The data will appear in tabular format.

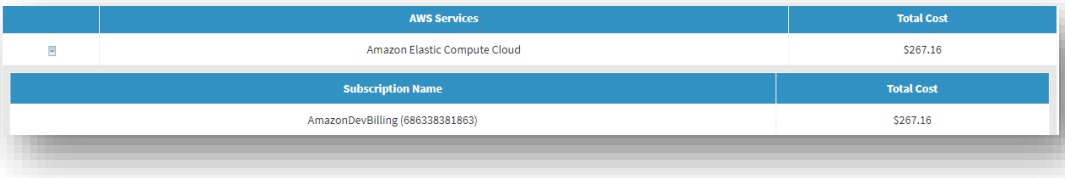


Figure 236 - Amazon Service Report (Contd.)

1.5.13.4 Public Cloud Billing

This report gives a list of the billed usage details. User can drill down the data up to resource level. Filter's options are also available to narrow downs the data.

To view the **Public Cloud Billing** report, provider user needs to follow the below steps:

1. Click **Public Cloud Billing** from the **My Reports** dropdown menu.
2. Select Provider, Platform & Subscription.
3. Select **Months** and **Year**.
4. Select **Tags**.
5. Click Show Report.
6. The following screen appears.

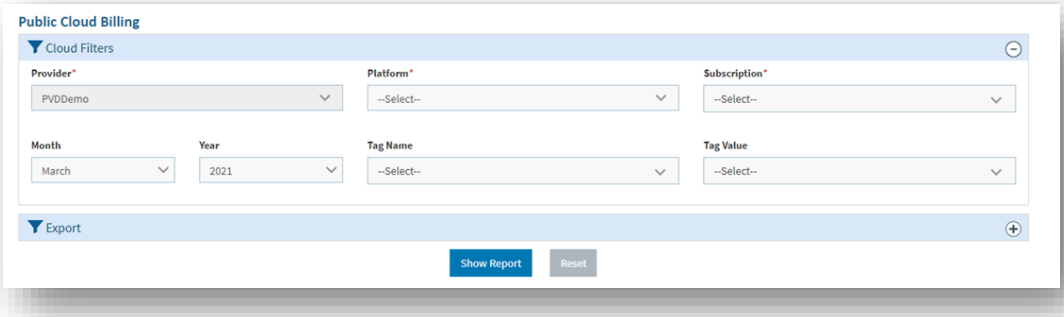


Figure 237 - Public Cloud Billing

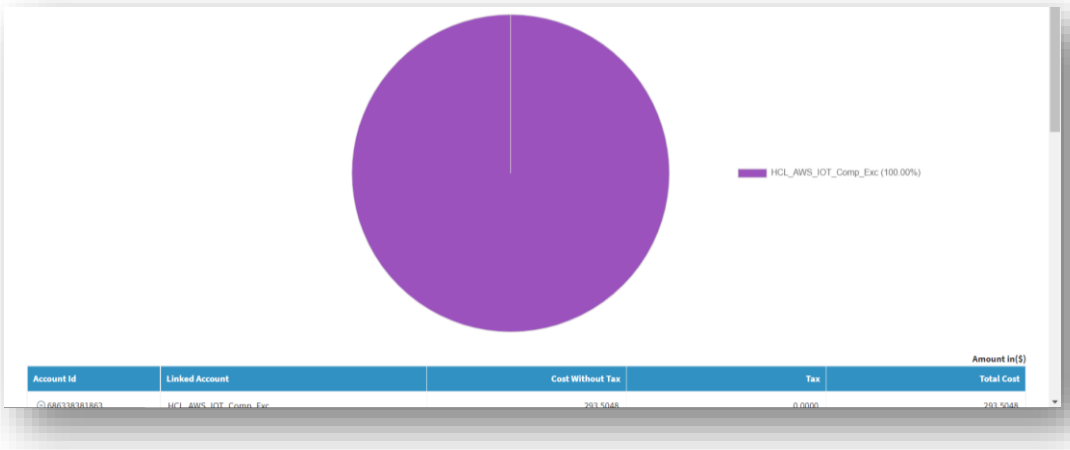


Figure 238 - Public Cloud Billing (Cont.)

7. On clicking of **Expand** ( ) button, it displays account information.
8. The following screen appears.

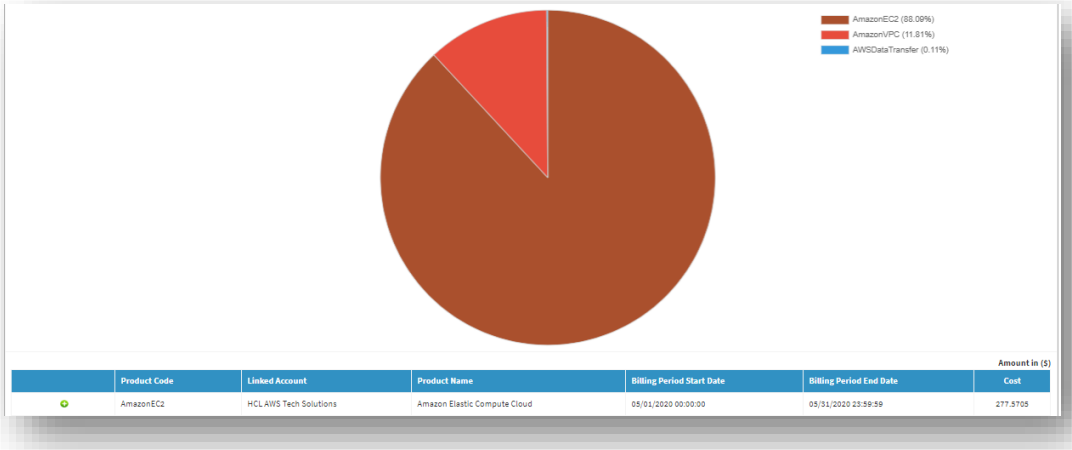


Figure 239 - Public Cloud Billing (Cont.)

9. On clicking of **Expand** ( ) button, it displays product information.
10. The following screen appears.

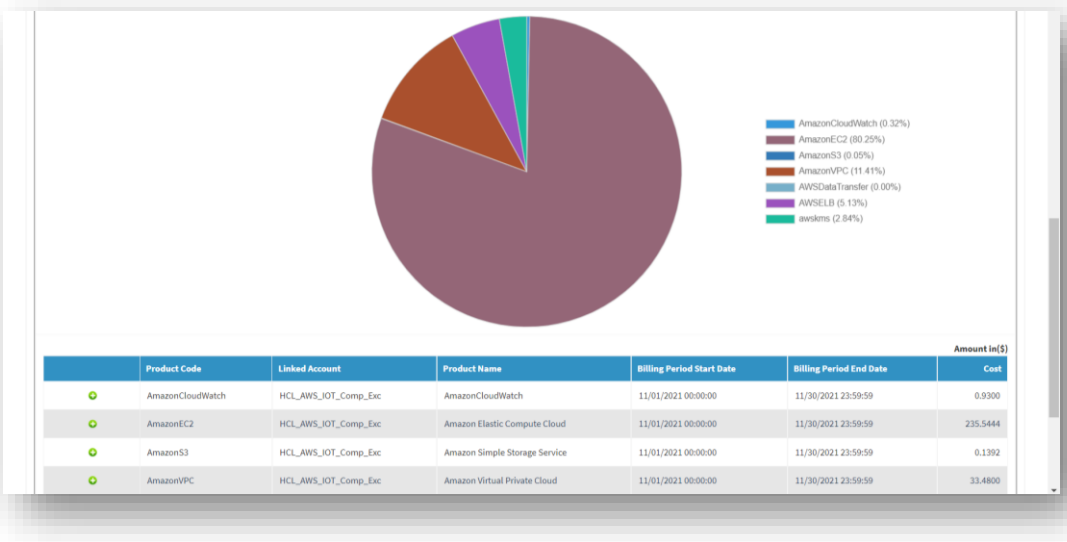


Figure 240 - Public Cloud Billing (Contd.)

11. On clicking of **Expand** ( ) button, it displays usage information.
12. The following screen appears.

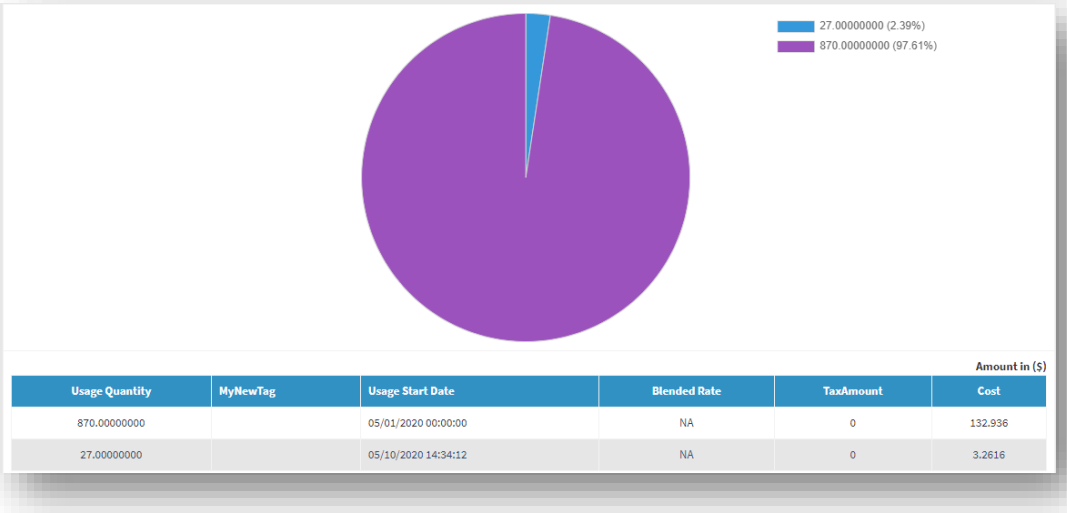


Figure 241 - Public Cloud Billing

1.5.13.5 CI Report

To view the CI report, provider user needs to follow below steps:

1. On main menu, click **My Reports** and then click **CI Report**.
2. The below screen appears.

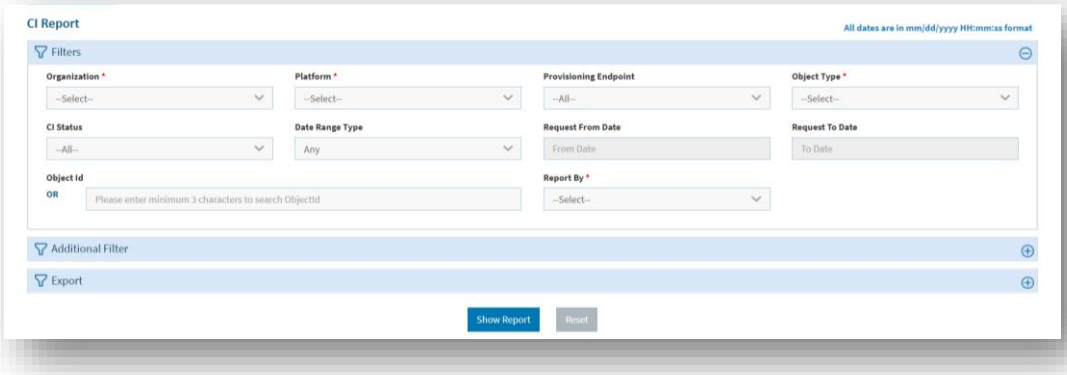


Figure 242 - CI Report

Fields marked with (*) are mandatory to fill. Reset will enable the cloud filters.

3. Select Organization, Platform & Environment\Endpoint.
4. Select Object Type, CI Status, Date Range Type.
5. Select Request from Date and Request To Date.
6. Or search by **Object ID**.
7. Click Show Report.

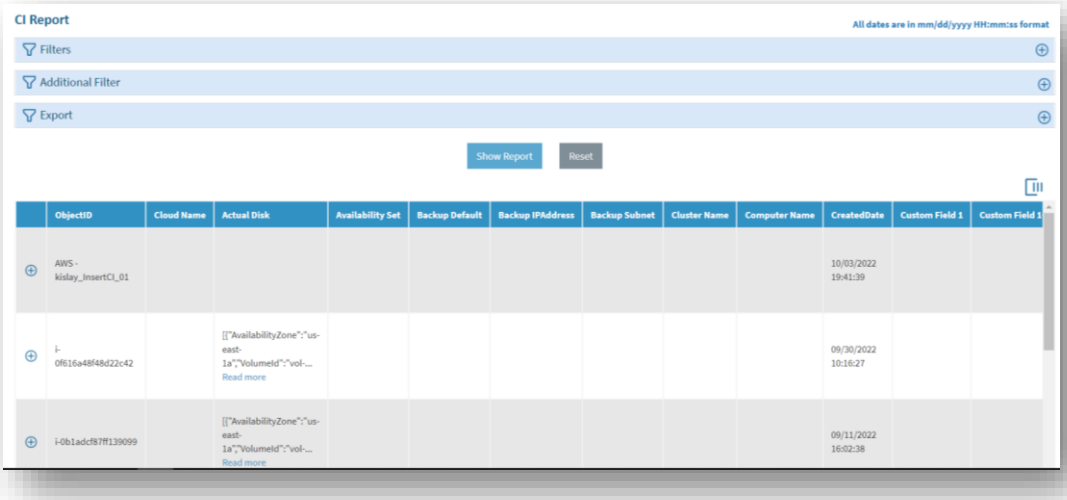


Figure 243 - CI Report

8. Click to **Expand** ( ) to see the request wise details of an object.

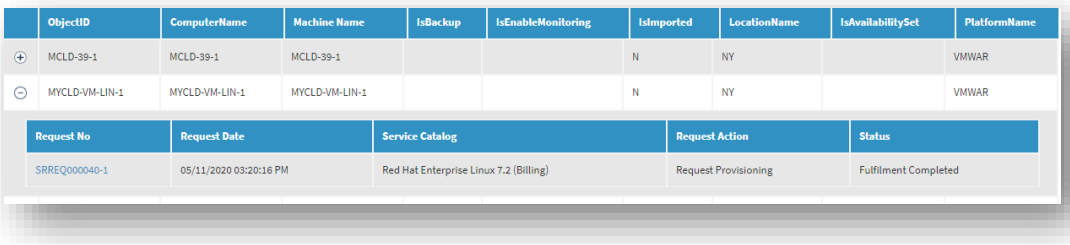


Figure 244 - CI Report (Cont.)

9. Click on Request No. to view the Request Details.

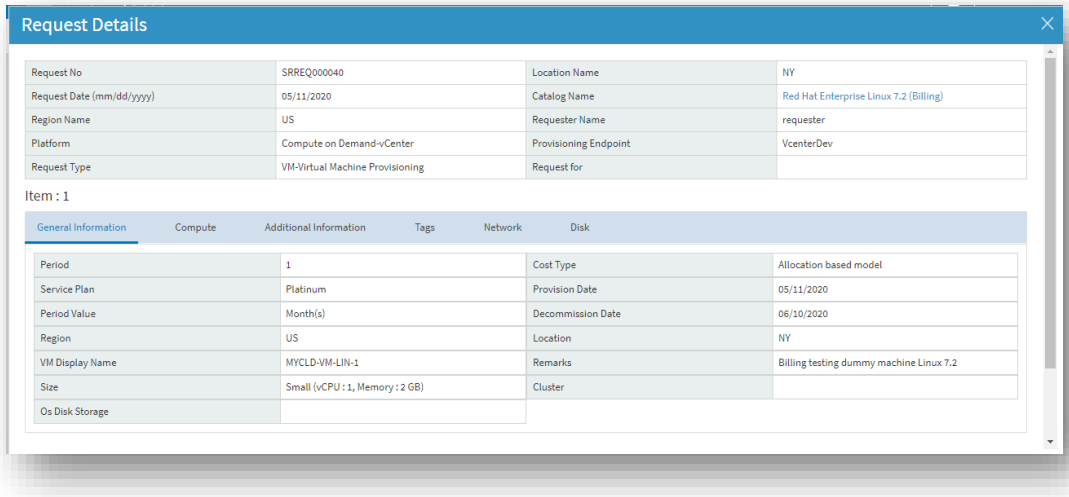


Figure 245 - CI Report (Cont.)

10. Click on **Configure CI Columns** ( ). This column setting configuration is user specific.
    - **Default Case**: In case no columns settings are done, by default all CI columns will appear.

      A screen apprears as below.

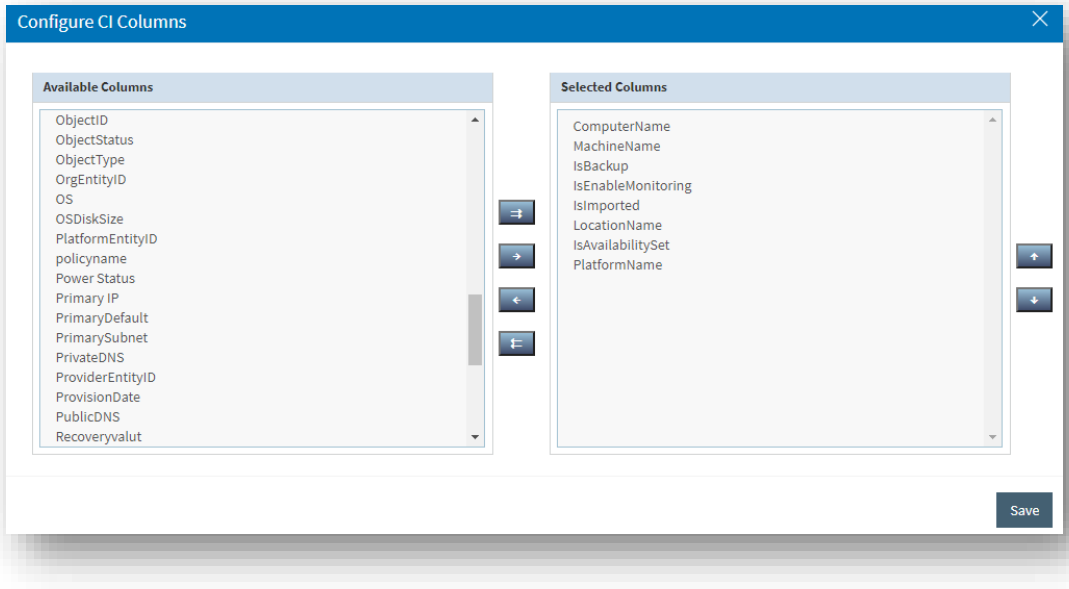


Figure 246 - CI Report (Cont.)

- **Available Columns:** Displays list of all the available CIs.
- **Selected Columns:** Displays list of all the CIs that have been selected to configure in the report.

  This screen also compromises of some actions,

- **Swap All Right ( ):** Move/swap all the available CIs under selected columns.
- **Swap Right( ):** Move selected CIs under selected column.
- **Swap Left( ):** Move/shift selected CIs to the left side (selected to available).
- **Swap All Left ( ):** Move/swap all the selected CIs under available columns.

Above actions are applicable for available columns and selected columns

11. To change the order of display of the selected columns, provider user can use the following options.

- **Move Up ( ):** Move selected columns up
- **Move Down( ):** Move selected columns down

12. Click **Save**.
13. A success message appears.

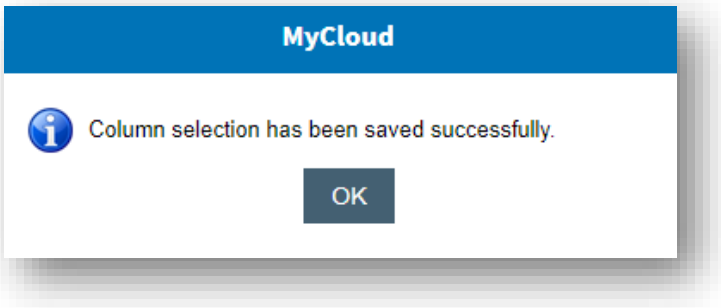


Figure 247 - CI Report

14. Provider user can export the report data either in JSON or CSV.
15. Select Export Type.
16. Click **Export**.

Figure 248 - CI Report

17. Below report appears, after download.

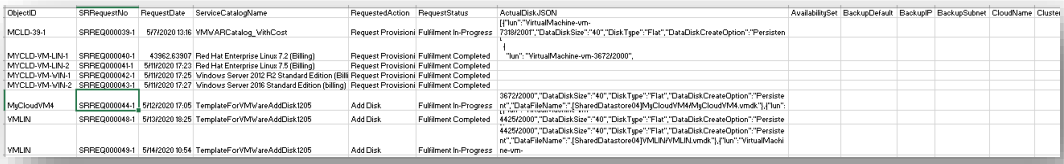


Figure 249 - CI Report

1.5.13.6 Resource Detail

To view the **Resource Detail** report, provider user needs to follow the below steps:

1. Click on **Resource Detail** from the **My Reports** dropdown menu.
2. The following screen appears.

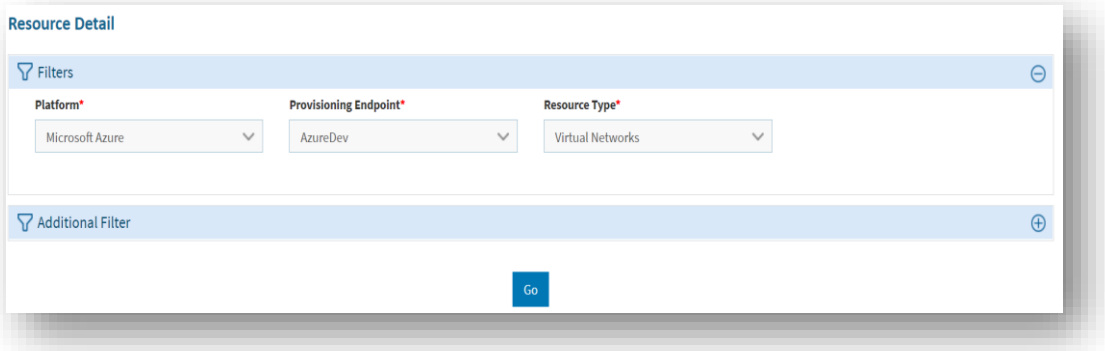


Figure 250 - Resource Detail

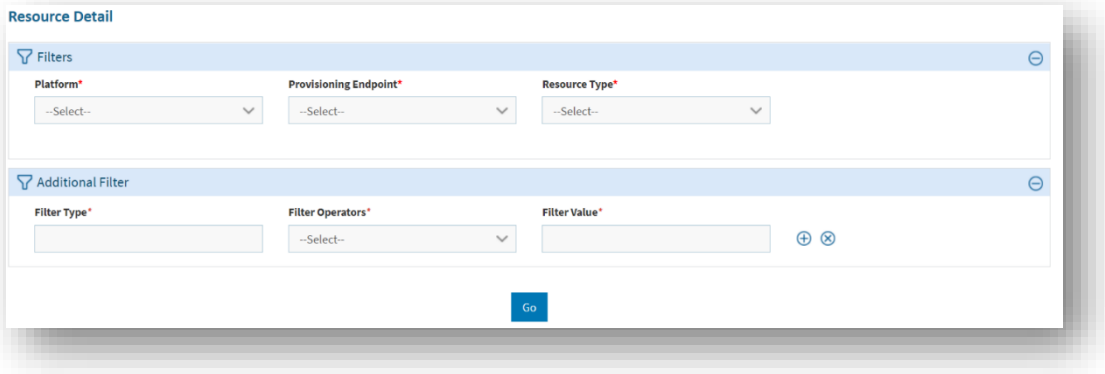


Figure 251 - Resource Detail (Cont.)

3. Select **Platform**.
4. Select Provisioning Endpoint.
5. Select Resource Type.
6. **Additional Filter** is optional. On clicking **Additional Filter,** following parameters need to be filled.
   - Select Filter Type.
   - Select Filter Operators.
   - Enter Filter Value.
7. Click **Add Button** ( )
8. Click **Go**.

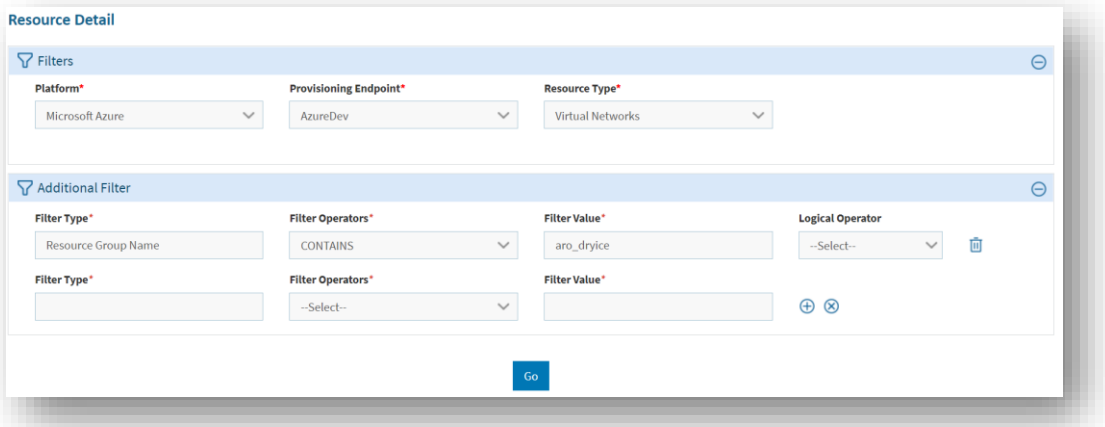


Figure 252 - Resource Detail (Cont.)

9. Reports are displayed in a tabular form.

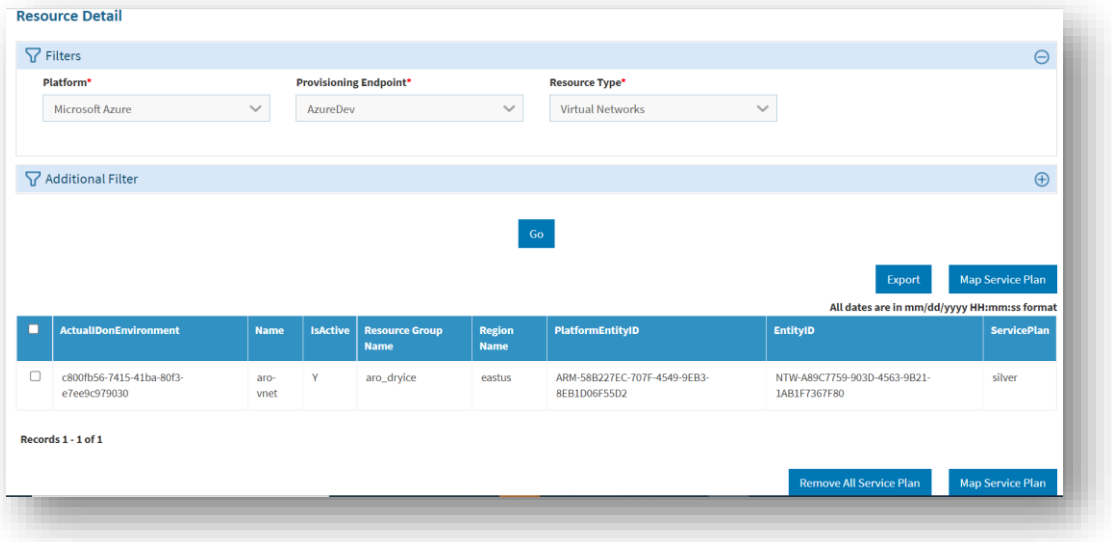


Figure 253 - Resource Detail (Cont.)

1.5.13.7 Request Task Management

This report lists the task level details against a request item. User can also take actions on task. Task status with different color codes will appear on screen. User can filter records based on available filters.

To view the **Request Task Management** report, provider user needs to follow the below steps:

1. Click on **Request Task Management** from the **My Reports** dropdown menu.
2. The following screen appears.

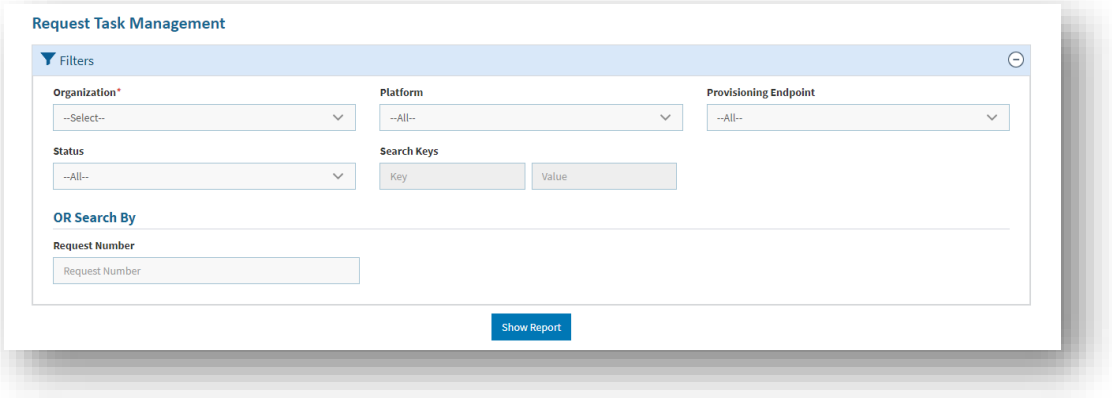


Figure 254 – Request Task Management

3. Select Organization.
4. Select Platform & Provisioning Endpoint.
5. Enter Status and Search Keys.

   Or
6. Enter Request Number.
7. Click Show Report.

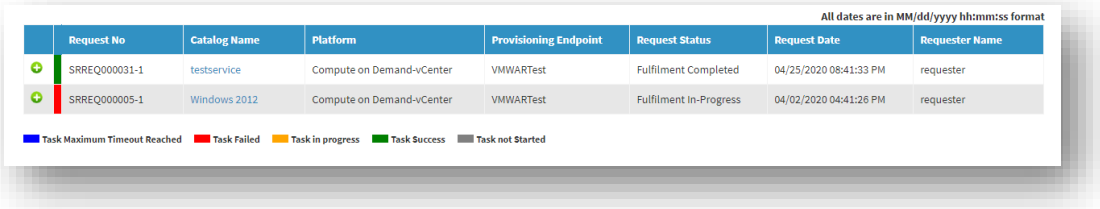


Figure 255 - Request Task Management (Cont.)

8. Reports are displayed in a tabular form.
9. Click **Expand** ( ) against a request if a user wishes to take an action.

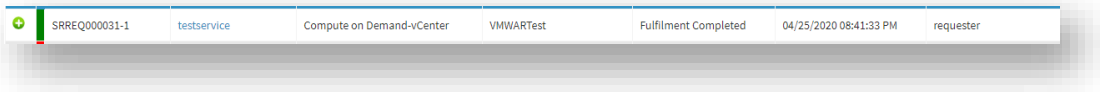


Figure 256 - Request Task Management (Cont.)

10. Details are displayed in a tabular form.

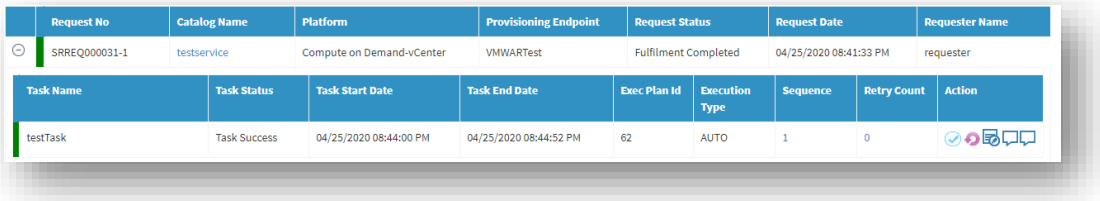


Figure 257 - Request Task Management (Cont.)

11. To mark a task as **Completed**, click **Complete**.

1.5.13.7.1 Restart Task

1. To restart a task, click on **Restart icon** ( ).

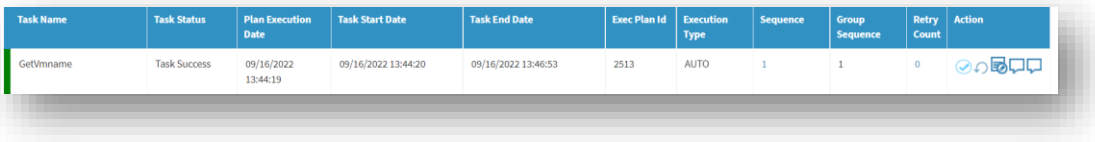


Figure 258 - Request Task Management (Cont.)

2. Click **OK**.

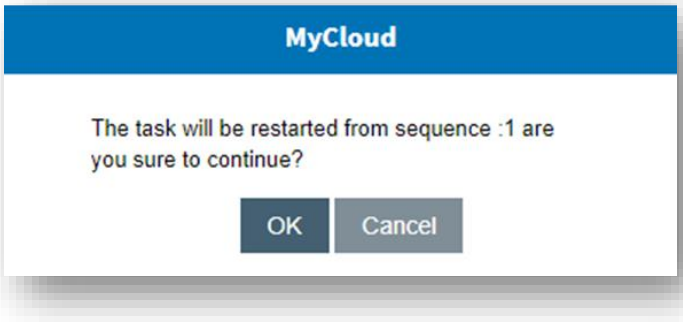


Figure 259 - Request Task Management (Cont.)

3. The task is restarted successfully.

1.5.13.7.2 View XML

1. To validate requested XML, click **View XML** ( ).
2. A pop-up appears.

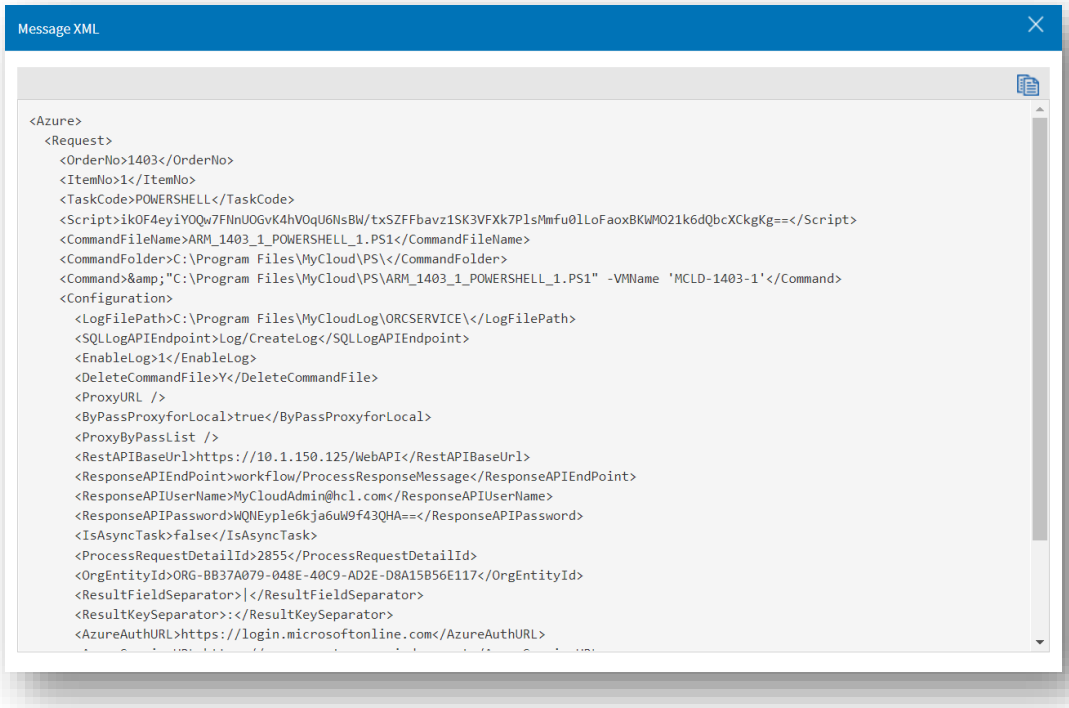


Figure 260 - Request Task Management (XML)

1.5.13.7.3 View Response

1. To validate response XML, click on **View Response** ( ).
2. A pop-up appears.

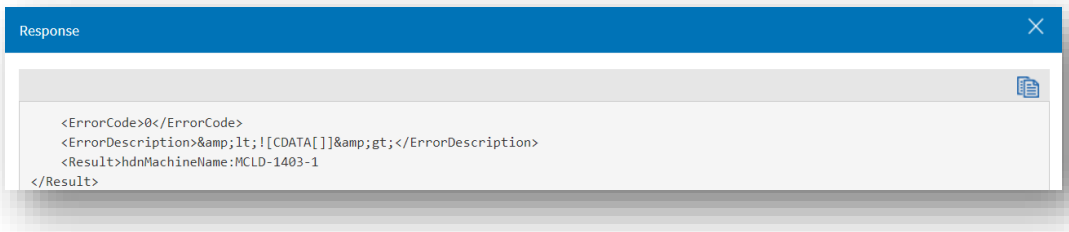


Figure 261 - Request Task Management (XML) (Cont.)

To check the status of the task, click on **Sequence**. To check the error detail of the task, click on **Detailed Logs**.

In request Task management there is new column External Tool which is configured by key" EnableExternalToolId" by provider admin.

To set value "Y" of this key admin user can enable to show external tool id in request task management screen for provider.

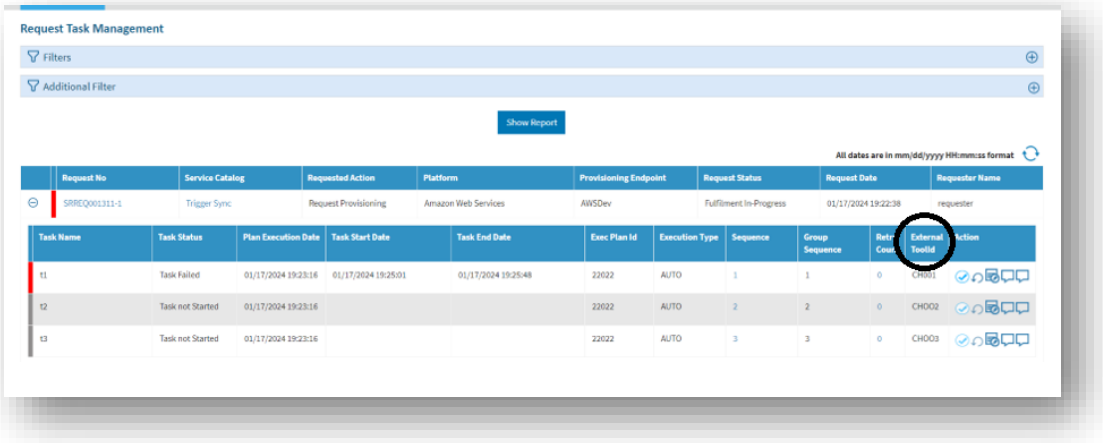


Figure 262 – Request Task Management

1.5.13.8 ITSM Status Tracking

To view the ITSM Status Tracking Report, provider user needs to follow the below steps:

1. Click ITSM Status Tracking under My Reports dropdown menu.
2. The following screen appears.

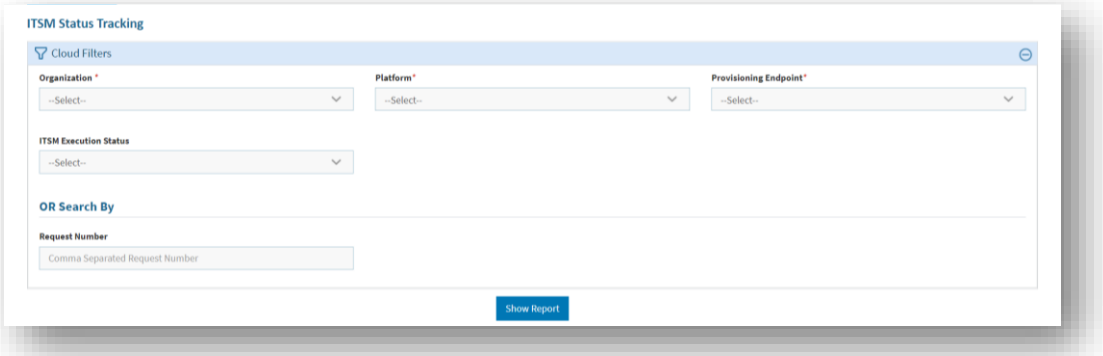


Figure 263 - ITSM Request Racking

3. Select Organization & Platform.
4. Select Provisioning Endpoint.
5. Select ITSM Execution Status.

   Or

6. Search by Request Number.
7. Click Show Report.

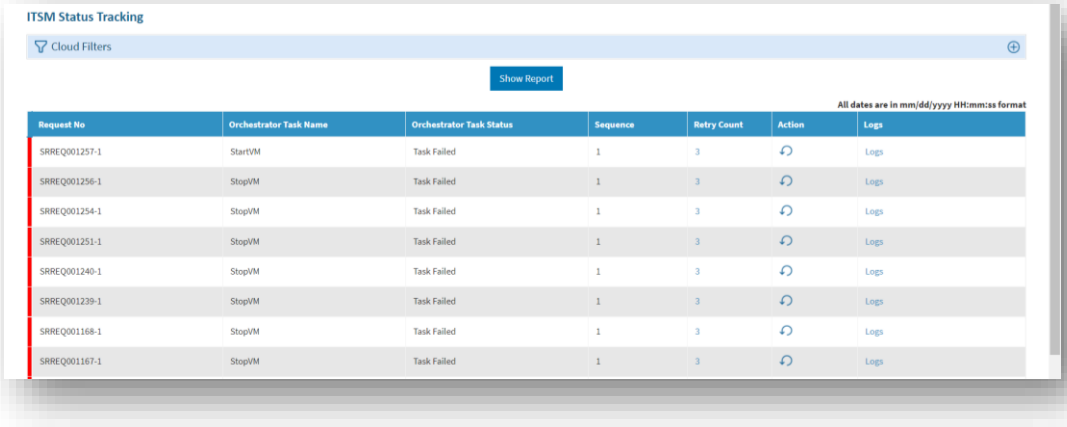


Figure 264 - ITSM Status Tracking (Cont.)

1.5.13.8.1 Reset Task

1. To **Restart** a task, click ( ).

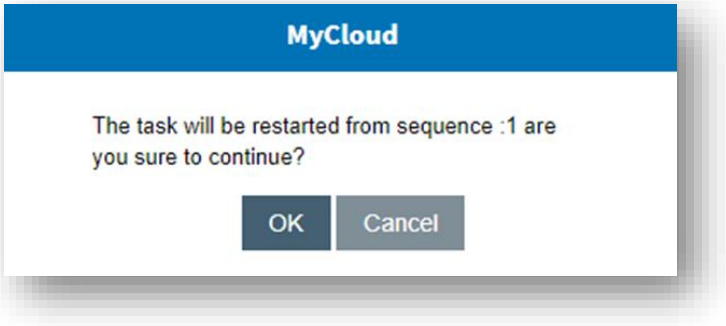


Figure 265 - ITSM Request Tracking (Cont.)

2. The task gets restarted.

To check the error detail of the task, click on **Retry Count Hyperlink**.

1.5.13.9 Request Tracking

To view the request tracking report, provider user needs to follow the below steps:

1. Click **Request Tracking** under **My Reports** dropdown menu.
2. The following screen appears.

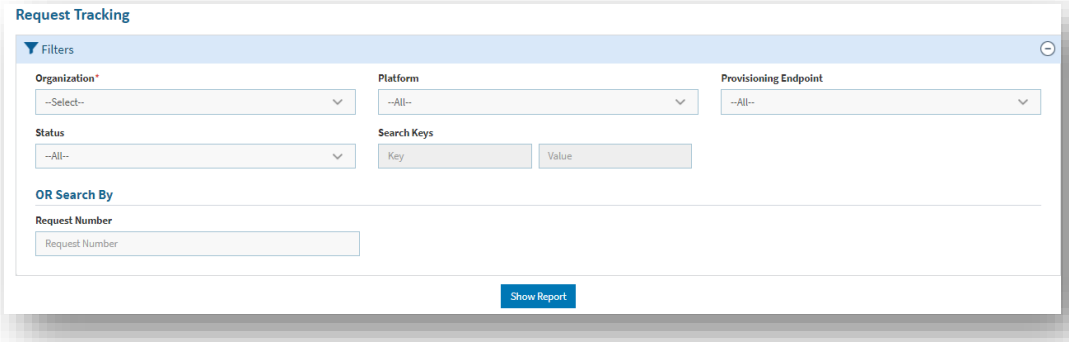
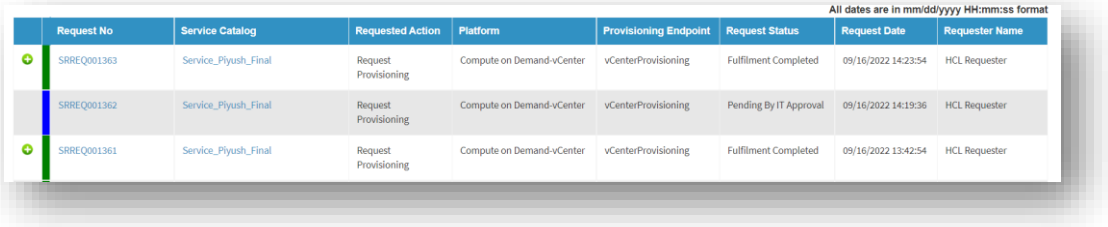


Figure 266 - Request Tracking

3. Select Organization, Platform, and Provisioning Endpoint.

4. Select **Status**.
5. Enter **Search Keys** or **Search By** Request Number.
6. Click Show Report.

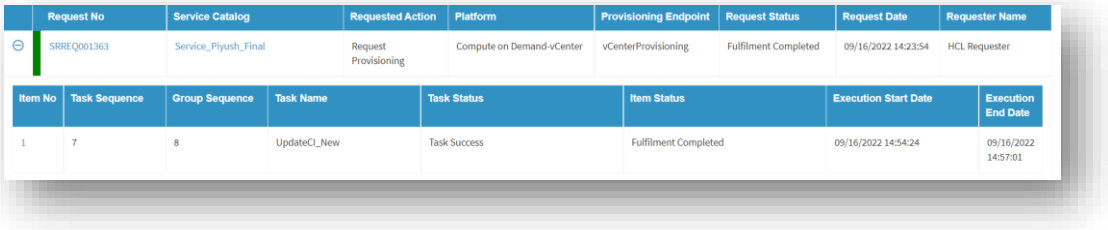


All dates are in mm/dd/yyyy HH:mm:ss format

Request No	Service Catalog	Requested Action	Platform	Provisioning Endpoint	Request Status	Request Date	Requester Name
SRREQ001363	Service_Piyush_Final	Request Provisioning	Compute on Demand-vCenter	vCenterProvisioning	Fulfilment Completed	09/16/2022 14:23:54	HCL Requester
SRREQ001362	Service_Piyush_Final	Request Provisioning	Compute on Demand-vCenter	vCenterProvisioning	Pending By IT Approval	09/16/2022 14:19:36	HCL Requester
SRREQ001361	Service_Piyush_Final	Request Provisioning	Compute on Demand-vCenter	vCenterProvisioning	Fulfilment Completed	09/16/2022 13:42:54	HCL Requester

Figure 267 - Request Tracking (Cont.)

7. On clicking **Expand** ( ) button, it displays task information.
8. The following screen appears:

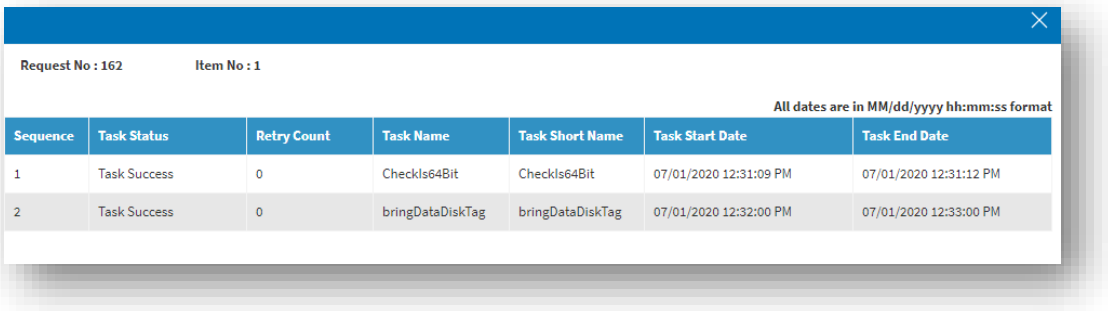


Request No	Service Catalog	Requested Action	Platform	Provisioning Endpoint	Request Status	Request Date	Requester Name
SRREQ001363	Service_Piyush_Final	Request Provisioning	Compute on Demand-vCenter	vCenterProvisioning	Fulfilment Completed	09/16/2022 14:23:54	HCL Requester

Item No	Task Sequence	Group Sequence	Task Name	Task Status	Item Status	Execution Start Date	Execution End Date
1	7	8	UpdateCI_New	Task Success	Fulfilment Completed	09/16/2022 14:54:24	09/16/2022 14:57:01

Figure 268 - Request Tracking (Cont.)

9. On clicking **Request No**. It displays item details.
10. The following screen appears.



Request No : 162 Item No : 1

All dates are in MM/dd/yyyy hh:mm:ss format

Sequence	Task Status	Retry Count	Task Name	Task Short Name	Task Start Date	Task End Date
1	Task Success	0	CheckIs64Bit	CheckIs64Bit	07/01/2020 12:31:09 PM	07/01/2020 12:31:12 PM
2	Task Success	0	bringDataDiskTag	bringDataDiskTag	07/01/2020 12:32:00 PM	07/01/2020 12:33:00 PM

Figure 269 - Request Tracking (Cont.)

1.5.13.10 Amazon Monthly Billing Analysis

This report gives details of monthly bill for AWS. Data is the line item of AWS Usage Bill. Tags filters can be used for search specific tagged resources.

To view the Amazon Billing Analysis Report, provider user needs to follow the below steps:

1. Click on Amazon Monthly Billing Analysis under My Reports dropdown menu.
2. The following screen appears.

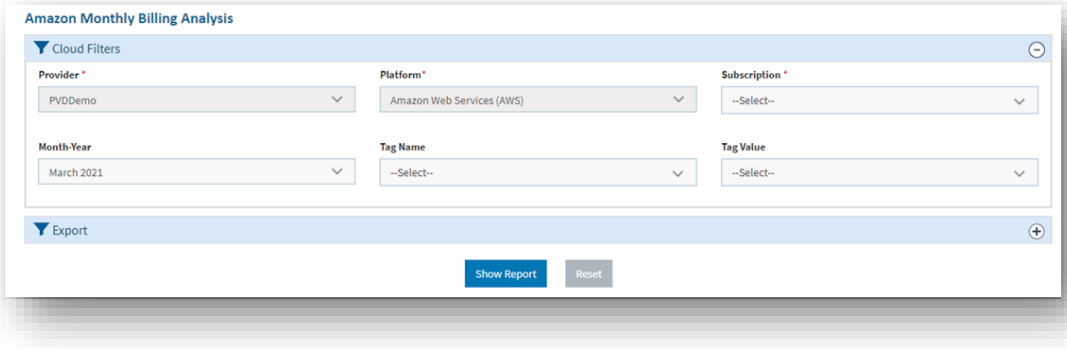
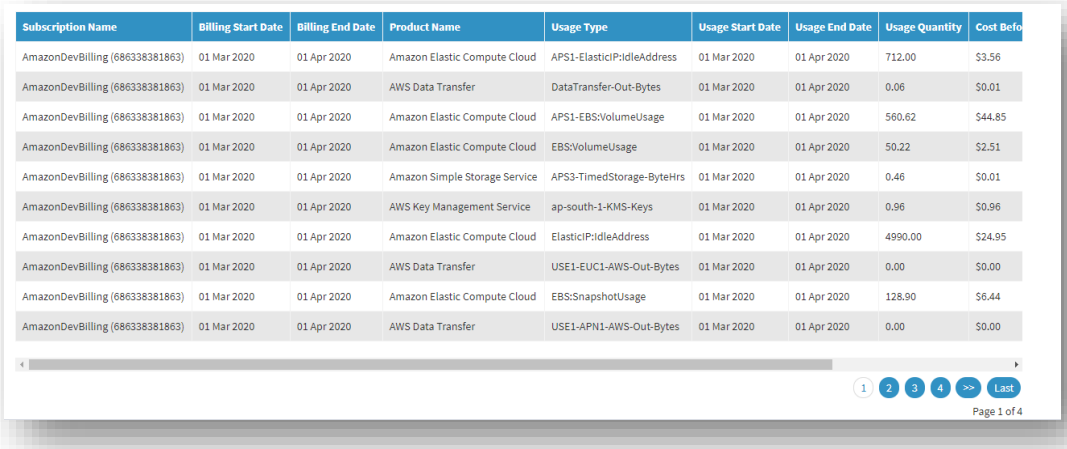


Figure 270 - Amazon Monthly Billing Analysis

3. Select Platform, Subscription, Tag Name, Tag Value, and Month from drop-down.
4. Click Show Report.
5. The following screen appears. Provider user can see the **Monthly Billing Report** as shown in the below figure:



Subscription Name	Billing Start Date	Billing End Date	Product Name	Usage Type	Usage Start Date	Usage End Date	Usage Quantity	Cost Befo
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	Amazon Elastic Compute Cloud	APS1-ElasticIP:IdleAddress	01 Mar 2020	01 Apr 2020	712.00	$3.56
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	AWS Data Transfer	DataTransfer-Out-Bytes	01 Mar 2020	01 Apr 2020	0.06	$0.01
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	Amazon Elastic Compute Cloud	APS1-EBS:VolumeUsage	01 Mar 2020	01 Apr 2020	560.62	$44.85
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	Amazon Elastic Compute Cloud	EBS:VolumeUsage	01 Mar 2020	01 Apr 2020	50.22	$2.51
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	Amazon Simple Storage Service	APS3-TimedStorage-ByteHrs	01 Mar 2020	01 Apr 2020	0.46	$0.01
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	AWS Key Management Service	ap-south-1-KMS-Keys	01 Mar 2020	01 Apr 2020	0.96	$0.96
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	Amazon Elastic Compute Cloud	ElasticIP:IdleAddress	01 Mar 2020	01 Apr 2020	4990.00	$24.95
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	AWS Data Transfer	USE1-EUC1-AWS-Out-Bytes	01 Mar 2020	01 Apr 2020	0.00	$0.00
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	Amazon Elastic Compute Cloud	EBS:SnapshotUsage	01 Mar 2020	01 Apr 2020	128.90	$6.44
AmazonDevBilling (686338381863)	01 Mar 2020	01 Apr 2020	AWS Data Transfer	USE1-APN1-AWS-Out-Bytes	01 Mar 2020	01 Apr 2020	0.00	$0.00

Figure 271 - Amazon Monthly Billing Analysis (Cont.)

1.5.13.11 SLA Report

To view **SLA Report**, Provider user needs to follow the below steps:

1. Click **SLA Reports** Under **My Reports** Dropdown Menu.
2. The following screen appears.

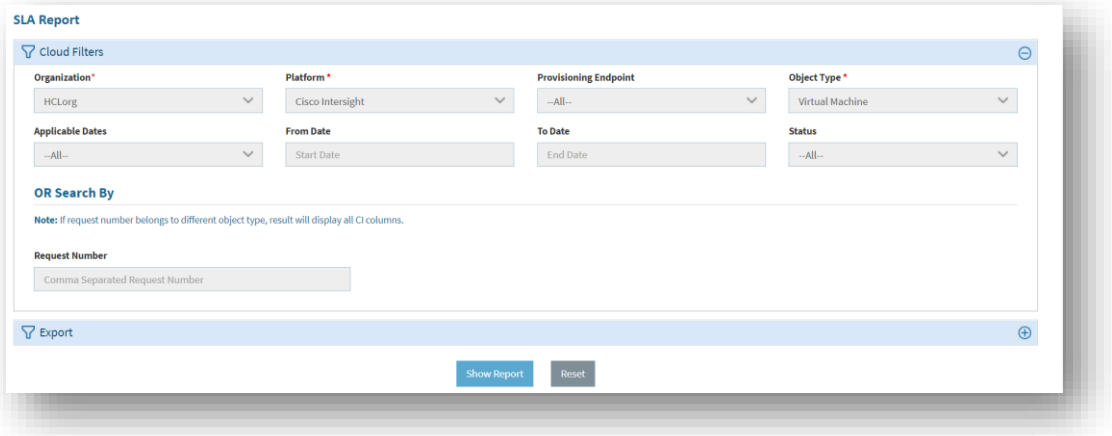
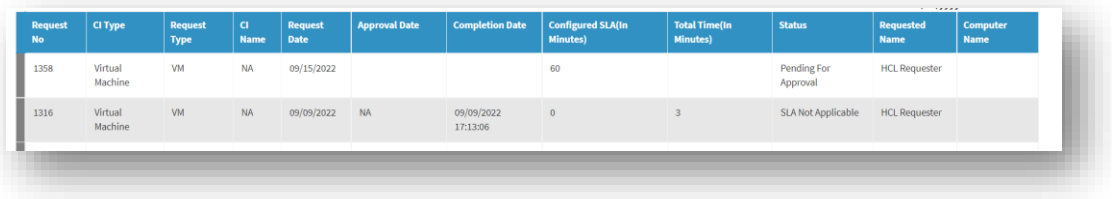


Figure 272 – SLA Reports

3. Select Organization, Platform, and Provisioning Endpoint.
4. Select Applicable Dates, From Date, To Date, and Status.
5. Select Object Type.

   Or
6. Provide **Request Number** from Input Box.
7. Click Show Report.
8. The following screen appears:



Request No	CI Type	Request Type	CI Name	Request Date	Approval Date	Completion Date	Configured SLA(In Minutes)	Total Time(In Minutes)	Status	Requested Name	Computer Name
1358	Virtual Machine	VM	NA	09/15/2022			60		Pending For Approval	HCL Requester	
1316	Virtual Machine	VM	NA	09/09/2022	NA	09/09/2022 17:13:06	0	3	SLA Not Applicable	HCL Requester	

Figure 273 – SLA Reports

1.5.13.12 vCenter Performance Dashboard

This report shows complete health of vCenter. This report has multiple widgets for different vCenter resources for their respective performances. All resources can be drilled down with lowest level of performance information.

To view the **vCenter Performance Dashboard** report, provider user needs to follow the below steps:

1. Click vCenter **Performance Dashboard** under **My Reports** dropdown menu.
2. The following screen appears.

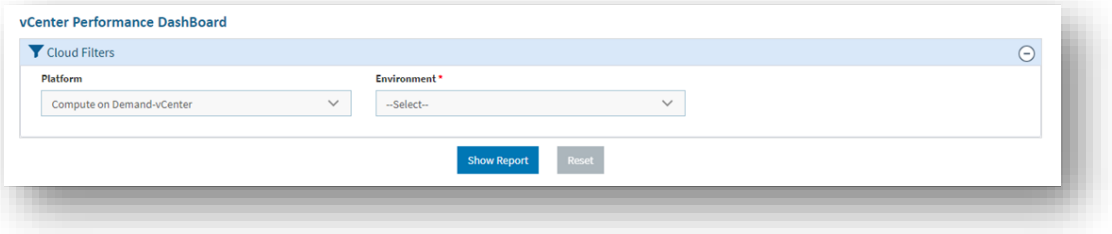


Figure 274 - vCenter Performance Dashboard (Cont.)

3. Select **Platform** and **Environment** from dropdown.
4. Click Show Report.
5. The dashboard appears containing multiple widgets. The description of each widget is as follows:
    - **vCenter Summary:** Highlights the overall summary of vCenter environment**.**

Figure 275 - vCenter Performance Dashboard (Cont.)

- **OS Wise Distribution Detail:** This section displays number of VMs based on OS.

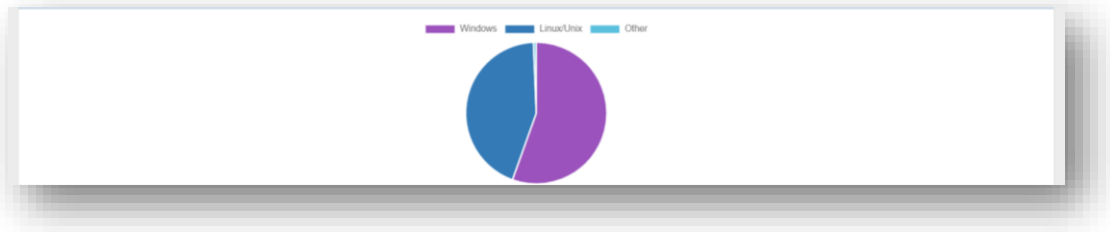


Figure 276 - vCenter Performance Dashboard (Cont.)

- **Cluster Utilization:** This section displays the details of cluster and their utilization.

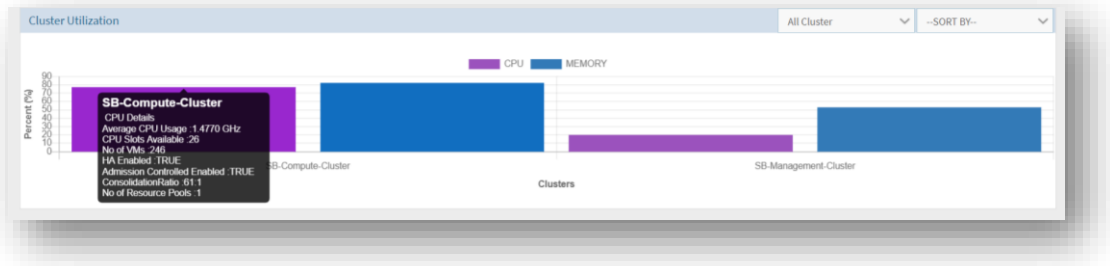


Figure 277 - vCenter Performance Dashboard (Cont.)

6. Click the bar chart for further details (of Hosts).

Host Name	Free CPU (%)	Used CPU (%)	Used Memory (%)	Free Memory (%)	Total Memory Capacity In GB	Total CPU Count	Server Model	Current CPU Usage In GHz	Current Memor
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455
indrcesxi04.dryicelabs.com	34	66	84	16	510.4971	36	Cisco Systems IncUCSB-B200-M5	77.6580	412.6455

Figure 278 – vCenter Performance Dashboard (Cont.)

- **Top 30 Host With CPU Utilization Detail:** This section displays the details of host and their utilization based on CPU utilization.

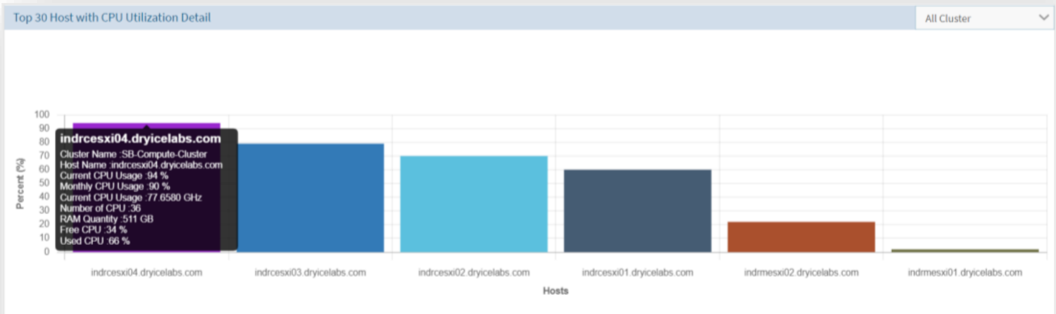
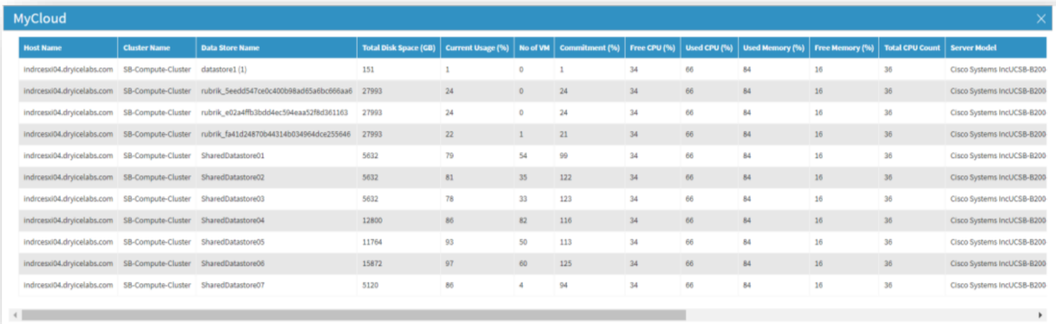


Figure 279 – vCenter Performance Dashboard (Cont.)

7. Click the **bar chart** for further details.



MyCloud

Host Name	Cluster Name	Data Store Name	Total Disk Space (GB)	Current Usage (%)	No of VM	Commitment (%)	Free CPU (%)	Used CPU (%)	Used Memory (%)	Free Memory (%)	Total CPU Count	Server Model
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	datastore1 (1)	151	1	0	1	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	rubrik_5eedd547ce0c400b98ad65a6bc666aa6	27993	24	0	24	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	rubrik_e02a4ffb3bdd4ec594eaa52f8d361163	27993	24	0	24	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	rubrik_fa41d24870b44314b034964dce255646	27993	22	1	21	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore01	5632	79	54	99	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore02	5632	81	35	122	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore03	5632	78	33	123	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore04	12800	86	82	116	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore05	11764	93	50	113	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore06	15872	97	60	125	34	66	84	16	36	Cisco Systems IncUCSB-B200
indrcesxi04.dryicelabs.com	SB-Compute-Cluster	SharedDatastore07	5120	86	4	94	34	66	84	16	36	Cisco Systems IncUCSB-B200

Figure 280 – vCenter Performance Dashboard (Cont.)

- **Top 30 Host With Memory Utilization Detail:** This section displays the details of host and their utilization based on memory utilization.

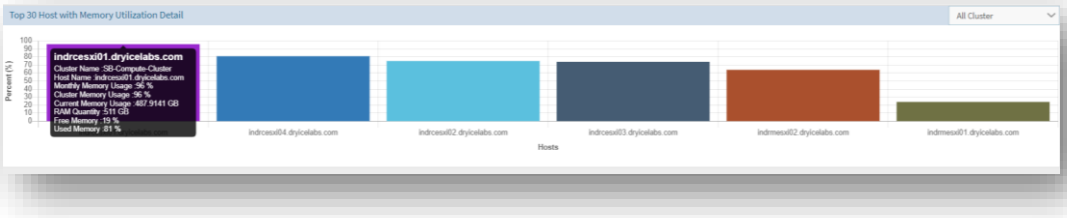


Figure 281 – vCenter Performance Dashboard (Cont.)

8. On clicking of bar chart, popup window will open which displays host details.

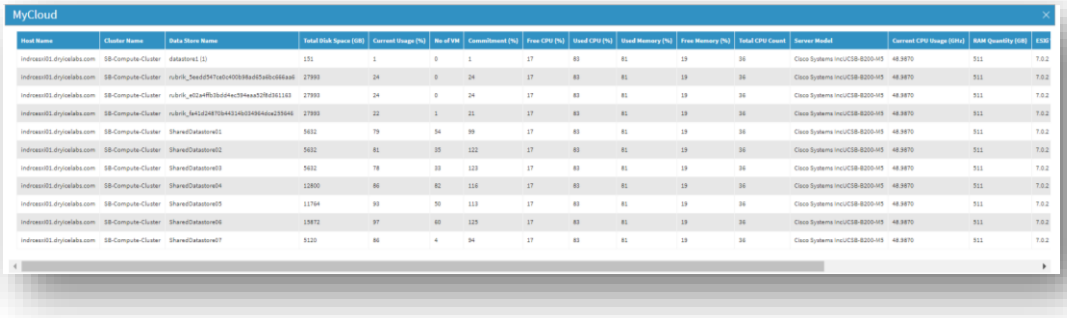


Figure 282 – vCenter Performance Dashboard (Cont.)

- **Top 30 Data Storage Detail:** This section displays the details of datastorage and its utilization.

Figure 283 – vCenter Performance Dashboard (Cont.)

- **Resource Pool:** This section displays the details (utilization) of resource pool and its clusters.

Figure 284 – vCenter Performance Dashboard (Cont.)

- **Cluster, Host And Data Store Detail:** This section displays the details of cluster, host and data store and their utilization for last 30 days.

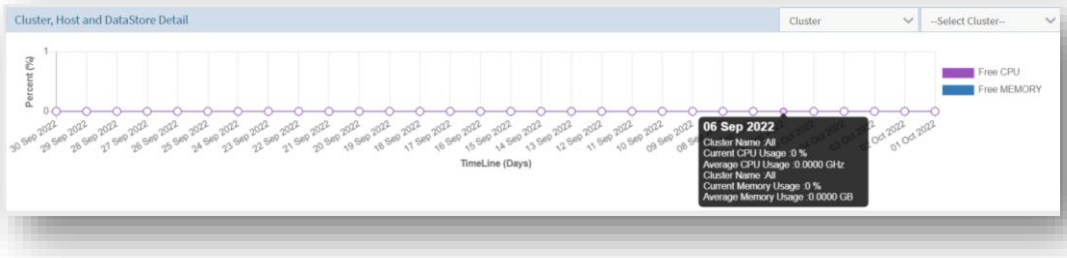


Figure 285 - vCenter Performance Dashboard (Cont.)

1.5.13.13 vCenter Performance Report

This report shows the nested visualization of vCenter. Starting from topmost datacenter level, user can view the data to lower-level resources like datastore.

To view the **vCenter Performance Report**, provider user needs to follow the below steps:

1. Click vCenter Performance Report under My Reports dropdown menu.
2. The following screen appears.

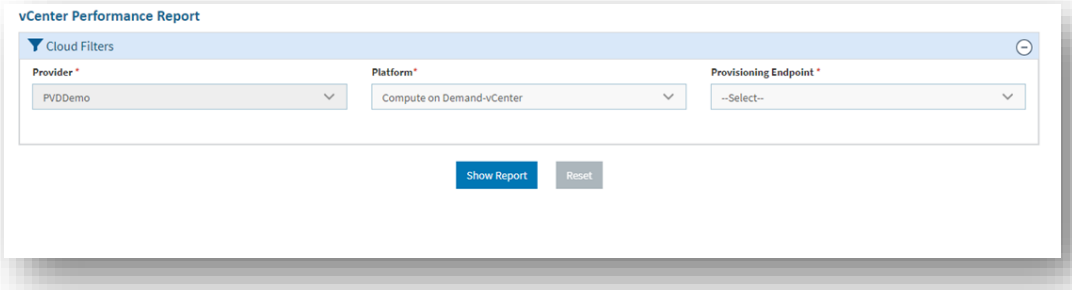


Figure 286 - vCenter Performance Report (Cont.)

3. Select Provider, Platform, and Provisioning Endpoint from dropdown.
4. Click Show Report.
5. The following screen appears:

Figure 287 - vCenter Performance Report (Cont.)

6. On clicking **Expand** ( ) button, data store's information will be displayed in textual and graphical representation.
7. The following screen appears:

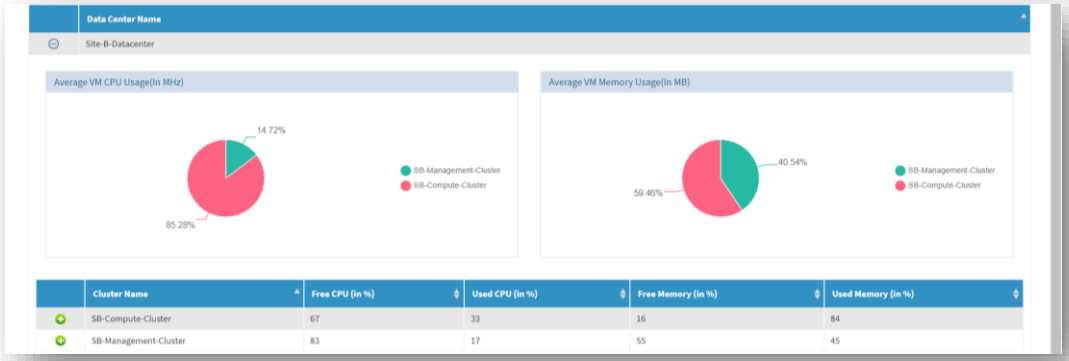


Figure 288 – vCenter Performance Report (Cont.)

8. On clicking **Expand** ( ) button, cluster related information will be displayed.
9. The following screen appears:

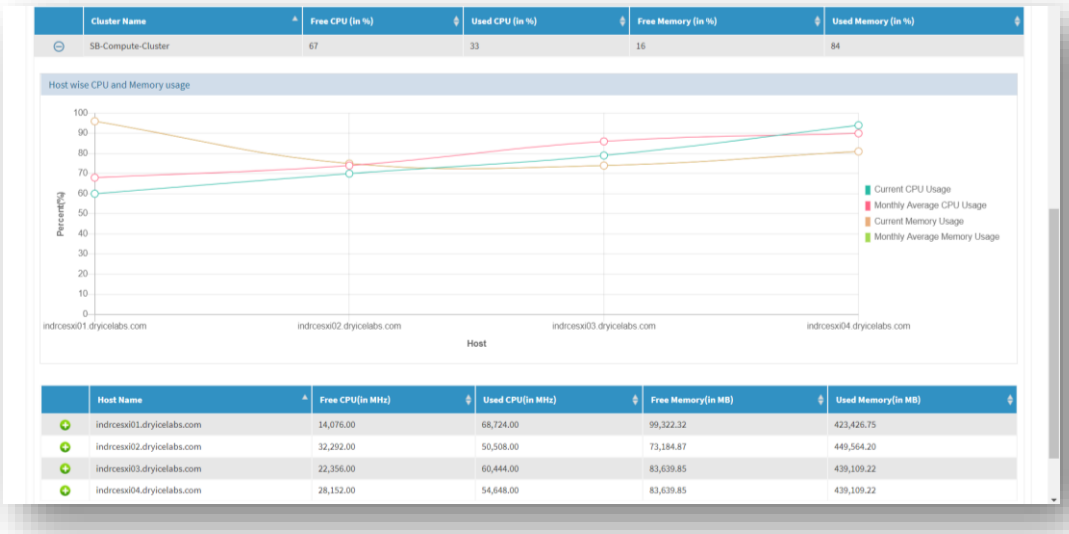


Figure 289 – vCenter Performance Report (Cont.)

10. On clicking of **Expand** ( ) button, host related information will be displayed.
11. The following screen appears:

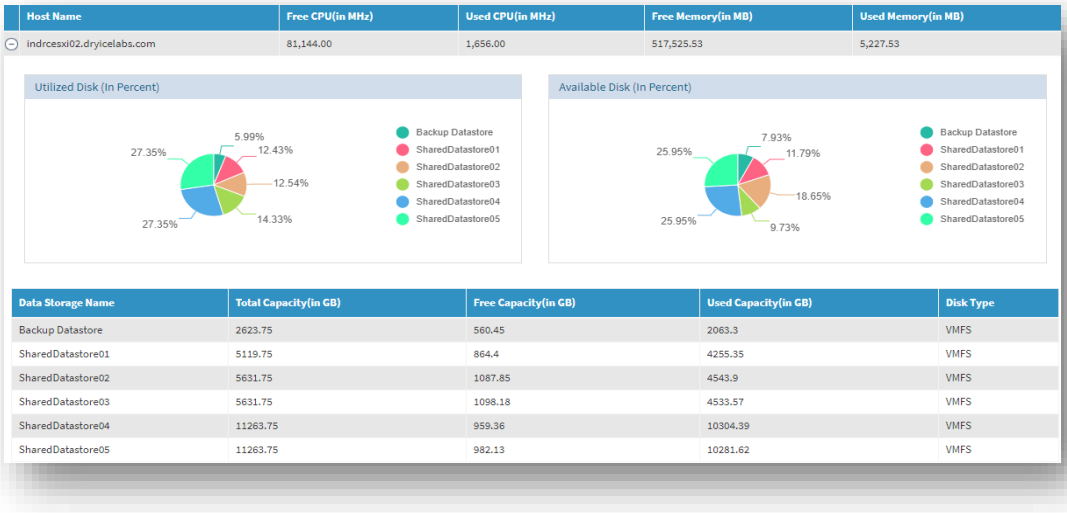


Figure 290 - vCenter Performance Report

1.5.13.14 Public Cloud Billing Analyzer

To view the **Public Cloud Billing Analyzer Report**, provider user needs to follow the below steps:

1. Click Public Cloud Billing Analyzer under My Reports drop-down menu.
2. Select Provider, Platform, Month, Subscription, Tag Name, and Tag Value.
3. Click Show Report.

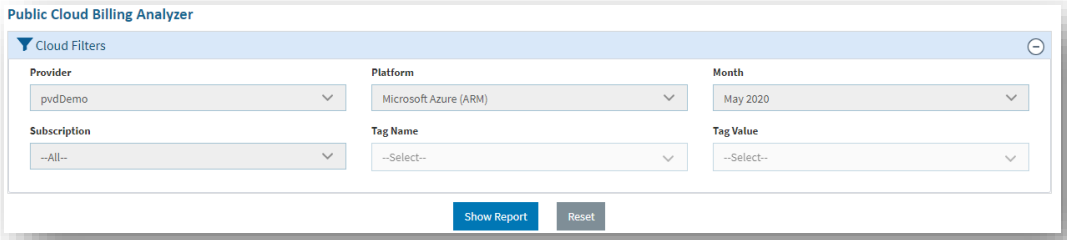


Figure 291 - Public Cloud Annual Billing Analyzer

4. The following screen appears:

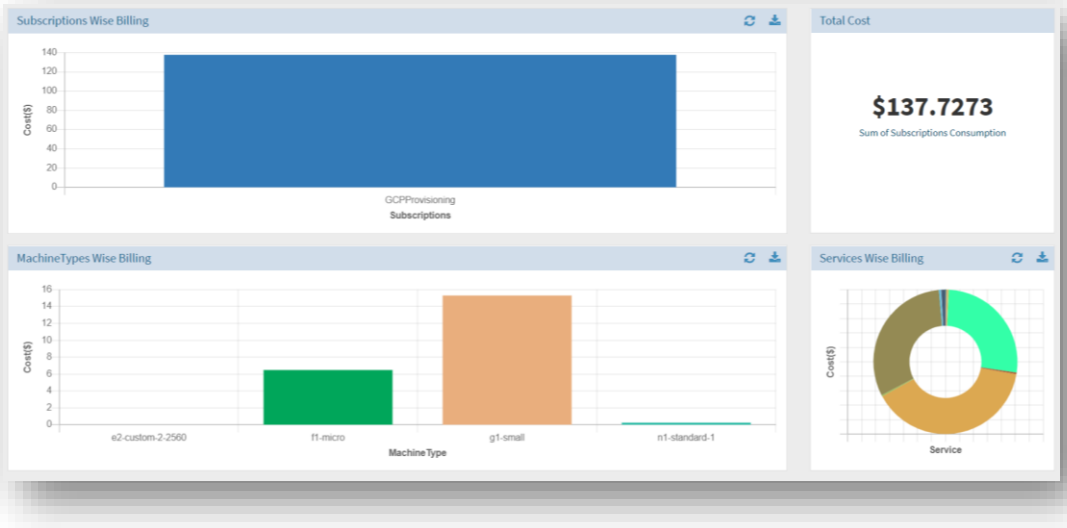


Figure 292 - Public Cloud Annual Billing Analyzer (Cont.)

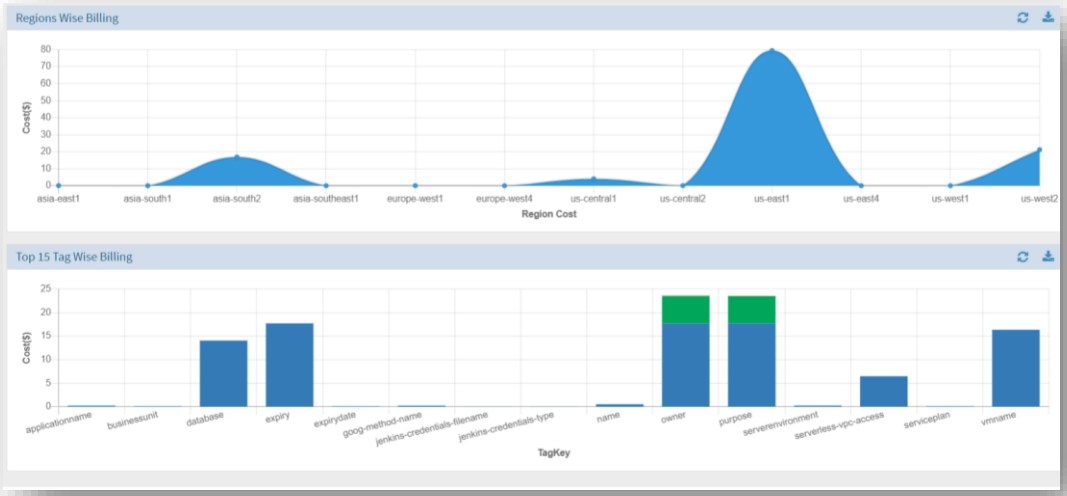


Figure 293 - Public Cloud Annual Billing Analyzer (Cont.)

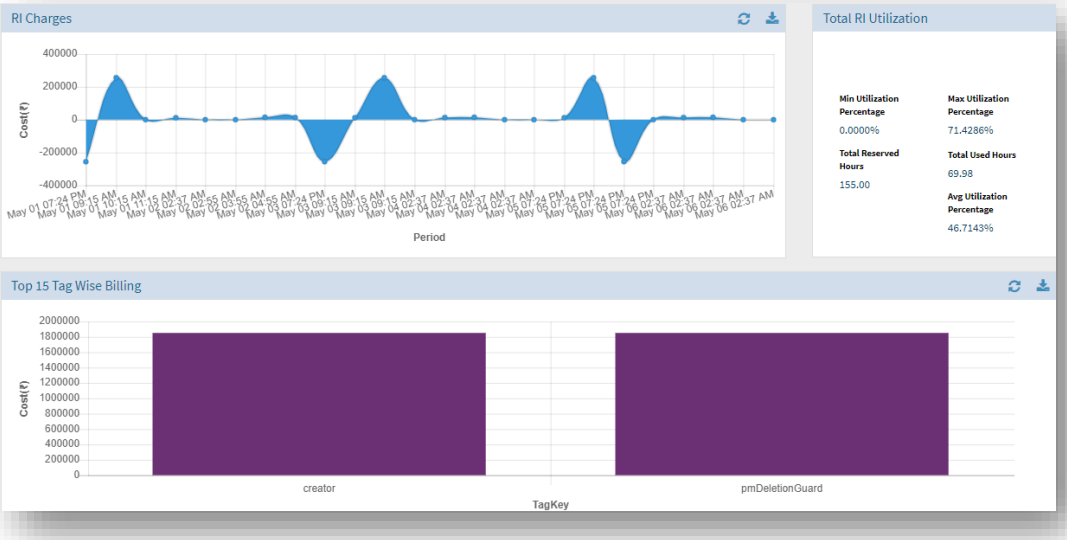


Figure 294 - Public Cloud Annual Billing Analyzer (Cont.)

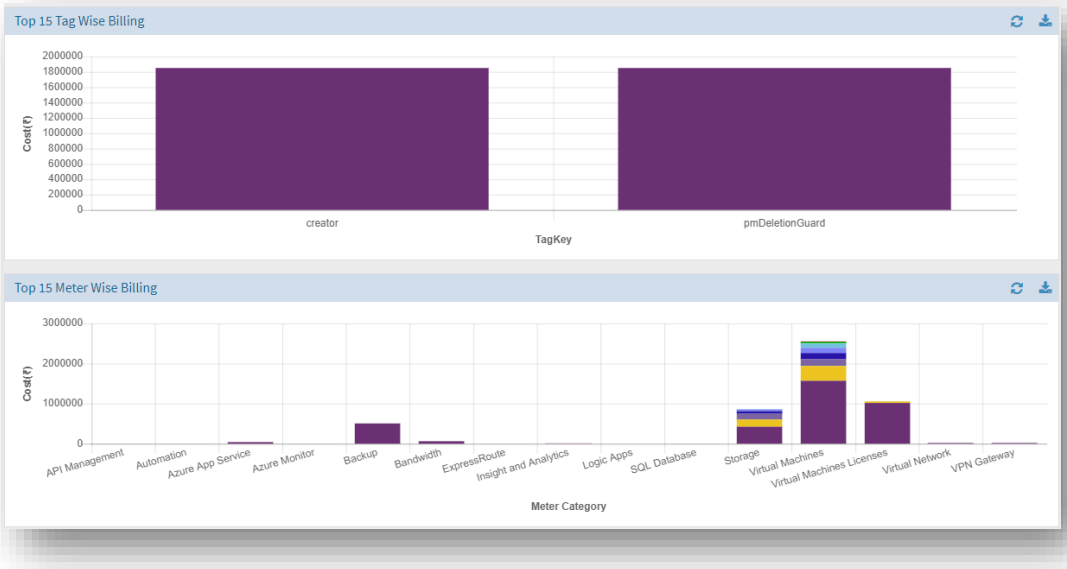


Figure 295 - Public Cloud Annual Billing Analyzer (Cont.)

1.5.13.15 Forecasting and RI Recommendation

This enables cost optimization and resource utilization by analyzing the past usage patterns & recommending the most optimal resource types on AWS and Azure.

For Example, Amazon EC2 Reserved Instances (RI) provides a significant discount (up to 72%) compared to on-demand pricing and provide a capacity reservation when used in a specific availability zone. Based on this provider user can reserve its resources for future and avail benefits in terms of cost.

1. On main menu, My Reports section, click Forecasting and RI Recommendation.
2. The below screen appears.

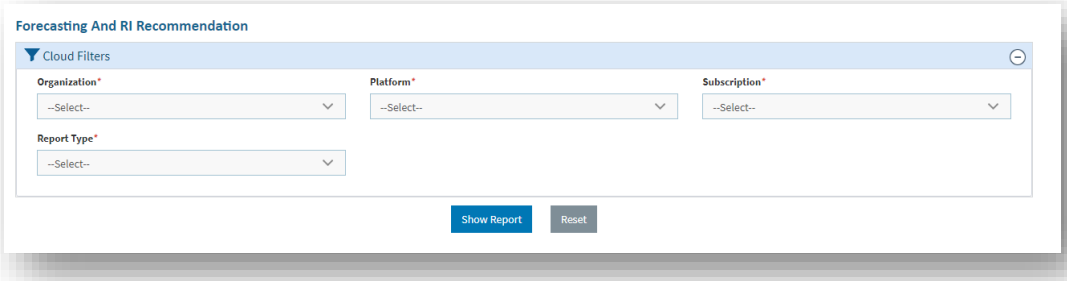


Figure 296 – Forecasting and RI Recommendation

3. Refer the below table to understand the fields mentioned in Figure 298 – Forecasting And RI Recommendation (Cont.)-AWS:

Table 25 - Forecasting and RI Recommendation

Field	Description
Organization	MyCloud unique name for organization
Platform	The field lists down the cloud service providers

Subscription	Name of the endpoint (subscription of cloud service provider)
Report Type (AWS)	Forecasting or RI recommendation
Report Type (Azure)	RI recommendation
Term In Year (Azure) – RI Recommendation	For example, 1 year or 3 years
Region (Azure) – RI Recommendation	List of available regions
Granularity (AWS)-Forecasting	Frequency daily or mo
Term In Year (AWS) – RI Recommendation	For example, 1 year or 3 year
Payment Option (AWS) – RI Recommendation	All upfront, partial upfront, no option
Service Type -(AWS) – RI Recommendation	Type of services offered

4. Select Organization, Platform, and Subscription.
5. Based on platform (AWS/AZURE) report type will vary. For ARM choose **RI Recommendation**.
6. Select Time In Years and Region.
7. Click Show Report.

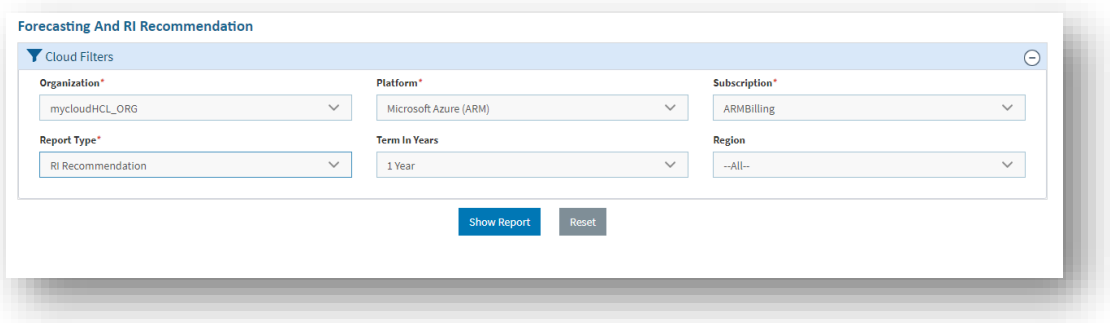


Figure 297 – Forecasting And RI Recommendation

(*) Are mandatory fields. Reset will enable the cloud filters.

8. A screen appears as below and displays the total forecast amount/cost and daily forecasting prediction in the form of bar chart.

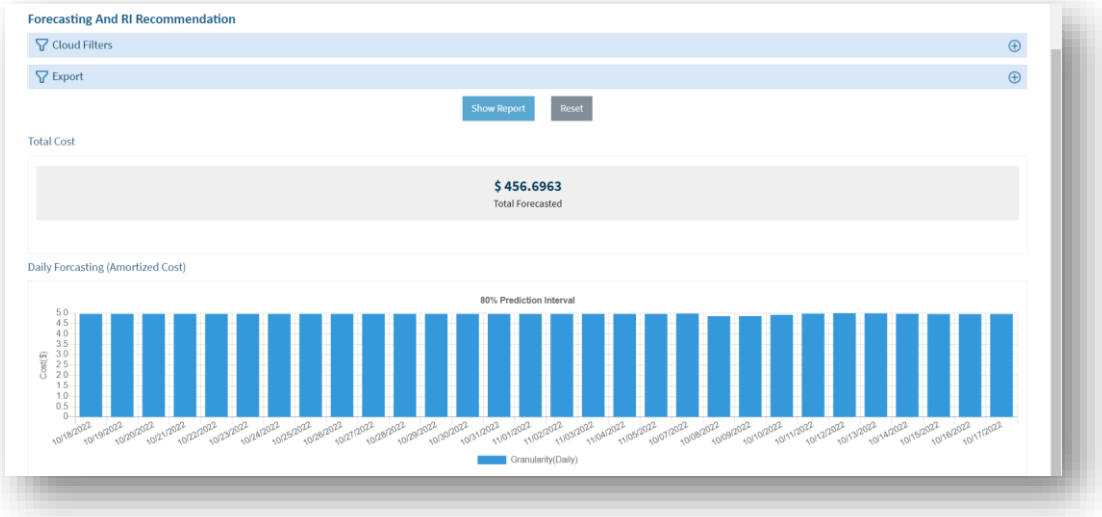


Figure 298 – Forecasting And RI Recommendation (Cont.)-AWS

9. Hover the mouse on the bar chart and detailed forecast prediction will be shown as below:

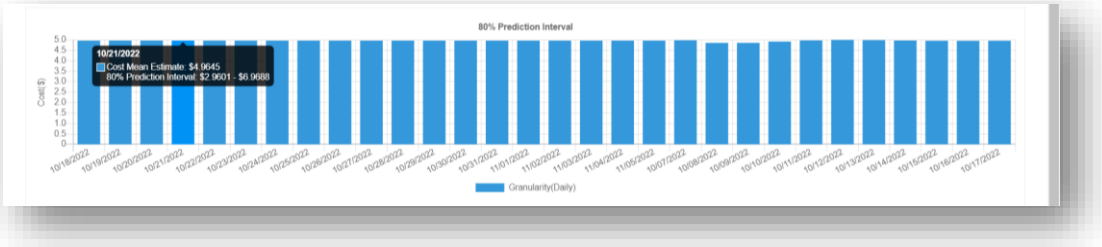


Figure 299 – Forecasting And RI Recommendation (Cont.)-AWS

10. In case the report type is RI Recommendation (AWS), below screen appears:

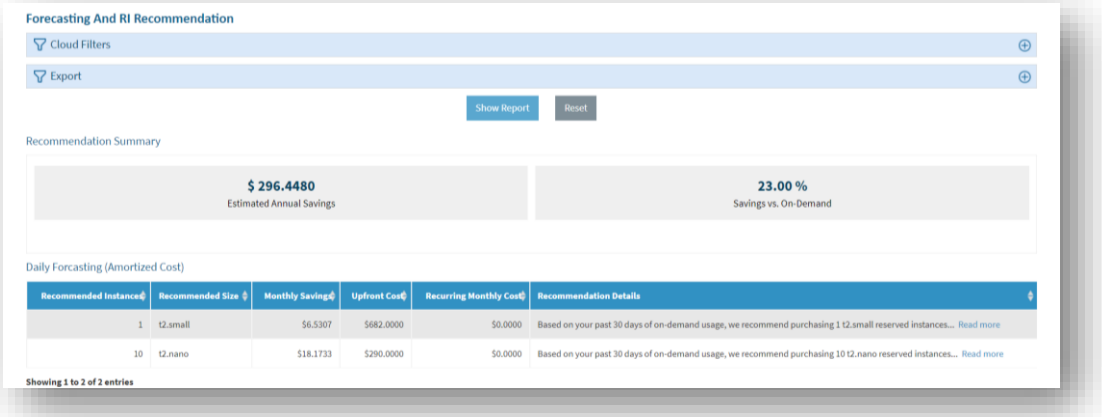


Figure 300 – Forecasting and RI Recommendation (Cont.)-AWS

11. Refer the below table to understand the fields mentioned in the above figure:

Table 26 - Forecasting And RI Recommendation

Field	Description
Recommended Instances	No. of recommended instances
Recommended Size	Size of AWS instance

Monthly Savings	Name of the endpoint (subscription of cloud service provider)
Upfront Cost	Cost associated to it
Recurring Monthly Cost	Recurring Monthly Cost
Recommendation Details	Recommendation details

1.5.14 Cloud Calculator

Cloud Calculator Report is used to get comparative cost between platform and available services such as for ARM virtual machine and disk and for VMVAR virtual machine and disk etc.

To view the Cloud Calculator Report, provider user needs to follow the below steps:

1. Click **Cloud Calculator** under **My Reports** drop-down menu.

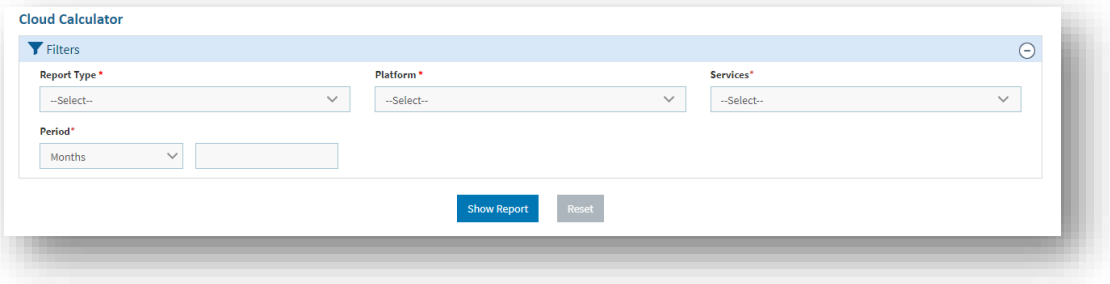


Figure 301 - Cloud Calculator

2. Select Report Type, Platform, Month, Services, and Period.
3. Click Show Report.

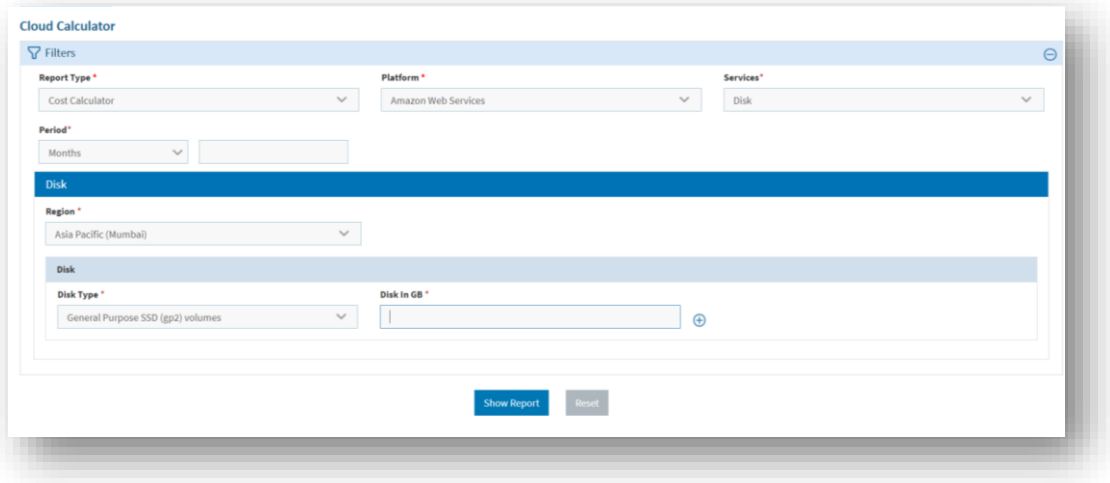


Figure 302 - Cloud Calculator (Cont.)

4. In the above report we have taken an example of platform AWS and virtual machine as services. Likewise, MyCloud provides multiple different services, platform-wise and based on requirement provider user can calculator the price.

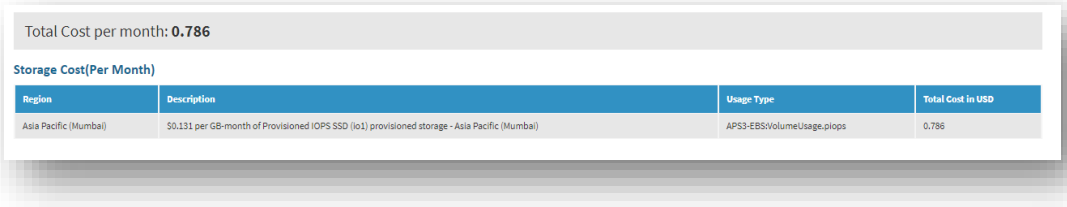


Figure 303 - Cost Per Month

1.5.15 Decommission Reminder

Through this section, provider user can configure reminder mails when decommissioning date is approaching.

1. On the main menu bar, click **Workflow Management** and then click **Decommission Reminder**.
2. The section has following options:
   - Create Reminder
   - View Reminder

1.5.15.1 Create Reminder

To add reminder, provider user needs to follow the below steps:

1. On the Decommission Reminder screen, click Create Reminder.

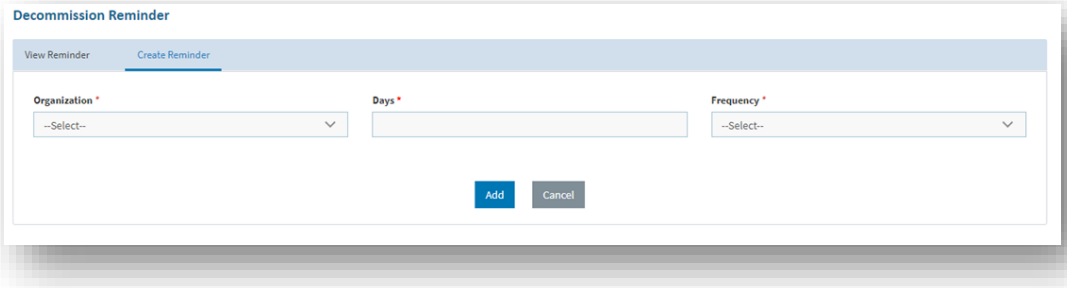


Figure 304 - Create Reminder (Cont.)

2. Refer below table for reference:

Table 27 - Create Reminder

Field	Description
Organization	Name of the organization (business units/ divisions in organizations)
Days	Date filed which shows that machine will be decommissioned after days.
Frequency	In which frequency, the machine will be decommissioned

3. Select Organization.
4. Enter **Days**.
5. Select Frequency.
6. Click **Add** or **Cancel** to discard changes.
7. A success message box appears as below:

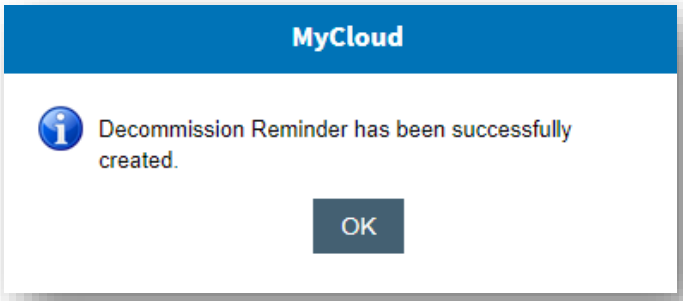


Figure 305 - Create Reminder (Cont.)

All the fields marked with asterisk (*) are mandatory.

1.5.15.2 View Reminder

Through This Section, Provider User Can View All the Existing Reminder Mails For A Specific Organization.

1. On Decommission Reminder module, select View Reminder tab.
2. Select the **Organization**.
3. Click **Go**.
4. A screen appears as below:

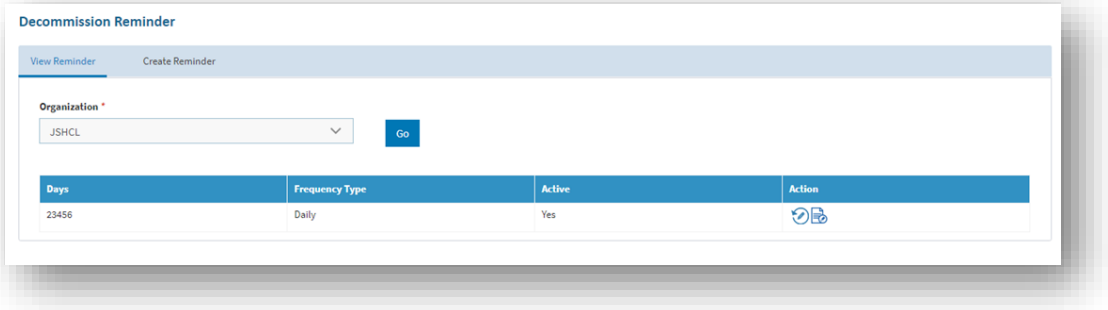


Figure 306 - View Reminder

5. It also comprises of following actions:
   - **Edit** ( ): To modify the details of existing reminder.
   - **Change Status** ( ): Toggle the status of existing reminder.

1.5.15.3 Edit Reminder

To edit/ modify the assigned reminder, provider user needs to follow the below steps:

1. Click **Edit** ( ) to modify the desired details.
2. Click **Update** to save the changes.

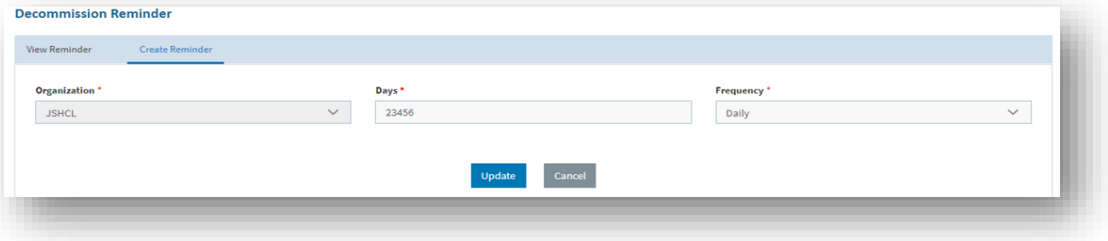


Figure 307 - Edit Reminder

3. A Success Message Box Appears.

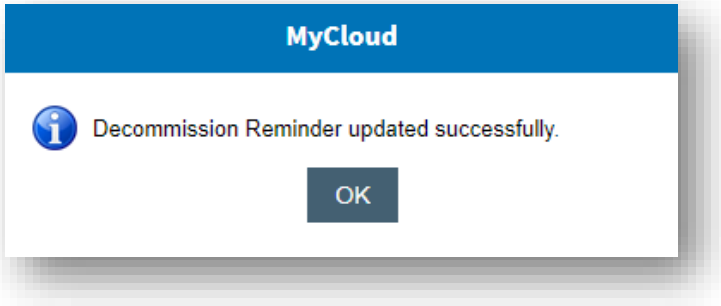


Figure 308 - Edit Reminder (Cont.)

All the fields marked with asterisk (*) are mandatory.

4. Click **OK**.

1.5.15.4 Change Status

To toggle the status of the assigned reminder, provider user needs to follow the below steps:

1. Click **Change Status** ( ) toggle the status of desired reminder.

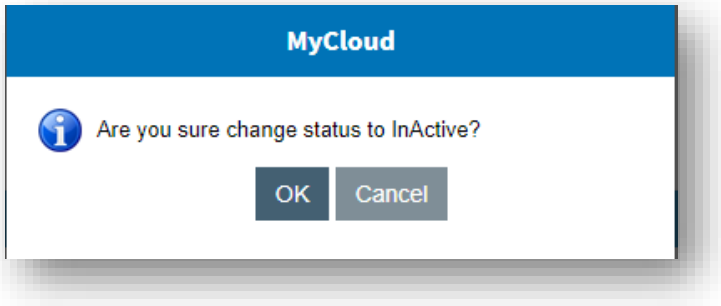


Figure 309 - Confirmation Message

2. A Success Message Appears.

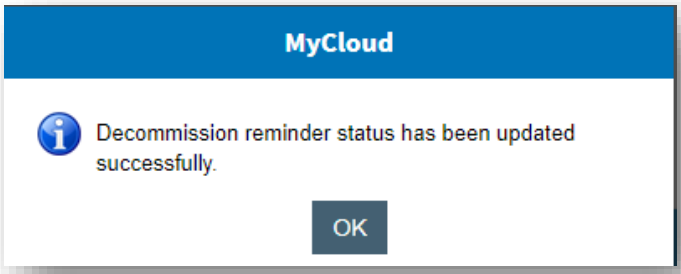


Figure 310 - Success Message

1.5.16 Manage Run Once

This screen configures RunOnce, which can be used to specify commands that the system will execute on provisioned VM. This is a day one activity (provisioning) specific to private cloud (VMWAR and SCVM) environment.

1. On the main menu bar, click **Master** and then click **Manage RunOnce**.
2. The section has following options:
   - View RunOnce Command
   - Add RunOnce Command

1.5.16.1 View RunOnce Command

To view command, provider user needs to follow the below steps:

1. On view **RunOnce Command** screen, select **Platform**.
2. Click **Go**.

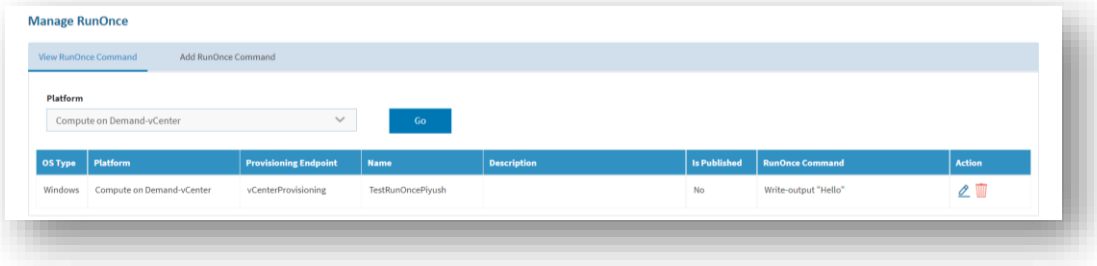


Figure 311 - View RunOnce Command (Cont.)

3. It also comprises of following actions:
   - **Edit** ( ): To modify the details of existing command.
   - **Delete** ( ): To delete existing commands

1.5.16.2 Edit RunOnce Command

To edit/modify a command, provider user needs to follow the below steps:

1. Click **Edit** ( ) to modify the desired details.
2. Click **Update** to save the changes.

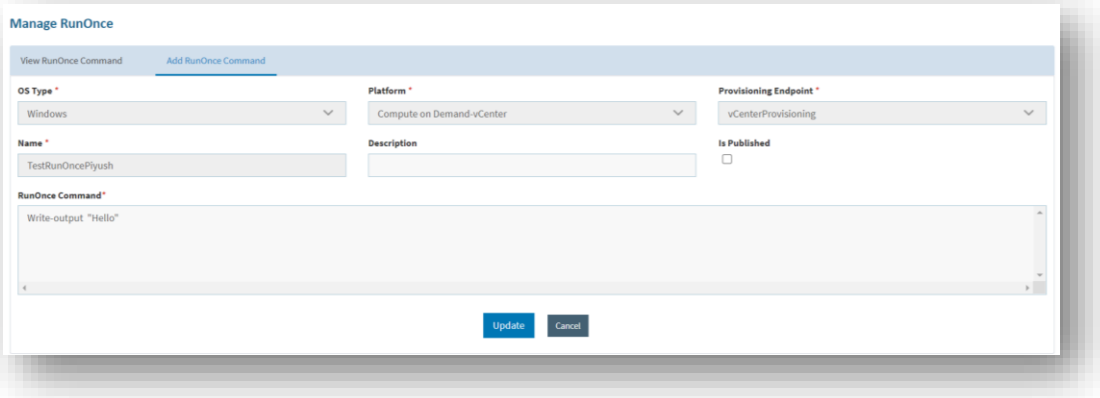


Figure 312 - Edit RunOnce Command

3. A success message box appears.

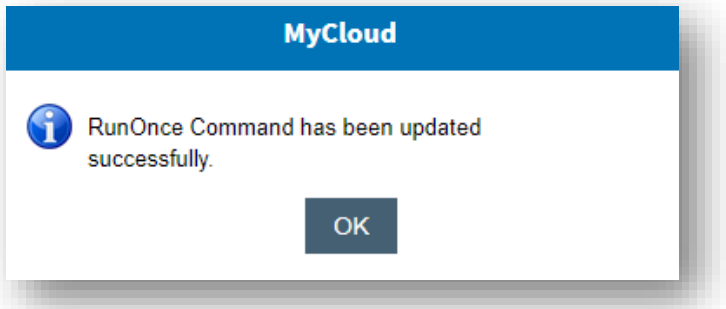


Figure 313 - Edit RunOnce Command (Cont.)

All the fields marked with asterisk (*) are mandatory.

1.5.16.3 Delete RunOnce Command

To delete a command, provider user needs to follow the below steps:

1. Click **Delete** ( ).
2. A popup message appears.

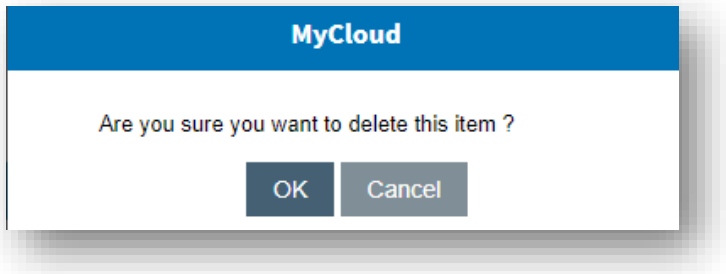


Figure 314 - Confirmation Message

3. Click **OK**
4. A success message appears.

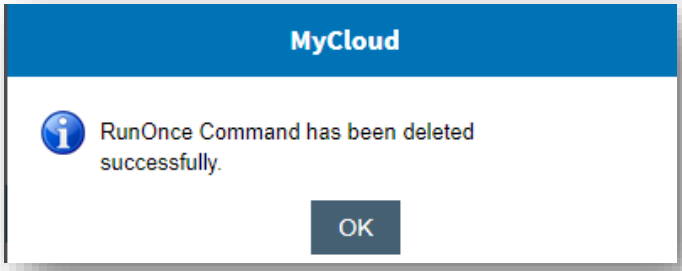


Figure 315 - Success Message

1.5.16.4 Add RunOnce Command

To add commands, provider user needs to follow the below steps:

1. On Manage RunOnce command screen, click Add RunOnce Command.

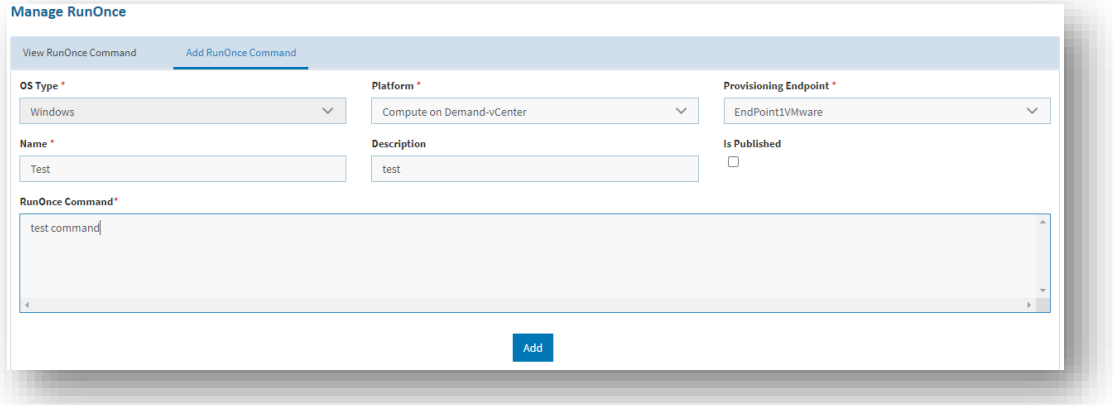


Figure 316 - Add RunOnce Command

2. Refer the below table to understand the fields mentioned in the above figure:

Table 28 - Manage RunOnce

Field	Description
OS Type	Displays the operating system type
Platform	Private cloud platform i.e., VMWARE or SCVMM.
Provisioning Endpoint	Displays the name of the environment (cloud endpoint)
Name	Command name
Description	Command description
Is Published	Command will be published if this checkbox is checked.
RunOnce Command	Command which will be executed when machine creates first time

3. Select **Platform**.
4. Select Provisioning Endpoint.
5. Enter **Name**.

6. Enter Description.
7. Check or uncheck **Is Published** checkbox.
8. Enter **Command**.
9. Click **Add**.
10. A success message box appears as below:

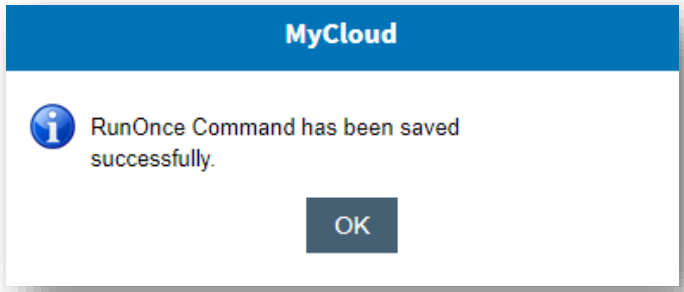


Figure 317 - Add RunOnce Command

1.5.17 CI Column Configuration

Through this section, provider users can configure CI Columns to import objects.

1. On the Main Menu bar, click Master and then click CI Column Configuration.
2. The below screen will appear.

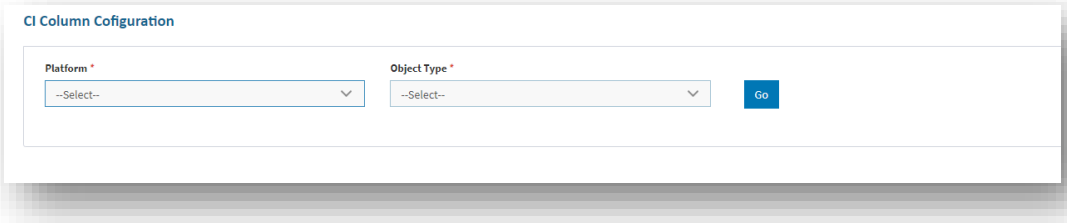


Figure 318 - CI Column Configuration

3. Select Platform and Object Type.
4. Click **Go**.

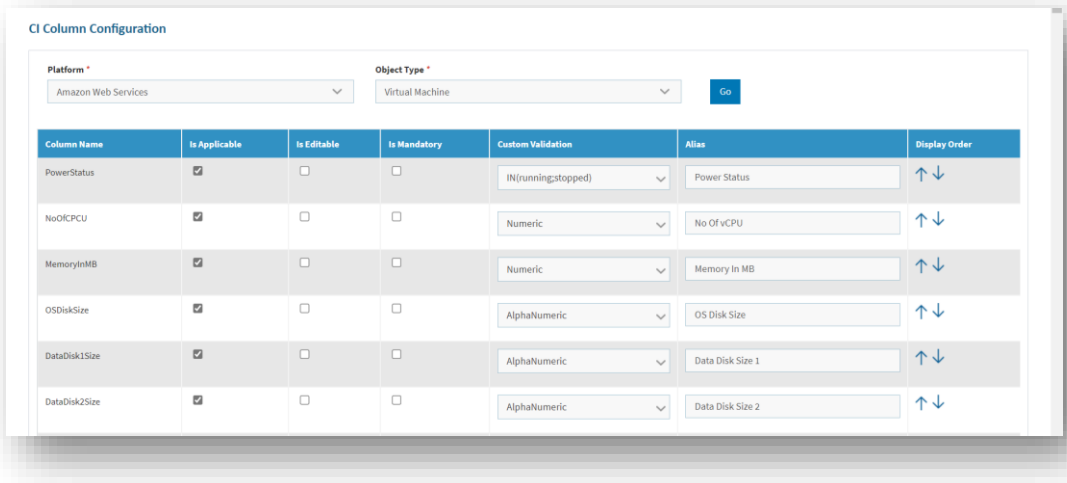


Figure 319 - Import Configuration (Cont.)

5. All the CI Columns will be displayed on the screen.

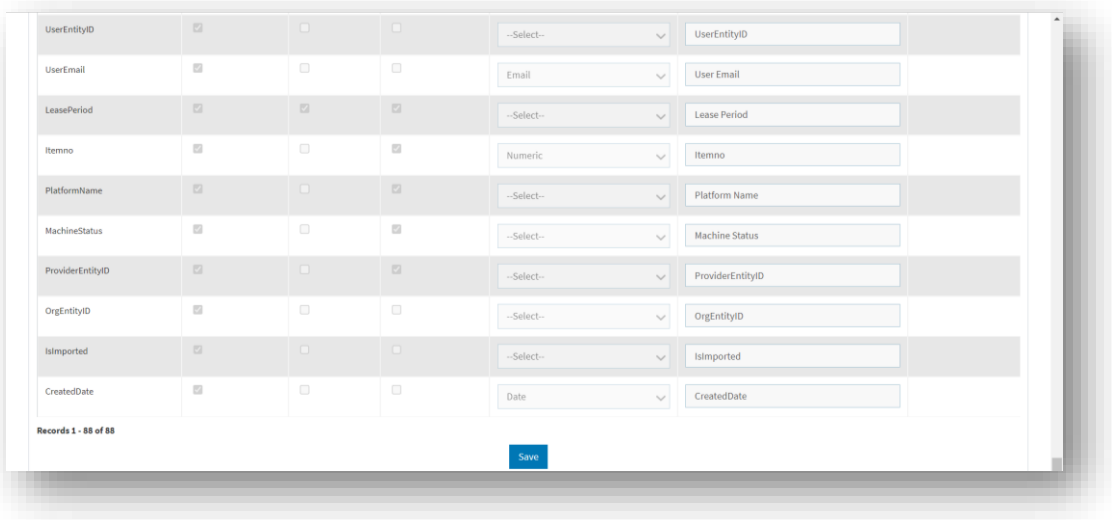


Figure 320 - Import Configuration (Cont.)

6. Click **Save**.

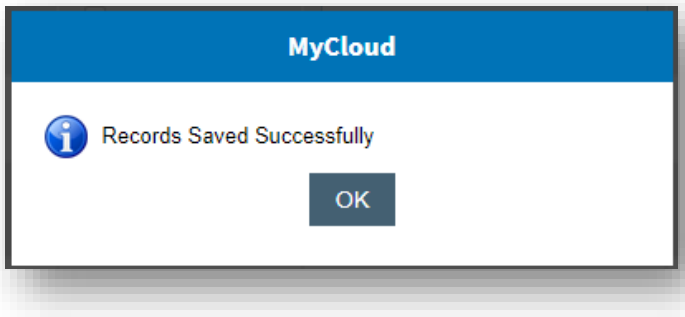


Figure 321 - Success Message

1.5.18 My Schedules

Through this module, the user can **Schedule Action**(s) on **Object**(s) in an organization. Pre-requisites of using my schedules:

1. Organization should have enabled "**Action Scheduling Enabled**" in the organization module.
2. At least one action should be active for respective object.
3. UI associated with action should not have approval associated with it.
4. Controls used in UI should be textbox and hidden controls only.
5. It has the following options:
   - View Schedules
   - Create Schedules
   - Schedule History

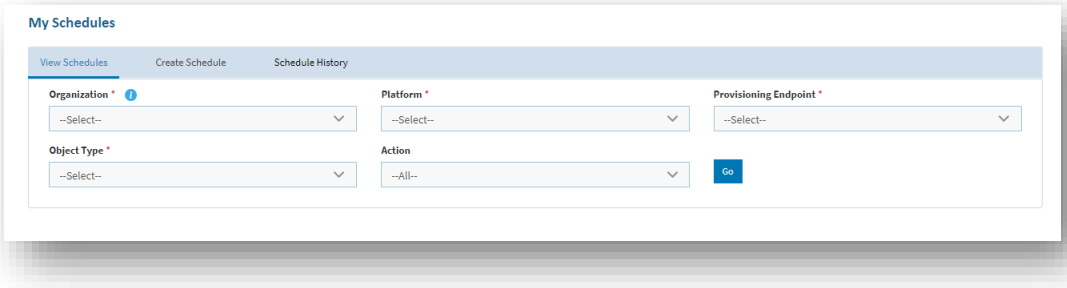


Figure 322 - My Schedules Home Screen

1.5.18.1 Create Schedule

To create a schedule of an action in an organization, login user needs to follow the steps below:

1. Click on the **My Schedules** menu option and then click **Create Schedule**.

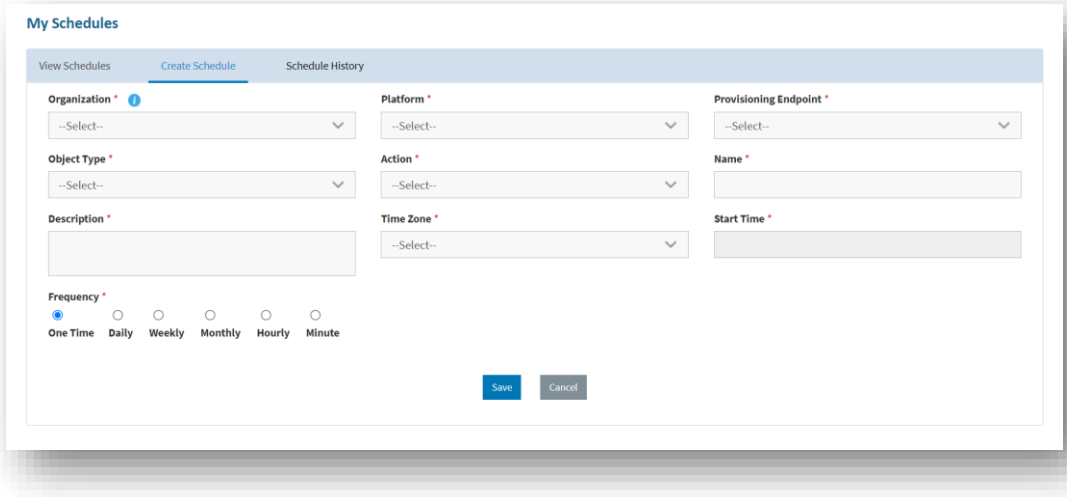


Figure 323 – Create Schedule

2. Refer the below table to understand the fields mentioned in the above figure.

Table 29 – Create Schedule Fields

Fields	Description
Organization	Select the name of the organization (business units/ divisions in organizations)
Platform	The field lists down the cloud service provider.
Provisioning Endpoint	Displays the name of the environment (cloud endpoint)
Object Type	Name of the infrastructure resource.
Action	Displays the list of action(s) associated to object.
Name	This unique name of schedule action.
Description	Description of schedule action.
Time Zone	This field represents the time zone of start time.

Start Time	The field represents when to start/schedule the action.
Frequency	Interval at which the action can be schedules
Action Parameter(S)	List of parameters depends on selected action

3. Select Organization.
4. Select Platform and Provisioning Endpoint.
5. Select Object Type.
6. Select **Action**.
7. Enter the **Name** and **Description** of schedule.
8. Select Time Zone and Start Time.
9. Select **Frequency**.
10. Now map the **Parameters of Action**. Parameter Data Type supports two types:
    - **Static** – User can provide the static value of a control.
    - **SQL Function** – SQL function can be used to find the dynamic value of a control.
11. Click **Save**.

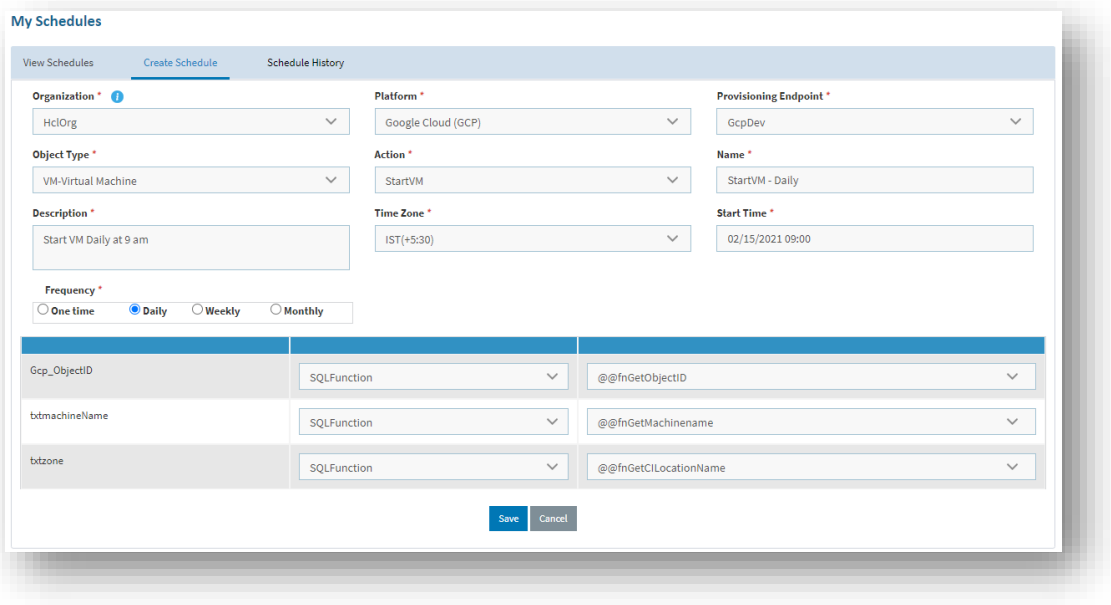


Figure 324 - Create Schedule (Cont.)

All The Fields Marked with an Asterisk (*) Are Mandatory.

12. A Success Message Box Appears.

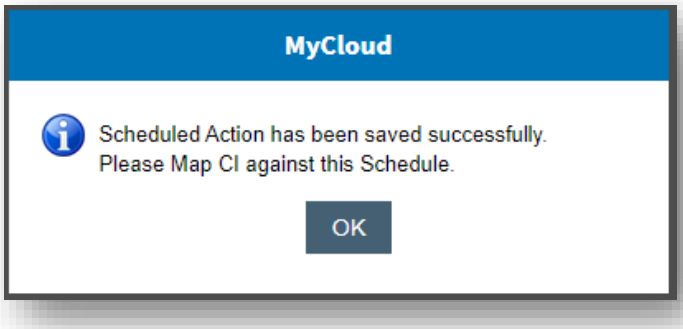


Figure 325 - Create Schedule (Cont.)

13. Now click **OK**. A popup will open containing relevant object(s).
14. You can select the appropriate object(s), on which **Action** need to be scheduled.

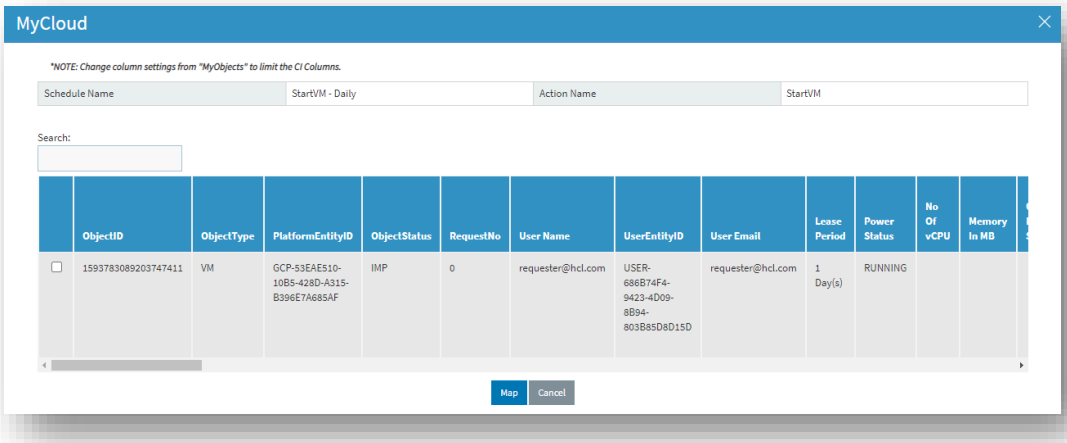


Figure 326 - Create Schedule (Cont.)

15. Now click on **Map Button**.
16. A success message box appears.

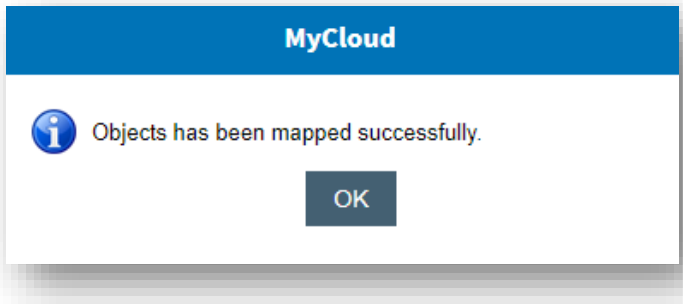


Figure 327 - Create Schedule (Cont.)

17. Action is scheduled successfully.

1.5.18.2 View Schedule

This section lists all the schedules that have been created by an organization admin.

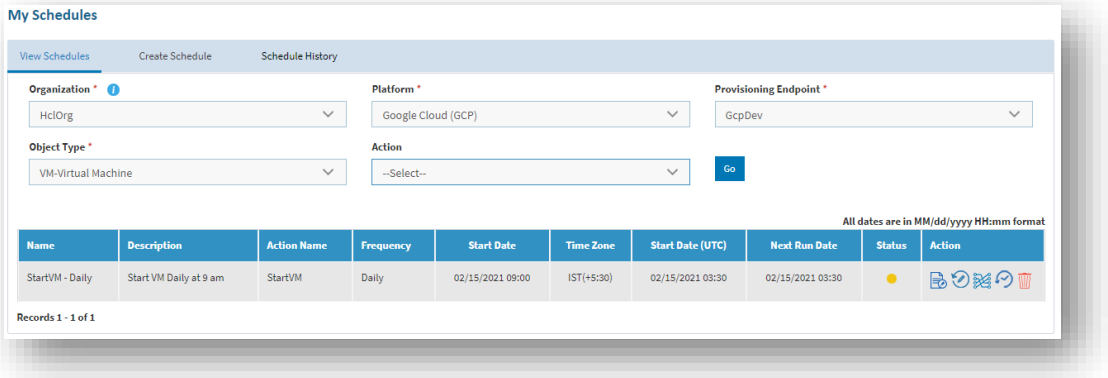


Figure 328 - View Schedules

Refer the below table to understand the fields mentioned in the above figure.

Table 30 – View Users Field

Fields	Description
Organization	Select the name of the organization (business units/ divisions in organizations)
Platform	The field lists down the cloud service provider.
Provisioning Endpoint	Displays the name of the environment (cloud endpoint)
Object Type	Name of the infrastructure resource.
Action	Displays the list of action(s) associated to object.
Name	This unique name of schedule action.
Description	Description of schedule action.
Action Name	Name of action for which schedule has been created
Frequency	Interval at which the action can be schedules
Start Date	The field represents when to start/schedule the action.
Time Zone	This field represents the time zone of start time.
Start Date (UTC)	The field represents when to start/schedule the action in UTC time zone
Next Run Date	The field represents next schedule time of the action
Status	The status of the schedule
Action	User to take actions like edit, change status, map objects, history, delete against the listed schedules

It also comprises the following actions:

- **Edit** ( ): To modify the details of schedule.
- **Change Status** ( ): To change the status of schedule.

- **Map Objects** (): To Map Objects To Schedule.
- **History** (): To Check The History Of Schedule.
- **Delete** (): To Delete The Schedule.

1.5.18.3 Schedule History

This section lists all the history of schedules actions.

To view the Schedule History, follow the below steps:

1. Click on () icon in the grid records on **View Schedule** tab.
2. The **Schedule History** tab will open.

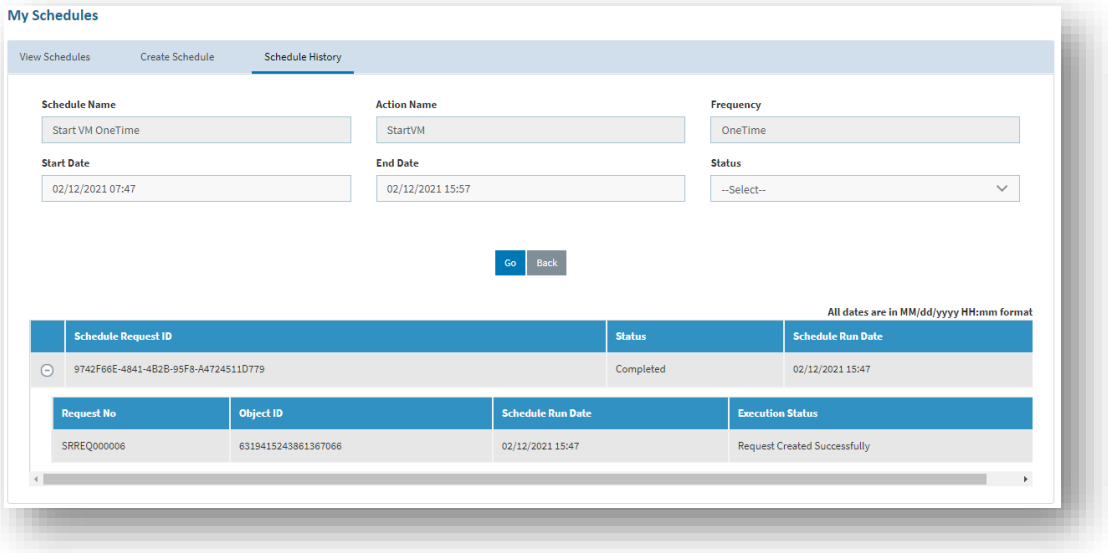


Figure 329 – Schedule History

3. Refer the below table to understand the fields mentioned in the above figure.

Table 31 – Schedule History Field

Fields	Description
Schedule Name	Refers to the unique name to be given for schedule action.
Action Name	Name of action for which schedule has been created
Frequency	Interval at which the action can be schedules
Start Date	Start time, to filter the history of schedules from this time
End Date	End time, to filter the history of schedules till this time
Status	InProgress, completed, failed filter status
Schedule Request ID	Unique GUID for the schedule instance.
Status	Status of the scheduled instance
Schedule Run Date	Run date of the scheduled instance

Request No.	Request tracking request number created by schedule request ID.
Object ID	Object ID, unique ID of the object on which action is performed.
Schedule Run Date	Run date of the scheduled instance
Execution Status	Status of the request execution

1.5.19 Logs

Through this module, user can view log(s) for components such as website and WebAPI.

1. User can click on **Logs** from **MyCloud** screen and below screen will appear.

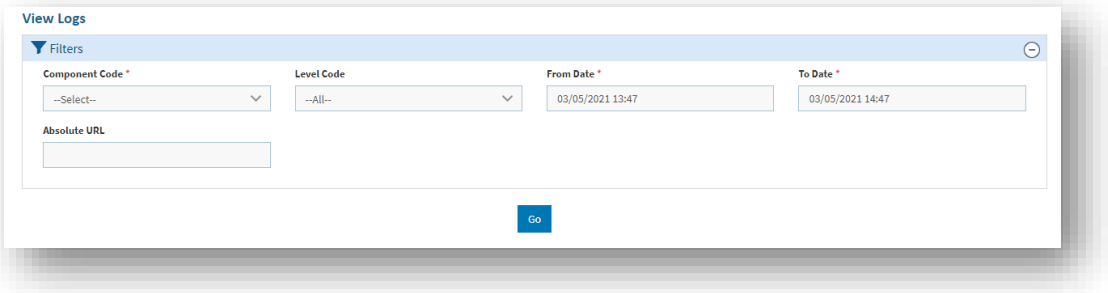


Figure 330 - View Logs Home Screen

2. Select Component Code, Level Code, From Date, and To Date.
3. Enter Absolute URL.
4. Click **Go**.

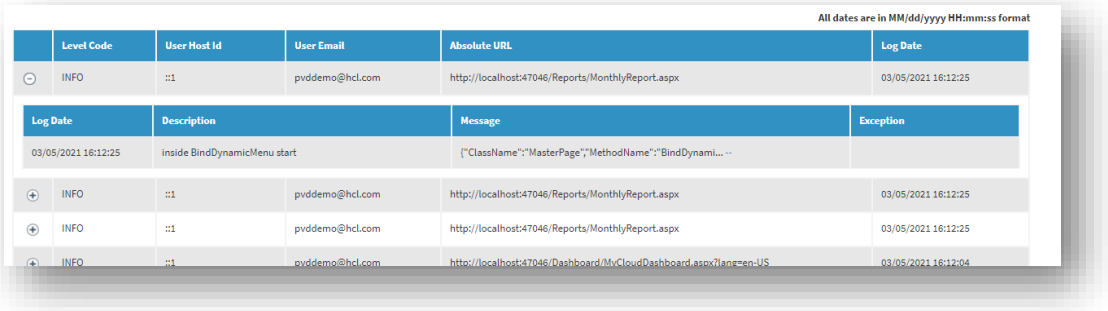


Figure 331 - View Logs (Cont.)

1.5.20 Help

To understand more about MyCloud, provider users can navigate to help icon from menu bar.

It has following actions:

- Download Reference Guide
- Generic Task Details
- License Report

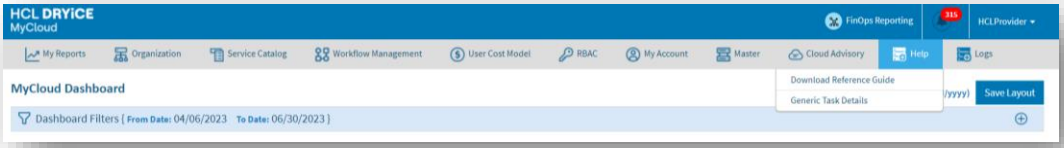


Figure 332 - Help

1.5.20.1 Generic Task Details

This section guides the provider user while configuring manage generic tasks (under manage process workflow) by mapping parameters.

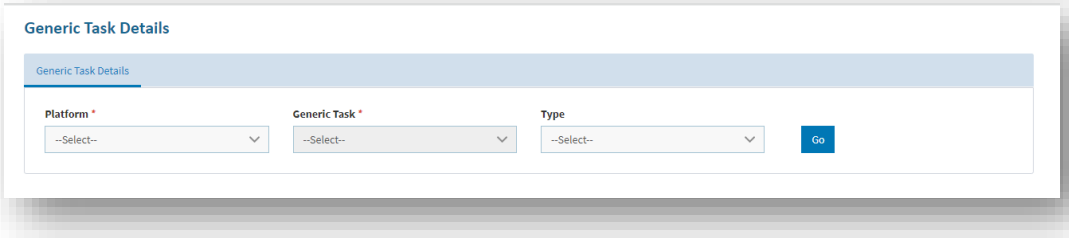
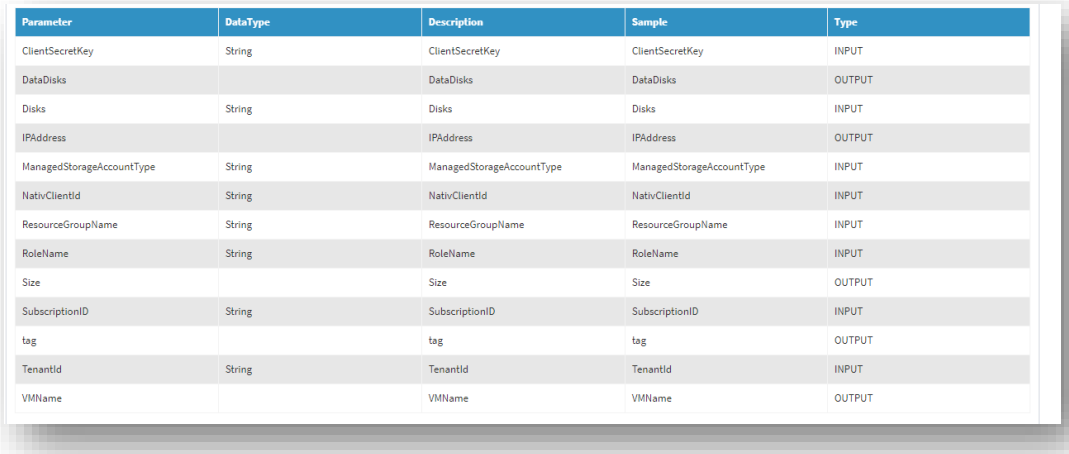


Figure 333 - Generic Task Detail

1. Select Platform, Generic Task and Type.
2. Click **Go**.



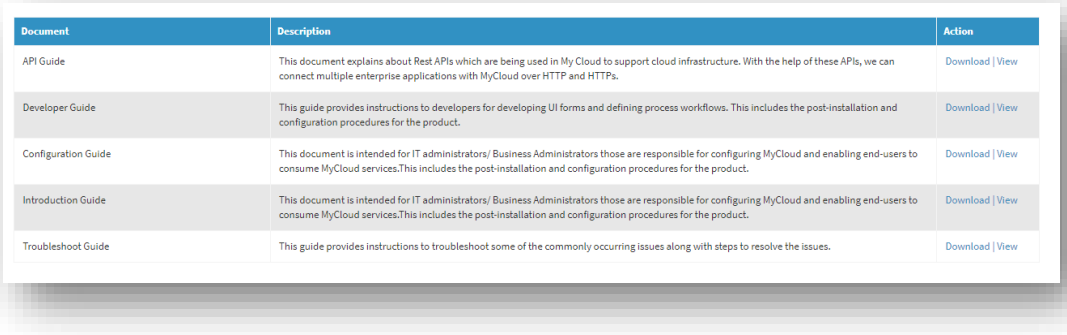
Parameter	DataType	Description	Sample	Type
ClientSecretKey	String	ClientSecretKey	ClientSecretKey	INPUT
DataDisks		DataDisks	DataDisks	OUTPUT
Disks	String	Disks	Disks	INPUT
IPAddress		IPAddress	IPAddress	OUTPUT
ManagedStorageAccountType	String	ManagedStorageAccountType	ManagedStorageAccountType	INPUT
NativClientId	String	NativClientId	NativClientId	INPUT
ResourceGroupName	String	ResourceGroupName	ResourceGroupName	INPUT
RoleName	String	RoleName	RoleName	INPUT
Size		Size	Size	OUTPUT
SubscriptionID	String	SubscriptionID	SubscriptionID	INPUT
tag		tag	tag	OUTPUT
TenantId	String	TenantId	TenantId	INPUT
VMName		VMName	VMName	OUTPUT

Figure 334 - Generic Task Detail (Cont.)

1.5.20.2 Download Reference Guide

To help Provider User, MyCloud Has **Provided Reference Guides**.

1. Click **Download** to get the guides.



Document	Description	Action
API Guide	This document explains about Rest APIs which are being used in My Cloud to support cloud infrastructure. With the help of these APIs, we can connect multiple enterprise applications with MyCloud over HTTP and HTTPs.	Download | View
Developer Guide	This guide provides instructions to developers for developing UI forms and defining process workflows. This includes the post-installation and configuration procedures for the product.	Download | View
Configuration Guide	This document is intended for IT administrators/ Business Administrators those are responsible for configuring MyCloud and enabling end-users to consume MyCloud services.This includes the post-installation and configuration procedures for the product.	Download | View
Introduction Guide	This document is intended for IT administrators/ Business Administrators those are responsible for configuring MyCloud and enabling end-users to consume MyCloud services.This includes the post-installation and configuration procedures for the product.	Download | View
Troubleshoot Guide	This guide provides instructions to troubleshoot some of the commonly occurring issues along with steps to resolve the issues.	Download | View

Figure 335 – Reference Guide

Click on the download link and guides will be downloaded in pdf.

1.5.21 Key Vault Configuration

Through this section, the provider user configures the key vault. Key Vault Configuration can be done by two ways.

- **Cyberark**: External tool to manage the confidential information.
- **MyCloud Secret Manager**: MyCloud Out Of The Box tool to manage the confidential information.
- **Azure Key Vault**: Azure vault to manage secret information

1. On the main menu bar, click **Master** and then click **Key Vault Configuration**.
2. The following screen appears:

Figure 336 – Key Vault Configuration

3. It has following options:
   - Add Configuration
   - View Configuration

1.5.21.1 Add Configuration

To add configuration, the provider user needs to follow the below steps:

1. On the Key Vault Configuration screen, click Add Configuration tab.

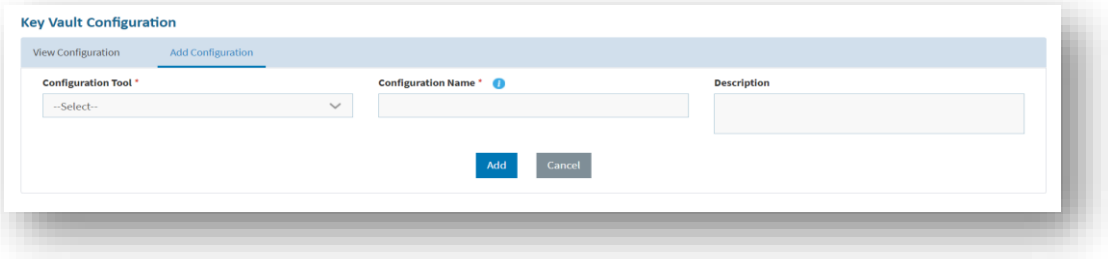


Figure 337 - Add Configuration

2. Refer the below table to understand the fields mentioned in the above figure:

Table 32 - Add Configuration

Field	Description
Configuration Tool	Select the configuration tool (Cyberark/ MyCloud Secret Manager/ Azure Key Vault)
Configuration Name	The name of the configuration. Only hyphens and underscores are allowed in the middle of the text. Other special characters are not allowed.
Description	Description of the configuration

Configuration key fields may vary depending on the configuration tool.

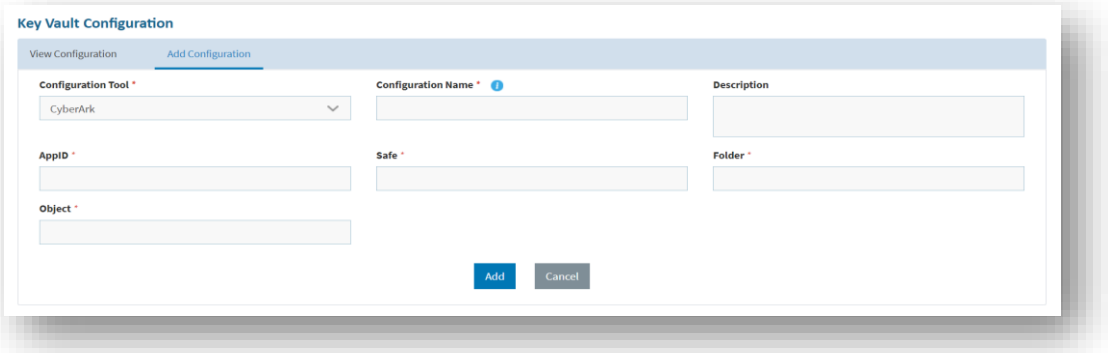


Figure 338 - Add Configuration (Cont.)

3. Click **Add**.
4. A success message box appears as below:

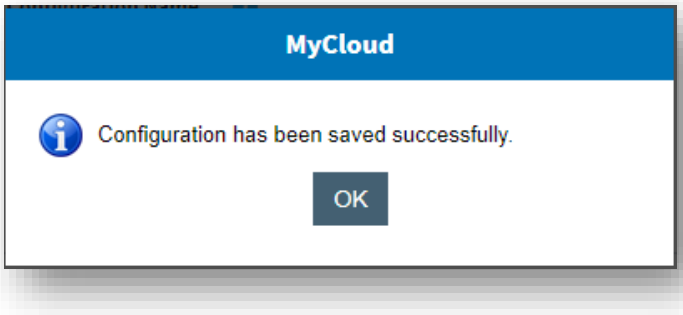


Figure 339 - Success Message

1.5.21.2 View Configuration

This section lists out all the Key Vault Configurations that have been created by the provider user.

Figure 340 - View Configuration

1. Select Configuration Tool.
2. Click **Go**.

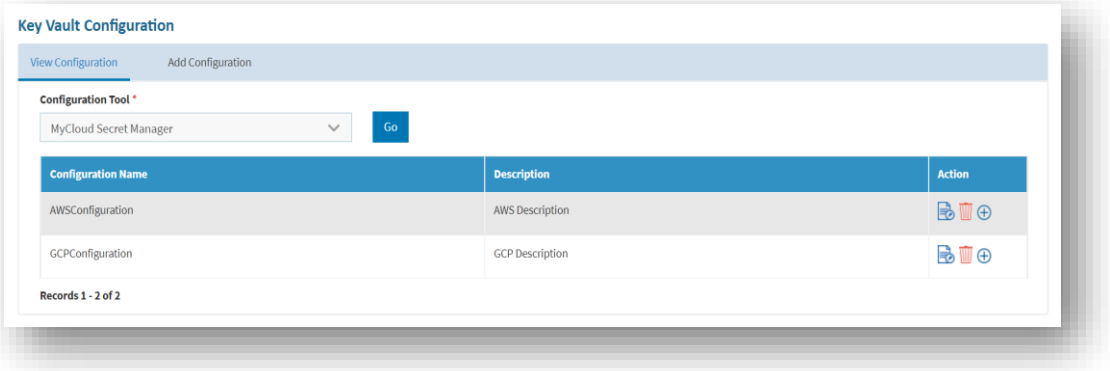


Figure 341 - View Configuration (Cont.)

3. Refer the below table to understand the fields mentioned in the above figure:

Table 33 - View Configuration

Field	Description
Configuration Name	Name of the configuration which is saved using the add configuration functionality.
Description	Description of the configuration

4. It also comprises of following actions:
   - **Edit** ( ): To modify the details of existing configuration.
   - **Delete** ( ): To delete the existing configuration.
   - **Add Key** ( ): To add keys to existing configuration. (this feature is only applicable for MyCloud secret manager configuration tool.) For detailed information, please **refer to section** Add Key.

1.5.21.2.1 Edit Configuration

To edit/ modify the existing configuration, provider user needs to follow the below steps:

1. Click **Edit** ( ) against the configuration that needs to be edited.

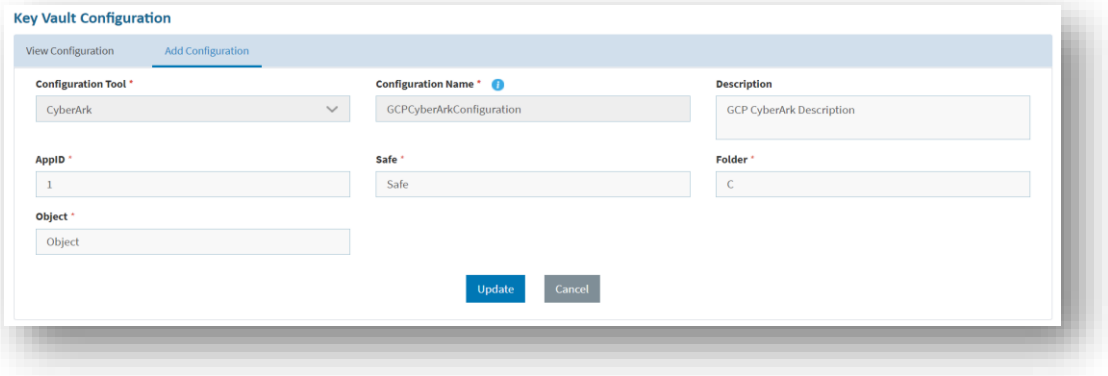


Figure 342 - Edit Configuration

Table 34 - Edit Configuration

Field	Description
Configuration Tool	Configuration tool is non-editable field.
Configuration Name	Configuration name is non-editable field.
Description	Description of the configuration

2. Update the required fields.
3. Click **Update** to save the changes.
4. A success message box shown as below.

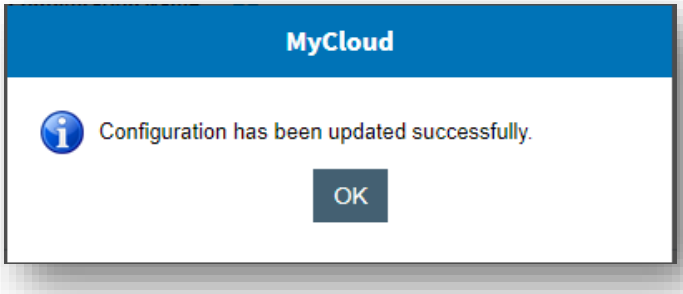


Figure 343 - Success Message

1.5.21.2.2 Delete Configuration

To delete the existing configuration, provider user needs to follow the below steps:

1. Click **Delete** ( ) against the configuration that needs to be deleted.
2. A confirmation message appears.

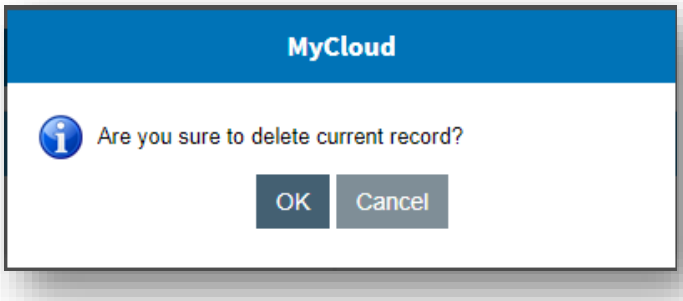


Figure 344 - Confirmation Message

3. Click **OK** to continue. A success message appears. Click **Cancel** to cancel the action.

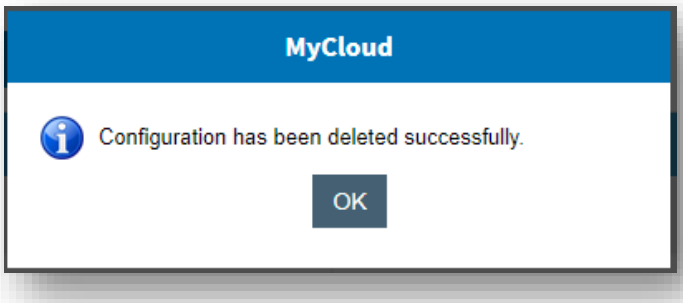


Figure 345 - Success Message

1.5.21.2.3 Add Key

To add any keys to the existing MyCloud secret manager configuration, provider user needs to follow the below steps:

1. Click **Add Key** ( ) against the configuration that needs to be edited.
2. The following screen appears:

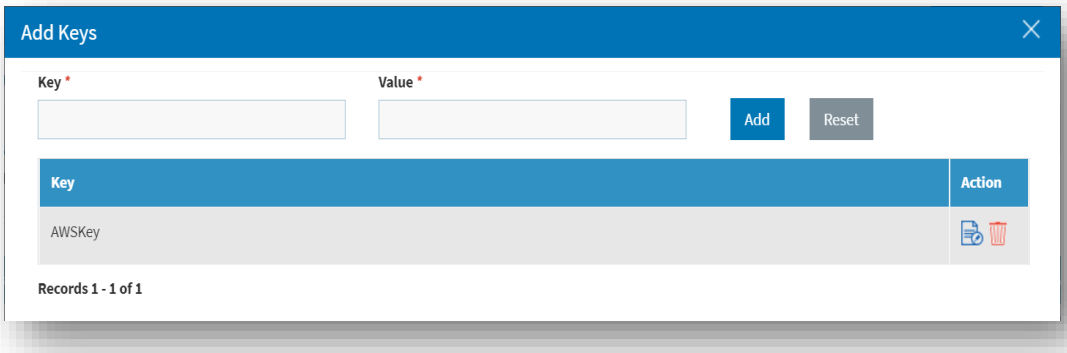


Figure 346 - Add Keys

3. Enter **Key** and **Value**.
4. Click **Add**.
5. User can edit and delete the keys based on the configuration.

1.5.22 Object Naming Convention

Through this section, provider user can configure object names.

1. On the Main Menu bar, click Master and then click Object Naming Convention.
2. The below screen will appear.

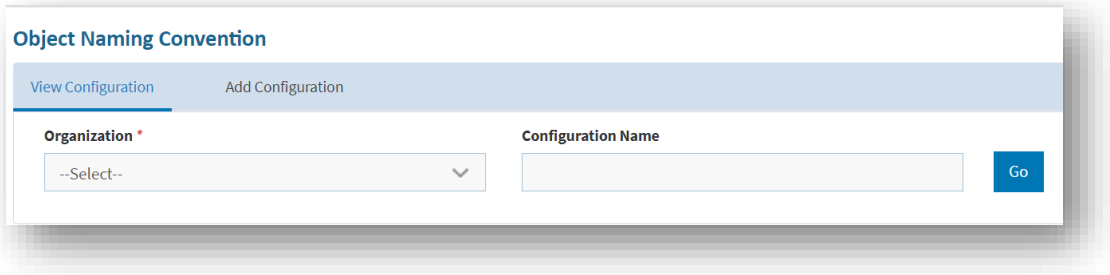


Figure 347 - CI Naming Convention Home Screen

3. It has following options:
   - Add Configuration
   - View Configuration

1.5.22.1 Add Configuration

To add configuration, provider user needs to follow the below steps:

1. On the Object Naming Convention screen, click Add Configuration tab.

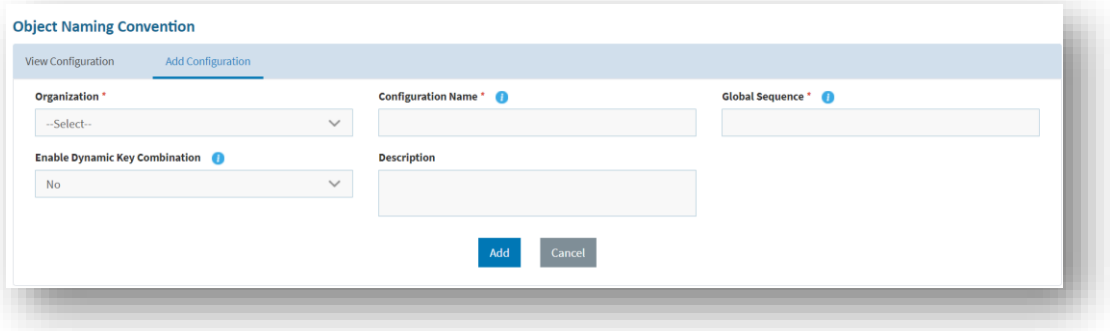


Figure 348 - Add Configuration

2. Refer the below table to understand the fields mentioned in the above figure:

Table 39 - Add Configuration

Field	Description
Organization	Select the name of the organization (business units/divisions in organizations)
Configuration Name	Name of the configuration. Provided that only hyphen and underscore are allowed in middle of text. Other special characters are not allowed.
Global Sequence	This value will be default for all type of keys combination and user can also override its value from manage key action.
Enable Dynamic Key Combination	This key is used to set the output of API based on configuration. If

	value is – • **Yes** -If key doesn't exist in the system against a configuration. New key will be created with initial sequence as global sequence. • **No** – If no key exist then error will be prompted stating that key not exist against configuration.
Description	Description of the configuration

3. Select Organization.
4. Enter Configuration Name, Global Sequence and Description.
5. Enter Enable Dynamic Key Combination.
6. Click **Add**.
7. A success message box appears as below:

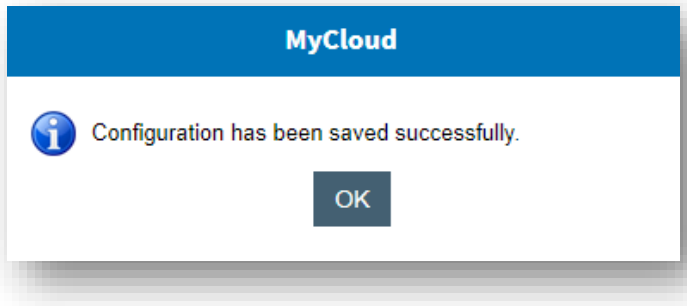


Figure 349 - Success Message

1.5.22.2 View Configuration

This section lists out all the CI naming convention configurations that have been created by the provider user.

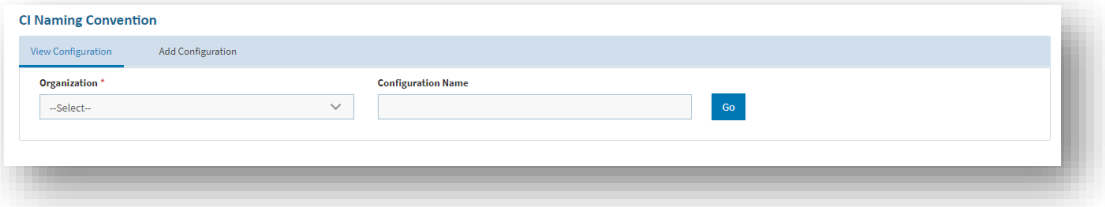


Figure 350 - CI Naming Convention Home Screen

1. Select Organization.
2. Enter Configuration Name.
3. Click **Go**

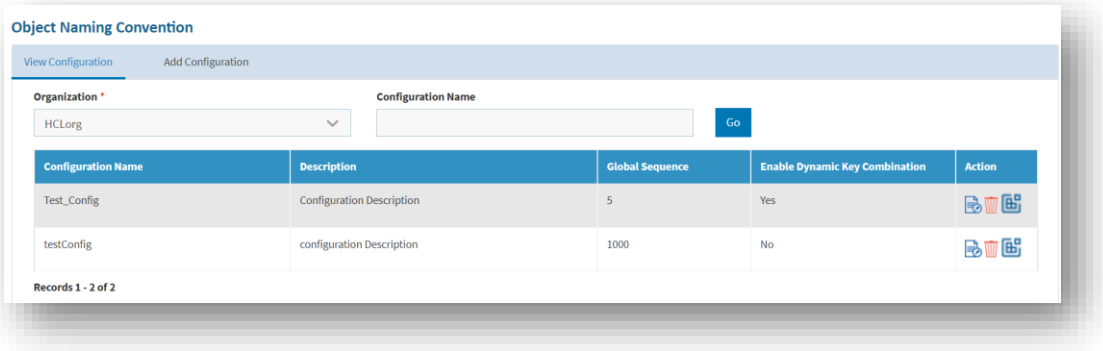


Figure 351 - View Configuration

4. It also comprises of following actions:
   - **Edit** ( ): To modify the details of existing configuration.
   - **Delete** ( ): To delete the existing configuration.
   - **Manage Keys** ( ): To manage keys of existing configuration.

1.5.22.2.1 Edit Configuration

To edit/modify the existing configuration, provider user needs to follow the below steps:

1. Click **Edit** ( ) against the configuration that needs to be edited.

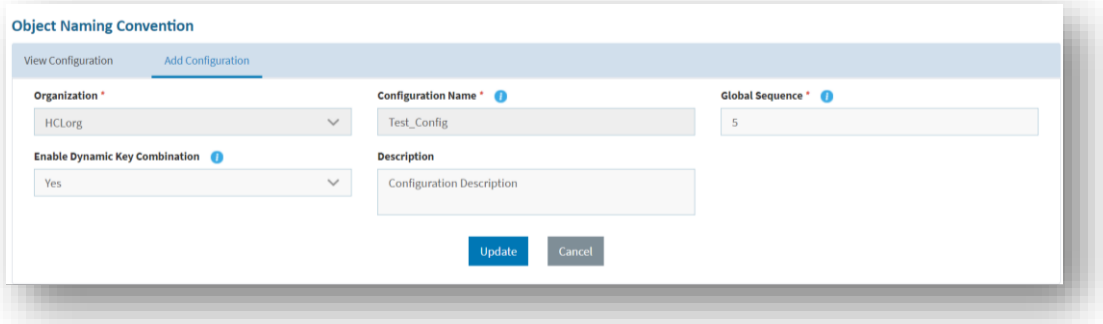


Figure 352 - Edit Configuration

2. Edit Global Sequence, Enable Dynamic Key Combination, and Description.
3. Click **Update** to save the changes.

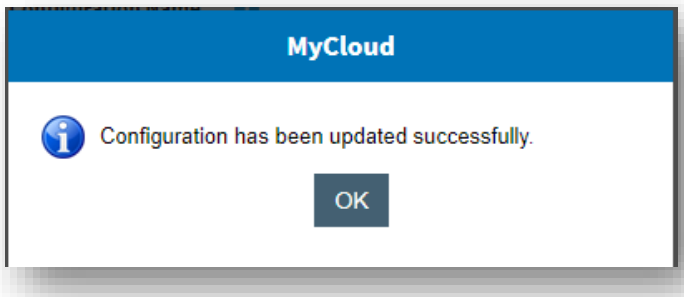


Figure 353 - Success Message

1.5.22.2.2 Delete Configuration

To delete the existing configuration, provider user needs to follow the below steps:

1. Click **Delete** ( ) against the configuration that needs to be deleted.
2. A confirmation message appears.

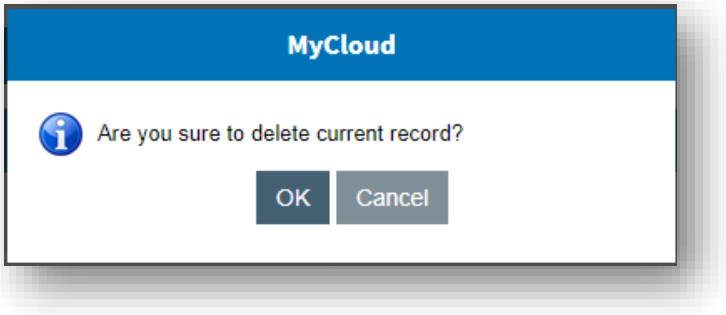


Figure 354 – Confirmation Message

3. Click **OK** to continue and **Cancel** to cancel the action.

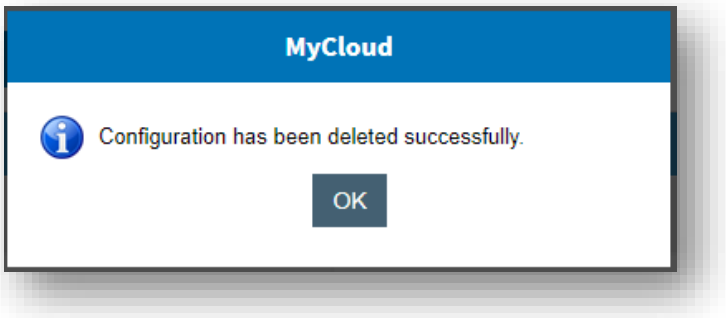


Figure 355 - Success Message

1.5.22.2.3 Manage Keys

To manage keys in the existing configuration, provider user needs to follow the below steps:

1. Click **Manage Keys** ( ) against the configuration that needs to be added or edited.
2. The below pop up will appear:

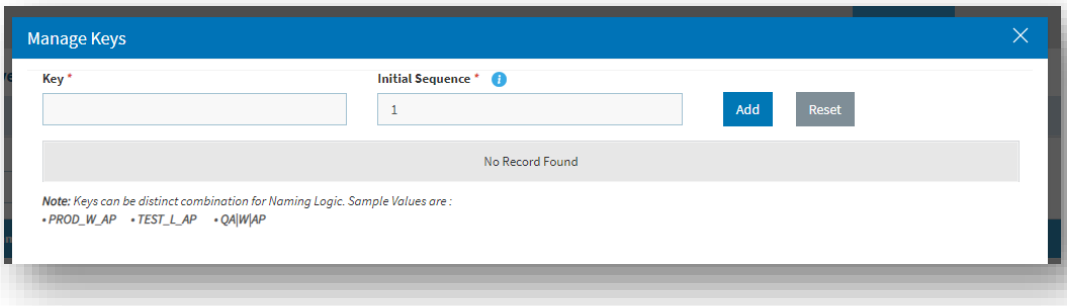


Figure 356 - Manage Keys

3. Enter Key and Initial Sequence.
4. Click **Add**.
5. Users can **Edit** and **Delete** the keys based on the configuration.
6. Keys can be distinct combination for naming logic. Sample values are:
   - PROD_W_AP

- TEST_L_AP
- QA|W|AP

1.5.23 Job Notification Details

Through this section, provider users can view job notifications.

1. On the Main Menu bar, click Master and then click Job Notification Details.
2. The below screen will appear.

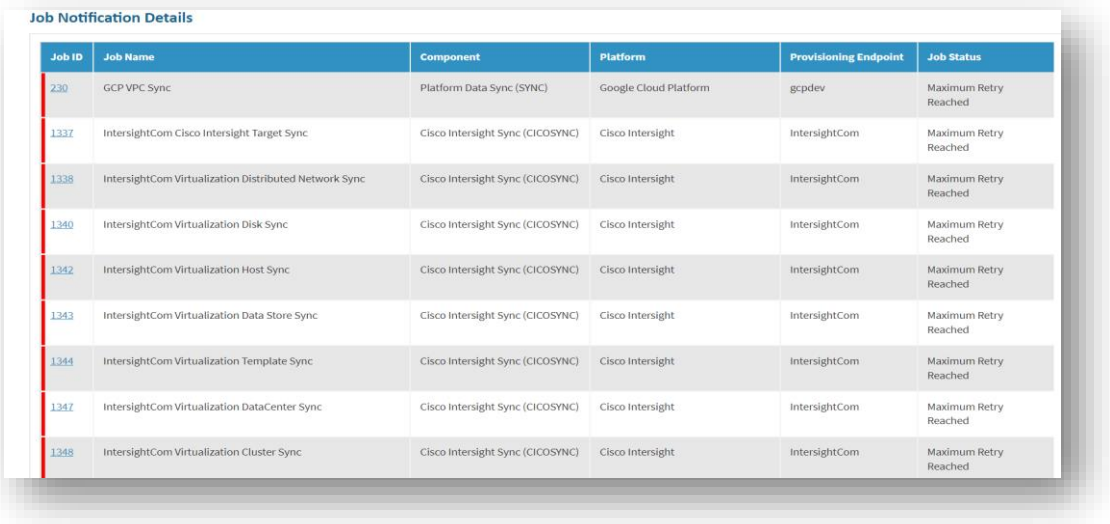


Figure 357 - Job Notification Details Home Screen

3. Refer the below table to understand the fields mentioned in the above figure:

Table 39 – Job Notification Details

Field	Description
Organization	Select the name of the organization (business units/ divisions in organizations)
Job ID	Unique ID of a job.
Job Name	Unique job name
Component Code	Job belongs to which component, like sync, comp etc.
Providing Endpoint	Unique endpoint name of the provider.
Job Status	Status of the job.

4. User can also check the job notification from the top of the screen by clicking bell icon. ( )
5. This will help user to notify the number jobs which are either on the state of **Maximum Retry Reached**, **Maximum Timeout Reached**, or **Failed**.
6. Hover on the **Bell**( ) Icon.
7. User will get the quick idea of job status.

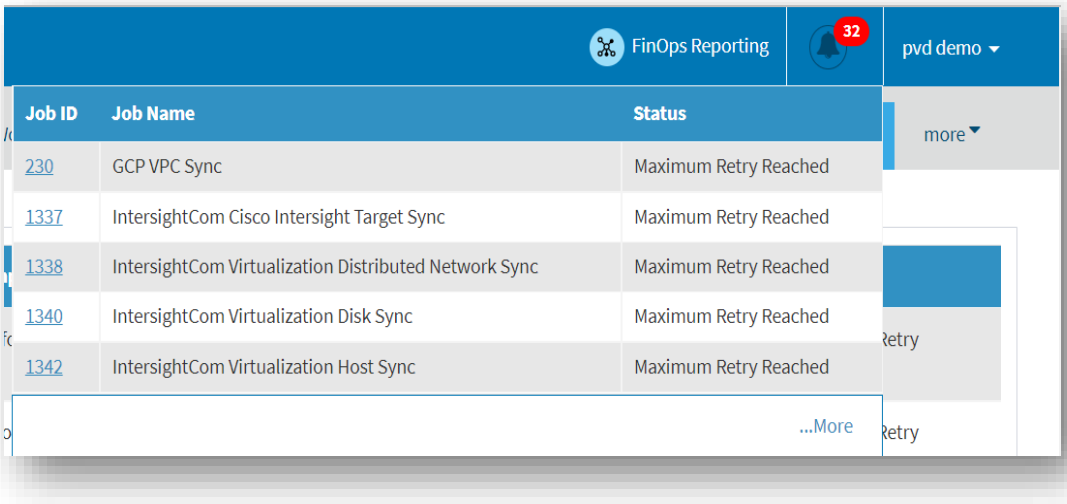


Figure 358 - Job Notification Popup

8. Click **More**
9. The user will be redirected to Job Notification Details screen.

1.5.24 Manage GIT Configuration

Through this section, provider user can manage GIT configuration.

1. On The Main Menu bar, click Master and then click Manage GIT Configuration.
2. The below screen will appear.

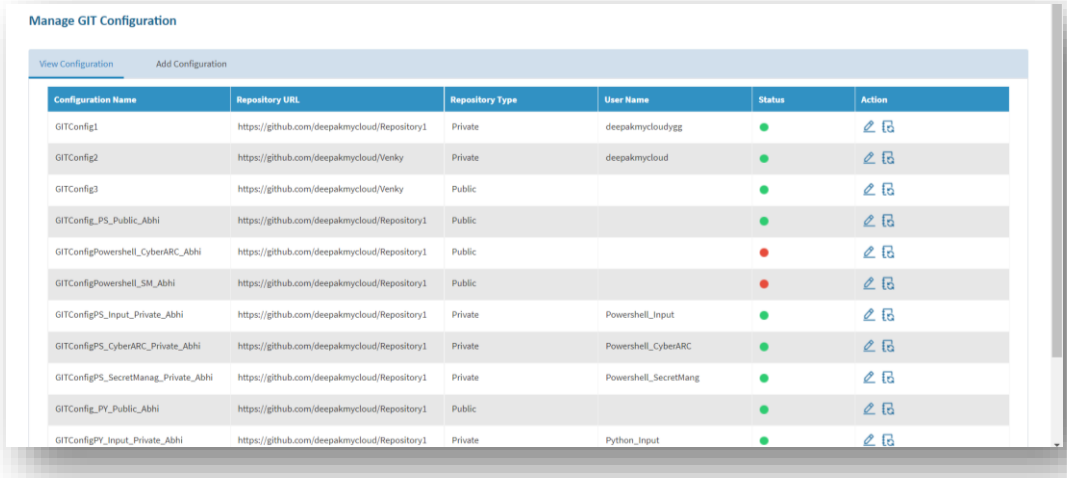


Figure 359 - Manage GIT Configuration Home Screen

3. It has following options:
   - Add Configuration
   - View Configuration

1.5.24.1 Add Configuration

To add configuration, provider user needs to follow the below steps:

1. On the Manage GIT Configuration screen, click Add Configuration tab.

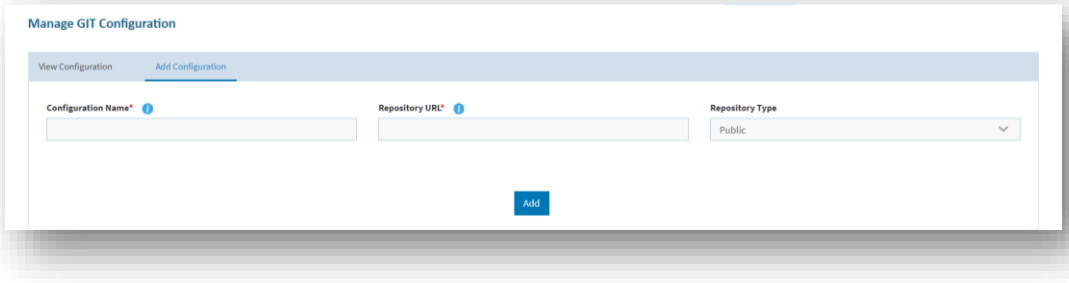


Figure 360 - Manage GIT Configuration

2. Refer the below table to understand the fields mentioned in the above figure:

Table 40 - Add Configuration

Field	Description
GIT Configuration Name	Unique name of the configuration.
Repository URL	Address of the GIT repository.
Repository Type	Type of the repository, public, or private
Username, Token	For repository type: private, user needs to add creds such as username and token.

3. Select GIT Configuration Name, Repository URL, Repository Type.
4. In the case of **'Private'** repository type, some additional fields appear.

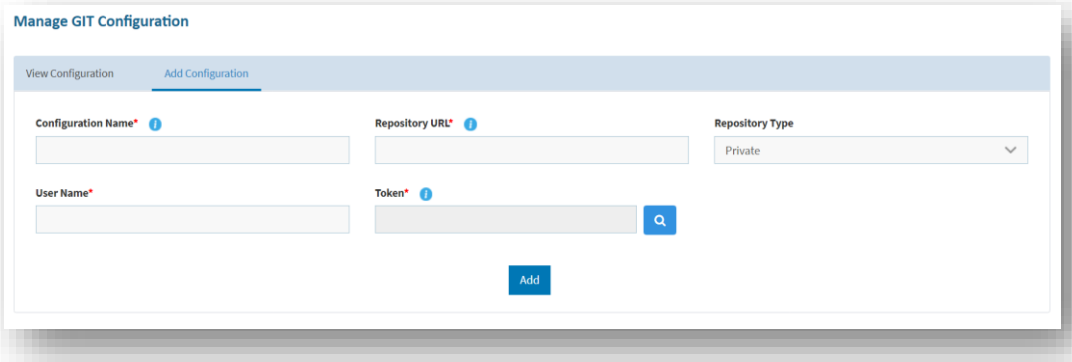


Figure 361 - Manage GIT Configuration (Cont.)

5. Enter Username and Token.
6. Click **Add**.
7. A success message box appears as below:

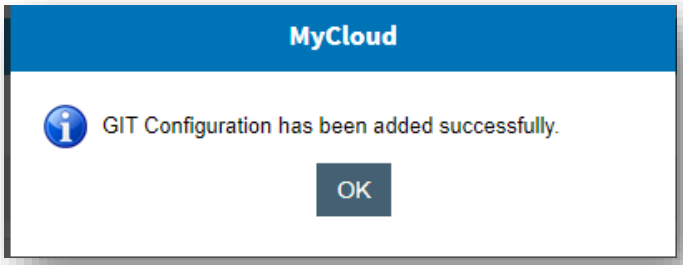


Figure 362 - Success Message

1.5.24.2 View Configuration

This section lists out all the GIT configurations that have been created by the provider user.

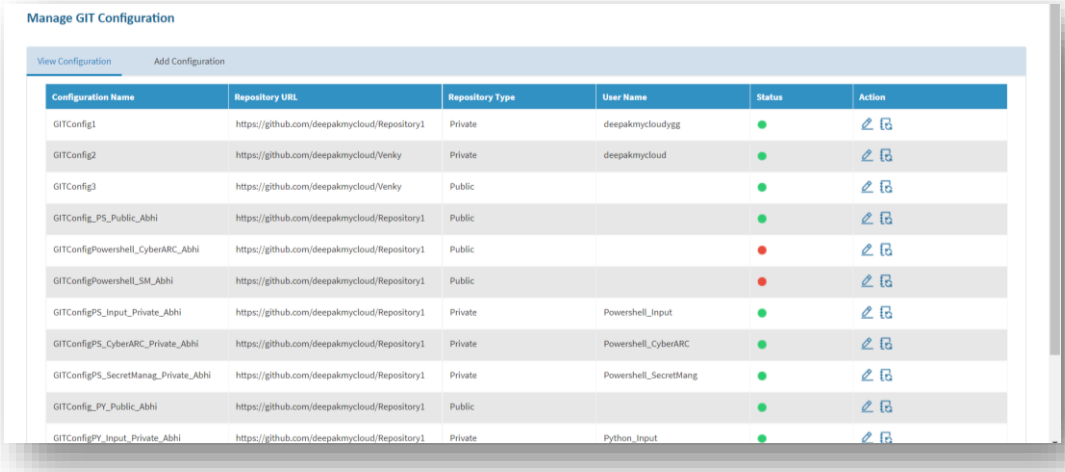


Figure 363 - Manage GIT Configuration

1.5.24.2.1 Edit Configuration

To edit/ modify the existing configuration, provider user needs to follow the below steps:

1. Click **Edit** (✎) against the configuration that needs to be edited.

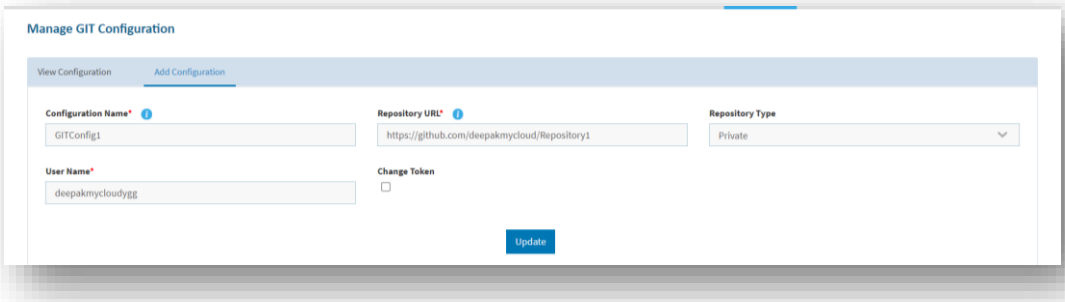


Figure 364 - Edit Configuration

2. Edit GIT Configuration Name, Repository URL, And Repository Type.
3. Click **Update**.
4. A success message appears.

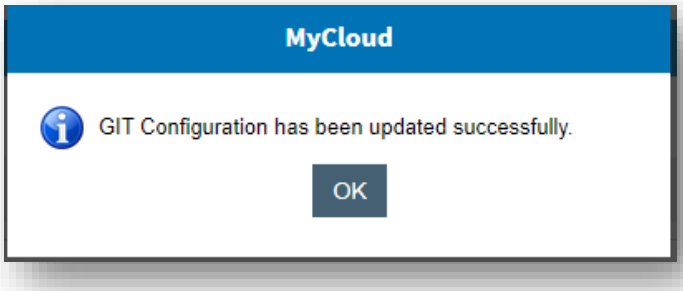


Figure 365 - Success Message

1.5.24.2.2 Change Status

To update/ modify the existing status of configuration, provider user needs to follow the below steps:

1. Click **Change Status** ( ) against the configuration that status needs to be changed.
2. A confirmation message appears.

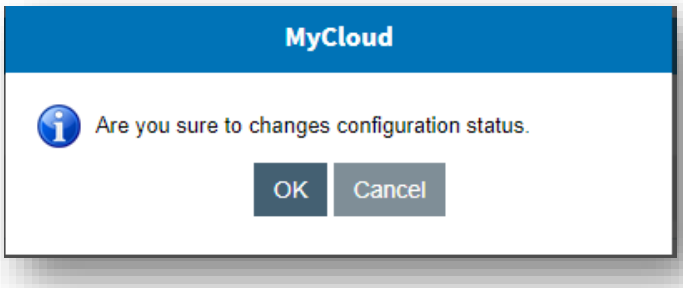


Figure 366 - Confirmation Message

3. Click **OK**.

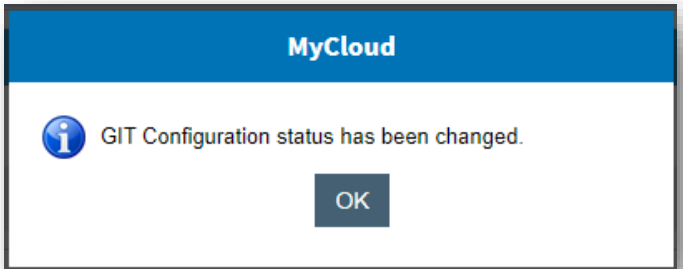


Figure 367 - Success Message

1.5.25 Public Cloud Size Allocation

This module helps provider users to allocate public cloud size allocation.

1. On the main menu Master, click Public Cloud Size Allocation.
2. The below screen appears.

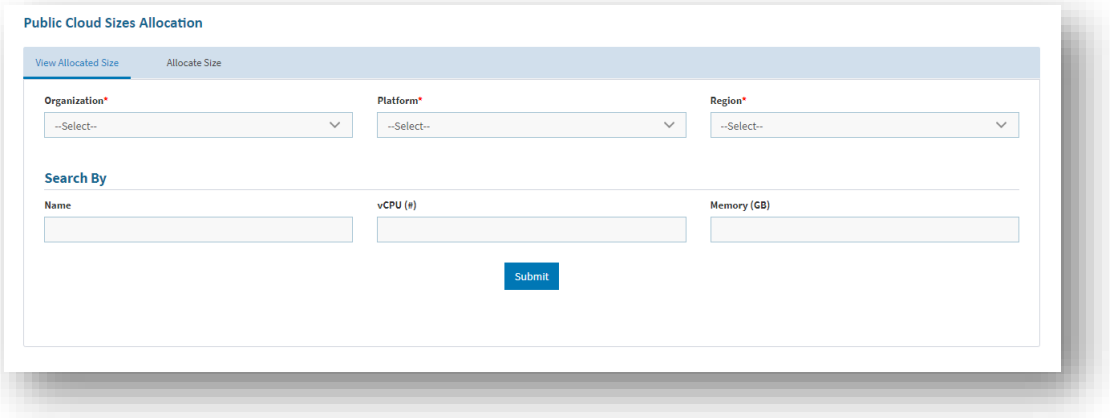


Figure 368 - Public Cloud Size Allocation

3. It has following options:
   - View Allocated Size
   - Allocate Size

1.5.25.1 Allocate Size

To allocate public cloud size in an organization, user needs to follow the steps below:

1. Click on the **Public Cloud Size Allocation** menu option and then click **Allocate Size**.

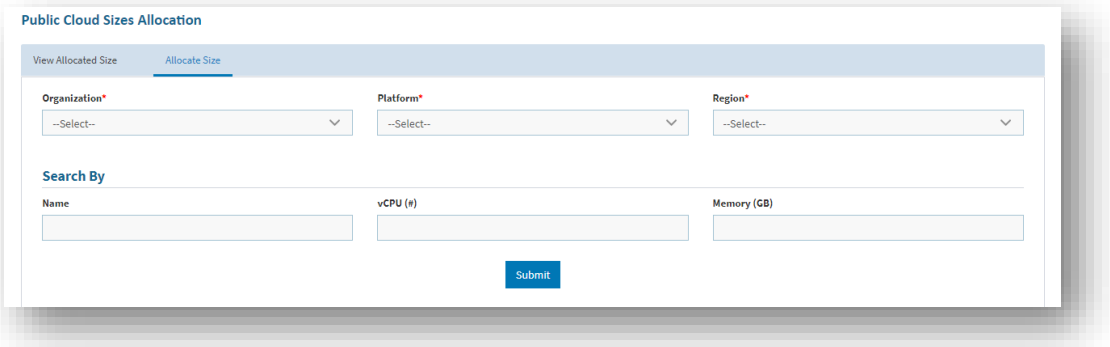


Figure 369 - Allocate Size

2. Select Organization, Platform, Region, and Location.
3. Provider user can search by **Name**, **vCPU**, and **Memory**.
4. Click **Submit**.
5. The below screen appears.

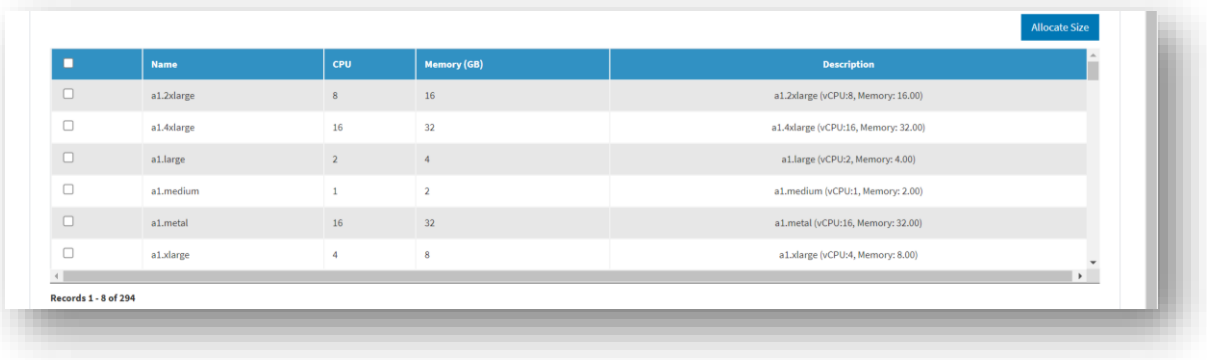


Figure 370 - Allocate Size

6. Select checkbox for the list of sizes.
7. Click Allocate Size.
8. The below message appears.

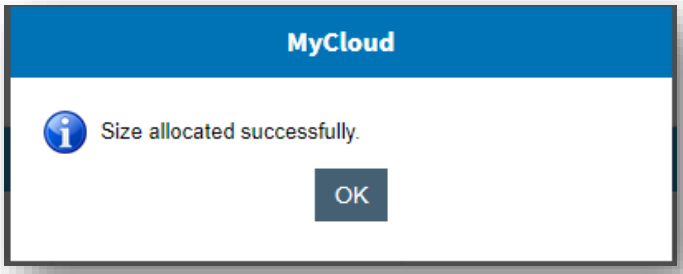


Figure 371 - Success Message

1.5.25.2 View Allocated Size

To view allocated public cloud size in an organization, user needs to follow the steps below:

1. Click on the Public Cloud Size Allocation menu option and then click View Allocated Size.

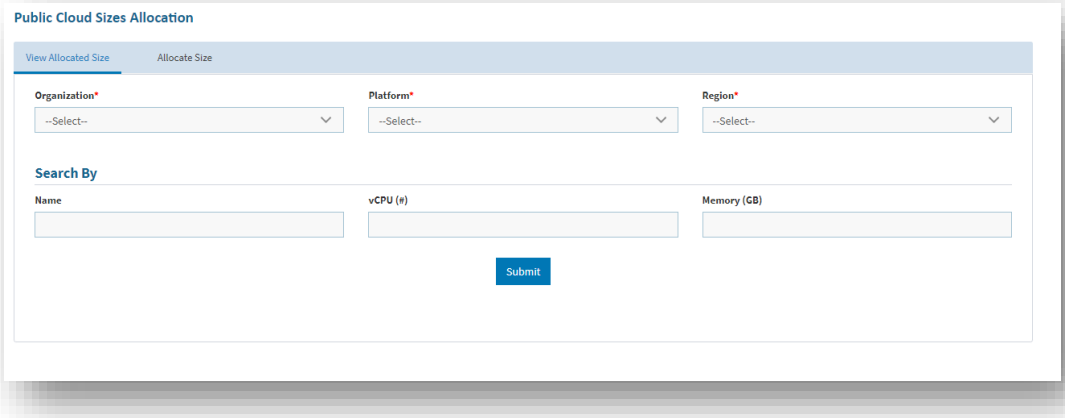


Figure 372 - View Allocated Size

2. Select Organization, Platform, Region, and Location.
3. User can search by **Name**, **vCPU**, or **Memory**.
4. Enter **Submit**.

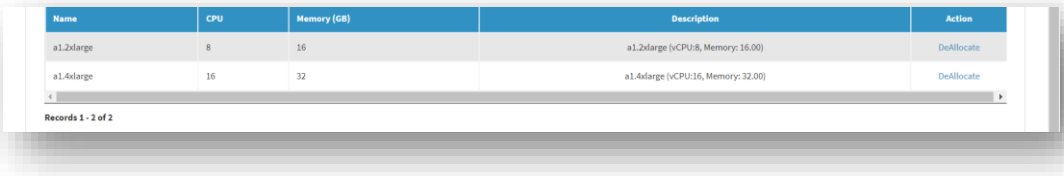


Figure 373 - List of Allocated Size

5. User can **Deallocate** the size.
6. Click on **Deallocate** to the size.
7. A confirmation message appears.

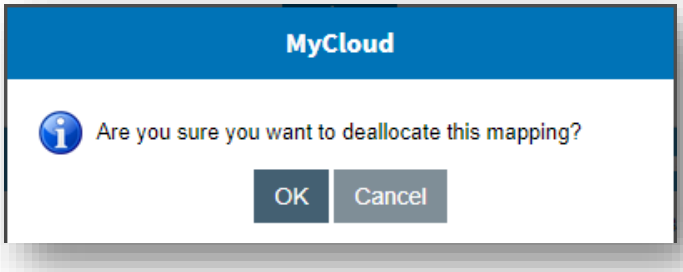


Figure 374 - Confirmation Message

8. Click **OK** to confirm.

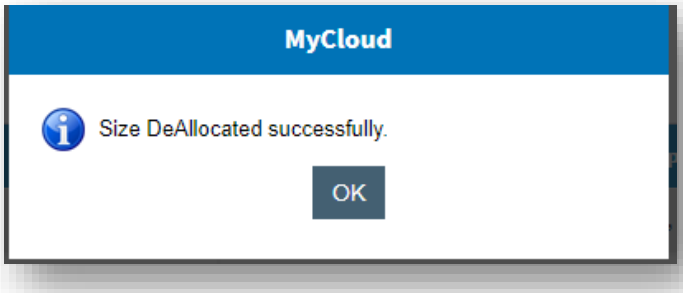


Figure 375 - Success Message

1.5.26 Manage Private Cloud Sizes

Through this section, provider users can configure private cloud size.

1. On the main menu bar, click **Master** and then click **Manage Private Cloud Sizes**.
2. The below screen will appear.

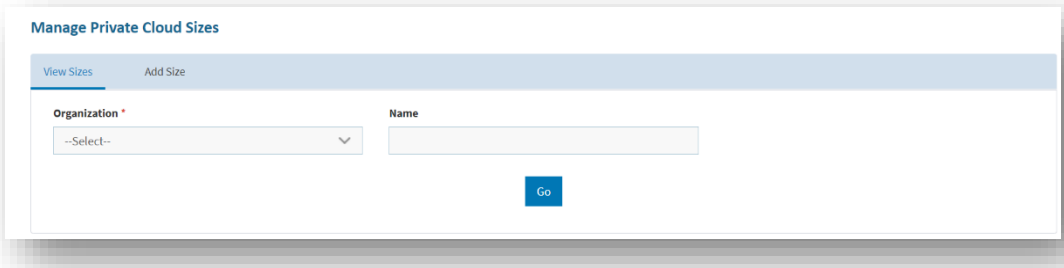


Figure 376 - Manage Private Cloud Sizes

3. It has following options:

- View Size
- Add Size

1.5.26.1 Add Size

To add private cloud size in an organization, user needs to follow the steps below:

1. Click on the **Manage Private Cloud Sizes** menu option and then click **Add Size**.

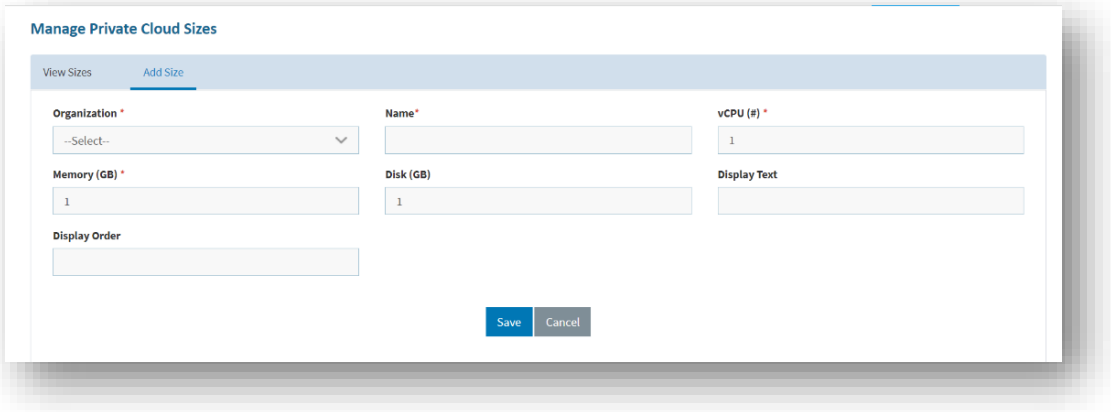


Figure 377 - Add Size

2. Select Organization.
3. Enter Name, vCPU (#), Memory (GB), Disk (GB), and Display Text.
4. Enter Display Order.
5. Click **Save**.

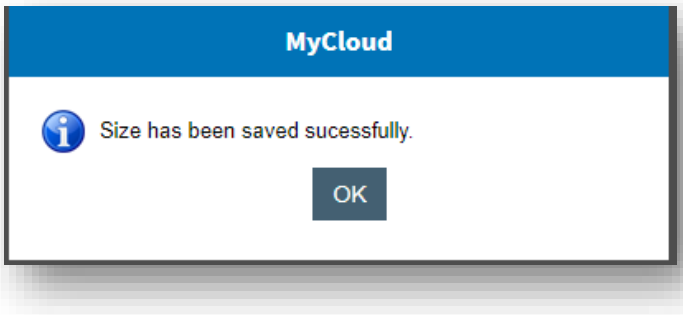


Figure 378 - Success Message

1.5.26.2 View Sizes

To view private cloud size in an organization, user needs to follow the steps below:

1. Click on the **Manage Private Cloud Sizes** menu option and then click **View Size**.

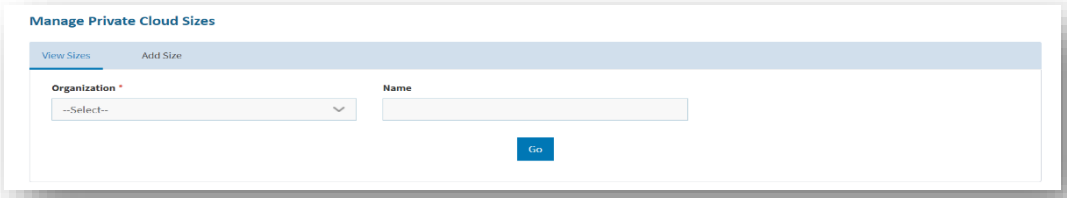


Figure 379 - View Sizes

2. Select Organization and Name.
3. Click **Go**.

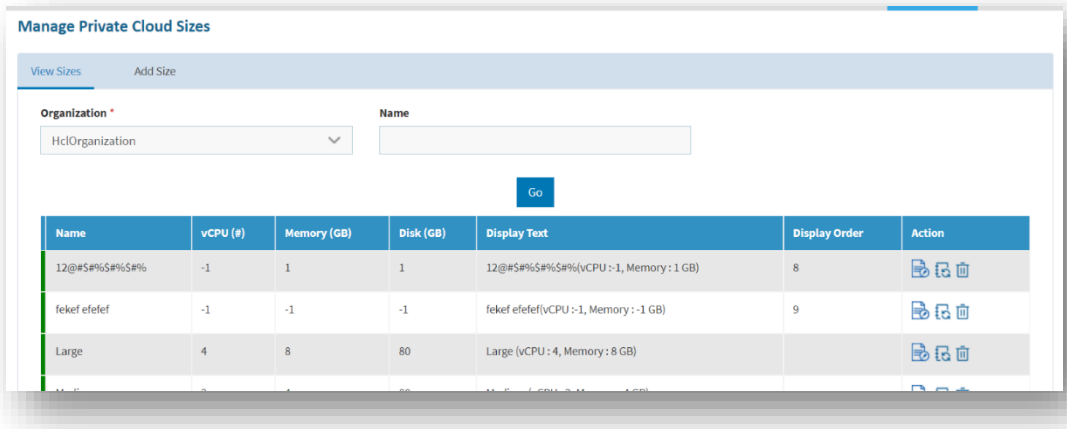


Figure 380 - Home Screen

4. It also comprises of following actions:
   - **Edit** ( ): To modify the details of existing configuration.
   - **Delete** ( ): To delete the existing configuration.

1.5.26.2.1 Edit Size

To edit/ modify the existing configuration, provider user needs to follow the below steps:

1. Click **Edit** ( ) against the configuration that needs to be edited.

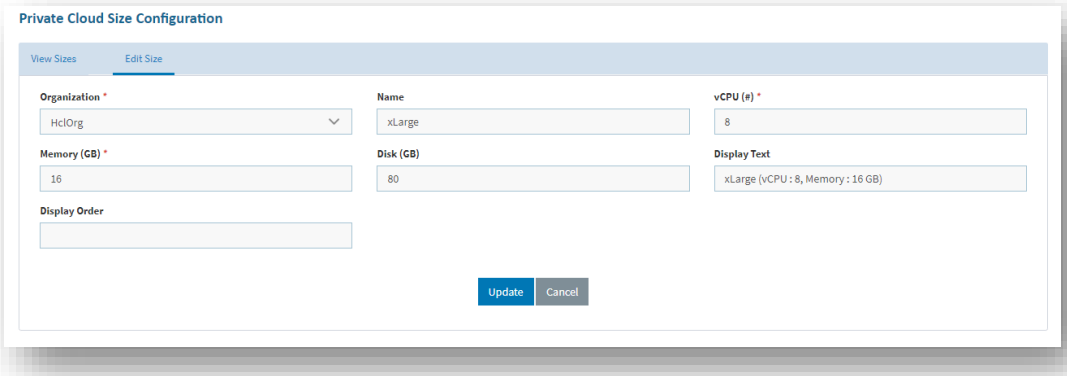


Figure 381 - Edit Size

2. Select Organization.
3. Enter Name, vCPU (#), Memory (GB), Size (GB), and Display Text.

4. Enter Display Order.
5. Click **Update**.
6. A success message appears.

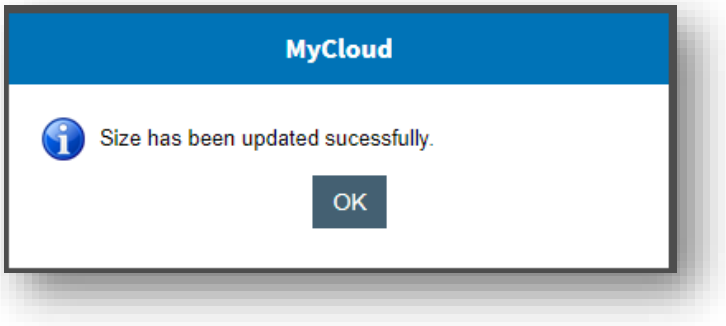


Figure 382 - Success Message

1.5.26.2.2 Change Status

To toggle the existing status of configuration, provider user needs to follow the below steps:

1. Click **Change Status** ( ) against the check that status needs to be changed.
2. A confirmation message appears.

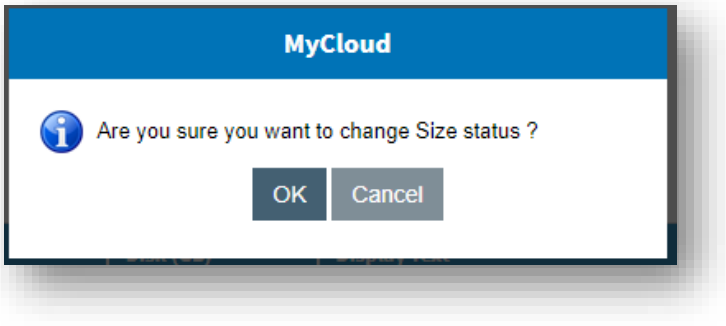


Figure 383 - Confirmation Message

3. Click **OK** to confirm.

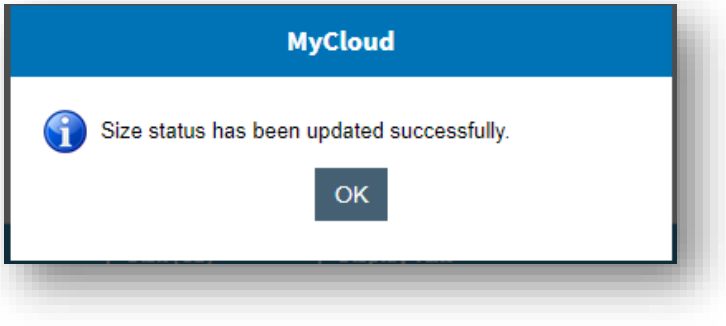


Figure 384 - Success Message

1.5.26.2.3 Delete Size

To delete the existing configuration, provider user needs to follow the below steps:

1. Click **Delete** ( ) against the check that needs to be deleted.
2. A confirmation message appears.

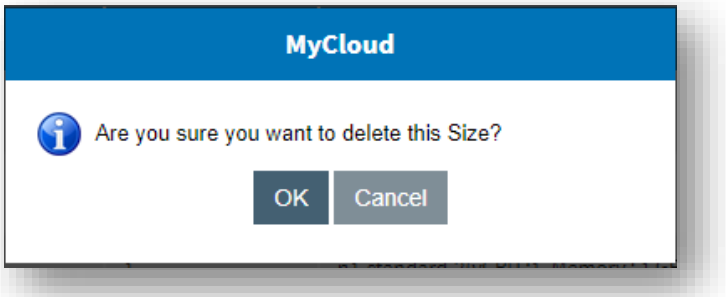


Figure 385 - Confirmation Message

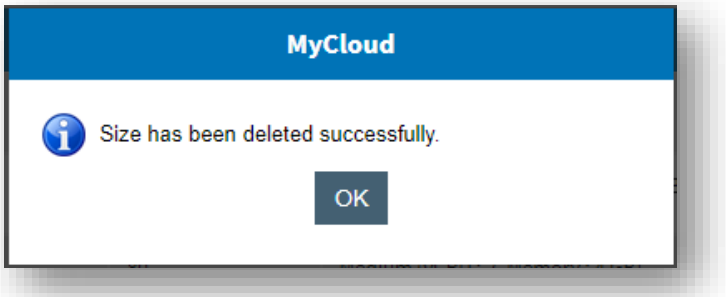


Figure 386 - Success Message

1.6 Blueprint Module

A blueprint is a package of deployable, reusable configuration and policies that implements and documents a specific solution. Blueprints enable users to design infrastructure, platforms, and application services by composing and connecting cloud resources with declarative configuration. Blueprints are designed to capture best practices for specific use cases, including appropriate resource groupings and policies. Once best practices are packaged into a blueprint, they can be shared internally within your organization or distributed among certain groups to evangelize them more broadly. Because blueprints package multiple resources together to target specific use cases, they can provide sensible, contextual default configurations, which reduces the need to tune every option on each resource. This makes onboarding faster and reduces costs. This module describes how to create, edit, and deploy blueprints in DRYiCE MyCloud. It is a drag and drop blueprint designer to support provisioning and post provisioning and has the following features covered.

- Support for GCP, Azure, AWS
- Support Ansible and Cisco Intersight for post provisioning task
- Ability to create infrastructure blueprint using Blueprint Designer
- Blueprint deployment and status tracking
- Out Of Box (OOB) method to deploy blueprints in MyCloud orchestrator
- View execution history and rerun functionality
- Downloads terraform files for blueprint
- History and drift view among multiple versions of blueprint

- Import/export functionality of blueprints

1.6.1 Manage Blueprint

1.6.1.1 Accessing Blueprint

The **Blueprint Module** is managed by the provider user. To access the blueprint, the user needs to login as a provider user and follow the below steps.

1. Login into MyCloud with **provider user** credentials.
2. On the main menu bar, click **Service Catalog** tab.
3. Select **Manage Blueprint** from the available options.

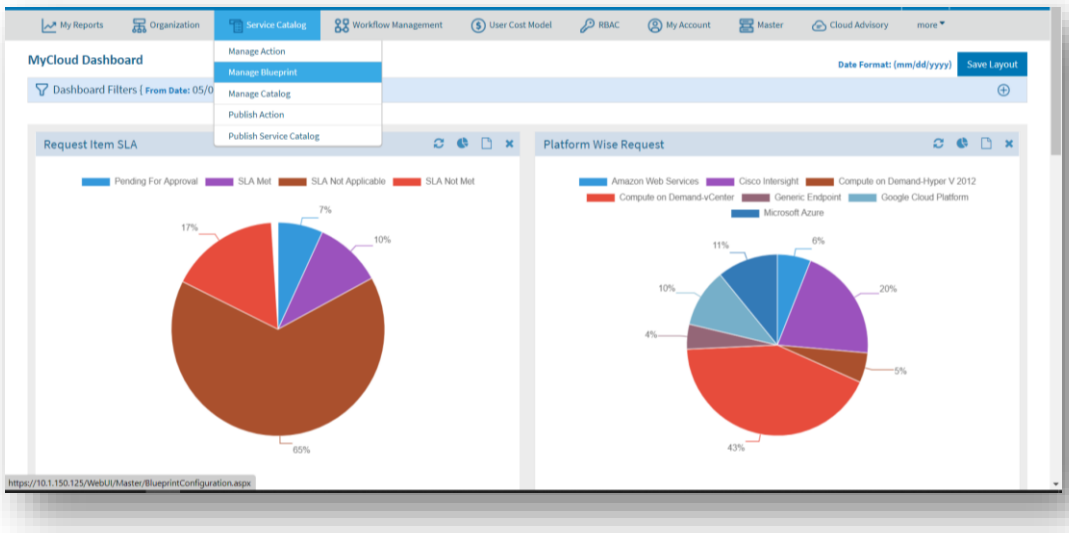


Figure 387 - Manage Blueprint Menu

4. The **Manage Blueprint** page appears:

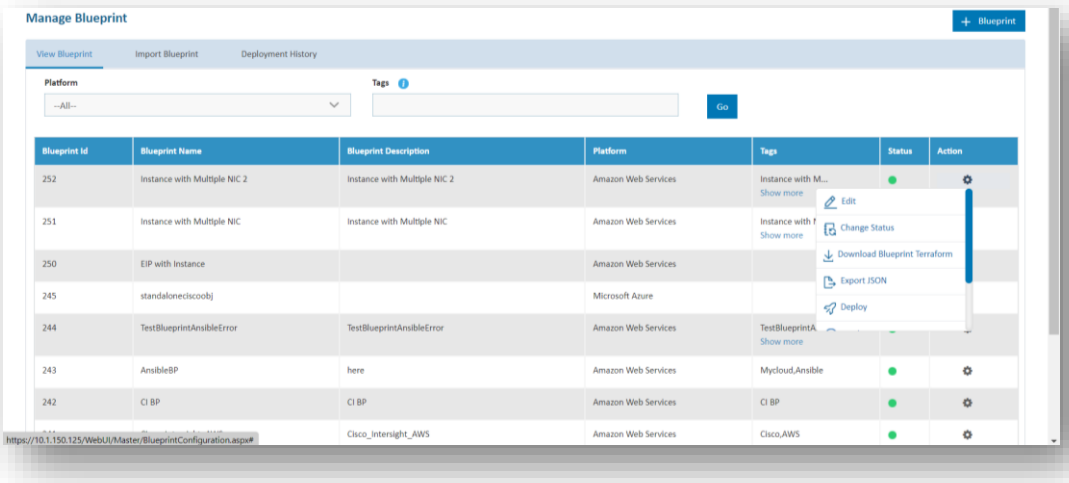


Figure 388 - Manage Blueprint Page

5. The **Manage Blueprint** page is the landing page for the blueprint module. This page has the options to create and list the blueprint. Under the list section, users have the options to import the blueprint and to view the deployment history, along with other actions. The manage blueprint page covers the following two areas of the blueprint module.

- Create New Blueprint
- Manage Existing Blueprints

1.6.1.2 Create New Blueprint

1. To create a new blueprint, click on the + Blueprint icon on **Manage Blueprint** page. The user is directed to the **Design Blueprint** page.

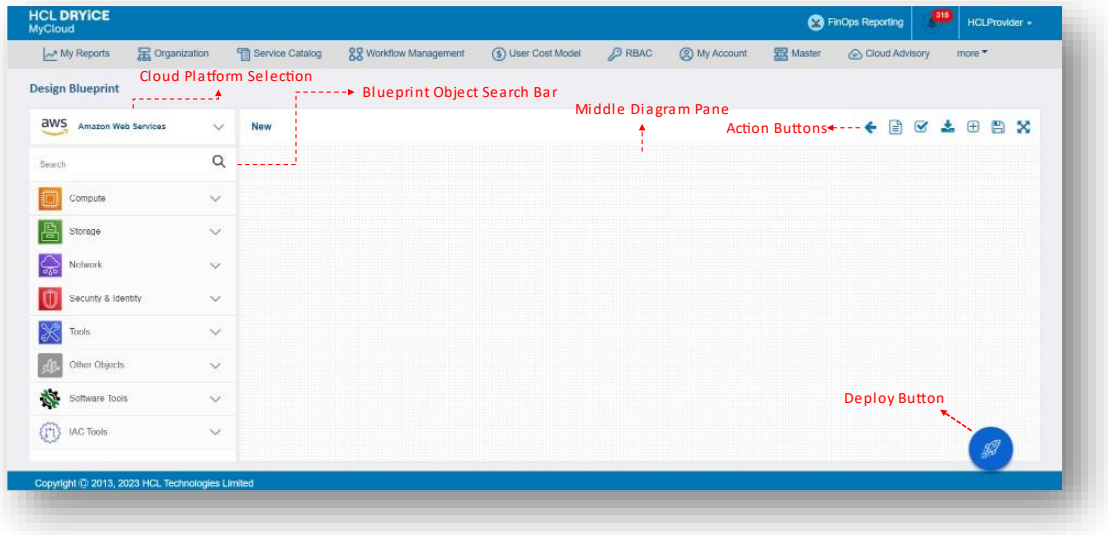


Figure 389 - Design Blueprint

The Design Blueprint page has the following functionalities:

- Cloud platform selection
- Blueprint object search bar
- Left object menu
- Middle diagram pane
- Right attribute window
- Deploy Blueprint (Icon)
- Action Buttons

1.6.1.2.1 Cloud Platform Selection

The Design Blueprint page has a platform selection dropdown where users can select the different configured cloud platforms supported by the Blueprint module.

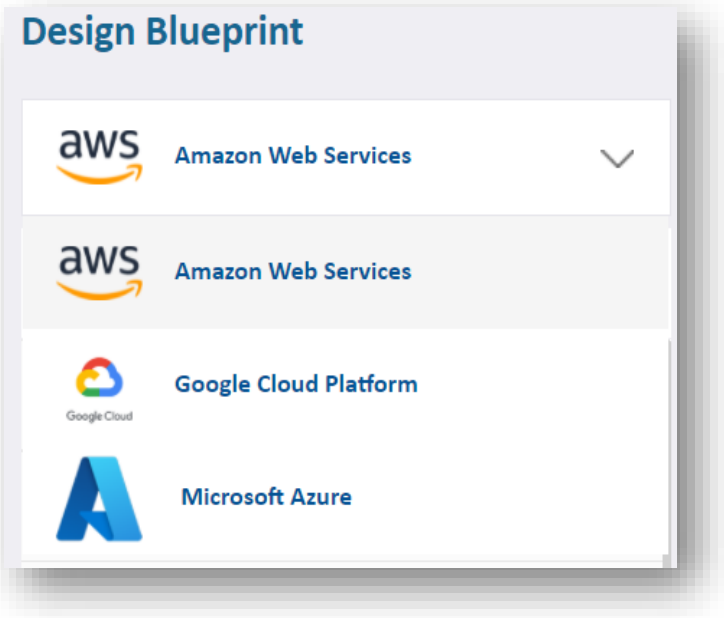


Figure 390 - Cloud Platform Selection

1.6.1.2.2 Blueprint Object Search Bar

The Design Blueprint page has the option to search for blueprint objects in the left menu. The left menu is filtered based on the input text in the search box.

1. To search, enter any filter value in the search box and click the **Search icon** ( ).

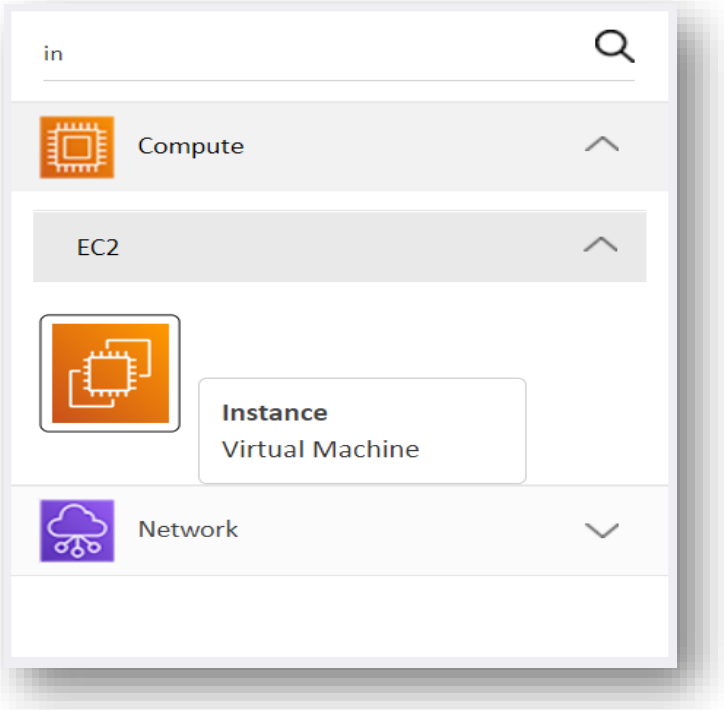


Figure 391 - Blueprint Object Search Bar

1.6.1.2.3 Left Object Menu

All the configured cloud resources (or objects) of the selected platform appear in the left menu on the **Design Blueprint** page. Cloud objects are arranged category-wise.

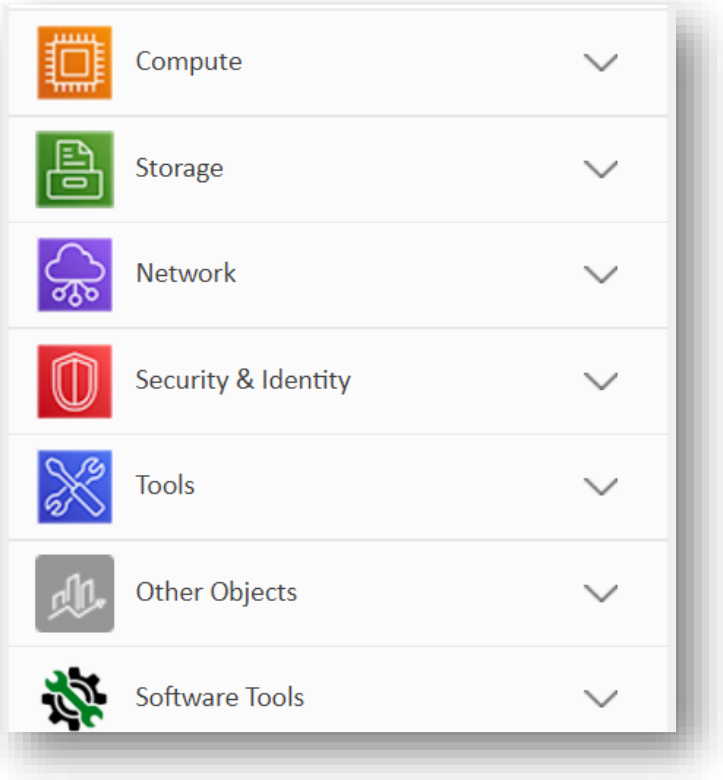


Figure 392 - Left Object Menu

To use the configured cloud objects, the user needs to take the following steps:

1. Click on desired **category**.
2. Click on desired **subcategory**.
3. Drag the **object** to the Middle Diagram Pane.

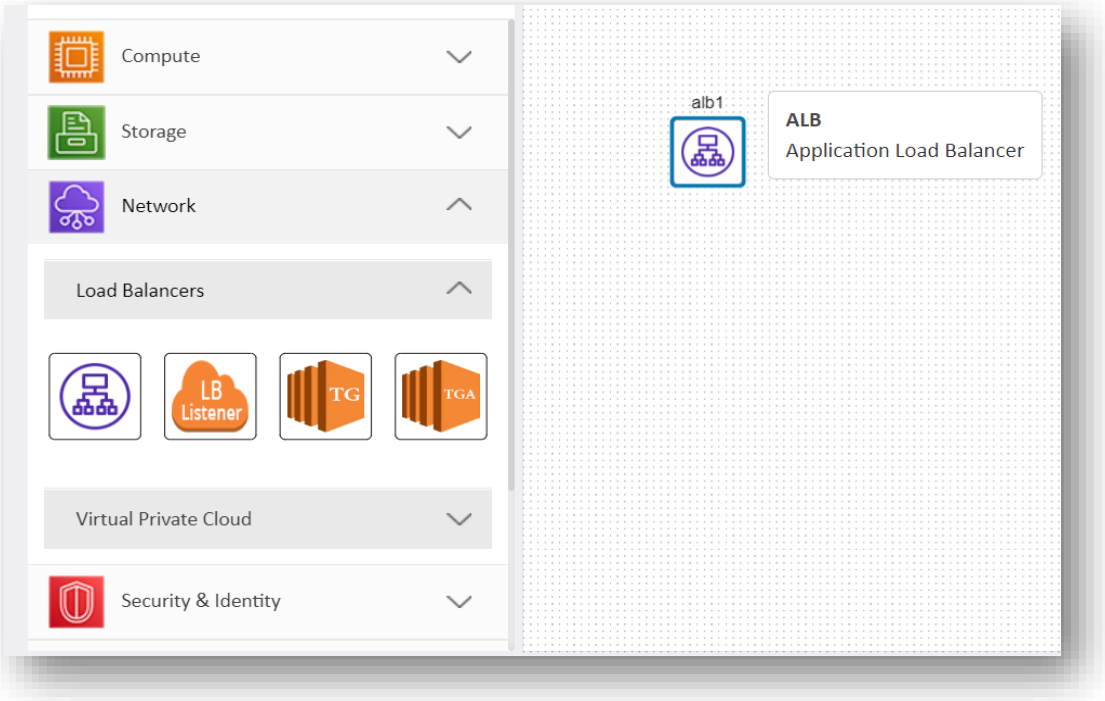


Figure 393 - Left Object Menu (Cont.)

1.6.1.2.4 Middle Diagram Pane

The middle diagram pane in the Design Blueprint page is the area where all the objects are dragged and the blueprints are designed. It is a designer pane where a user can drag objects and map them to other objects.

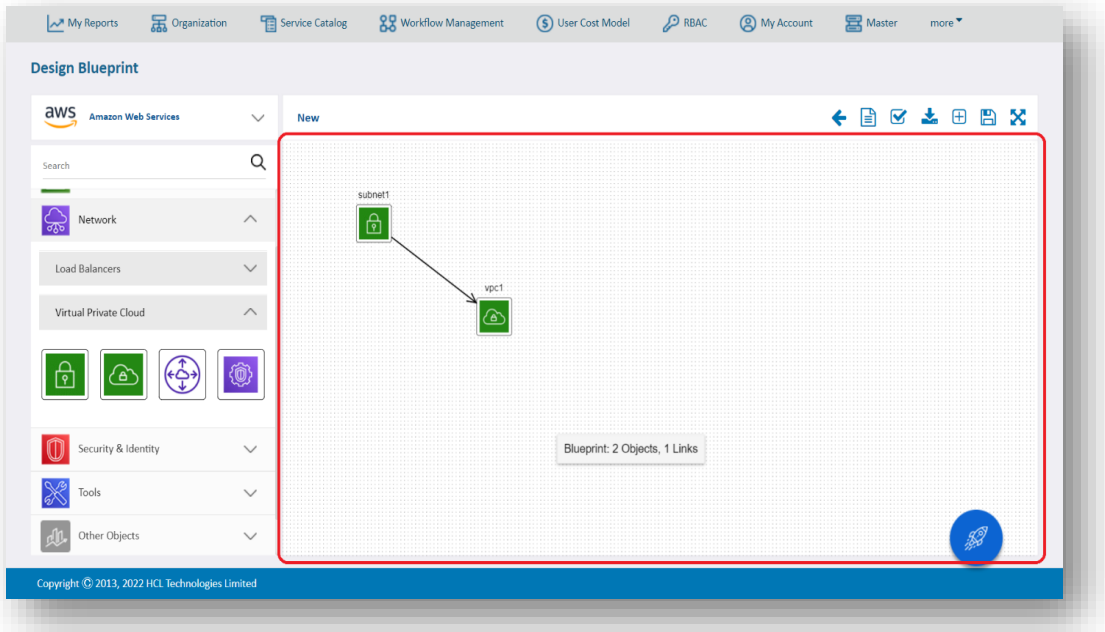


Figure 394 - Middle Diagram Pane

1.6.1.2.5 Right Attribute Pane

The right attribute pane appears on clicking any object in the diagram pane. It has an attribute list of the selected object. The cloud object attribute can be configured here for the selected object.

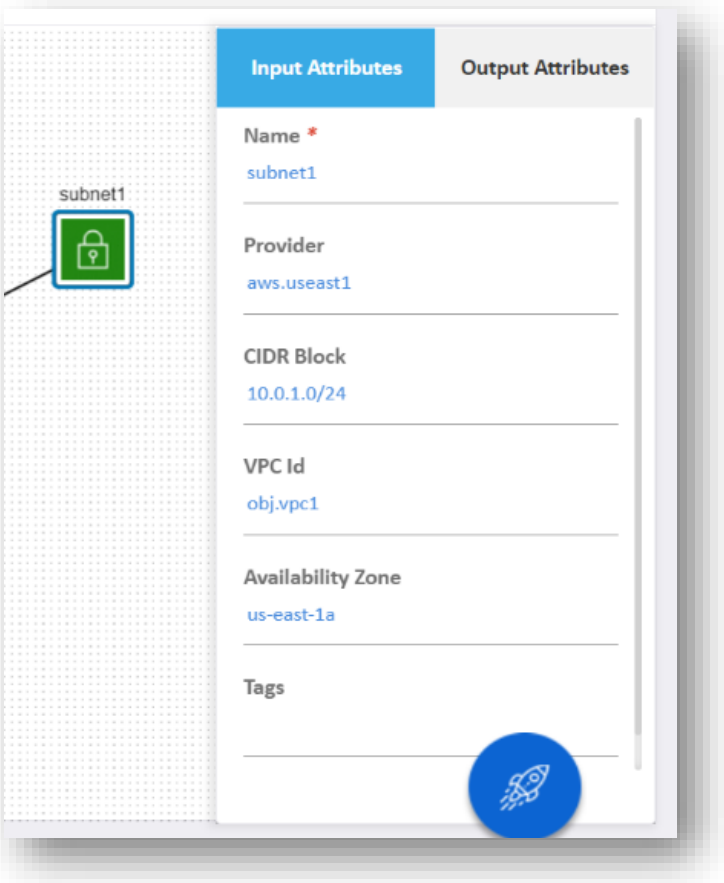


Figure 395 - Right Attribute Window

The right attribute window has two types of attributes. The user can configure both types of attributes by selecting the desired tab.

- **Input attributes**: This tab displays the input attributes for the selected object.

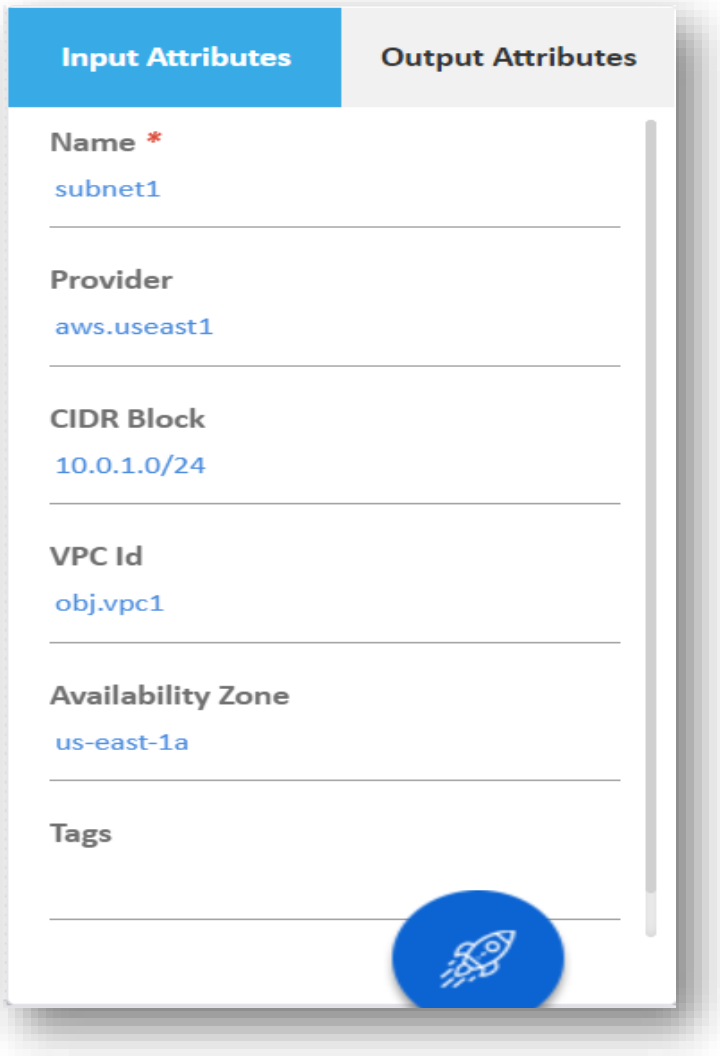


Figure 396 – Input Attributes

- **Output attributes**: This tab displays the output attributes for the selected object. There is a checkbox for the attribute name. If this is unchecked, the output property will not be used to capture the output of blueprint execution.

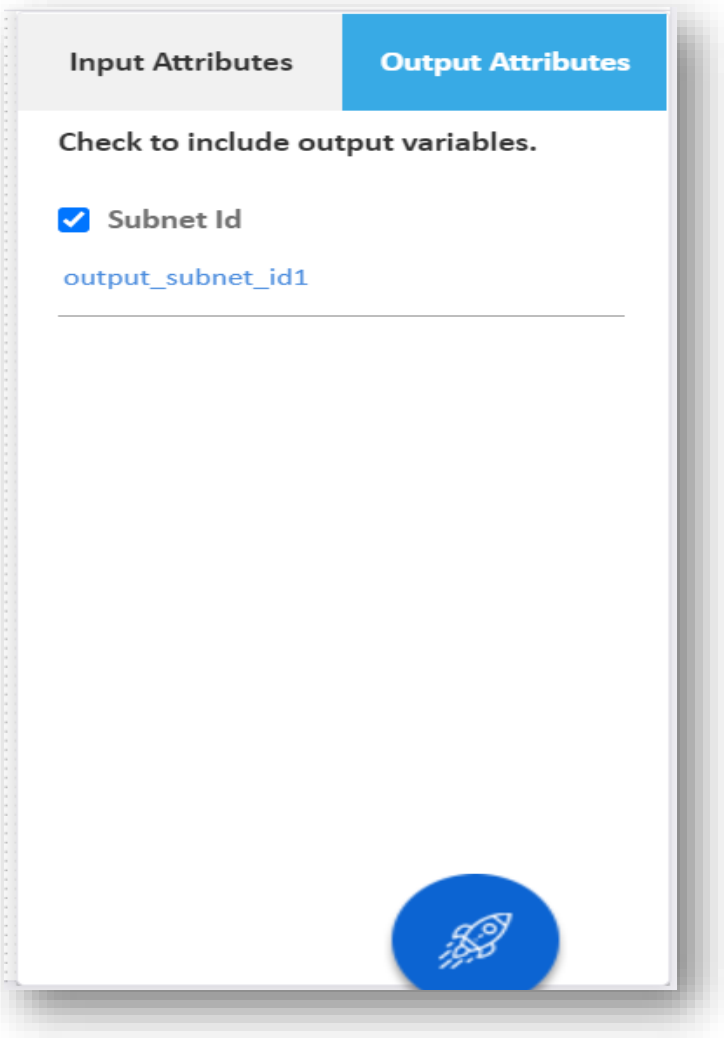


Figure 397 – Output Attributes

By default, the output property is output_subnet_id1 which is changeable. Ensure that the value is unique throughout the blueprint.

The attribute window has the following options for user input.

- Variable Mapping
- Provider Mapping
- Zone mapping
- Object Mapping/Multiple Object Mapping

1.6.1.2.5.1 Variable Mapping

The user has the option to map the variable to the object attribute which is configured to map variables. Variables can be created using Variables window from top menu. The list of variables shown for that attribute can be filtered by configuring mapping restrictions.

1. Click on the **attribute textbox** and type "var."

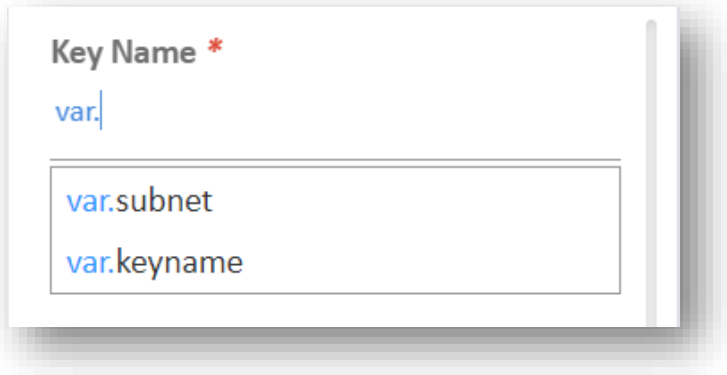


Figure 398 – Variable Mapping

2. Select the variables from the list.

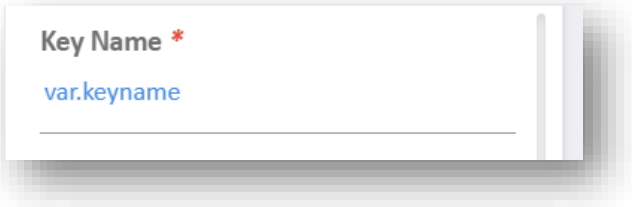


Figure 399 – Variable Mapping (Cont.)

1.6.1.2.5.2 Provider Mapping

The user has the option to map the provider to the object attribute which is configured to map providers. List of providers will be available based on the Cloud platform selected.

1. Click on the attribute textbox and type "**AWS.**" For **Amazon**, and "**google.**" For the **GCP platform**.
2. Select the **provider** from list.

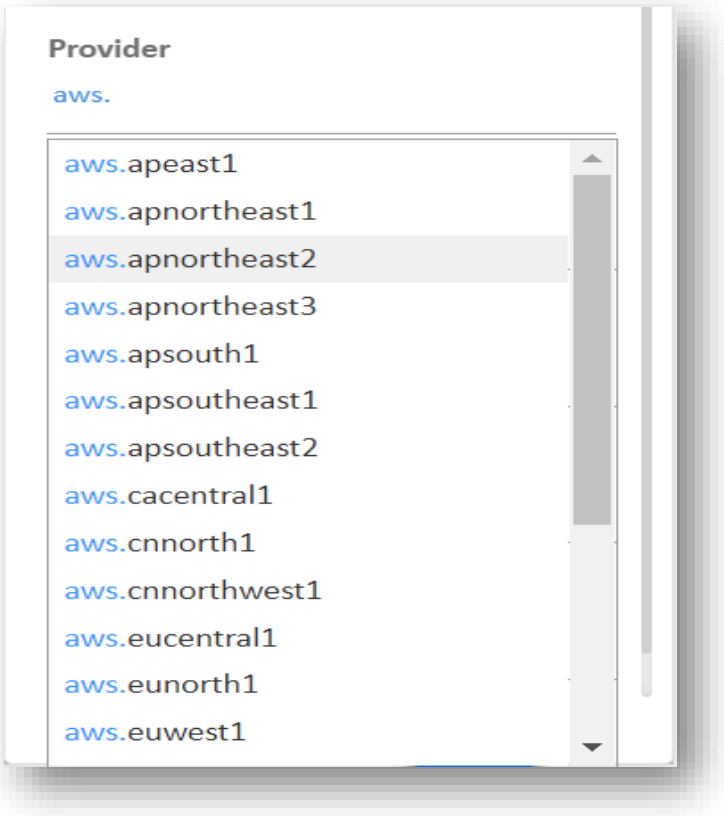


Figure 400 – Provider Mapping

1.6.1.2.5.3 Zone Mapping

The user has the option to map the zone (in case of AWS and GCP). The zone attribute is used to map the object. A list of zones is available based on the cloud platform selected.

1. Click on the **attribute textbox** and start typing the name of any zone. A list appears.
2. Select the desired zone from the list.

Figure 401 – Zone Mapping

The Object Mapping option allows users to map either single object or collection of objects to the object attribute which is configured to map objects.

Single Object Mapping:

1. Click on the **attribute textbox** and type "**obj.**"
2. Select the object from the list.

Figure 402 – Object Mapping

Multiple Object Mapping:

The Multiple Object Mapping option is used to map multiple objects to the object attribute which is configured to map multiple objects to it. There are three options available in multiple object mapping.

1. **Input object ID as text**: the user can input an existing object ID into the attribute field.

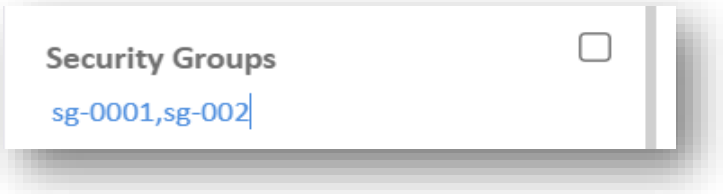


Figure 403 - Input object ID as Text

2. Select the object from list.

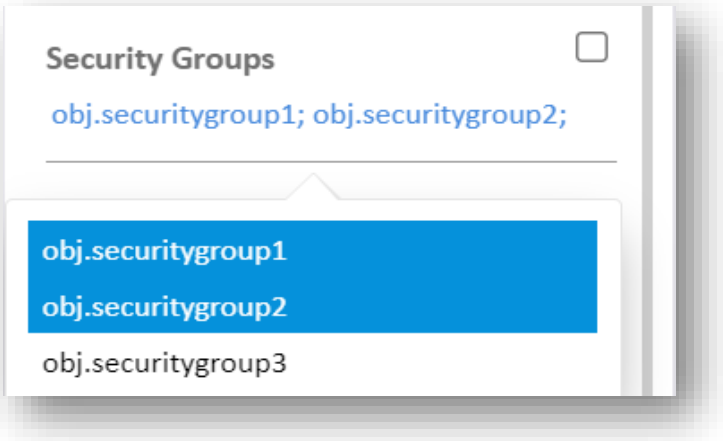


Figure 404 – Select the Object from List

3. Map variables to the attributes for providing the objects' name at a later stage:

4. For mapping variables, the user needs to click on the bind variables checkbox next to the attributes.

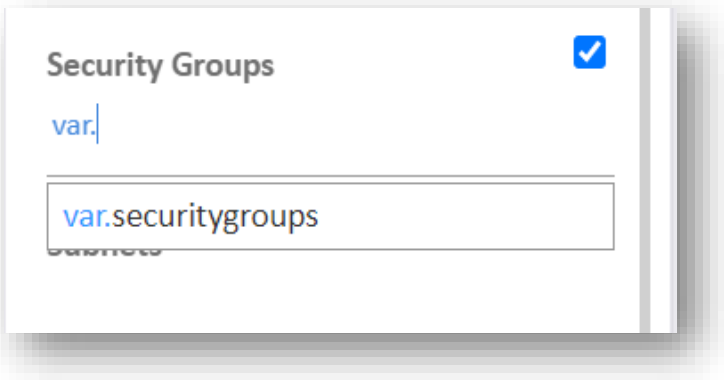


Figure 405 – Object Mapping Using Variables

1.6.1.2.6 Action Buttons

The icons on the top of the Design Blueprint page are the action buttons and are the short cuts for taking the following actions:

- Expand/Collapse
- Save Blueprint
- Variables
- Download TF (Terraform) File
- Validate Blueprint
- New Blueprint
- Back to Manage Blueprint
- Blueprint Name textbox (Title)

1.6.1.2.6.1 Expand/Collapse

Clicking on the Expand/collapse icon ( ) expands the Diagram Pane to cover the entire page. Clicking the icon again resizes the pane to its original position.

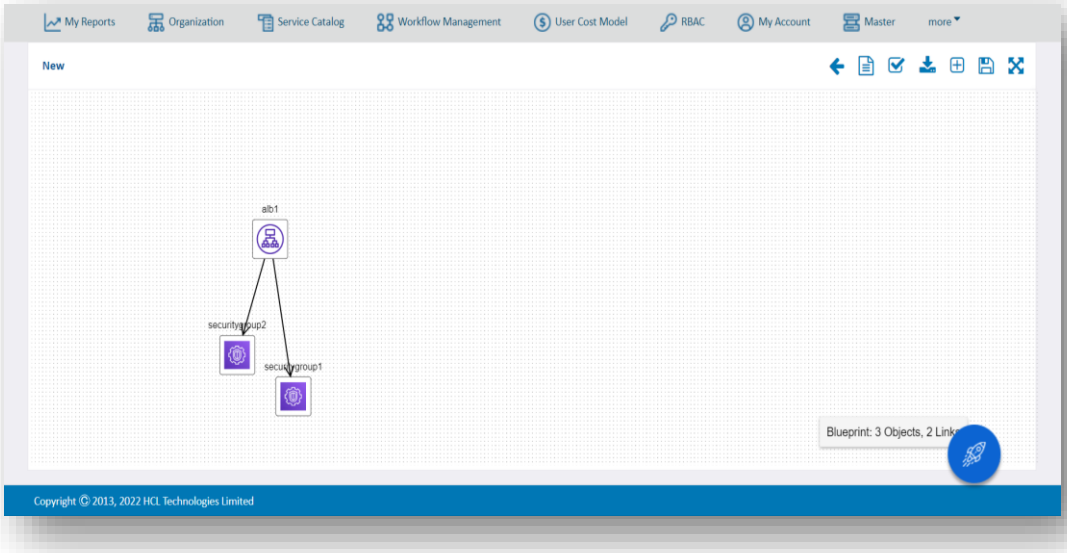


Figure 406 – Expand

1.6.1.2.6.2 Save Blueprint

Clicking the **Save Blueprint** icon ( ) saves the newly created blueprint.

1. Click the **Save Blueprint** icon ( ), the **Save Blueprint** dialog box appears.

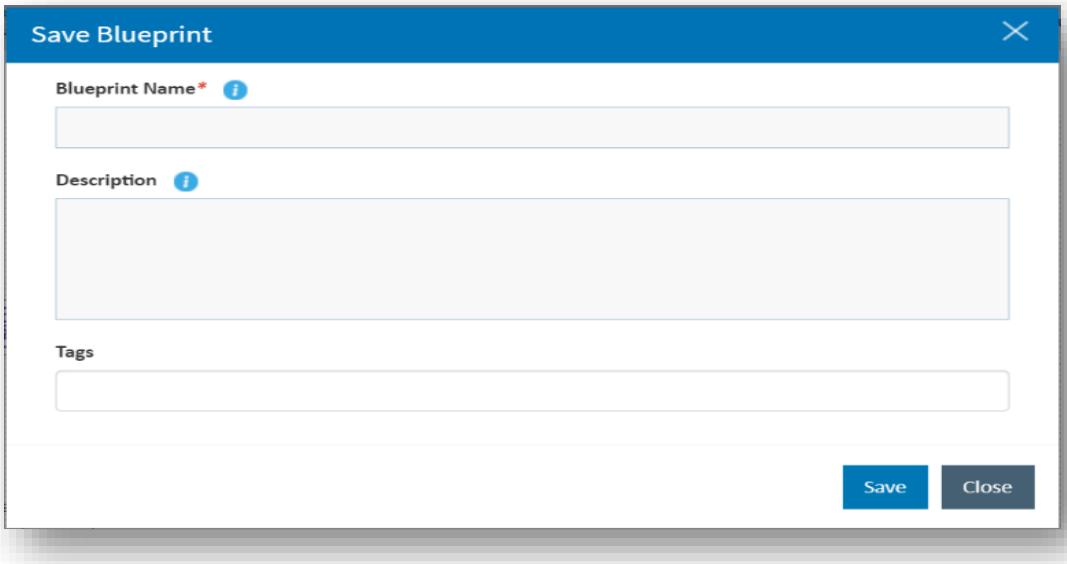


Figure 407 - Save Blueprint

2. The dialog box has the following fields that need to be populated:
   - Blueprint Name
   - Description
   - Tags
3. Click **Save**. A success message appears:

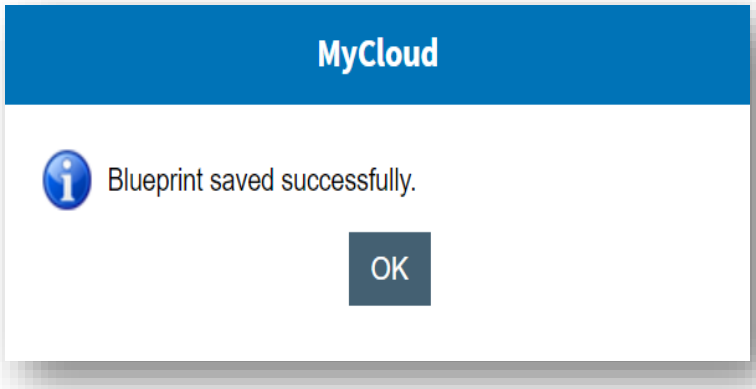


Figure 408 - Success Message

The '**Tags**' field in the Save Blueprint dialog box is to attach tags while saving the blueprint. These tags help users to search for an existing blueprint.

1.6.1.2.6.3 Variables

Create Variable:

To create a variable, take the following steps:

1. Click on **Variables** ( ) icon.
2. Click on **Add Variable** tab.

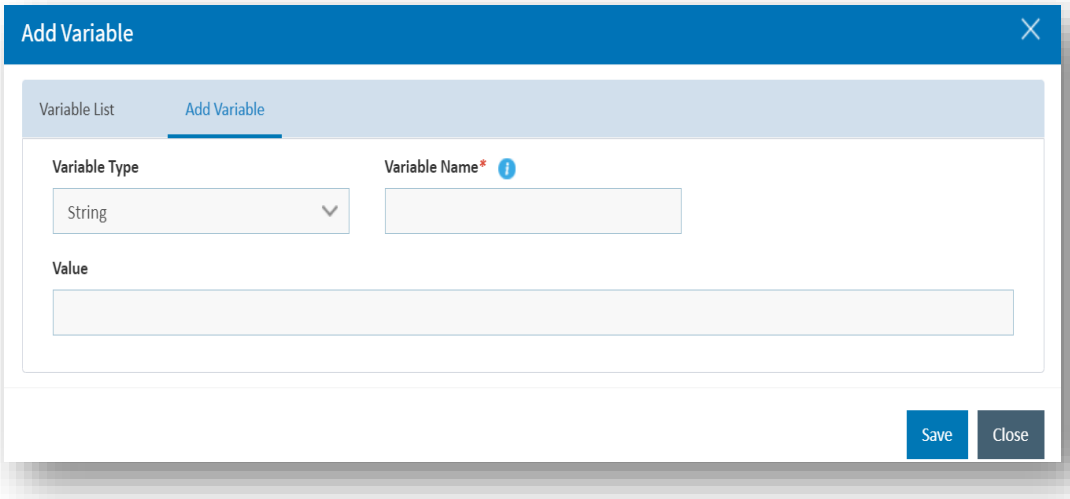


Figure 409 - Add Variable

3. Select the **Variable Type** from the dropdown.

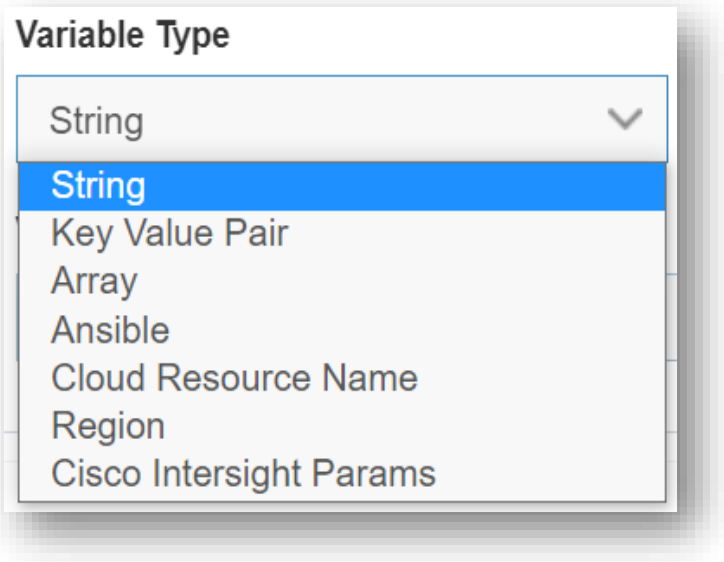


Figure 410 – Variable Type

4. Seven types of variables are available:
   - **String**: This variable is used to map plain text values like IDs or any other input value to attributes.
   - **Key Value Pair**: This variable is used to map the Tags type of input to any attributes. The value of this variable type is passed in "key=Value" format.

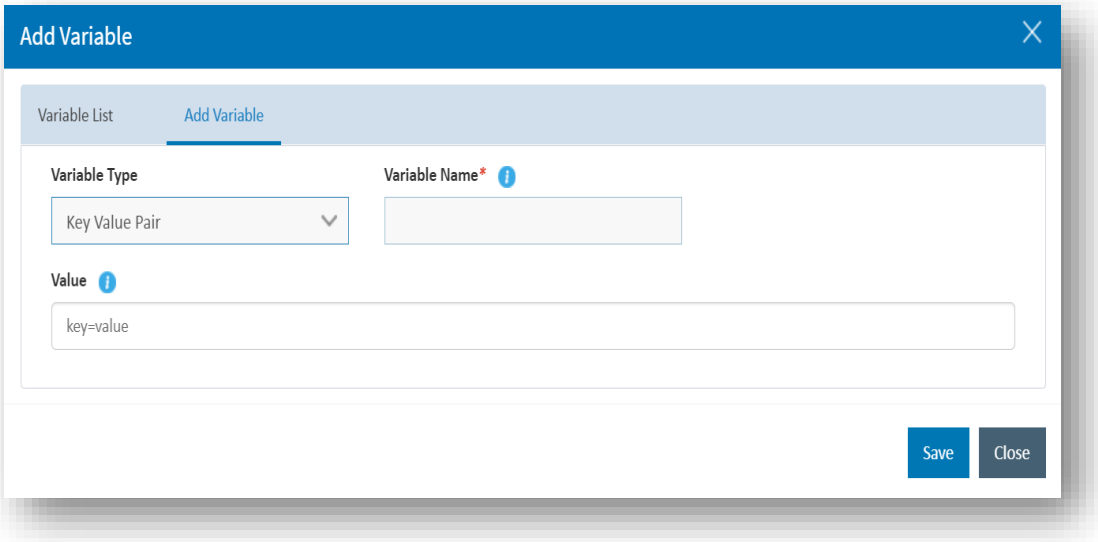


Figure 411 – Add Variable - Key Value Pair Variable

   - **Array**: This variable is used to map array type of values to attributes.

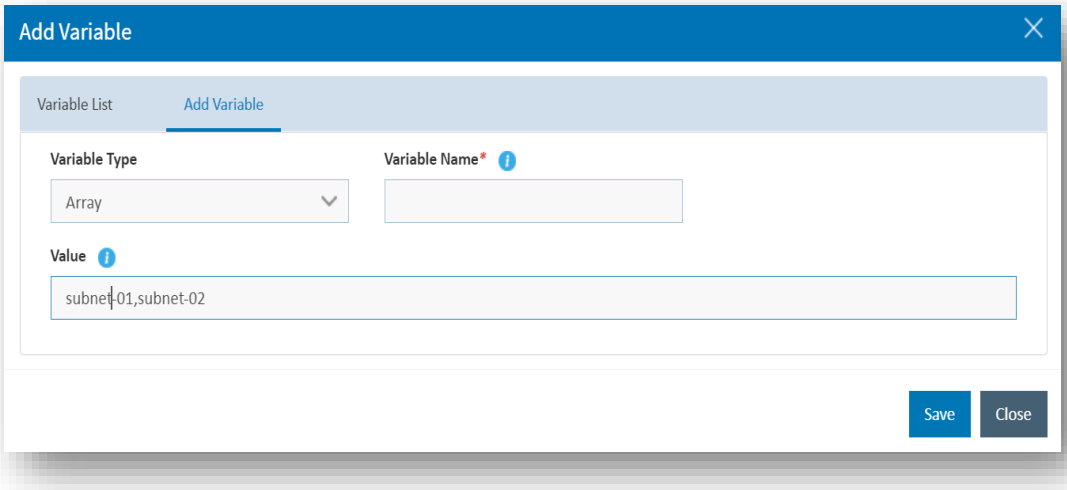


Figure 412 –Add Variable - Array Variable

- **Ansible**: This variable is used to map Ansible Extra Vars types of values to attributes.

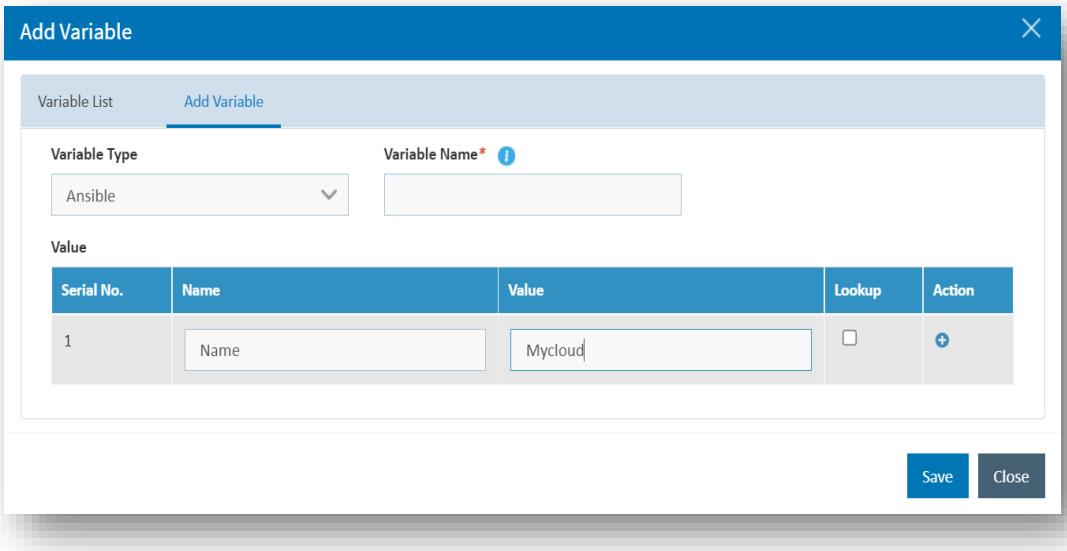


Figure 413 - Add Variable - Ansible Variable

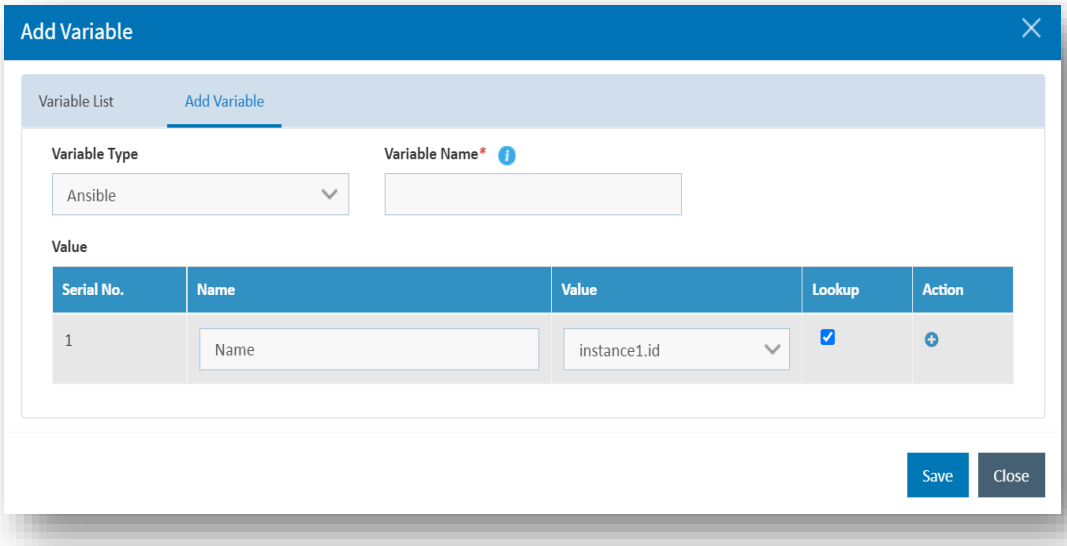


Figure 414 - Add Variable - Ansible Variable (Cont.)

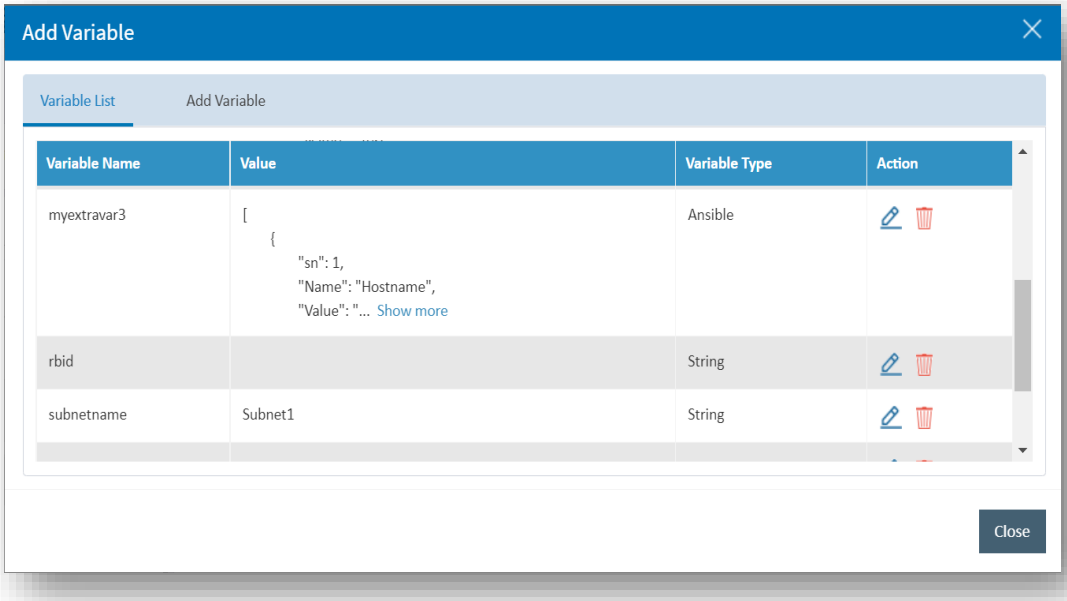


Figure 415 - Add Variable - Ansible Variable (Cont.)

- **Cloud Resource Name**: This variable is used to map the Cloud Resource (Object) Name attribute of an object. In other words, this type of variable is specially used for the name attribute of an object.
- **Region**: This variable is used to map default provider in case of AWS and GCP.

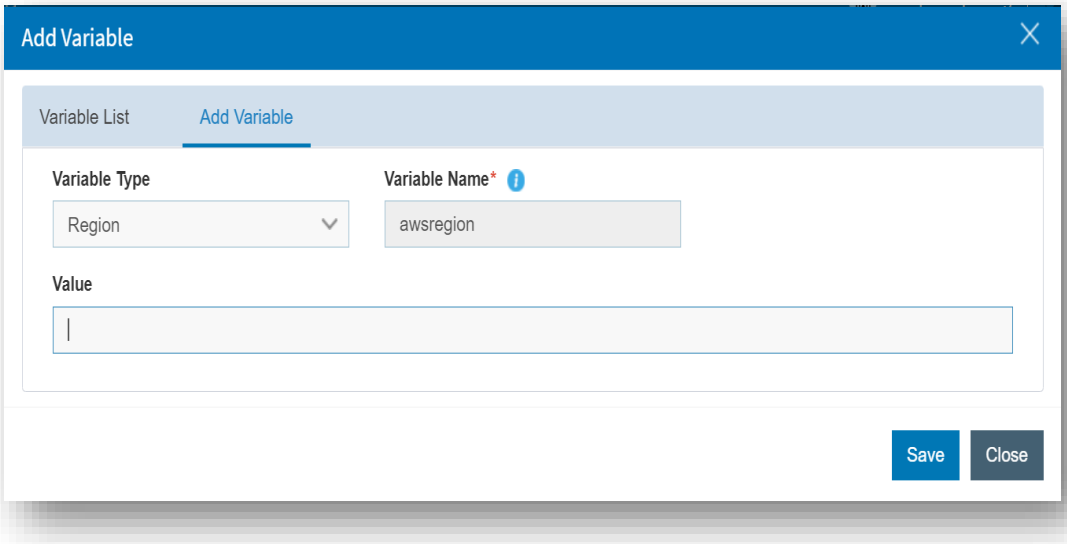


Figure 416 - Add Variable - Region Variable

- **Cisco Intersight Params**: This variable is used to map Cisco Intersight Params types of values to attributes.

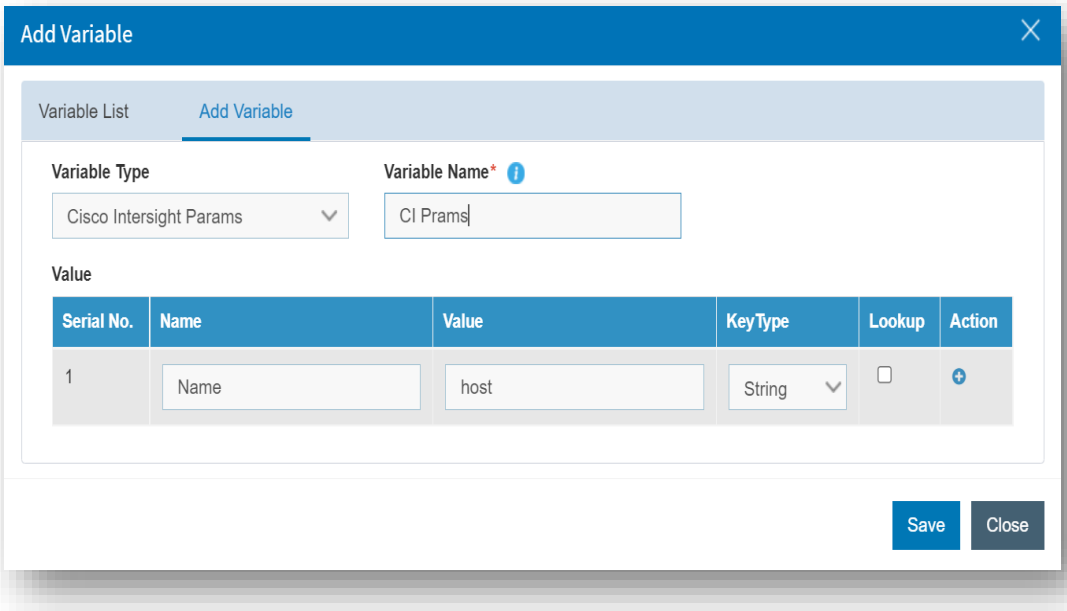


Figure 417 - Add Variable – Cisco Intersight Params Variable

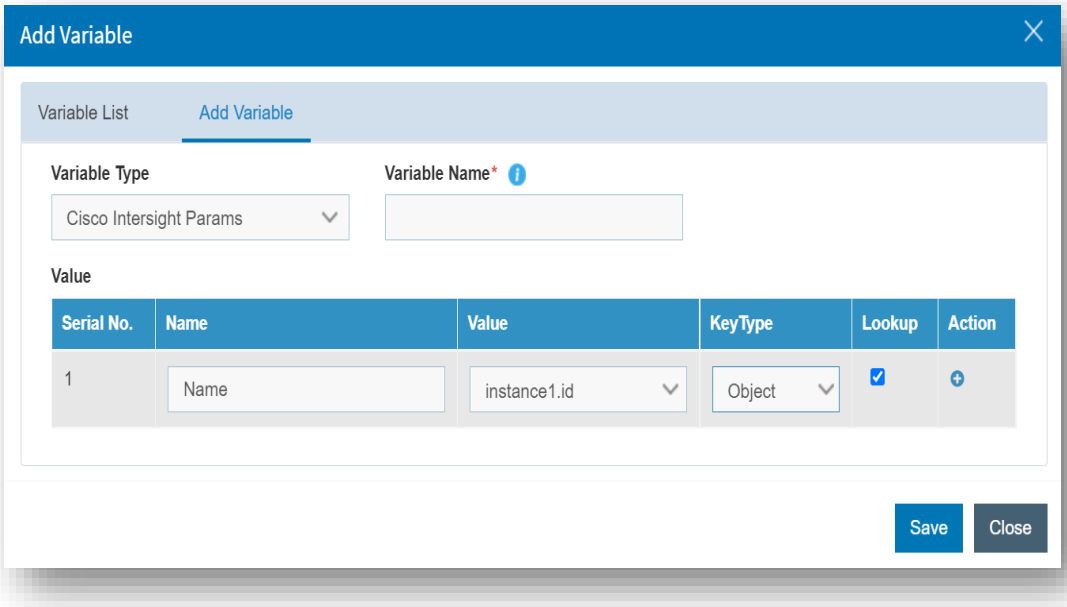


Figure 418 - Add Variable - Cisco Intersight Params Variable (Cont.)

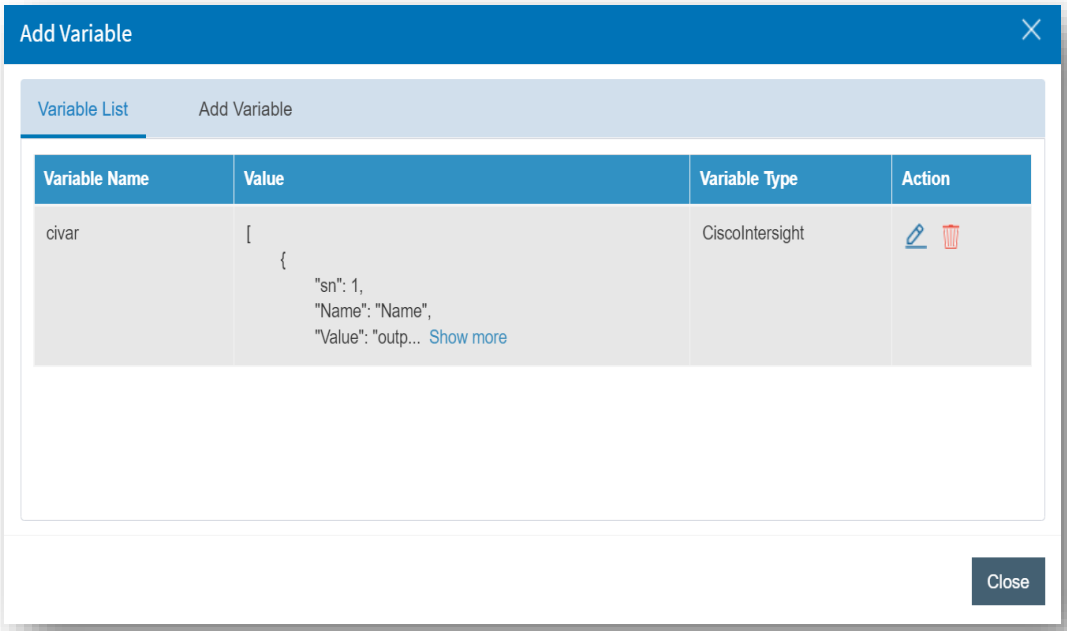


Figure 419 - Add Variable - Cisco Intersight Params Variable (Cont.)

5. Once the Variable type is selected, enter the **Variable Name** and **Value**.
6. Click on **Save** button. A success message appears:

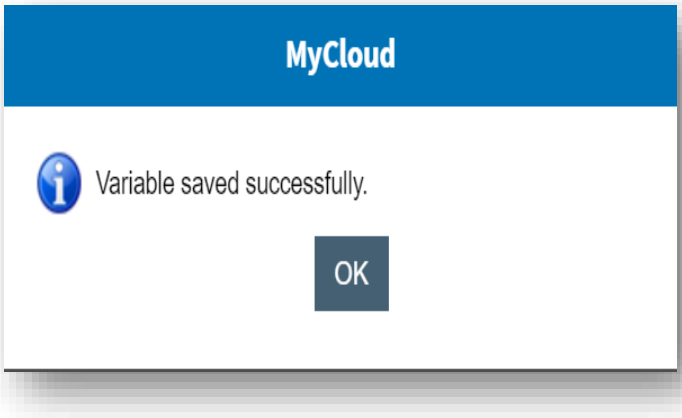


Figure 420 - Success Message

Edit Variable:

The Edit Variables option is available only for the unmapped variables. If the variables are mapped to the attributes the edit option does not appear. To edit a variable, perform the following steps:

1. Click on the **Variables** ( ) icon.
2. Select the **Variable List** tab.
3. Click on the **Edit** ( ) icon corresponding to the variable to be edited.

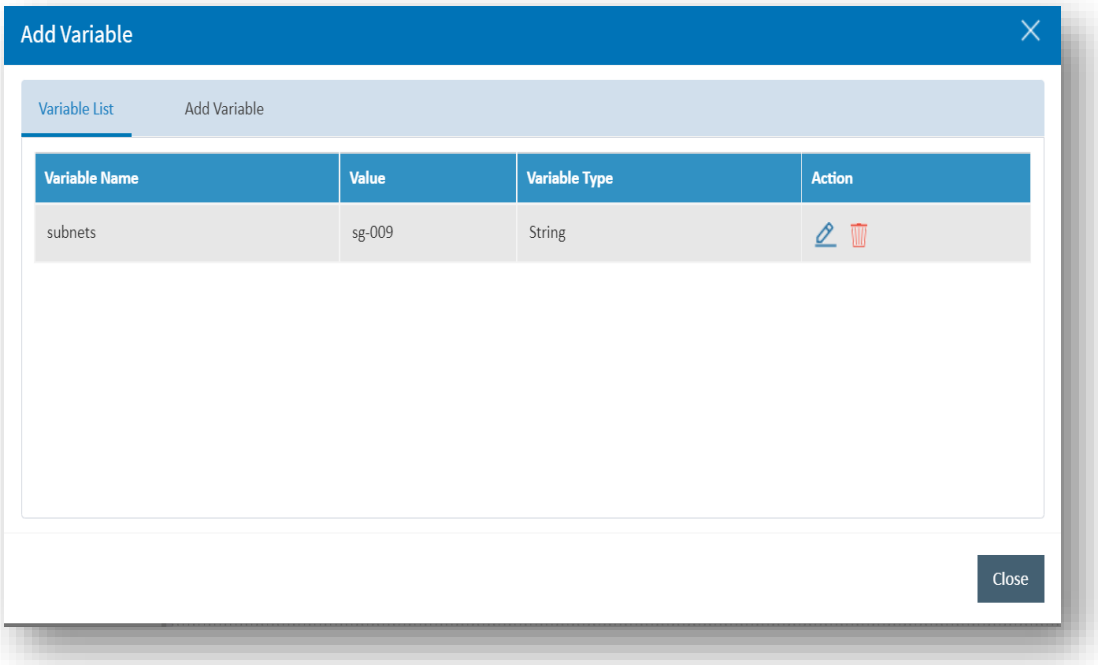


Figure 421 – Edit Variable

4. Change the **Value** and Click on **Update** button.

The **Variable Type** and **Name** are not editable.

Delete Variables:

The Delete Variables option is available only for the unmapped variables. If the variables are mapped to the attributes the delete option does not appear. To delete a variable, perform the following steps:

1. Click on the **Variables** ( ) icon.

2. Select the **Variable List** tab.
3. Click on the **Delete** ( ) icon corresponding to the variable to be deleted.

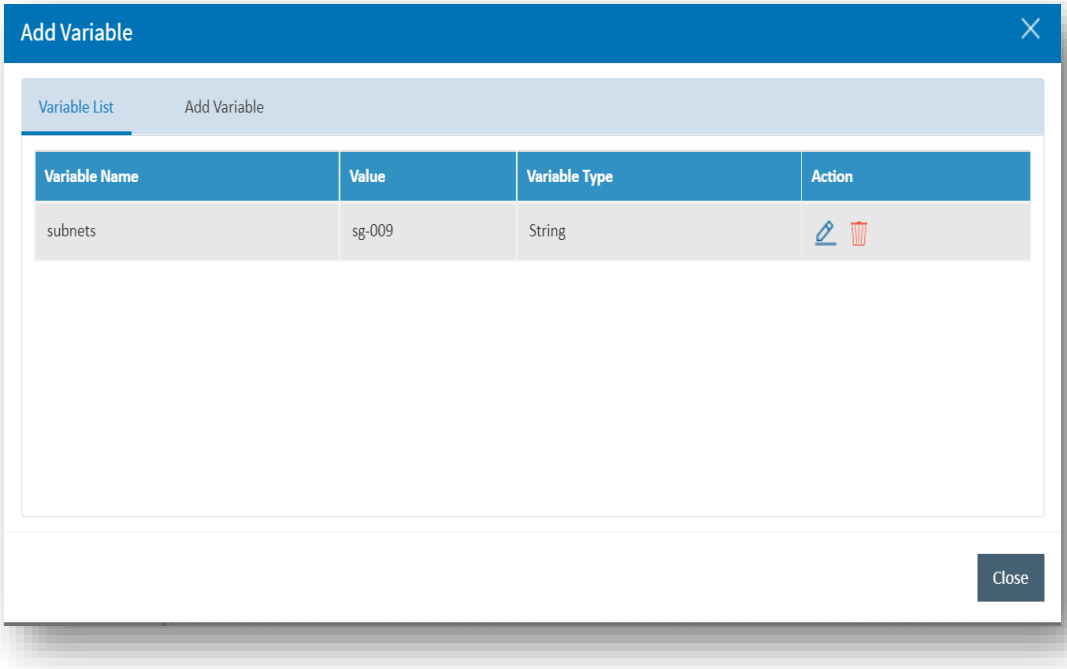


Figure 422 – Delete Variable

1.6.1.2.6.4 Download TF File

1. Click on **Download TF File** ( ) icon.
2. A zip file with the blueprint name is downloaded. The file contains the main.tf, variable.tf, and provider.tf files inside it.

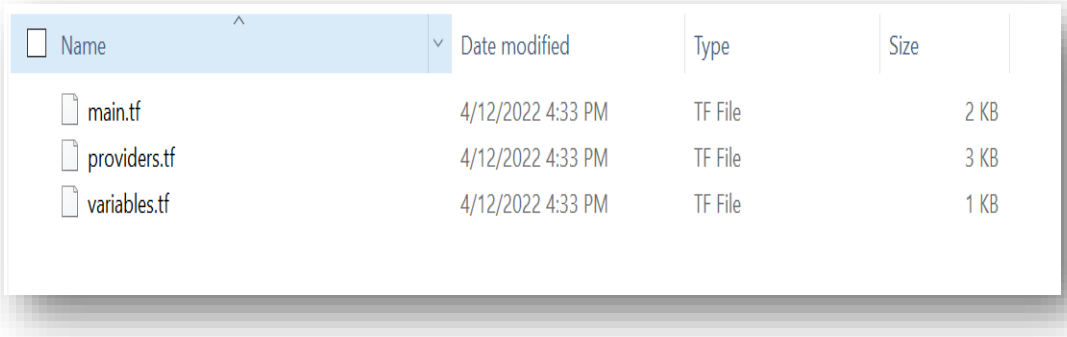


Figure 423 – Download TF File

1.6.1.2.6.5 Validate Blueprint

This option is used to validate the attribute data entered for each object on the blueprint diagram against the configured validation data for each attribute.

1. Click on **Validate attributes** ( ) icon.
2. A Validation Summary dialog box appears.

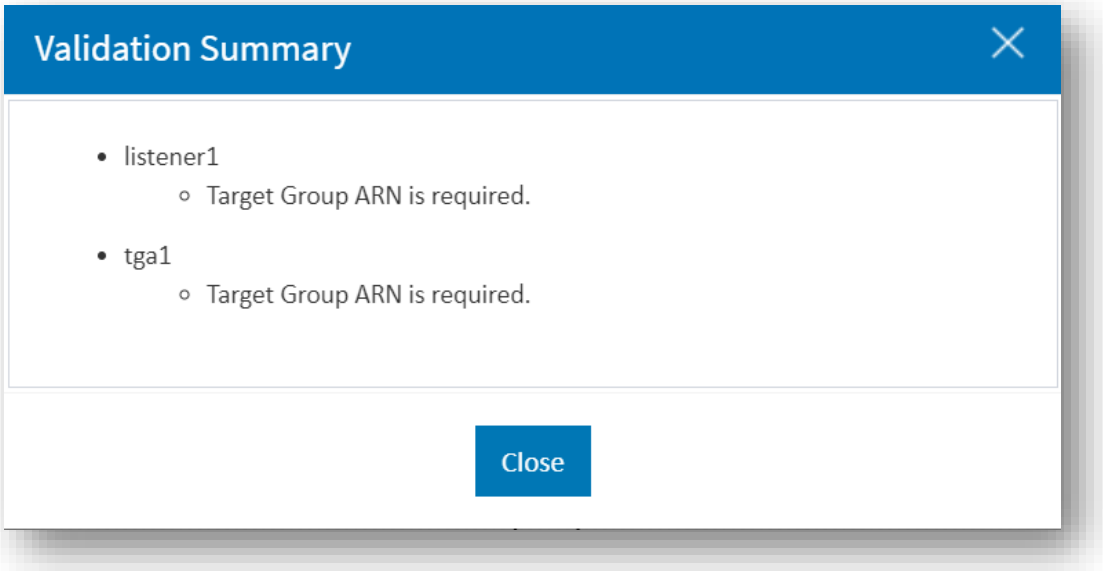


Figure 424 – Validation Summary

3. On successful validation, the following success message appears:

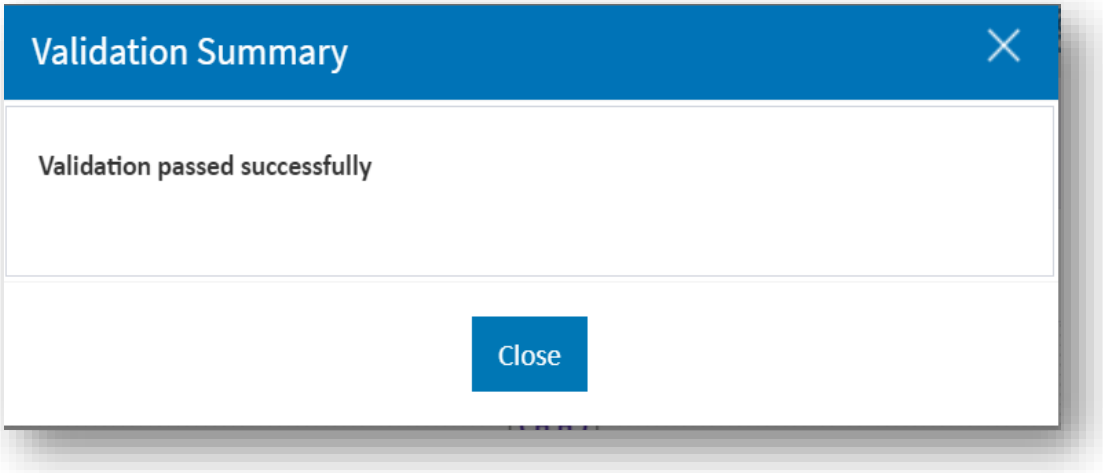


Figure 425 - Validation Success Message

1.6.1.2.6.6 New Blueprint

Clicking the **New Blueprint icon** ( ) opens a new blank blueprint window to create a new blueprint.

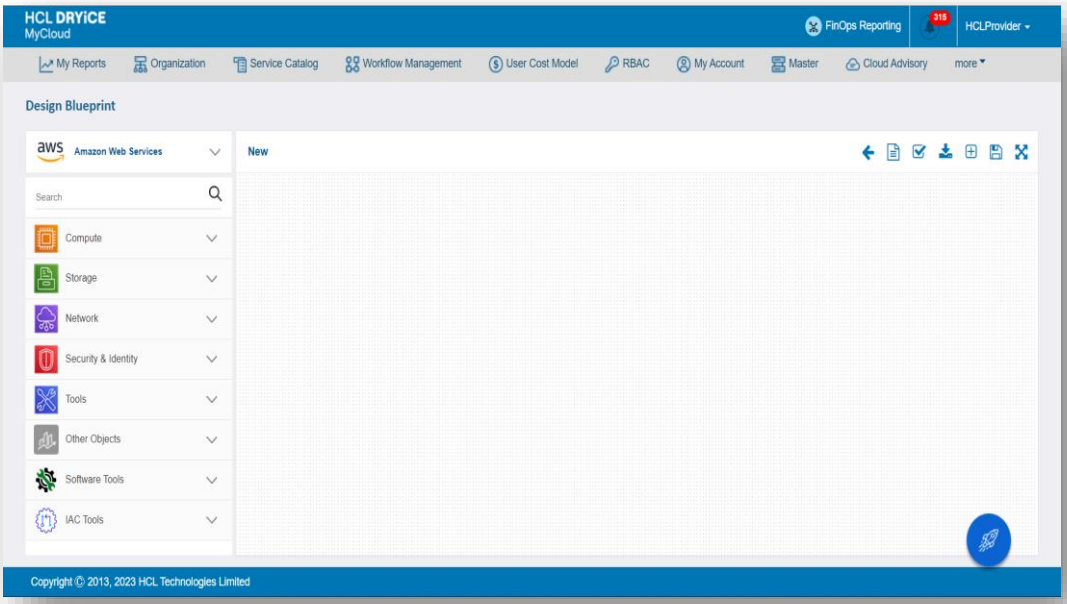


Figure 426 - New Blueprint

For a new blueprint, the default name is "**New**". Once the blueprint is saved with a name, that name appears as the blueprint title.

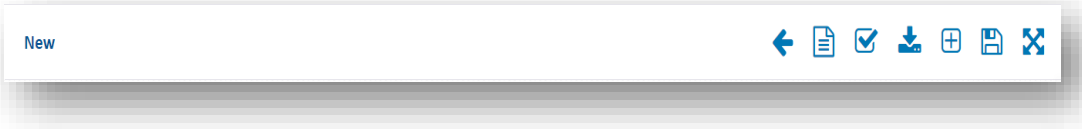


Figure 427 - Blueprint Title

1.6.1.2.6.7 Back to Manage Blueprint

Clicking on the **Back to Manage Blueprint** ( ) icon redirects users to the **Manage Blueprint** page.

1.6.1.2.7 Deploy Blueprint

The **Deploy Blueprint icon** ( ) on the bottom right allows users to deploy the blueprints through the Design Blueprint page.

For detailed information about the deployment process of blueprints, refer to Deployment from the Design Blueprint Page.

1.6.1.3 Manage Existing Blueprints

All the existing blueprints are listed on the Manage Blueprint page and are managed using the following options available on the page itself:

- View Blueprint
- Import Blueprint
- Deployment History

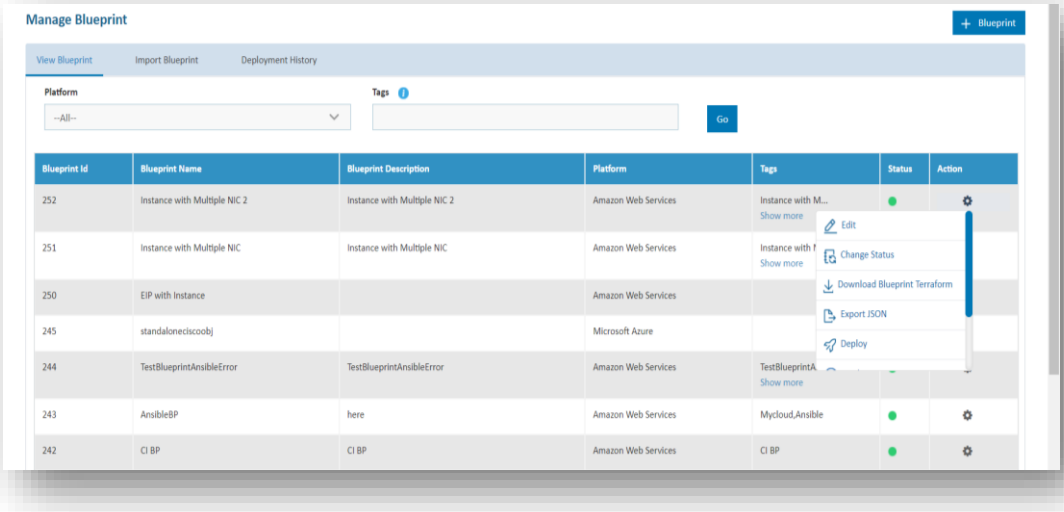


Figure 428 - Manage Blueprint Page

1.6.1.3.1 View Blueprint

The View Blueprint tab lists all the existing blueprints and displays various options associated with each blueprint. The user can search for specific blueprints by using the filter option.

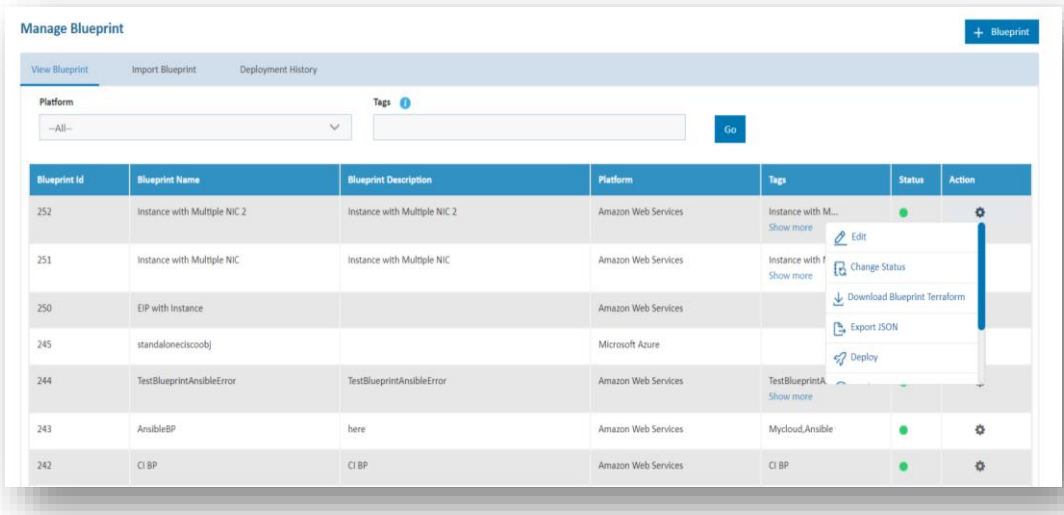


Figure 429 - View Blueprint

Refer the below table to understand the columns in the above figure:

Table 35 - View Blueprint Table Columns

Fields	Description
Blueprint ID	Displays the ID of the listed blueprint. This is used in process template for the execution of the Blueprint.
Blueprint Name	Displays the Name of the listed blueprint.
Blueprint Description	Displays the Description of the listed blueprint.

Platform	Displays the Platform of the listed blueprint.
Tags	Displays the tags associated with the listed blueprint.
Status	Displays the Active/Inactive status of the listed blueprint.
Action	Displays the actions that can be performed on the listed blueprints.

The search can be filtered by selecting the Platform and by providing Tags associated with the blueprints. By default, the page displays data for all the platforms.

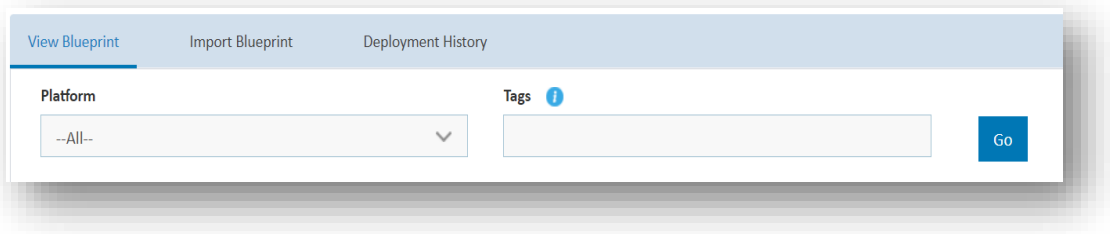


Figure 430 - View Blueprint Filter Option

The **gear icon** ( ) under the **Action** column displays the actions that can be performed on each blueprint.

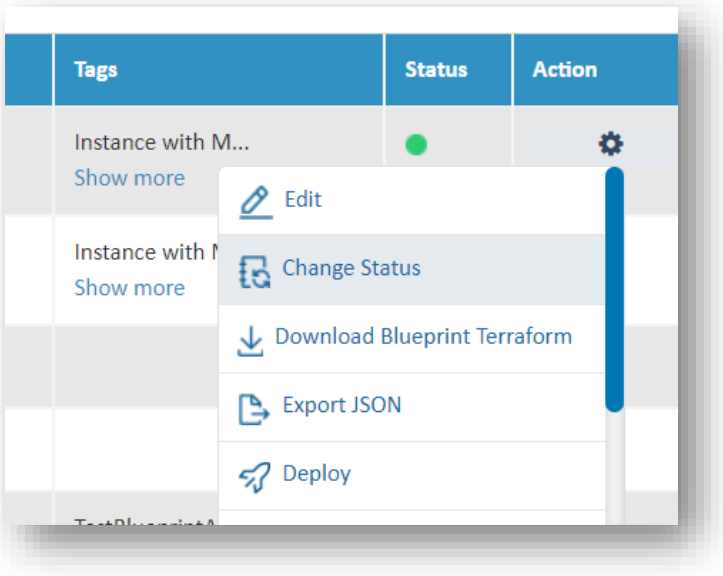


Figure 431 - Options in the Action Column

Below actions can be performed to manage an existing blueprint:

- Edit
- Change Status
- Download Blueprint Terraform
- Export JSON
- Deploy
- Deployment History
- Compare Blueprint Files

1.6.1.3.1.1 Edit

To edit a blueprint, follow the below steps:

1. From the list of the existing blueprints under the **View Blueprint** tab, click on the gear icon corresponding to the blueprint to be edited and the click the **Edit** icon ( ).
2. It opens the **Design Blueprint** page in edit mode loaded with the selected blueprint in the diagram pane along with all the attributes and variables.

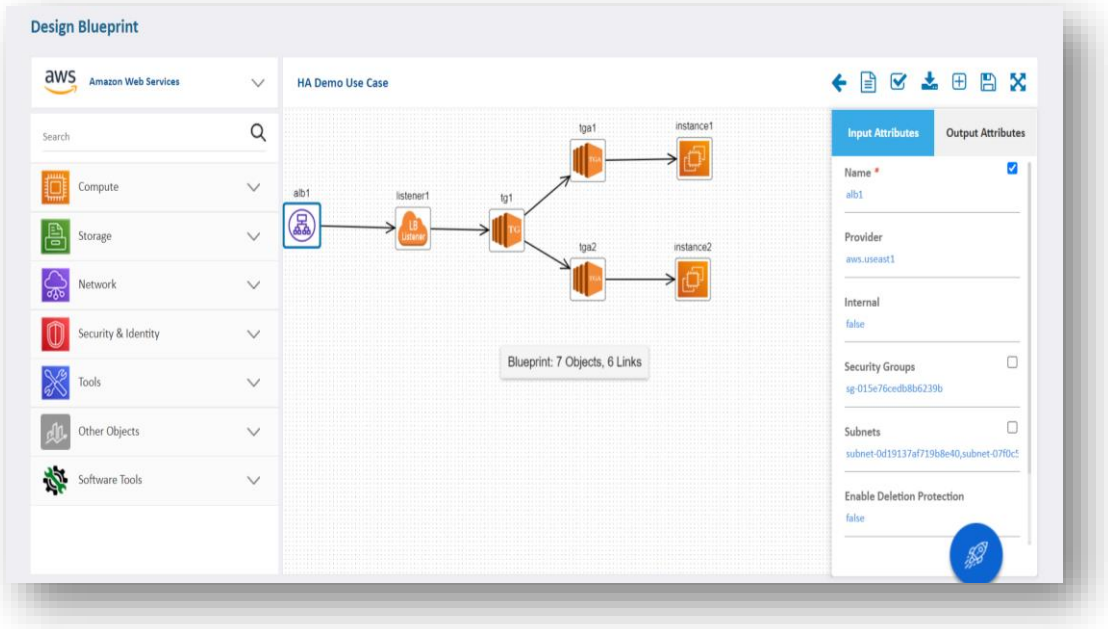


Figure 432 - Edit Blueprint

3. Make the required changes and click on the **Save** ( ) action button.
4. The **Update Blueprint** dialog box appears.

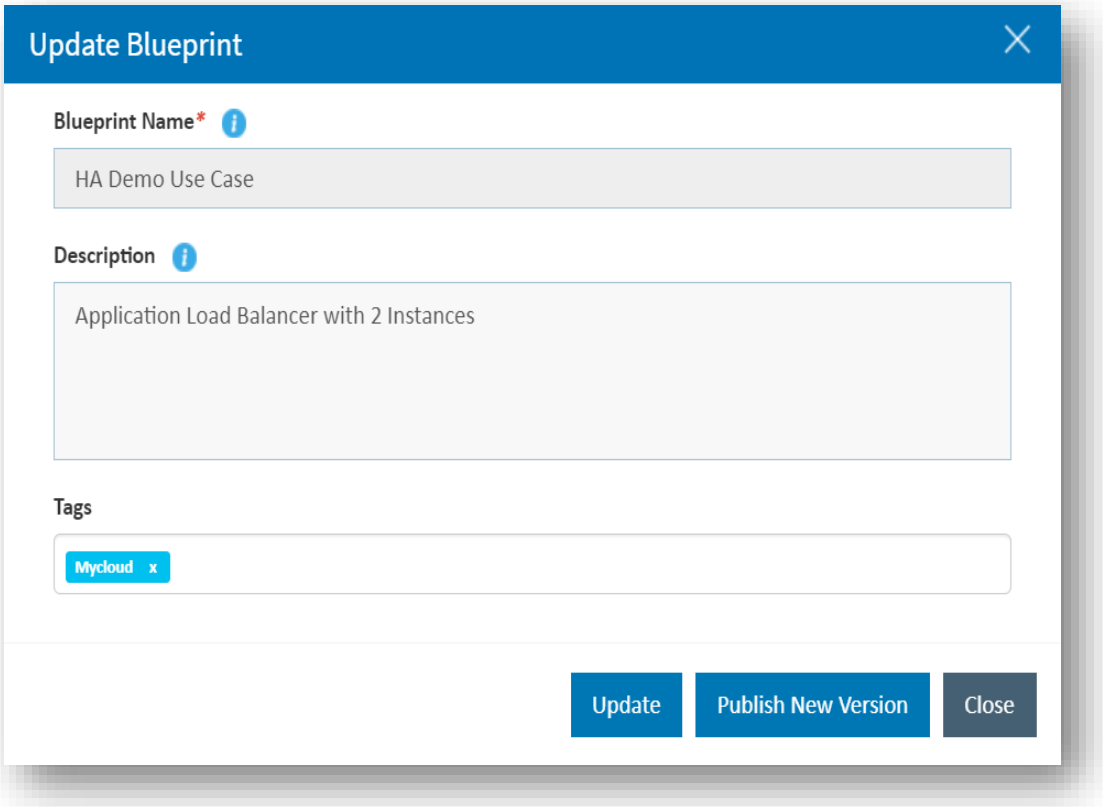


Figure 433 – Update Blueprint

5. On the **Update Blueprint** screen, users can add or remove tags while updating the blueprint. This can be used to search for the created blueprint with the help of tags attached to it under the **View Blueprint** tab.

Only **Blueprint Description** and **Tags** fields are editable here.

6. This dialog has two options for updating the blueprint.
   - **Update**: Clicking on Update button updates the selected blueprint and displays the following success message:

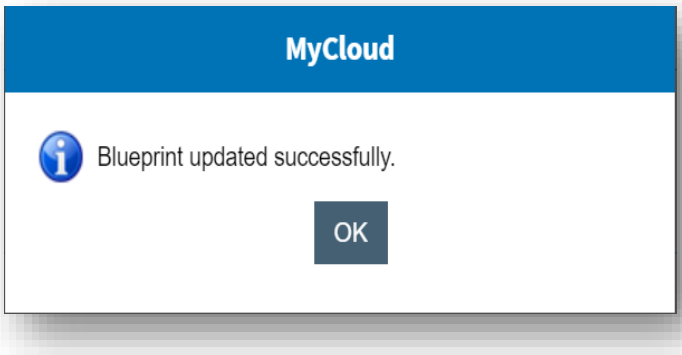


Figure 434 - Success Message for Update

   - **Publish New Version**: Selecting this option creates a new version of the blueprint along with all the changes and saves it in the table with the new version number with column 'ispublished' as 'Y'. The old copy of the blueprint is marked 'ispublished' as 'N' in the table.

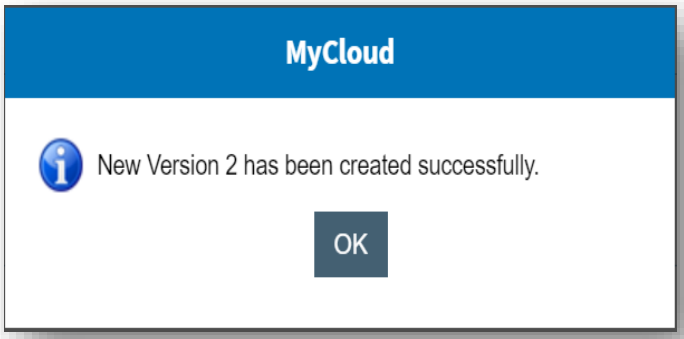


Figure 435 - Success Message for a New Version Update

1.6.1.3.1.2 Change Status

The option is to mark the listed blueprint status as **Active/Inactive**.

1. Click on the **gear icon** corresponding to the desired blueprint and then click **Change Status** icon ( ).
2. A confirmation dialog appears to confirm the action.

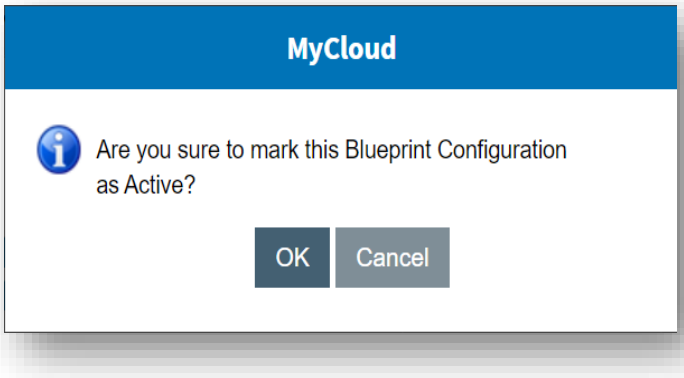


Figure 436 - Change Status Confirmation

3. On clicking **OK**, the status of the blueprint is changed to **Active** or **Inactive** and a success message appears as follows:

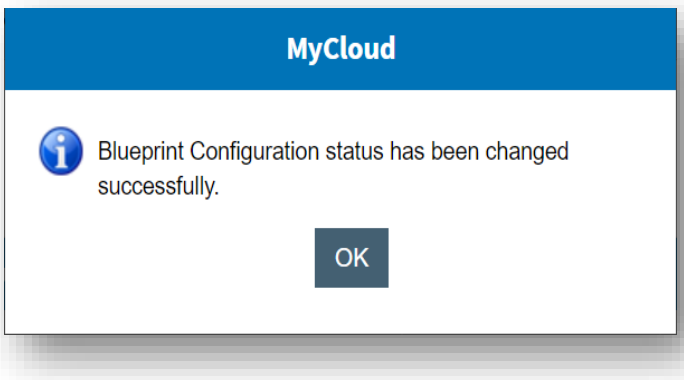


Figure 437 - Success Message for Status Change

- If the status is changed to "**Active**," it is marked with a green color as shown in the following screen:

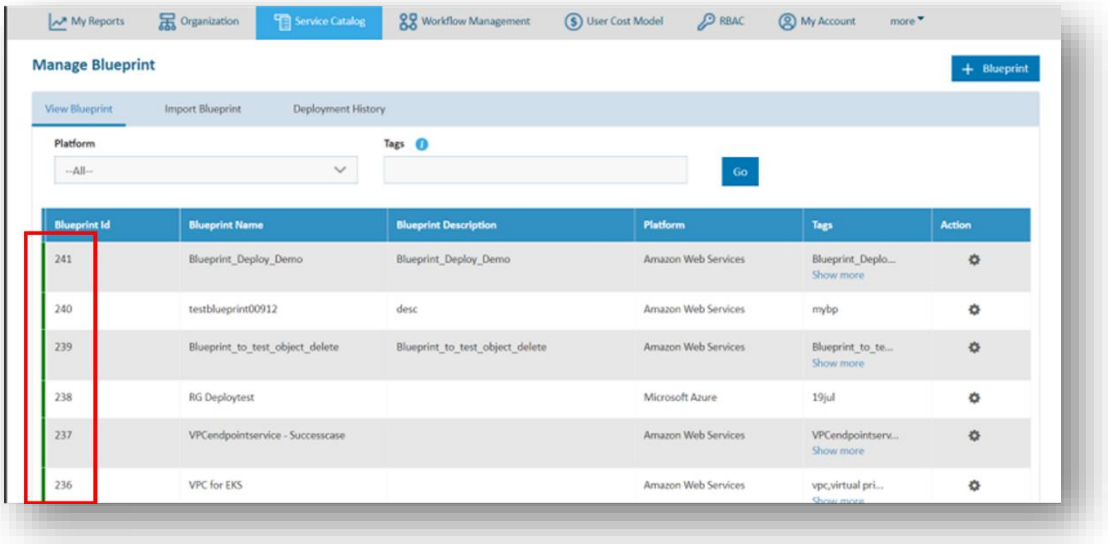


Figure 438 - Status Changed to 'Active'

- Similarly, if the status is changed to "**Inactive**," it is marked with a **red** color.

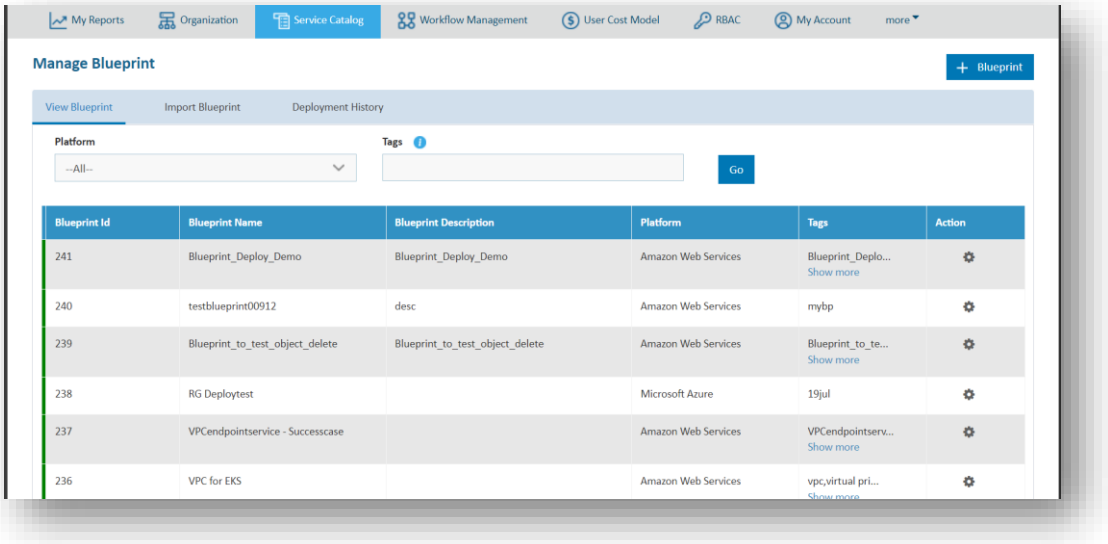


Figure 439 - Status Changed to 'Inactive'

For an Inactive Blueprint, the Edit, Deploy and Deployment History options are not available under the Action tab.

1.6.1.3.1.3 Download Blueprint Terraform

This option is used to download the blueprint TF file.

1. Click on the **Download Blueprint Terraform** icon ( ) corresponding to the desired blueprint.
2. This downloads a zip file with the blueprint name.
3. For further steps to download Blueprint Terraform, please refer to **Download TF File**.

1.6.1.3.1.4 Export JSON

This option is used to export the blueprint JSON that can be imported later to any other environment.

1. To export the blueprint JSON, click on the **gear icon** corresponding to the blueprint and then click ( ) icon.
2. A single JSON file with the blueprint name is downloaded. It has the blueprint data in JSON format.

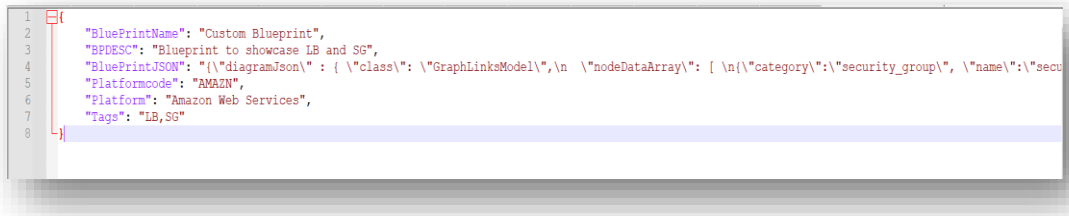


Figure 440 - Exported JSON File

1.6.1.3.1.5 Deploy

Another way of deploying a blueprint is by clicking the Deploy icon under the Action column on the View Blueprint page.

For detailed information about the deployment process of blueprints, refer to Deployment from the View Blueprint Tab.

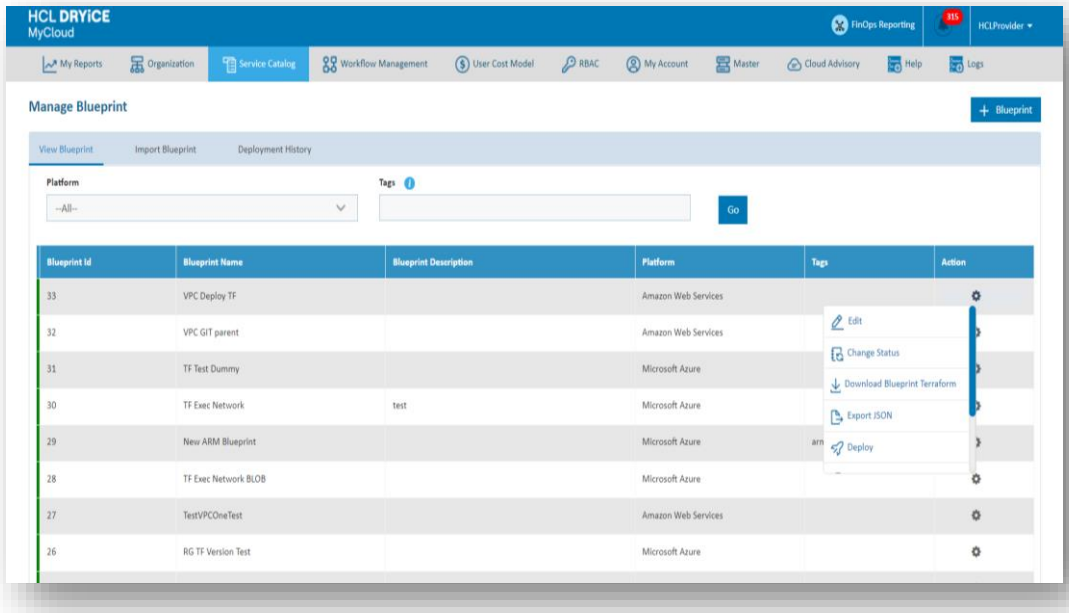


Figure 441 - Deploy Blueprint from View Blueprint Page

1.6.1.3.1.6 Deployment History

This option is used to view the deployment history of the listed blueprints. This option enables the user to view the Deployment History tab of the Manage Blueprint Page. The Deployment History tab cannot be directly accessed. It can be accessed through this action item of listed blueprints.

1. Click on the Gear Icon -> Deployment History icon .
2. This takes the user to the to the **Deployment History** tab where he/she can view the deployment history of the blueprint.

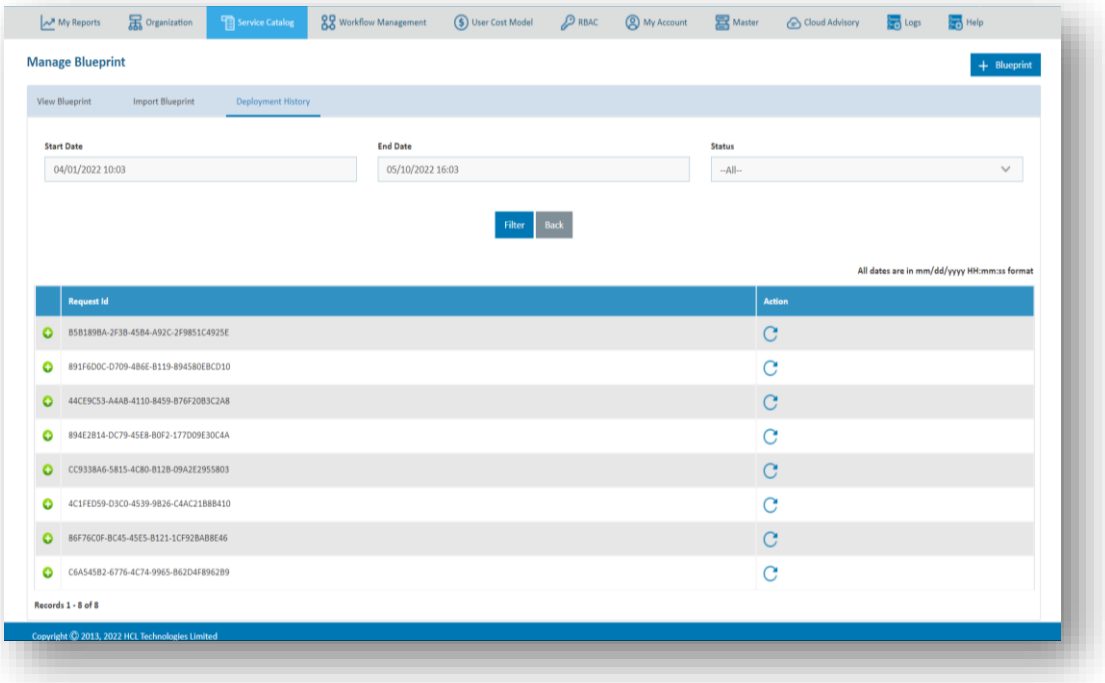


Figure 442 - Deployment History

3. The **Deployment History** can be filtered by specifying the **Start Date**, **End Date**, and **Status**, then clicking the **Filter** button.
4. Refer the below table to understand the columns in the above figure.

Table 36 - Deployment History Table Columns

Fields	Description
Request ID	Displays the Request ID of the blueprint deployment. On deployment of the blueprint, a request ID is generated.
Action	Displays the actions that can be taken against the listed deployment request ID. E.g.: Rerun.

5. On expanding the listed request ID by clicking on the plus icon ( ), a drill down table opens. This table displays the deployment request data. All the tasks created for Blueprint Deployment are listed under the given Request ID created for deployment. Tasks are grouped and listed under the Request ID created for deployment.

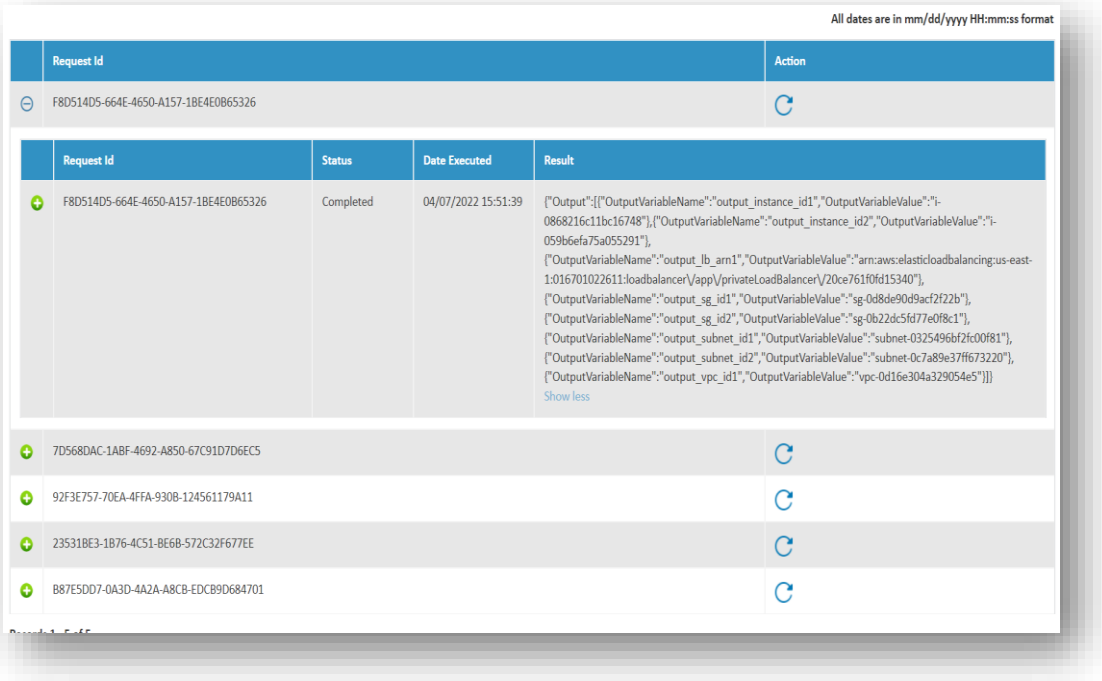


Figure 443 - Deployment History Drill Down

Refer the below table to understand the columns in the above figure:

Table 37 – Deployment History Drill Down Table Field

Fields	Description
Request ID	Displays the Request ID of the blueprint deployment. On deployment of the blueprint, a request ID is generated.
Status	Displays the status (Completed/inprogress/Error) of the blueprint deployment request.
Date Executed	Displays the Execution Date of the blueprint deployment request.
Result	Displays the Result of the blueprint deployment request.
Action	Displays the actions that can be taken against the listed deployment request ID. E.g.: Rerun.

6. Further expanding the listed Request Id by clicking again on the **plus icon** ( ) opens the complete execution log of the blueprint deployment task.

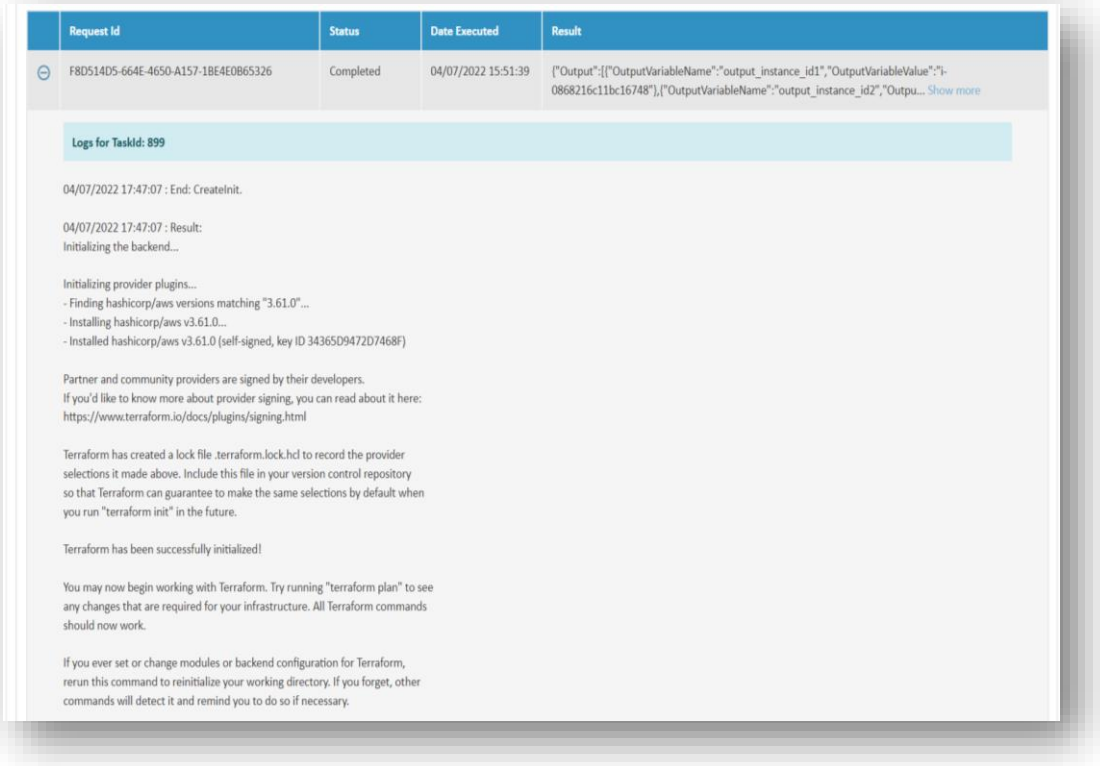


Figure 444 –Deployment Execution Log

7. One request can have multiple tasks that are listed in the drill down logs page as shown below:

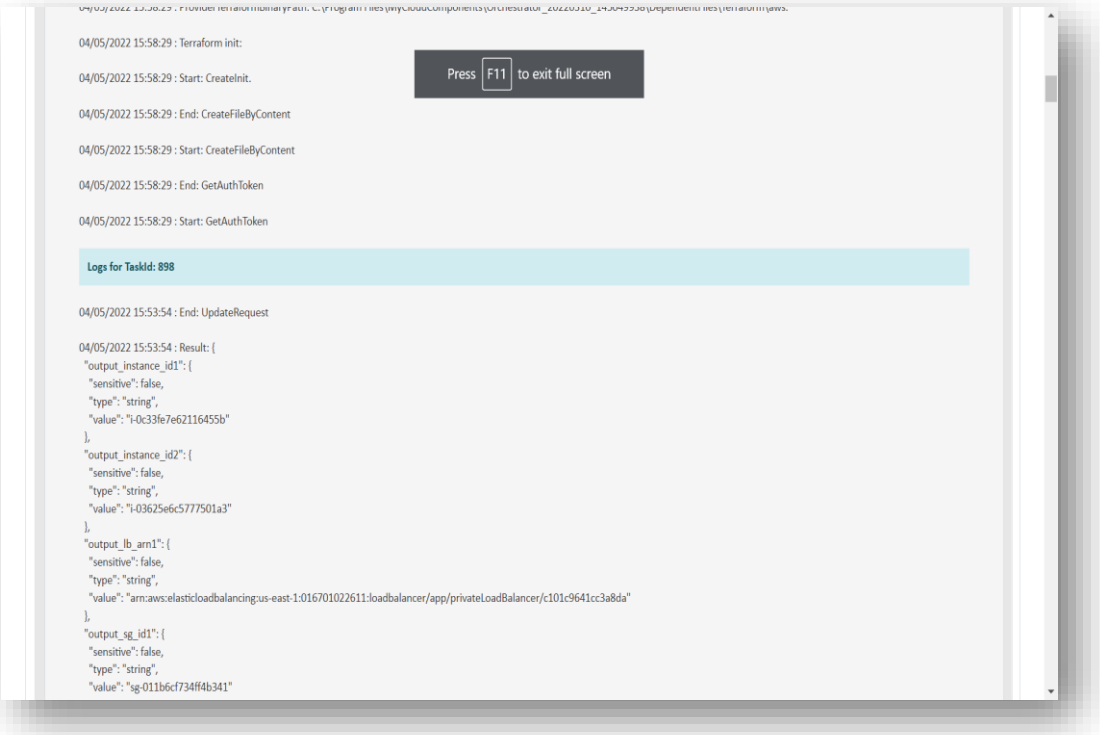


Figure 445 – Multiple Tasks Listed under Deployment History Drill Down

8. The **Re-Run** functionality allows users to re-run a deployment request multiple time. To re-run the deployment request, click on the **Re-Run** icon ( ) located under the **Action** column in the Deployment History table.

To learn more about the Re-Run Blueprint functionality, please refer to the section **Re-Run Blueprint.**

1.6.1.3.1.7 Delete Blueprint

The Delete icon under the Action column in the View Blueprint tab allows users to delete the listed blueprint.

1. Click on the **Gear Icon** - **Delete** icon ( ) corresponding to the blueprint to be deleted.
2. A confirmation message appears as follows:

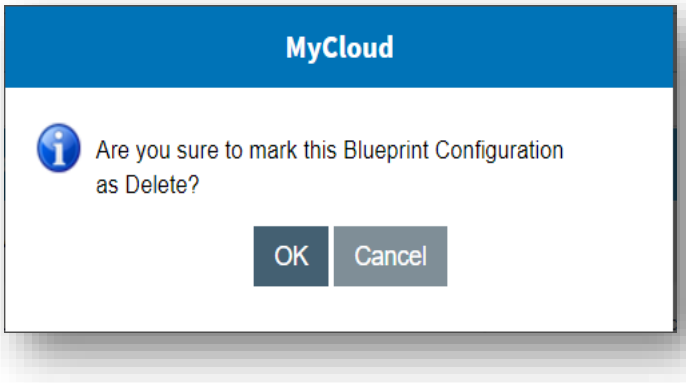


Figure 446 - Confirmation Message

3. Click **OK** to confirm. A success message appears as follows:

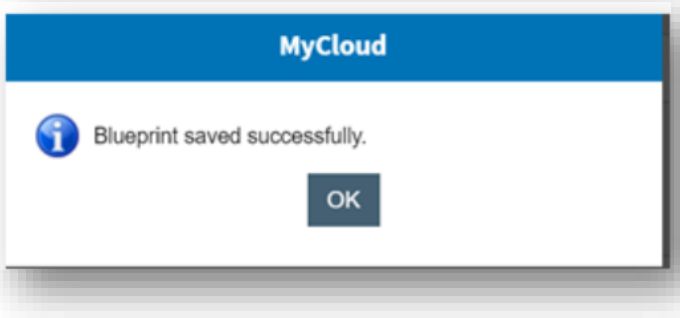


Figure 447 - Success Message

1.6.1.3.2 Import Blueprint

This tab allows the user to import the exported blueprint JSON. It is useful to migrate the created blueprint from one environment to another.

1. On the **Manage Blueprint** page, click on the **Import Blueprint** tab.
2. Browse for the exported blueprint JSON file by clicking on **Choose a file** button.

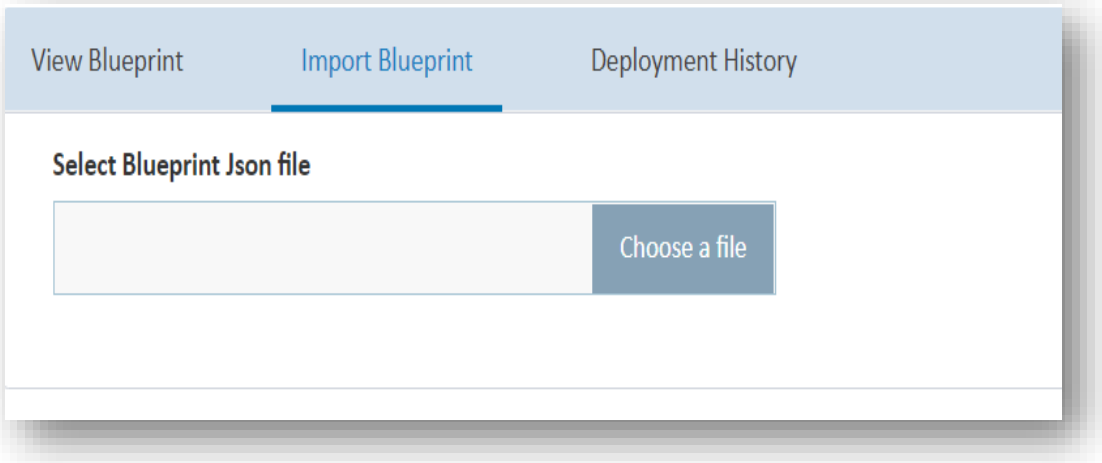


Figure 448 - Import Blueprint

3. The following dialog box appears and allows the user to choose the file:

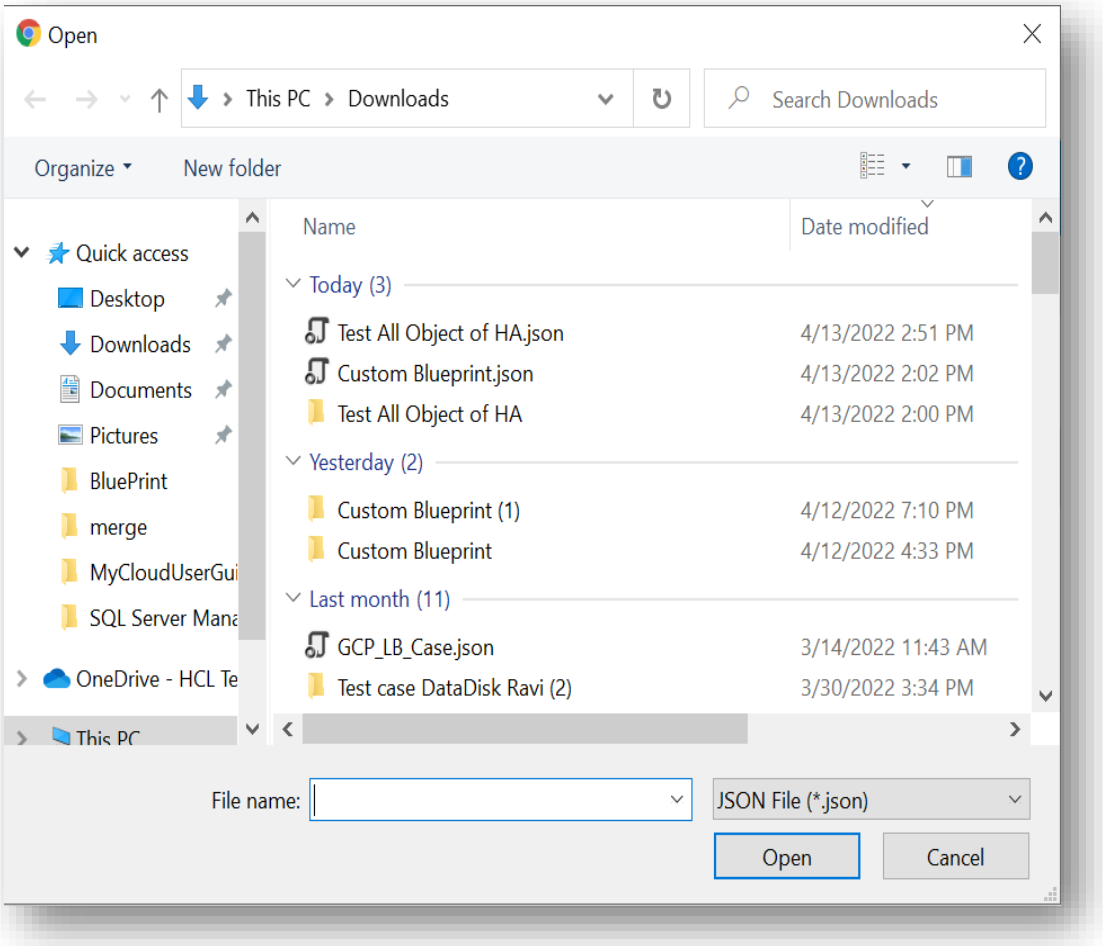


Figure 449 – Import Blueprint Choose File

4. Select the **Blueprint JSON** file.
5. The file gets uploaded for confirmation with the blueprint JSON data, Blueprint Name, Blueprint Description, and Platform.

For some files, the Platform field is disabled. This signifies that the platform for the imported document cannot be changed while importing the blueprint. It automatically detects and imports the blueprint of the listed platform.

6. Once the user clicks on the **Import button**, the blueprint gets imported successfully and starts appearing in the blueprint list on the View Blueprint page.

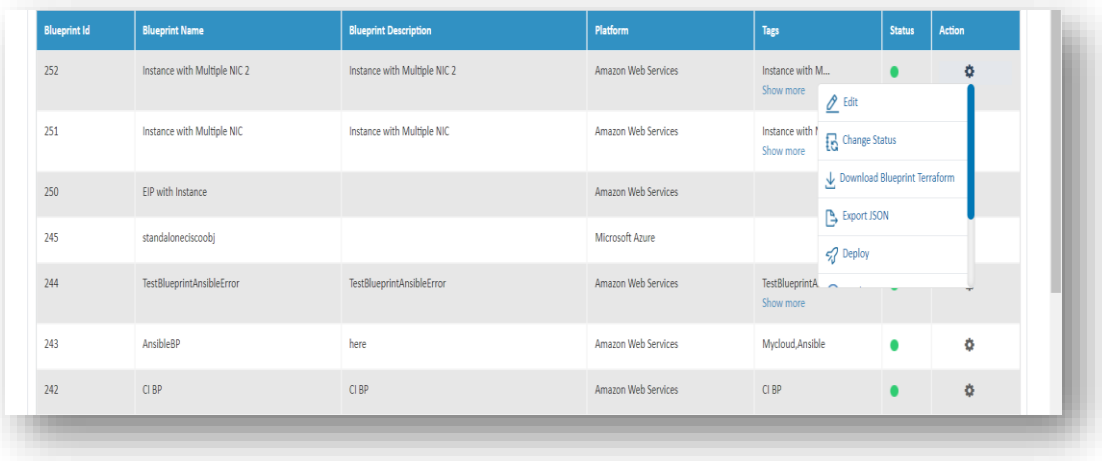


Figure 450 – Imported Blueprint listed in View Blueprint

1.6.1.3.3 Deployment History

The Deployment History tab is not directly accessible; however, it can be accessed via the Deployment History action item of listed blueprints in the View Blueprint section of the Manage Blueprint page.

For details, please refer to the **Deployment History** section.

1.6.1.4 Enabling Ansible in Blueprint

The Ansible objects are enabled in Blueprint using the Software Tools option in the Left Object Menu. This software tool is independent of Amazon, Azure, GCP, or VMware and holds the Ansible objects in the blueprint.

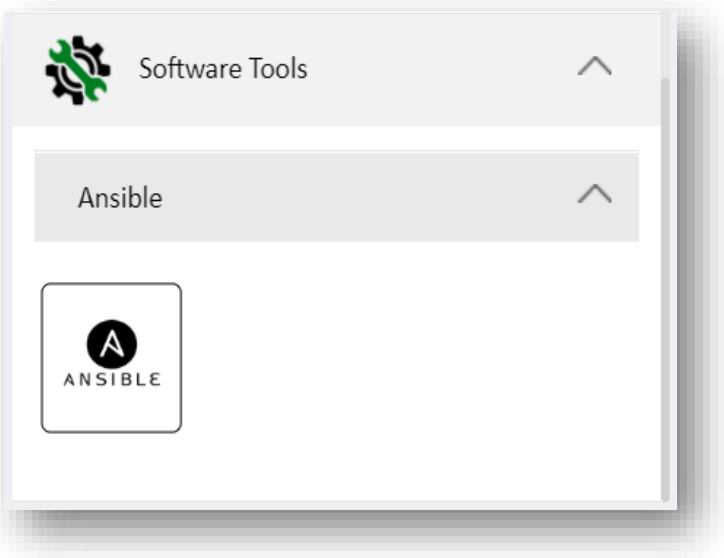


Figure 451 - Ansible Object

1. Drag Ansible object to **Diagram Pane** and create the use case.

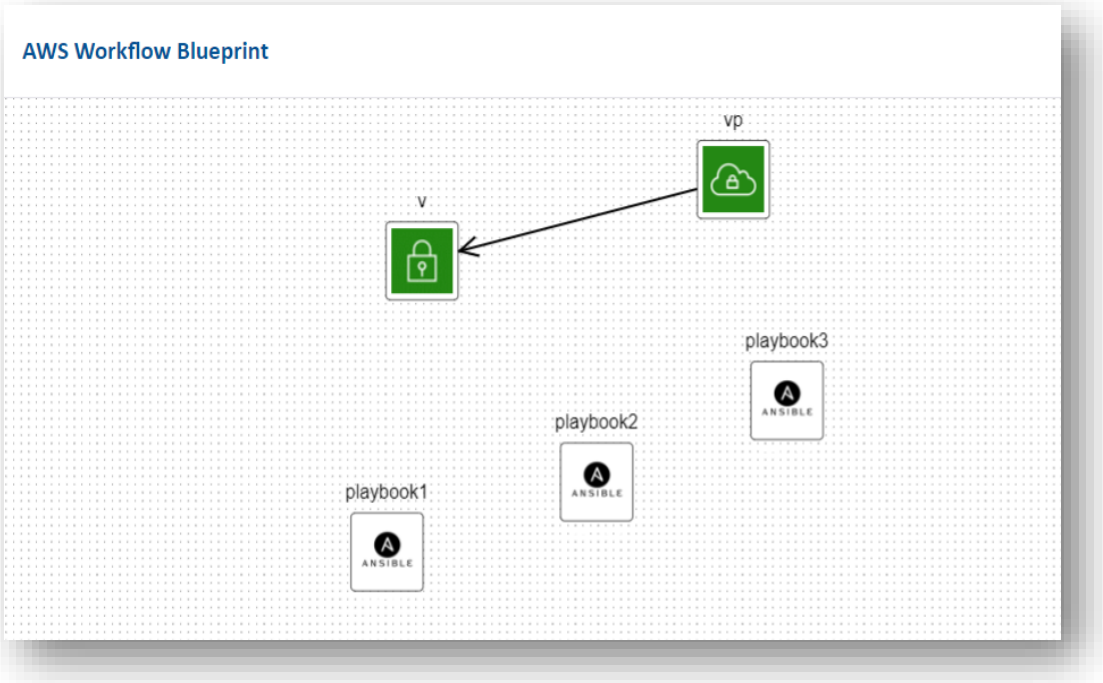


Figure 452 - Ansible Object on Blueprint Diagram

2. In the Right Attribute Panel, select the Input Attribute tab and populate the fields:
   - **Name**: The name of the object/resource to identify the purpose of the runbook.
   - **Execution Order**: The execution order attribute is used to refer to the execution order of the tasks executed during the deployment process explained under Point no. 3 of section Deployment History.
   - **Runbook ID**: It is the id of the runbook provided by the user for post provisioning or day two task.
   - **Extra Vars**: A new type of variable (Ansible) can be created from variables window. For the details about Ansible variables, please refer to the section Variables.

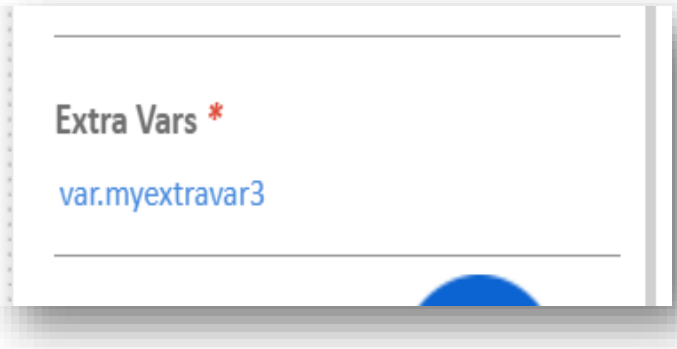


Figure 453 - Extra Vars in Ansible Object

3. Click on the **deploy blueprint icon** ( ). For details on how to deploy the Ansible type object from the Design Blueprint page, please refer to the section **Deployment from the Design Blueprint Page**.

1.6.1.5 Enabling Cisco Intersight in Blueprint

The Cisco Intersight objects are enabled in Blueprint using the **Software Tools** option in the Left Object Menu. This software tool is independent of Amazon, Azure, GCP, or VMware and holds the Cisco Intersight objects in the blueprint.

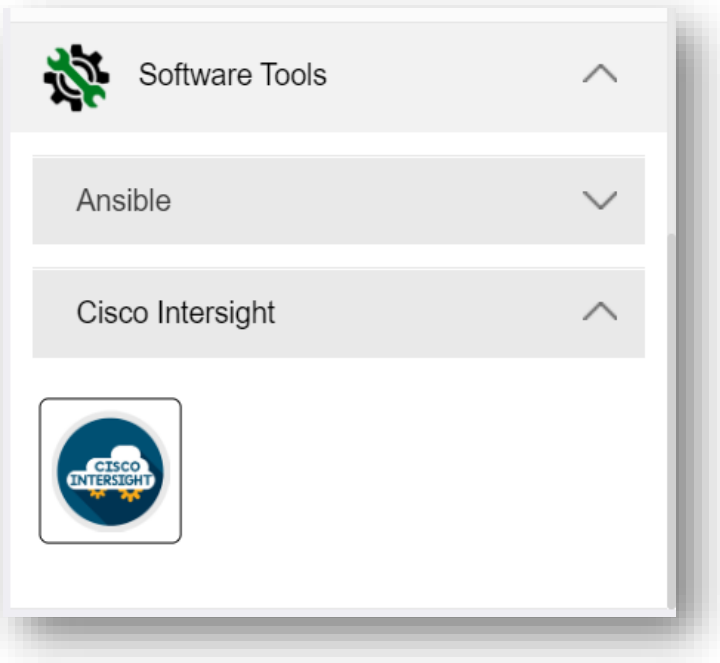


Figure 454 – Cisco Intersight Object

1. Drag **Cisco Intersight** object to **Diagram Pane** and create the use case.

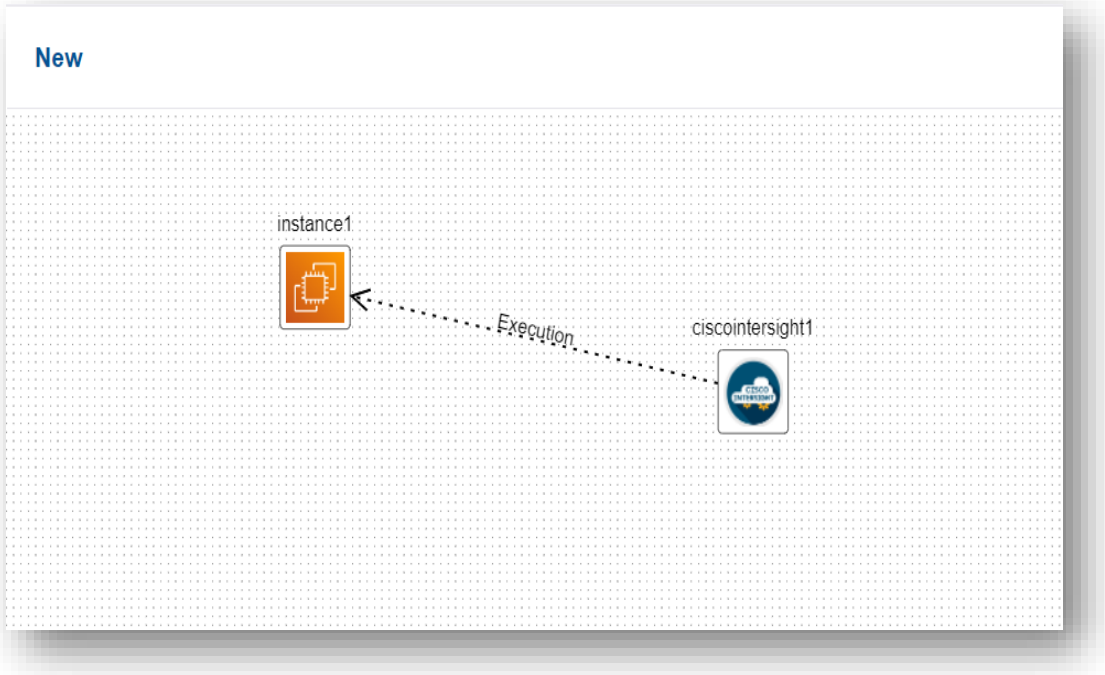


Figure 455 - Cisco Intersight Object on Blueprint Diagram

2. In the Right Attribute Panel, select the Input Attribute tab and populate the following fields:
   - **Name**: The name of the object/resource to identify the purpose of the Cisco Intersight object.
   - **Virtual Machine**: The Virtual Machine attribute is used to map the Instance.

- **Execution Name**: It is the Execution name for Cisco Intersight provided by the user for post provisioning or day two task.
- **Organization Moid**: It is the Organization Moid for Cisco Intersight provided by the user for post provisioning or day two task.
- **Workflow Moid**: It is the Workflow Moid for Cisco Intersight provided by the user for post provisioning or day two task.
- **Execution Order**: The execution order attribute is used to refer to the execution order of the tasks executed during the deployment process explained under Point no. 3 of section Deployment History.
- **Workflow Parameters**: A new type of variable (Ansible) can be created from variables window. For the details about Ansible variables, please refer to the section Variables.

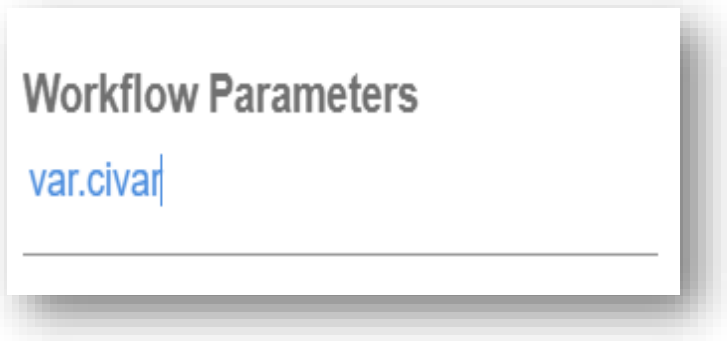


Figure 456 - Workflow Parameter in Cisco Intersight Object

3. Click on the **deploy blueprint icon** ( ). For details on how to deploy the Cisco Intersight type object from the Design Blueprint page, please refer the section **Deployment from the Design Blueprint Page**.

1.6.2 Deploy Blueprint

There are three ways to deploy a blueprint:

- Deployment from the Design Blueprint page
- Deployment from the View Blueprint tab of the Manage Blueprint page
- Deployment from Process workflow

1.6.2.1 Deployment from the Design Blueprint Page

The Deploy Blueprint option on the Design Blueprint page is to deploy the created blueprint to do provisioning of the objects configured in the blueprint.

The deployment can be categorized into two types:

- Deployment without Ansible objects
- Deployment with Ansible objects

For deployment without Ansible Objects:

1. Click on the **Deploy icon** ( ) on the bottom right of the page.
2. The **Blueprint Deployment** window appears.

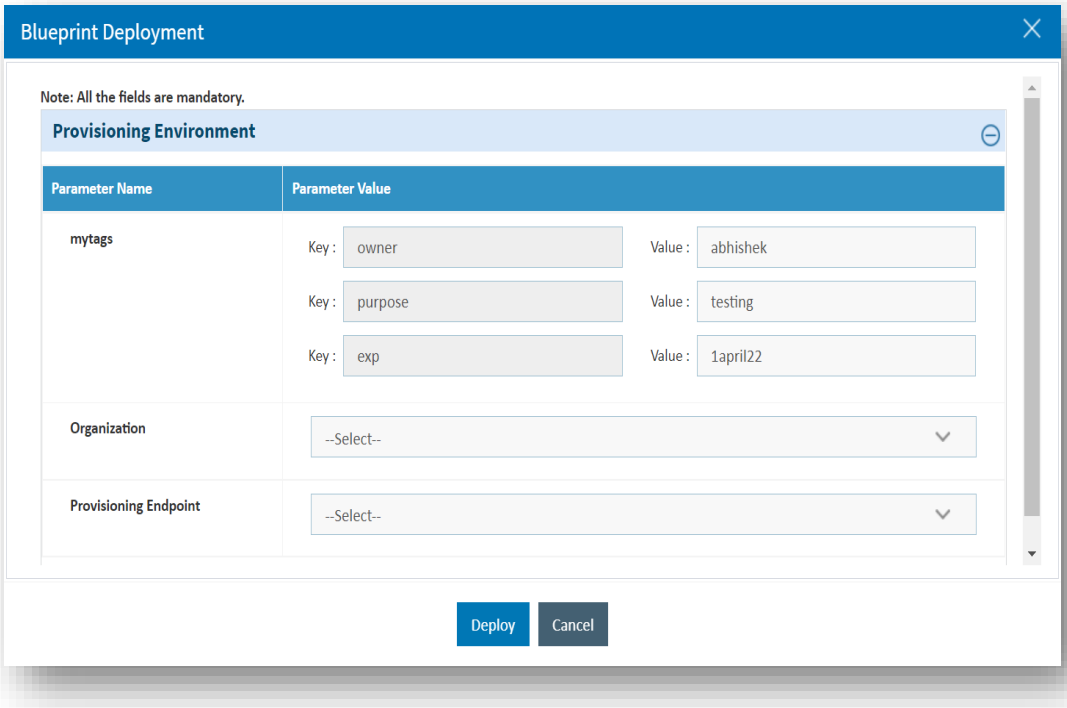


Figure 457 – Blueprint Deployment

3. The user has the option to change the mapped variable values if desired.
4. Select the Organization and Provisioning Endpoint.
5. Click on **Deploy** button.
6. A Provisioning window appears and shows the real-time provisioning logs.

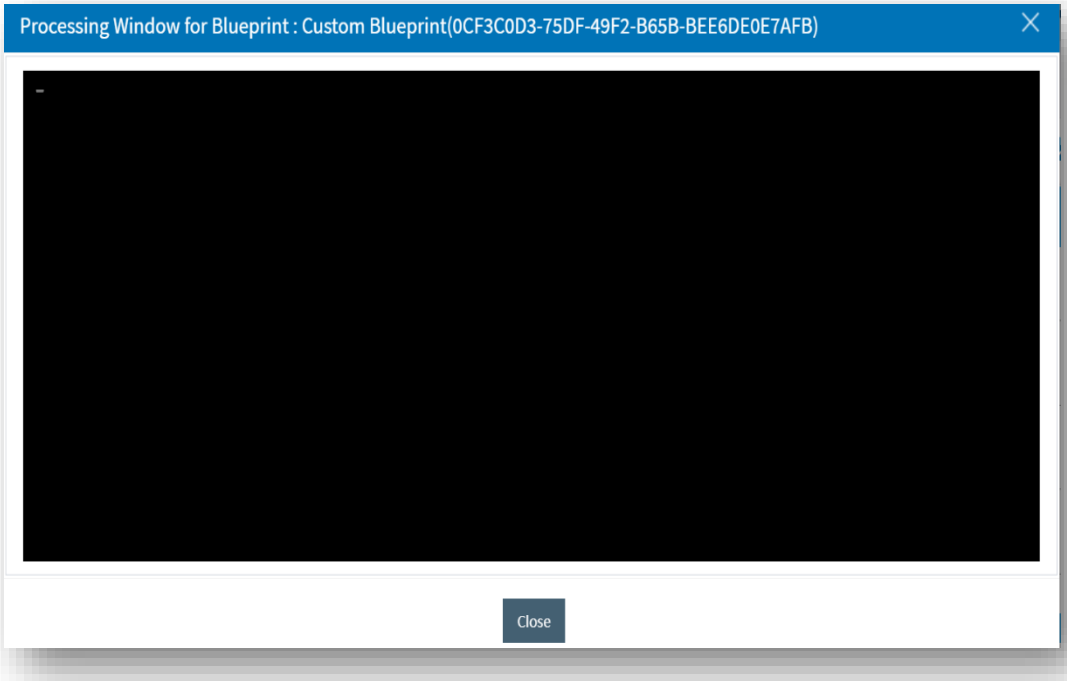


Figure 458 – Provisioning Window for Blueprint

7. On successful completion of provisioning, the output result is displayed in green color. The blueprint objects are successfully provisioned on the selected cloud platform.

Figure 459 – Successful Provisioning of Blueprint Objects

8. In the case of any error in processing, it shows it in red color.

For Deployment with Ansible Objects:

1. Click on the **Deploy icon** ( ) on the bottom right of the page.
2. The **Deployment** window appears.

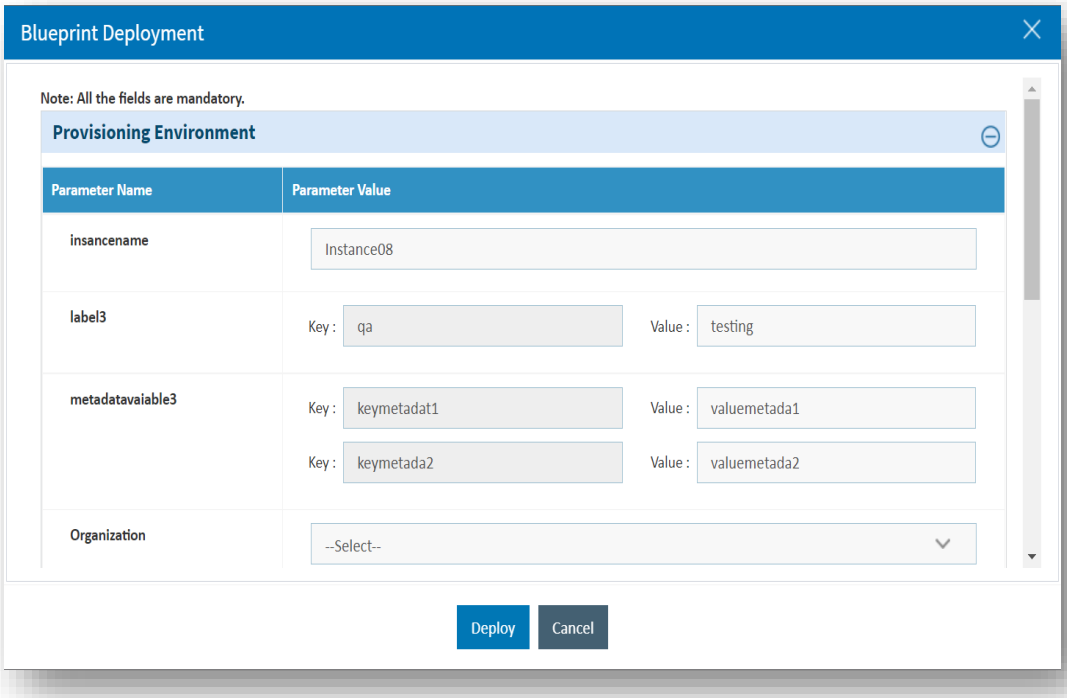


Figure 460 – Blueprint Deployment Window from Ansible Object

3. On the **Blueprint Deployment** window, the Ansible Extra Vars will be displayed under **Ansible Environment** section.

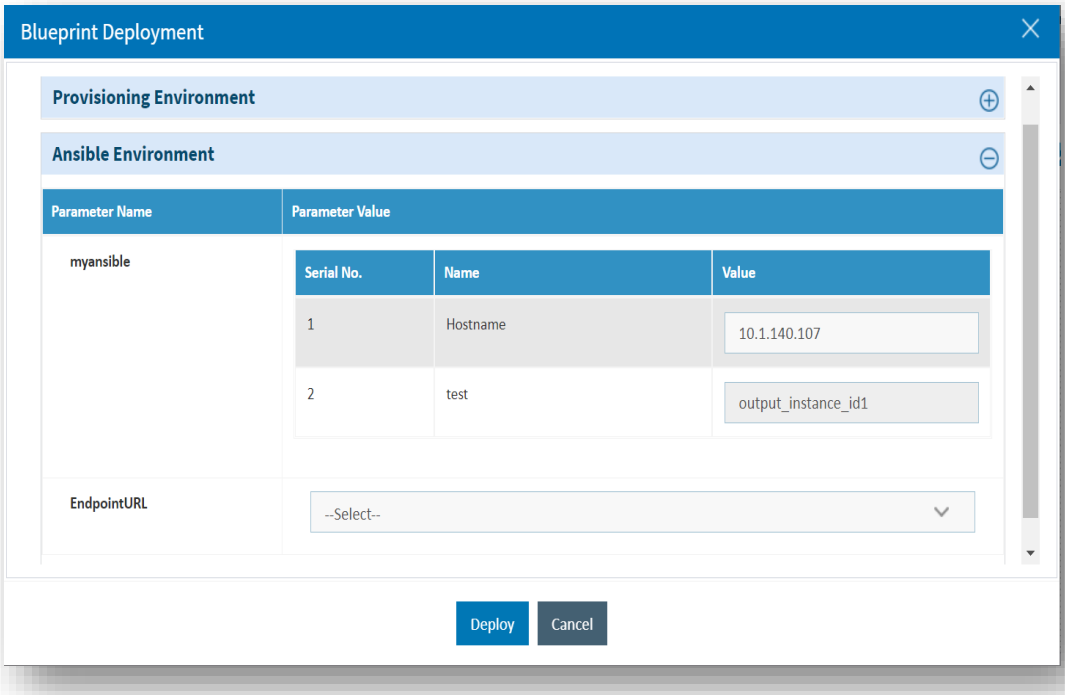


Figure 461 – Extra Vars in Ansible Object

4. Change the Extra Vars values if required.
5. Select the **endpointurl**, populate all the required fields, and click on **Deploy** button.
6. The further steps are same as described in the section Deploy Blueprint.
7. On successful deployment, the configured ansible task is run.

For Deployment with Cisco Intersight Objects:

1. Click on the **Deploy icon** ( ) on the bottom right of the page.
2. The **Deployment** Window appears.

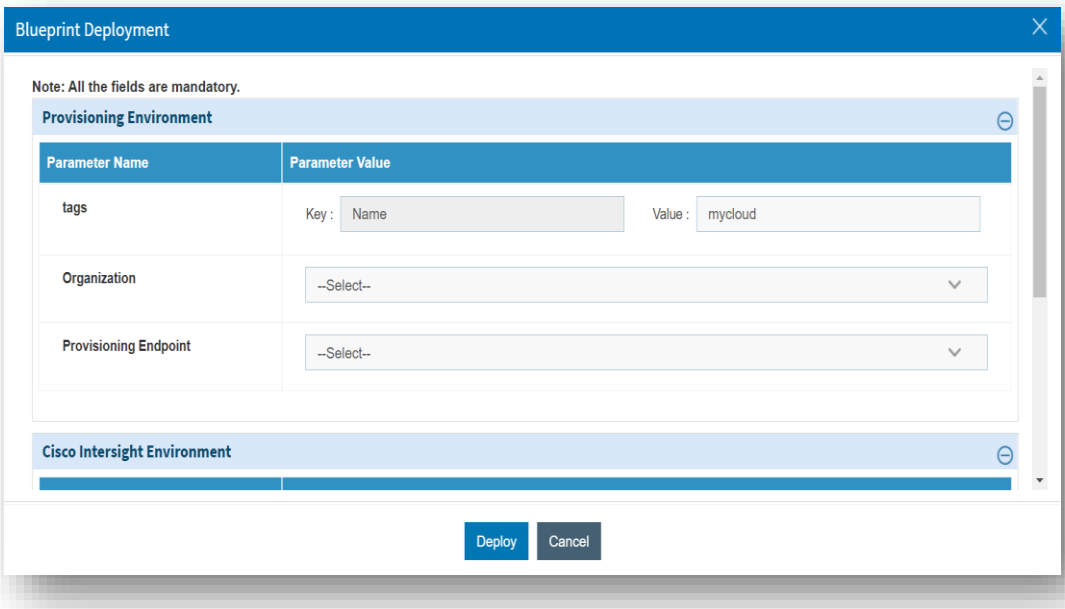


Figure 462 – Blueprint Deployment Window from Cisco Intersight Object

3. On the **Blueprint Deployment** window, the Cisco Intersight Workflow parameters will be displayed under **Cisco Intersight Environment** section.

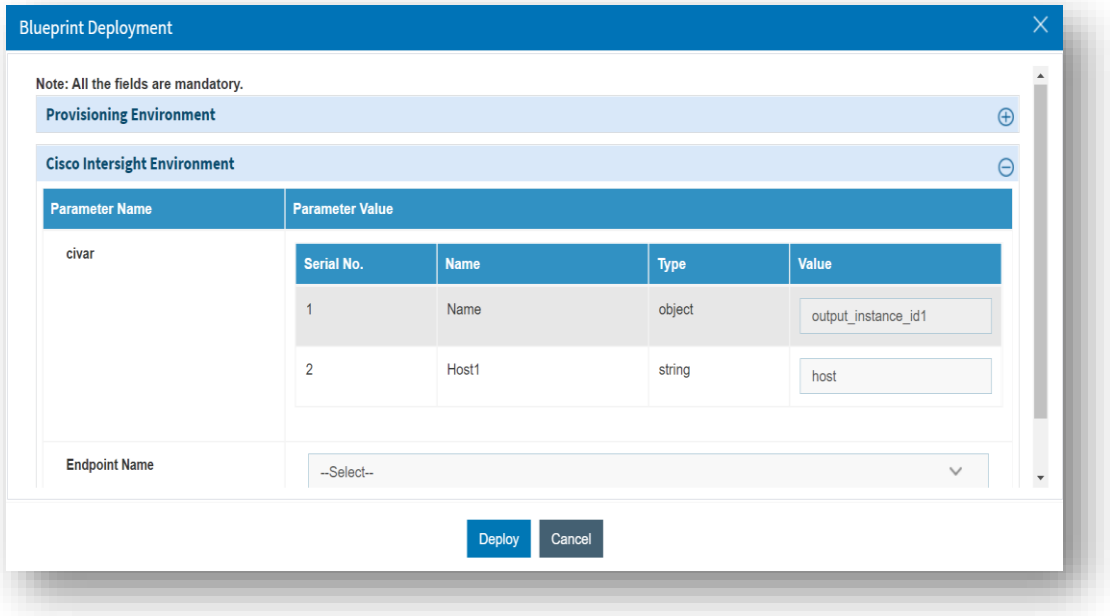


Figure 463 – Workflow Parameter in Cisco Intersight Object

4. Change the Workflow Parameter values if required.
5. Select the **endpointurl**, populate all the required fields, and click on **Deploy** button.
6. The further steps are same as described in the section Deploy Blueprint.
7. On successful deployment, the configured Cisco Intersight task is run.

1.6.2.2 Deployment from the View Blueprint Tab

Another way to deploy the blueprints is from the View Blueprint tab. The deploy button ( ) available on this screen allows users to deploy a blueprint from here. Clicking on the deploy button opens the deploy dialog box. Follow the similar steps as described in the section "Deployment from the Design Blueprint Page."

1.6.2.3 Deployment from Process Workflow

In this method, the blueprints are deployed through process workflow. The section "Execution of Blueprint by Creating UI and Process Template" contains detailed information on deployment from process workflow.

1.6.3 Re-Run Blueprint

This option is used to re-run the deployment request. By using Re-run, a user can again request the deployment of the same blueprint request and can change the existing machine attributes values which are mapped to variables. For the attributes which are not mapped with the variables, the user will not be able to change values on re-run.

If the deployment request is not decommissioned, this option does not create new cloud objects; it makes modifications to the existing cloud objects that were created during the deployment request.

If the deployment request has been decommissioned and then re-run is used, it creates the new cloud object mentioned in the deployment request.

The user cannot change the platform or environment in the case of re-run.

The Re-Run action does not appear in the case of an inprogress or Error status of the deployment request. It appears only in the case of the Success status of the deployment request.

For a new deployment, it creates the new request ID in the deployment history but for the re-run case, it runs the execution under the same request ID. It does not create the new request ID. It uses the same terraform state file for task execution.

1.6.3.1 Terraform State File

Terraform must store information about your managed infrastructure and configuration. This information/state is used by Terraform to map real-world resources to your configuration, to keep track of metadata, and to improve performance for large infrastructure.

This state is stored by default in a local file named "terraform.tfstate", but it can also be stored remotely, which works better in a team environment.

Terraform uses this local state to create plans and make changes to your infrastructure. Terraform performs a refresh prior to any operation to update the state with the actual infrastructure.

The primary purpose of Terraform state is to store bindings between objects in a remote system and resource instances declared in your configuration. When terraform creates a remote object in response to a change in configuration, it records the identity of that remote object against a particular resource instance and then potentially updates or deletes that object in response to future configuration changes.

Terraform stores information about your infrastructure in a state file. This state file keeps track of resources created by your configuration and maps them to real-world resources.

Terraform compares your configuration with the state file and your existing infrastructure to create plans and make changes to your infrastructure. When you run terraform apply or terraform destroy against your initialized configuration, terraform writes metadata about your configuration to the state file and updates your infrastructure resources accordingly.

1. Click on **Re-Run** ( ) icon listed in the action column.
2. The **Blueprint Deployment** window appears.

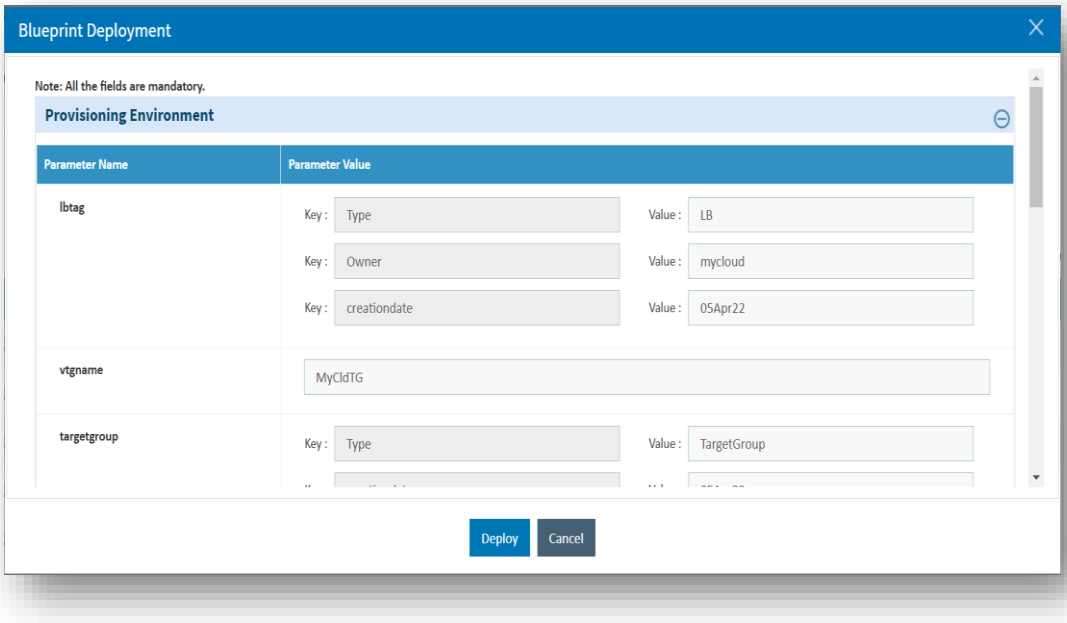


Figure 464 – Blueprint Deployment on Re-Run

3. The user has the option to change the variable values mapped to the object attributes.
4. Click on the deploy button and perform the similar steps as described in the section "Deployment from the Design Blueprint Page".

1.6.4 Execution of Blueprint by Creating UI and Process Template

The section covers information about the deployment of blueprint through process workflow. This is one of the three methods of blueprint deployment.

To deploy the blueprints through process workflow, the user first needs to create a new blueprint through the Design Blueprint page. (Refer to the section Create New Blueprint to create a new blueprint).

In the example below, the workflow blueprints are created for all three platforms. As already discussed earlier, the listed blueprint can be filtered by typing the tag name in the Tags section.

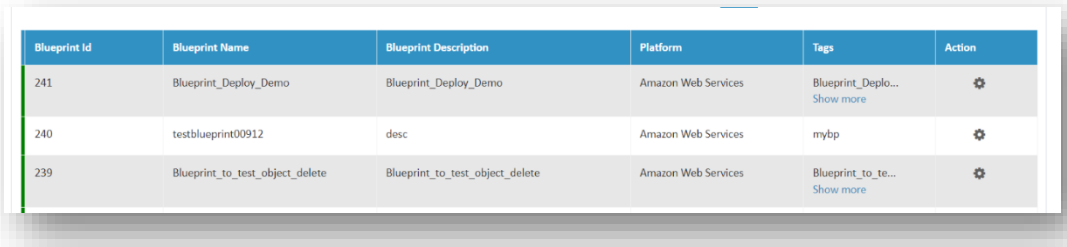


Figure 465 – Blueprint Created for Process Workflow

For executing the created Blueprint from Process Workflow, the user needs to do the following:

1. Create the **UI Template**.
2. Create the Process template.
3. Create the Cloud template.
4. Create **Catalog.**
5. Publishing the **Service Catalog**.

6. Execution of Blueprint through **Requester**.
7. Viewing the Request processing on the **Request Task Management**.

1.6.4.1 Creating UI Templates

For processing requests from the process template, the user needs to create a UI template where any blueprints can be deployed. The user provides input attributes and after completing the deployment task the output attributes are returned. These output attributes are passed to the process workflow to run the tasks. So, the UI templates are the medium to pass these output values from blueprint deployment output to process workflow execution.

1. Click on Manage UI Template under Workflow Management menu.

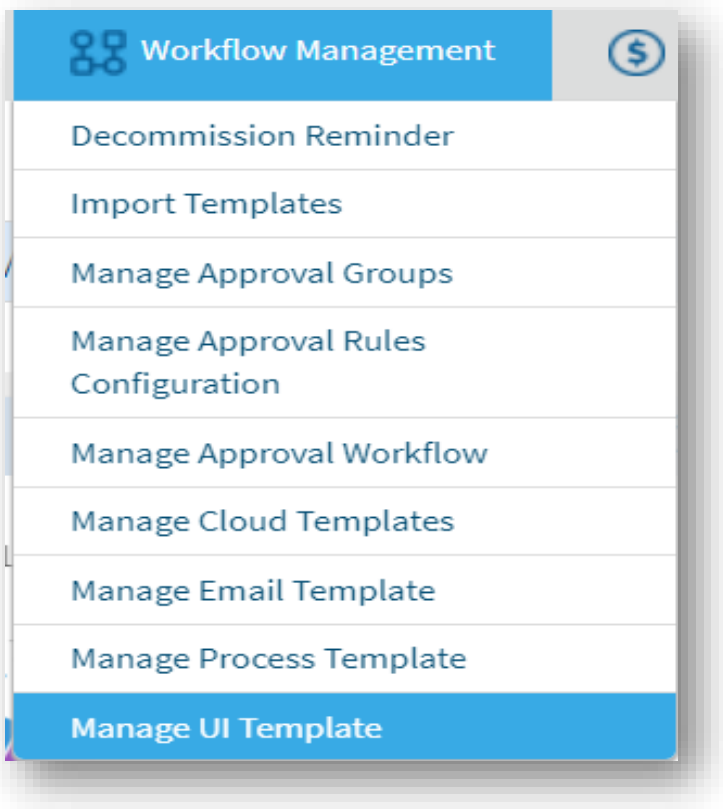


Figure 466 – Create UI Template Menu

2. Go to **Create UI Template** tab and create a UI template. For details on How to create a UI template, please refer to the section "**Manage UI Template Create UI Template**" in the *MyCloud Configuration Guide – Provider Module – Part 1*.

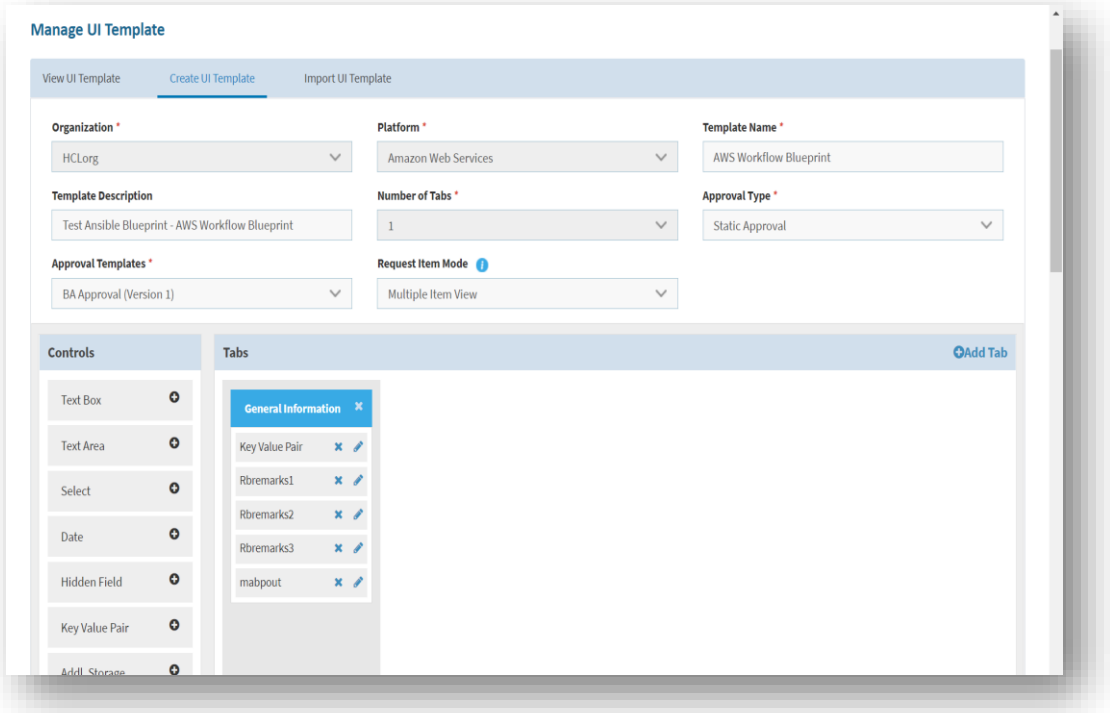


Figure 467 – UI Template Creation for Blueprint Deployment

The following five inputs have been created for the UI template as the blueprint to be executed expects these values form the user input:

- Key Value Pair

- Rbremarks1

- Rbremarks2

- Rbremarks3

- mabpout

To pass the inputs to the process workflow through the UI template, the user needs to create all the input and output parameters in the UI template to map.

1.6.4.2 Create Process Template

After creating UI template, we need to create process template.

1. Click on Manage Process Template under Workflow Management menu.

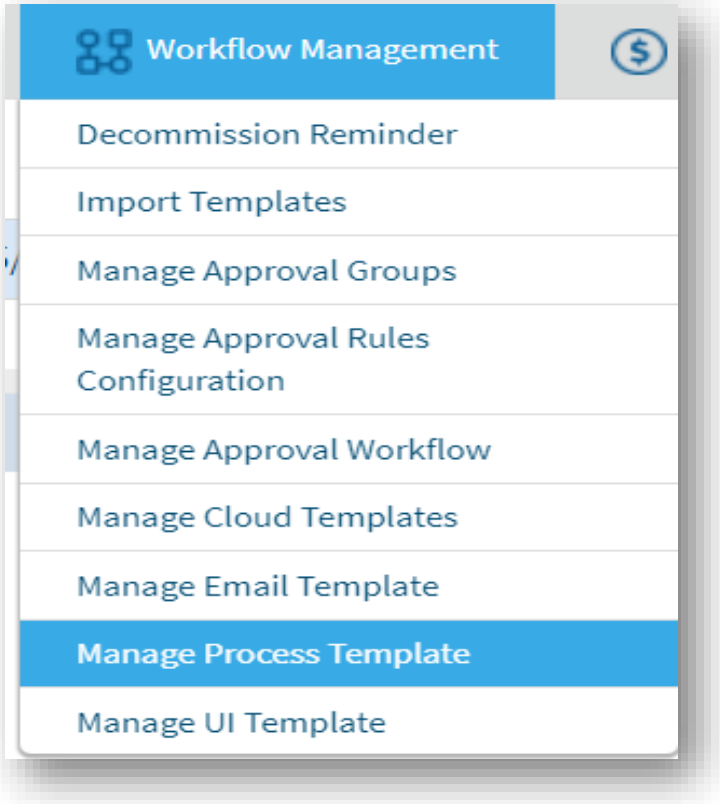


Figure 468 – Create Process Template Menu

2. Go to **Add Template** tab and create process template for the UI template. For details on How to create a Process template, please refer to the section "**Manage Process Template Add Template**" in the *MyCloud Configuration Guide – Provider Module – Part 1*.

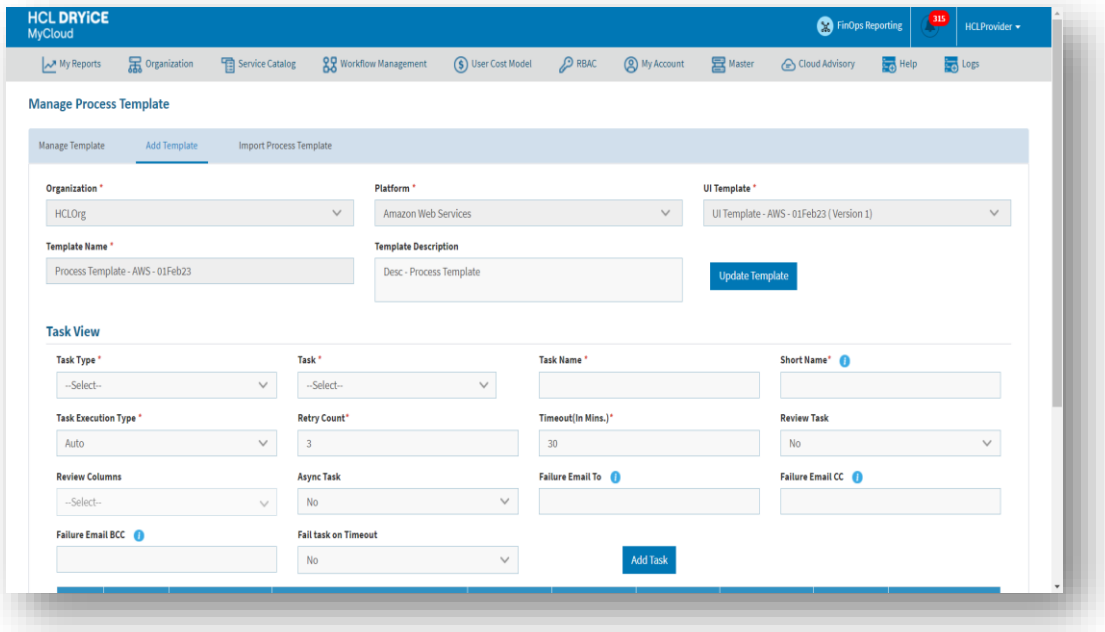


Figure 469 – Process Template Creation for Blueprint Deployment

3. Add the Task to Process template to be used to run the process workflow.

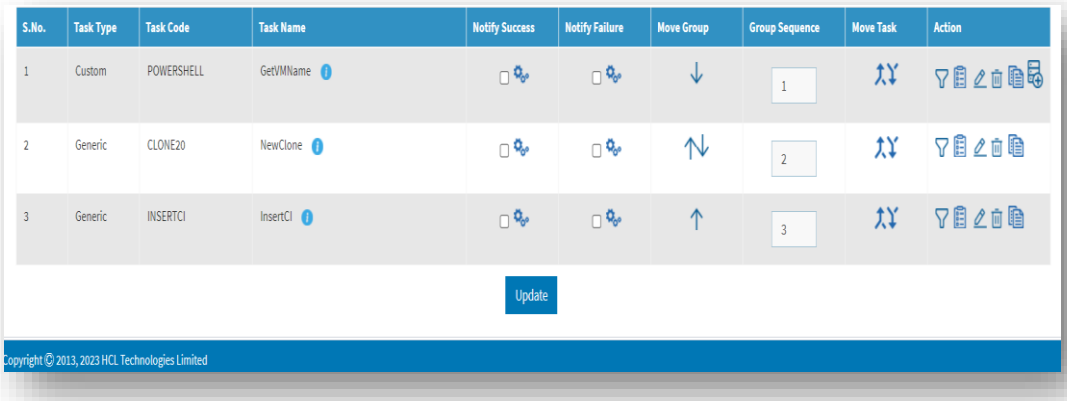


Figure 470 – Add Task for Process Template

4. Here the DEPLOYBL tasks have been created for the execution of the blueprint. It is a generic type of task. Different tasks are created for different platform workflows.
5. Click on **Manage Task** action on the created task table list.

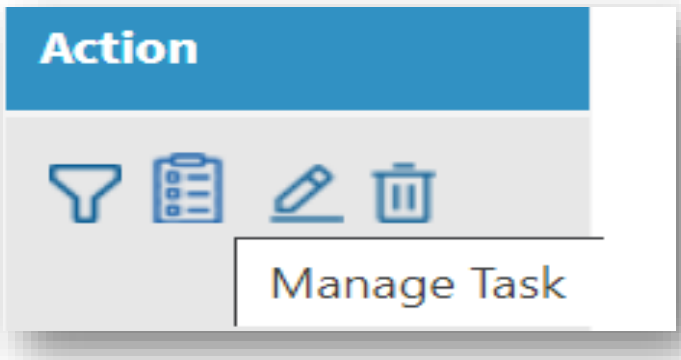


Figure 471 – Manage Task Action

6. The **Manage Task** window appears.

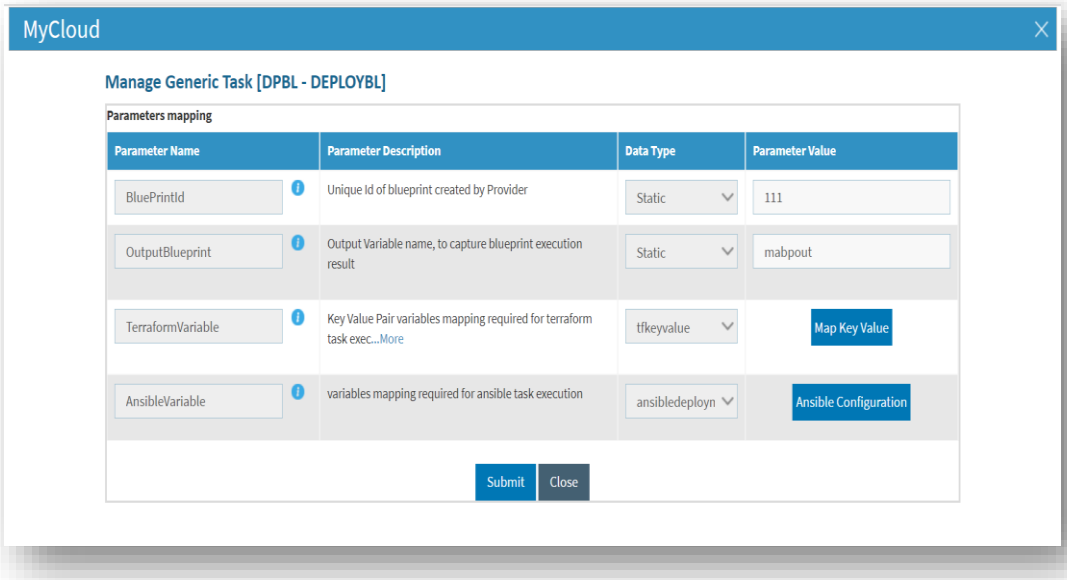


Figure 472 – Manage Task Action Window

7. Under the task, the user needs to map the input parameters to the process workflow. In the given example, there are four parameters mapped for the Deploy Blueprint task (deploybl) as shown in the above screenshot.
8. All the parameters can be managed by selecting an option from the dropdown menu.
9. **Blueprint ID**: This is the Blueprint ID created for deploying the blueprint from the process workflow. Refer to the **Table 35 – View Blueprint Table** Columns.
10. **Output Blueprint**: Created to capture the output parameter value. There should be the same value of the output attribute created on the UI for the value provided here. And if there is no output attribute created in the UI, it creates a new key with the provided output value here.
11. **Terraformvariable:** It takes key value pair type variables. Click on the **Map Key Value** (Map Key Value) button to map the key value for this parameter.

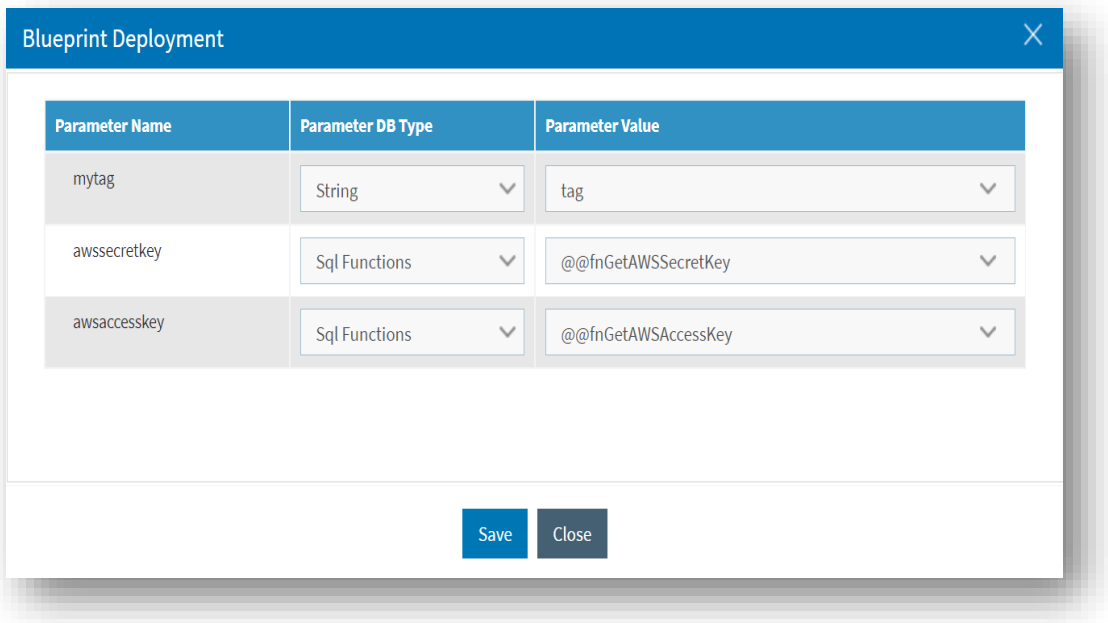


Figure 473 – Map Key Value of Manage Task Action

12. The above screen allows you to map the subscription details for which the blueprints are deployed by selecting the respective credential of that environment. This window displays the platform-wise parameters and subscription-wise parameters. For AWS, the access key and the security key are platform specific. The user needs to provide credentials to access the provisioning environment. For GCP, provide the project id and for ARM, provide four keys to access the environment.
13. The window also allows users to map the key-value pairs. The following pairs are available:
    - Parameter Name
    - Parameter DB Type
    - Parameter Value.
14. In the case of Blueprint Deployment, the user needs pass the Access Key and Security Key from the configured values during the execution but in case process workflow, he/she needs to pass it thorough predefined SQL functions. This value is used to decide on which subscription the user deploys the blueprint. This depends on the selected platform such as AWS, ARM and GCP.

15. For Ansible, there is an option to configure Ansible variables by clicking on **Ansible Configuration** button (Ansible Configuration).

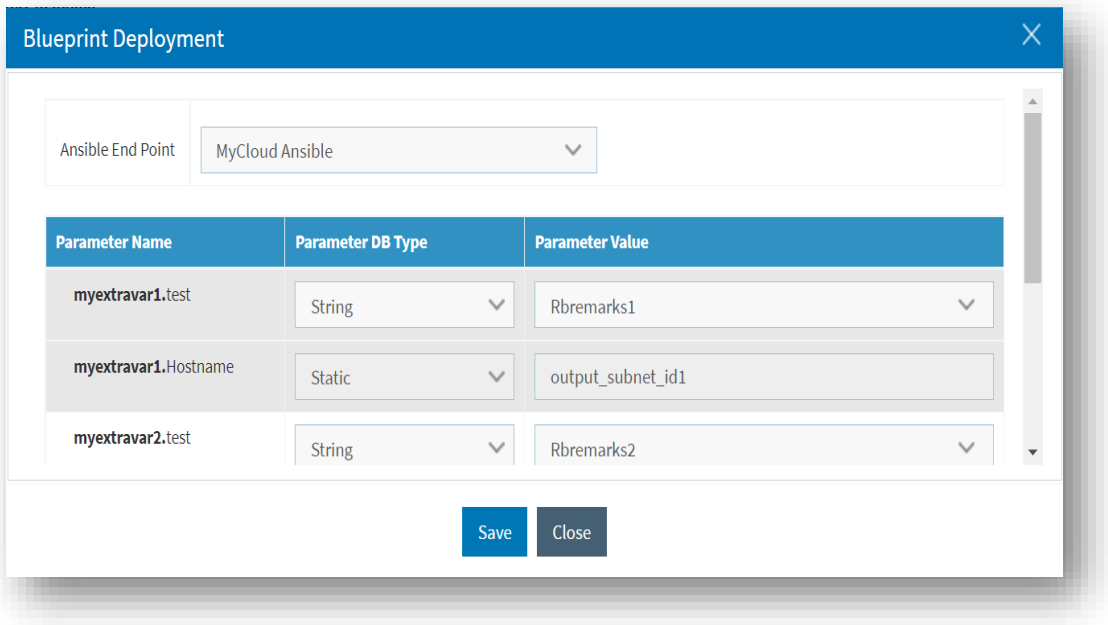


Figure 474 – Ansible Configuration of Manage Task Action

16. The user selects the Ansible endpoint, and all the key value mentioned in Ansible variables are listed here.

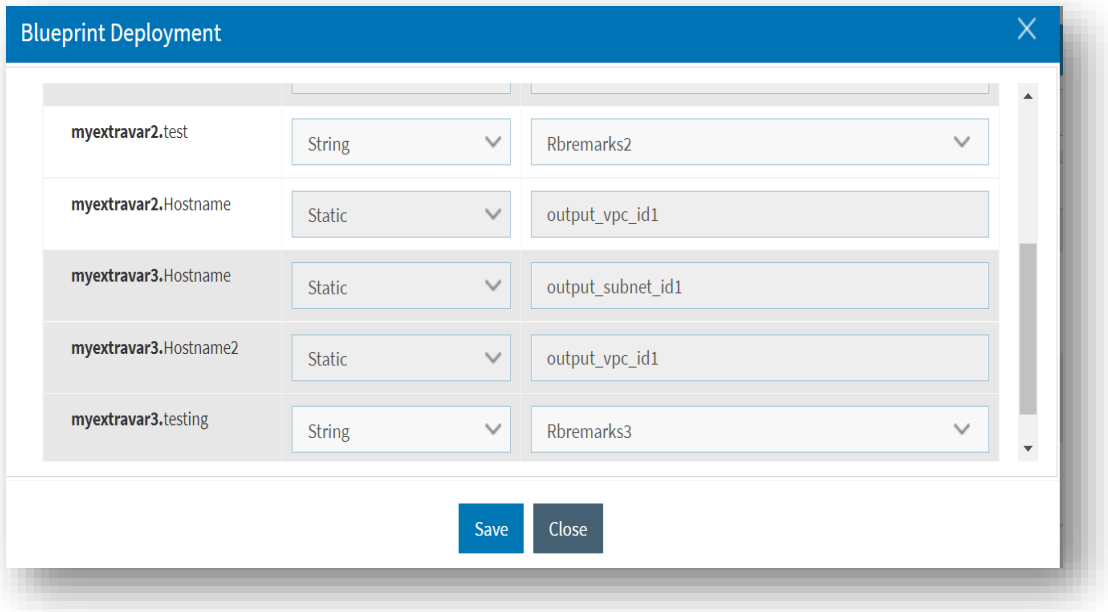


Figure 475 – Ansible Configuration of Manage Task Action (Cont.)

1.6.4.3 Create the Cloud Template

To process the requests from the process template, the user needs to create a cloud template.

1. Click on Manage Cloud Template in the Workflow Management menu.

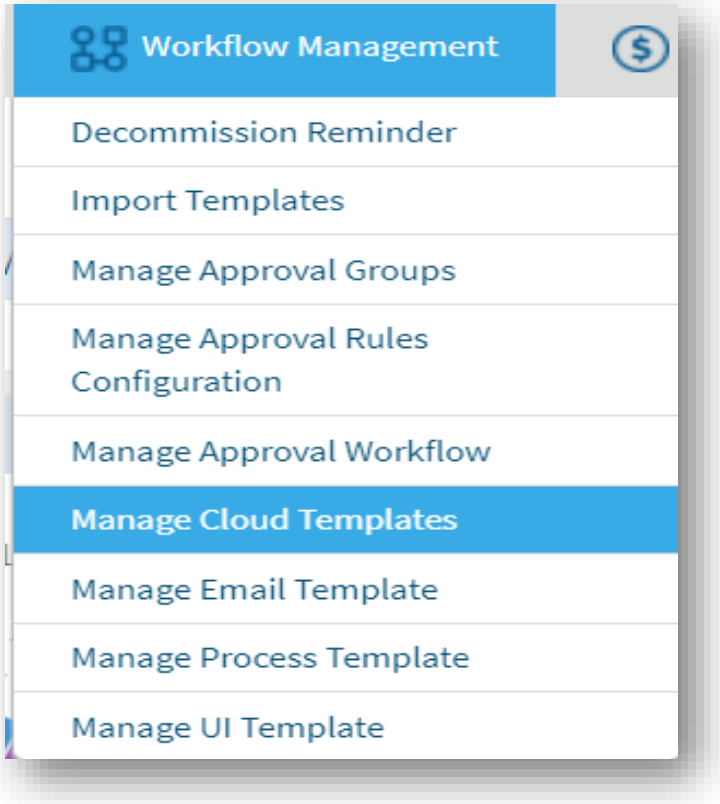


Figure 476 – Manage Cloud Template Menu

2. Select the Platform and the Provisioning Endpoint.

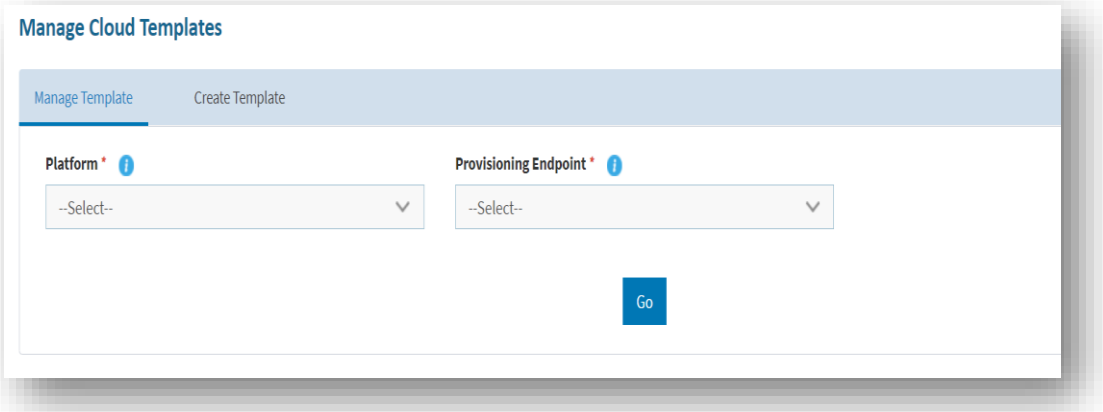


Figure 477 – Manage Cloud Templates

3. Select the **Create Template** tab and create a cloud template. For details on How to create a Cloud template, please refer to the section "**Manage Cloud Template ◐ Create Template**" in the *MyCloud Configuration Guide – Provider Module – Part 1*.

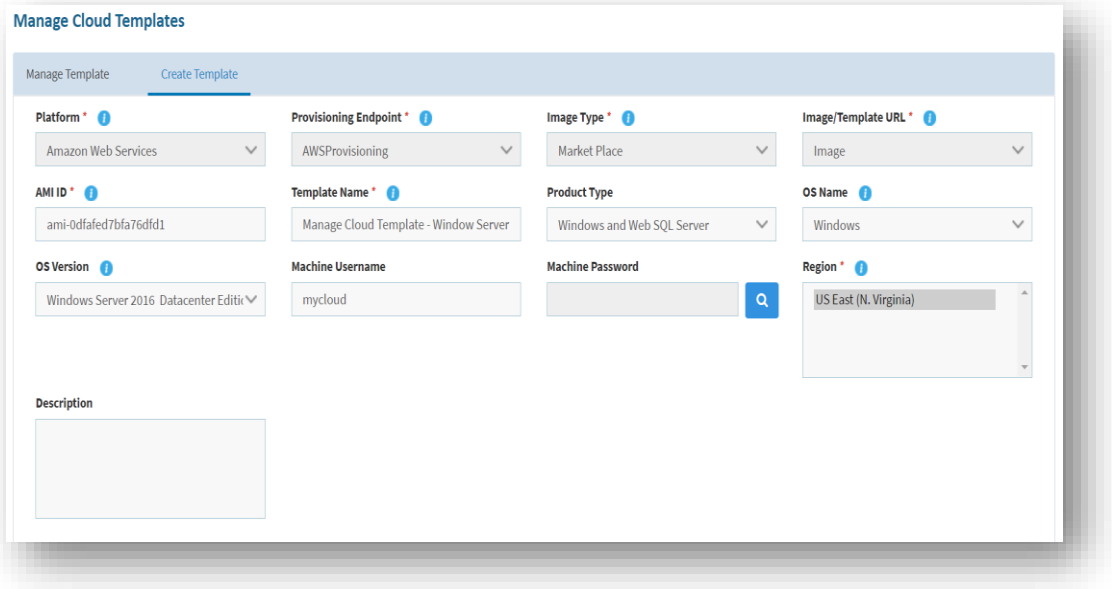


Figure 478 – Create Cloud Template

1.6.4.4 Create Catalog

To process the request from the process template, the user needs to create a catalog.

1. Click on Manage Catalog in the Service Catalog menu.

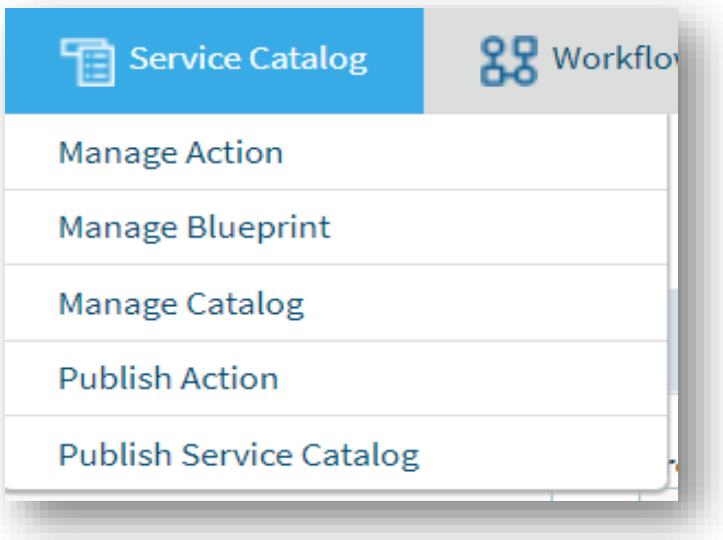


Figure 479 – Create Catalog Menu

2. Select the Platform and Provisioning Endpoint.

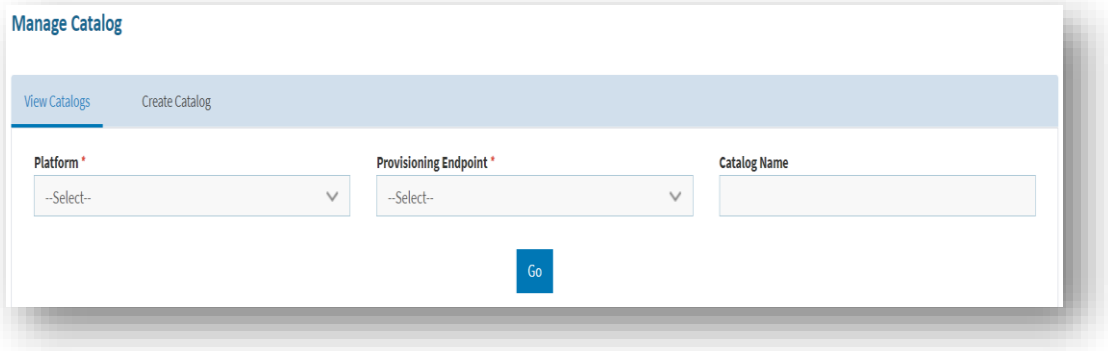


Figure 480 – Manage Catalog

3. Create a Catalog from the **Create Catalog** tab. For details on How to create a catalog, please refer to the section "**Manage Catalog -> Create Catalog**" in the *MyCloud Configuration Guide – Provider Module – Part 1*.

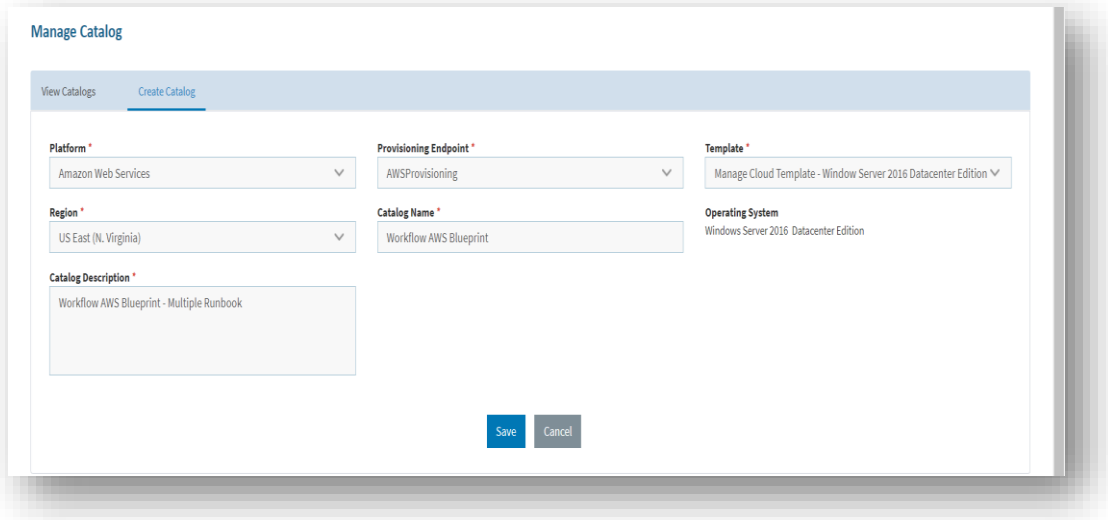


Figure 481 – Manage Catalog (Cont.)

1.6.4.5 Publish Service Catalog

To process the request from the process template, the user needs to a create catalog.

1. Click on Publish Service Catalog in the Service Catalog menu.

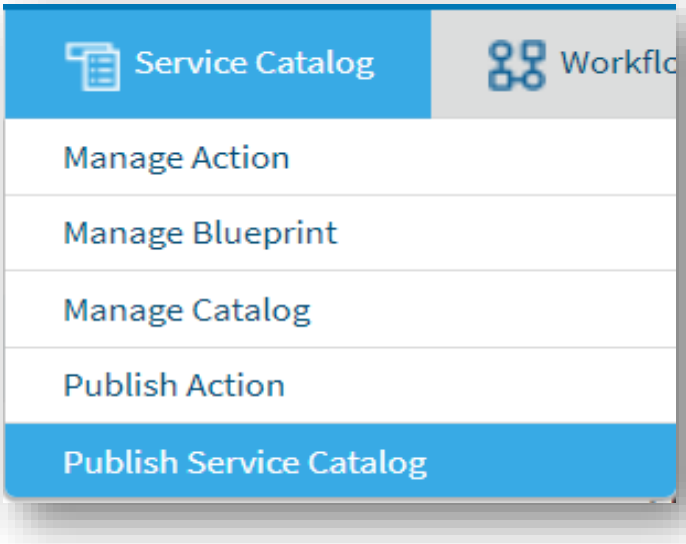


Figure 482 – Publish Service Catalog Menu

2. Select the Organization, Platform, and Provisioning Endpoint.

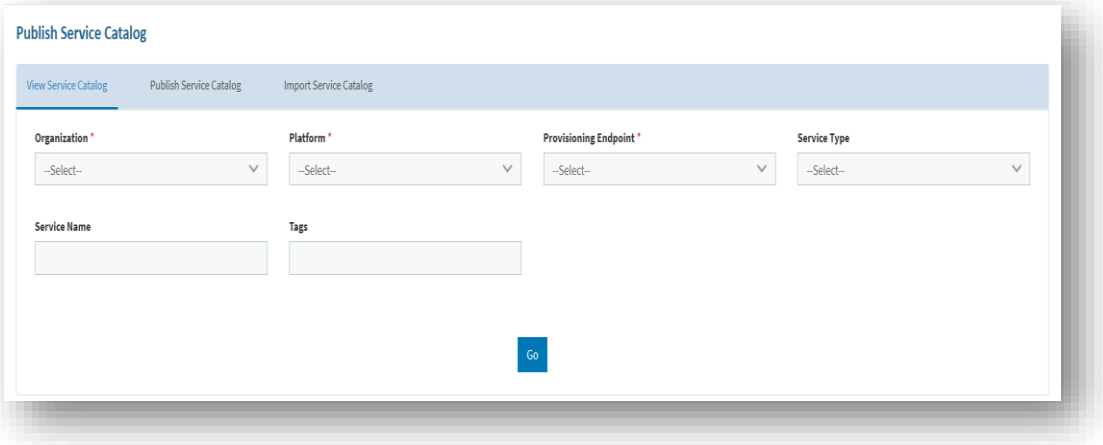


Figure 483 – Publish Service Catalog

3. Create a **Service Catalog** from the Publish Service Catalog tab. For further steps to create a Service catalog, please refer to Section **- Publish Service Catalog** in the *MyCloud Configuration Guide – Provider Module – Part 1.5.3.2*

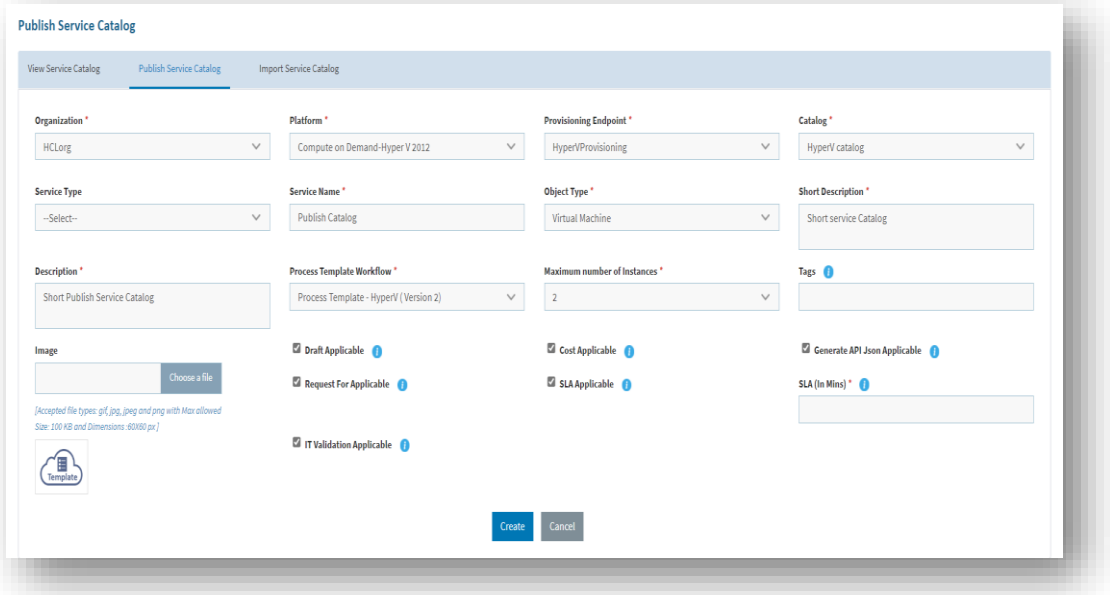


Figure 484 – Publish Service Catalog (Cont.)

1.6.4.6 Execution of Blueprint through Requester

To create requests for the workflow execution, the user needs to create a service catalog. This is done similarly to the existing UI and process template creation process. The following are the steps to explain one of the cases of deploying the blueprint through process workflow.

1. Login to MyCloud as a **Requester**.
2. Click on Request Service Catalog under the Request Menu.

Figure 485 – Request Service Catalog Menu

3. Select the Environment Type, Purpose, and OS Type. Click on Proceed.

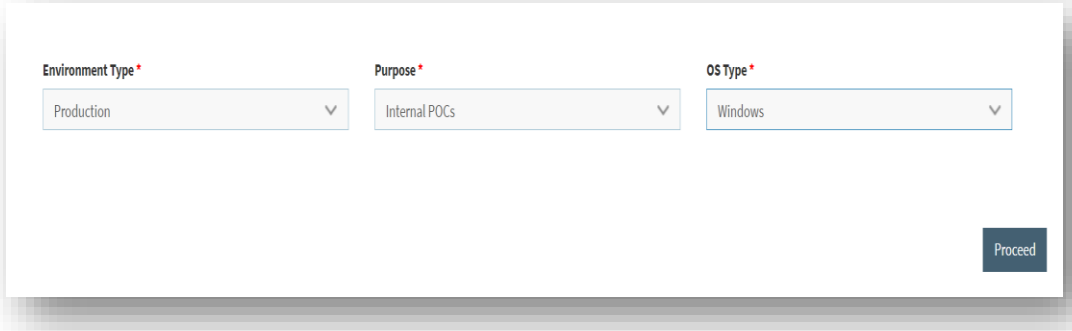


Figure 486 – Request Service Catalog

4. Select the **Platform** for which you want to create a request and click on **Proceed**.

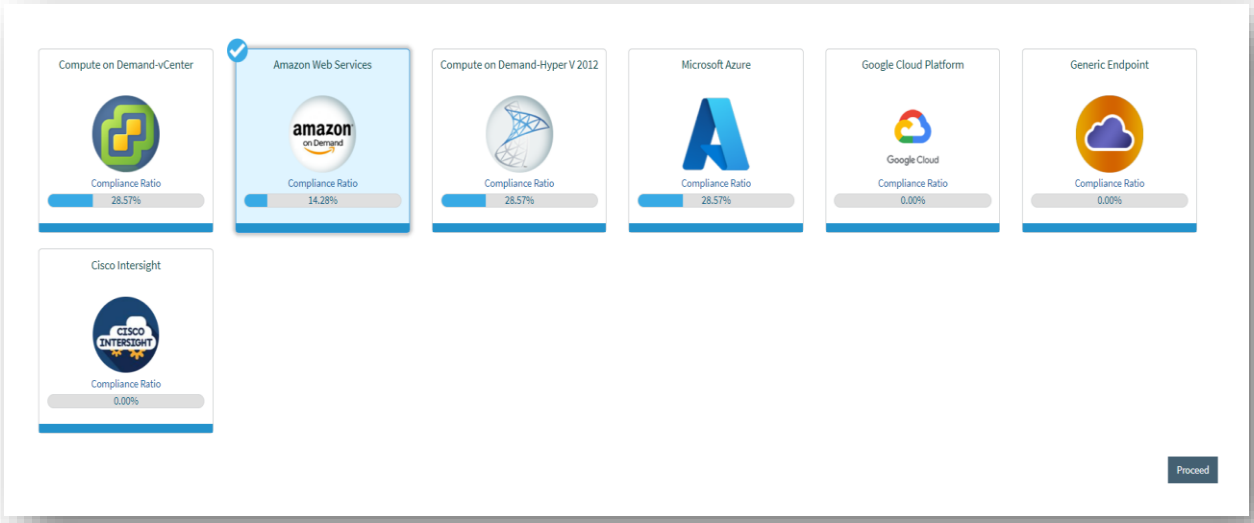


Figure 487 – Request Service Catalog (Cont.)

5. Click on the Created Service Request.

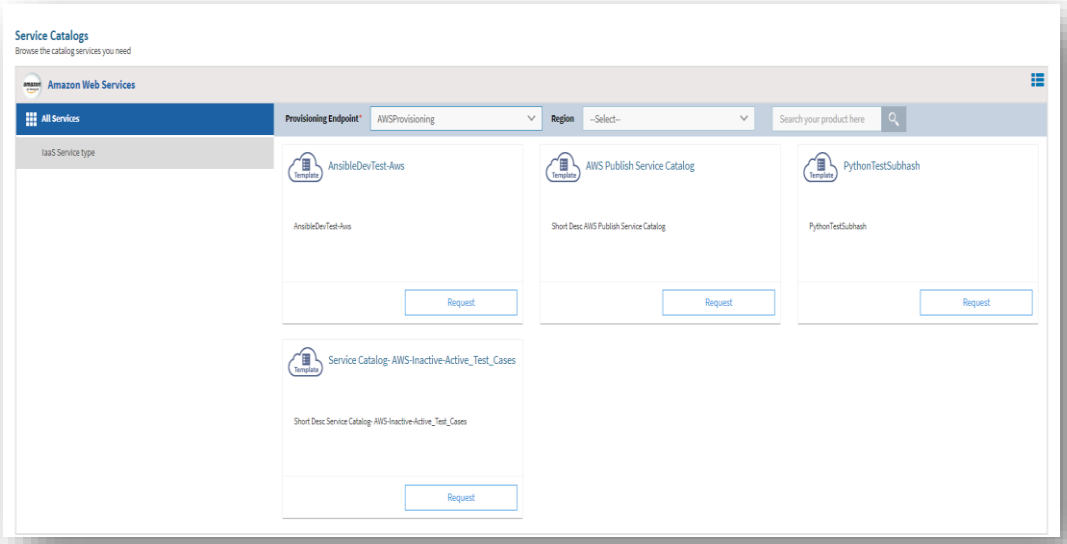


Figure 488 – Request Service Catalog (Cont.)

6. Select the Number of Instances and click Proceed.

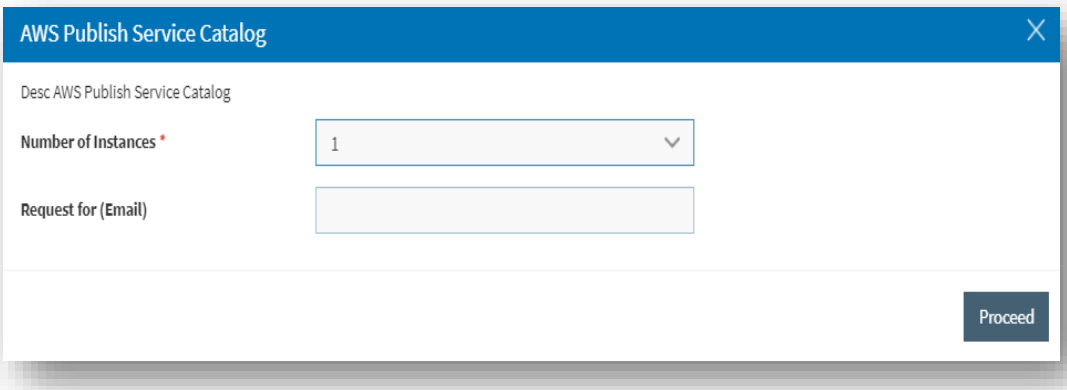


Figure 489 – Request Service Catalog (Cont.)

7. The UI template for requesting appears.

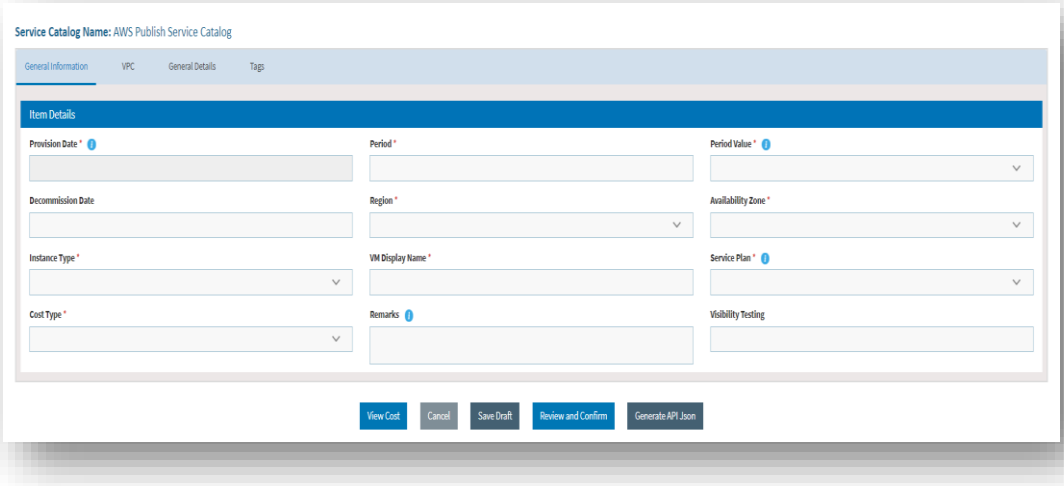


Figure 490 – Request Service Catalog (Cont.)

8. Input the values and click on **Submit** to raise a new request.
9. The request can be seen by clicking on **My Request** under **My Account** menu.

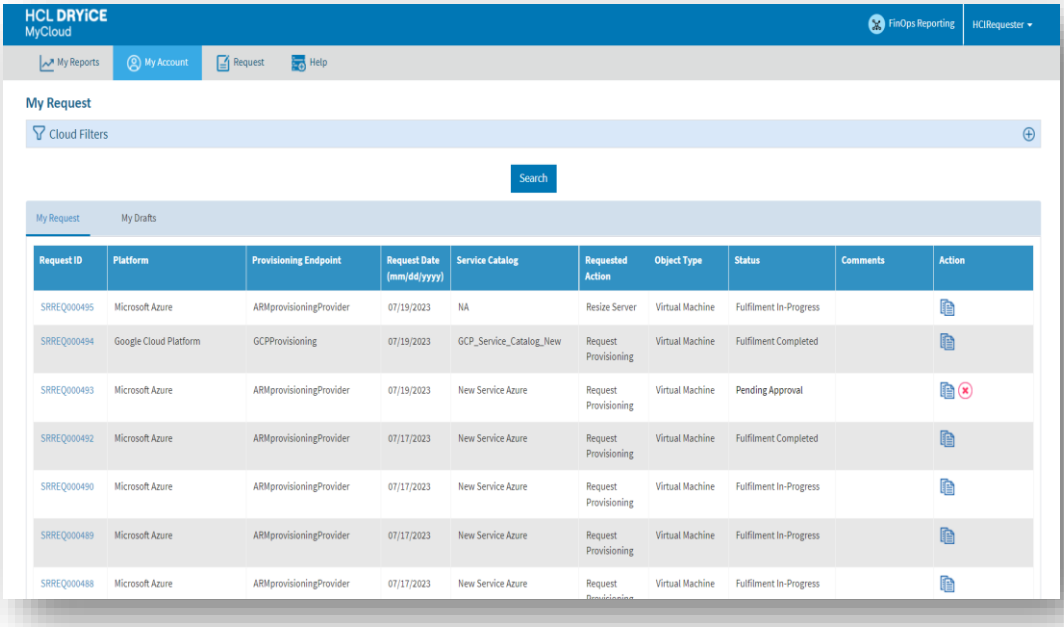


Figure 491 – Request Under My Request

10. Clicking on the request displays the further details related to the task.

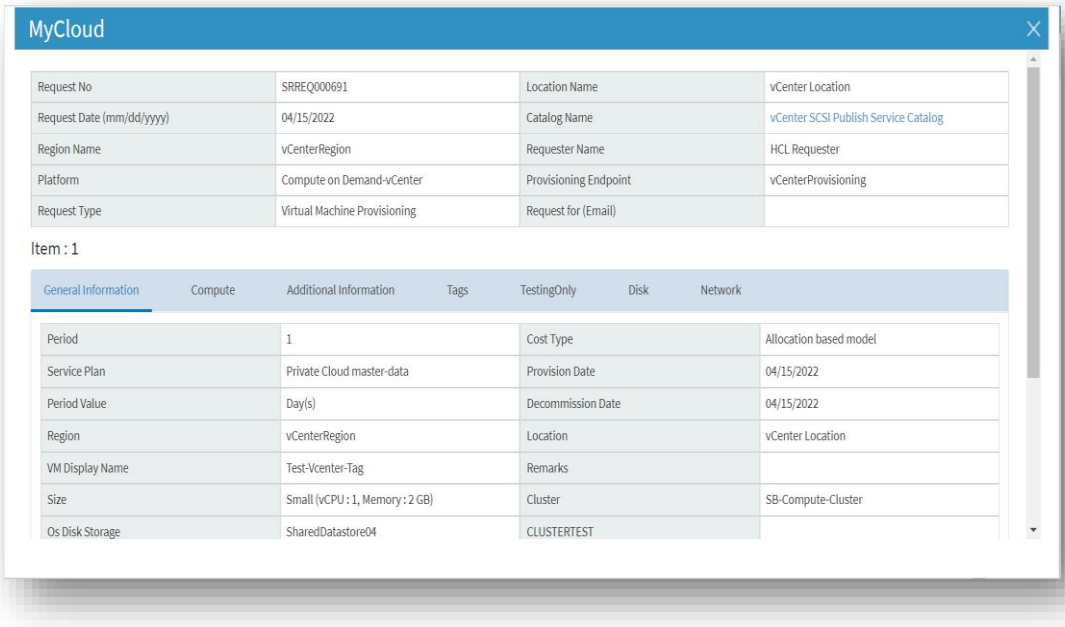


Figure 492 – Request under My Request (Cont.)

1.6.4.7 Viewing the Request Processing on Request Task Management

To check the task execution status, the user needs to take the following steps:

1. Login to MyCloud as a **Provider User**.
2. Click on Request Task Management under the My Report menu.

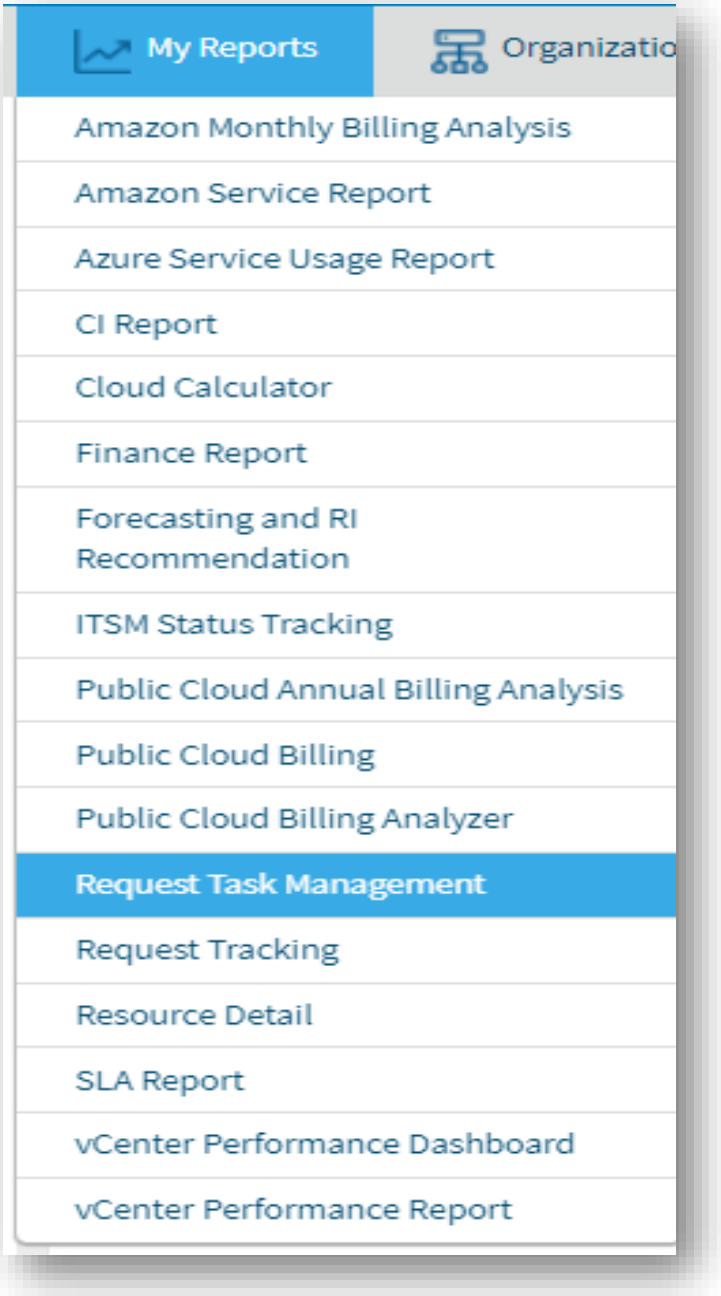


Figure 493 – Request Task Management Menu

3. The **Request Task Management** page appears, displaying the list of requests.

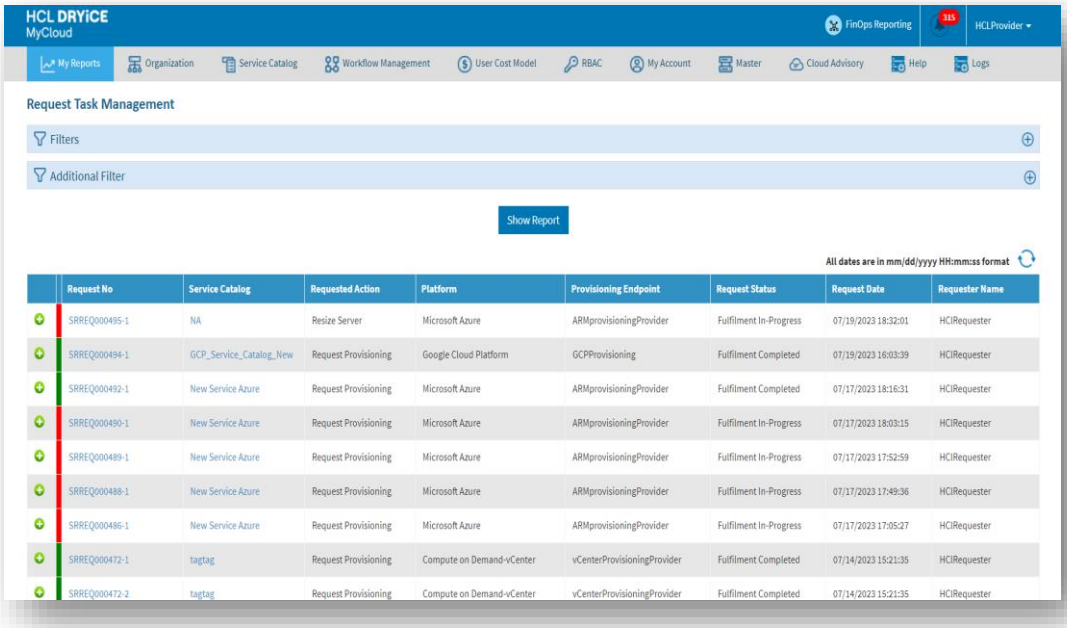


Figure 494 – Request Task Management

4. Expand your request by clicking on the **plus icon** ( ).

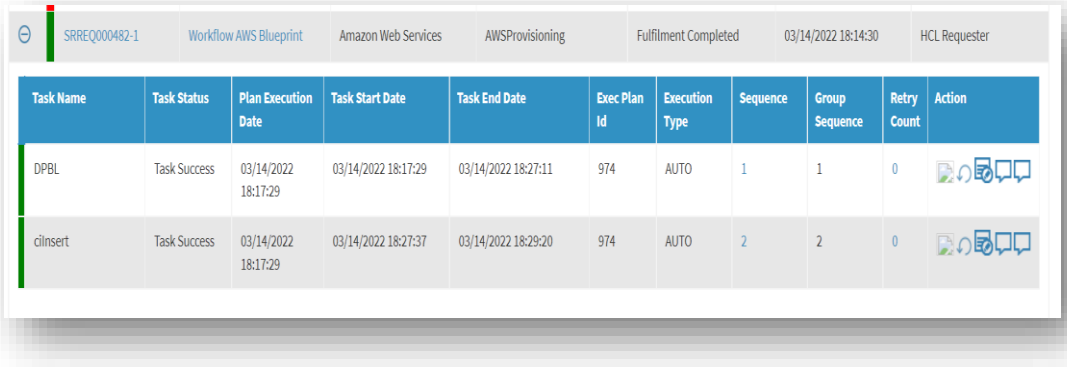


Figure 495 – Request Task Management (Cont.)

5. The Task execution list is displayed.

6. The user can view the Request XML of the task by clicking on the **View Message XML** icon ( ) under the action column.

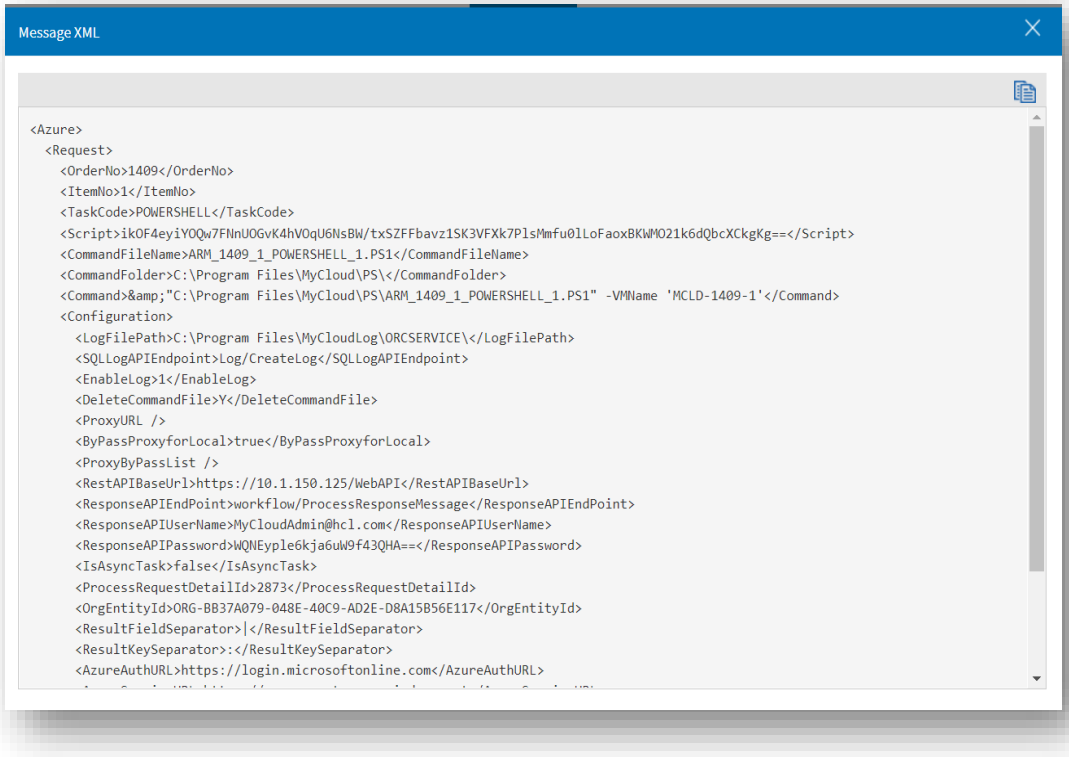


Figure 496 – Request Task Management (Message XML)

7. Click on the **View Response** icon ( ) under the action column to view the response.

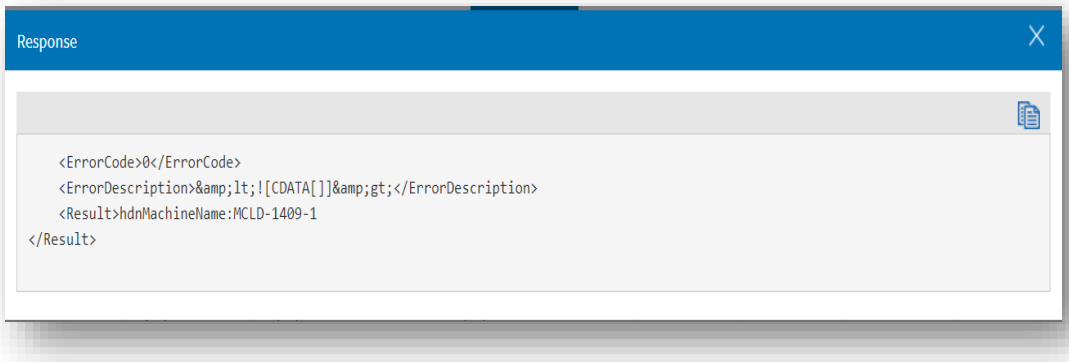


Figure 497 – Request Task Management (View Response)

8. To view the detailed logs, click on the **Detailed Log** icon ( ) in the action column.

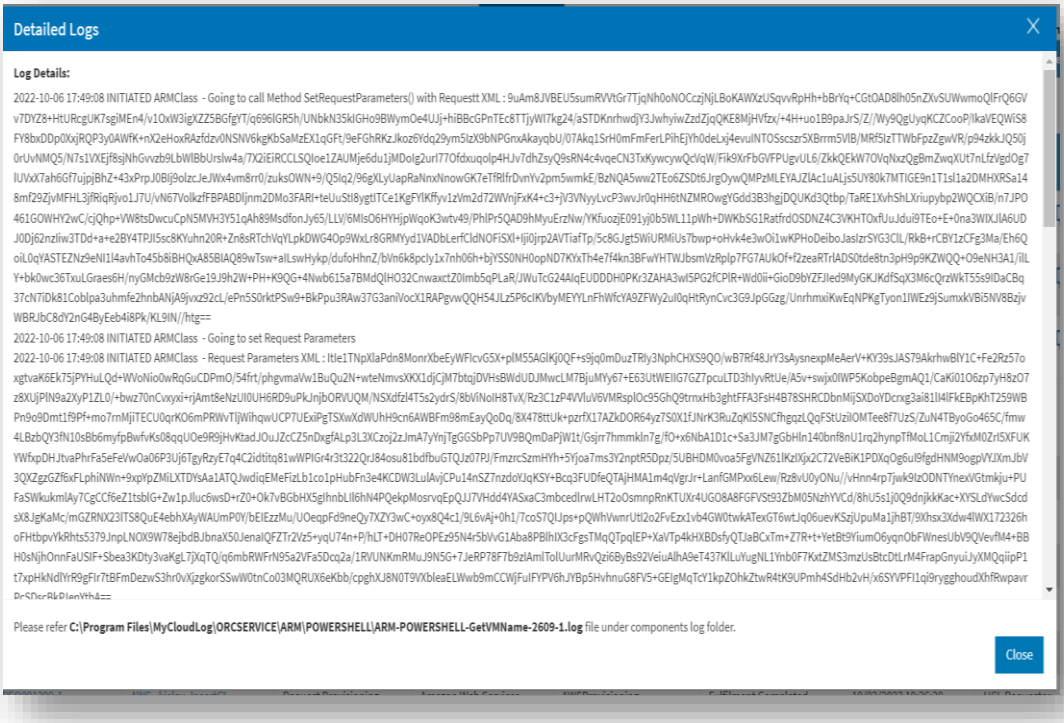


Figure 498 - Detailed Logs

1.6.5 New Resource in Blueprint to Execute Terraform File from GIT Repository

A new resource onboarded with name "Execute terraform file" under software tools like in below diagram-

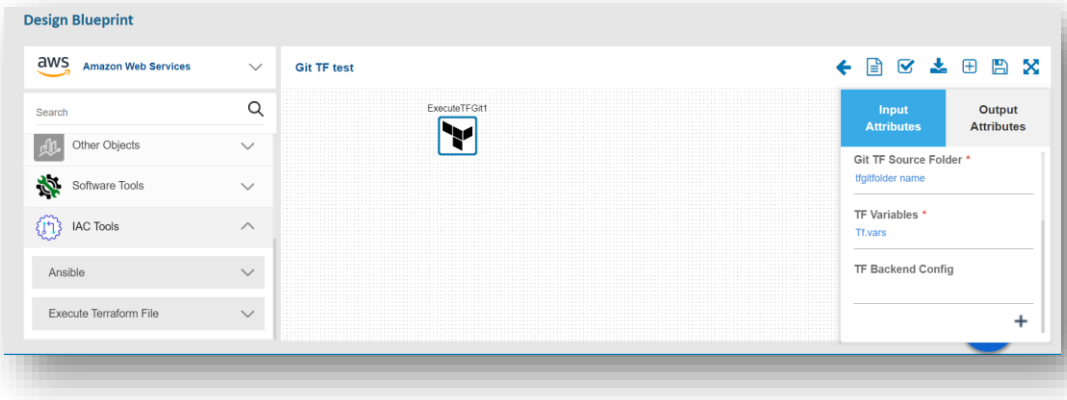


Figure 499 – Execute Terraform File from Git Repository

These new resources will have below attributes as:

Table 38 – Input Attributes in Git Repository

Field	Description
Name	Name of Execution
Git Branch Name	Git Branch name
Git TF Source Folder	Folder name of that git branch
TF Variables	Variables which are require to execute Git terraform files. With the help of ⊞ icon user can create variable of type "Git terraform variables"

	It is key value pair of all variables used execute git terraform files.
TF backend Config	These configurations will define the location to save state file created during terraform execution. With the help  icon user can define TF backend config. Variable type is "Terraform Backend config" on the change of variable type backend type will populate Possible values of backend type are: • For Amazon platform it is "S3" it will populate to save information of bucket to save state file created during terraform execution. • For ARM it is "blob" it will populate to save information of bucket to save state file created during terraform execution • For others it will local.

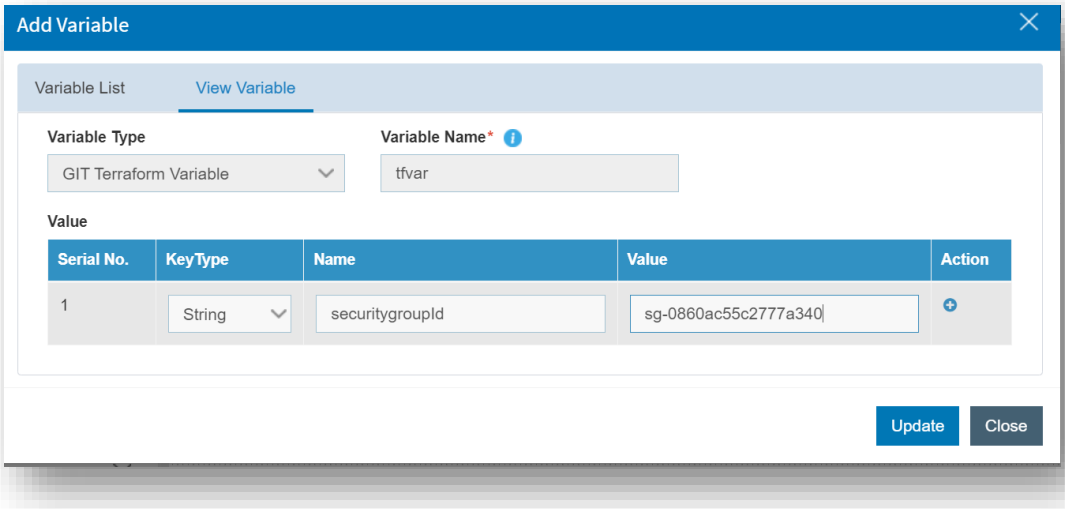


Figure 500 – Terraform Variables

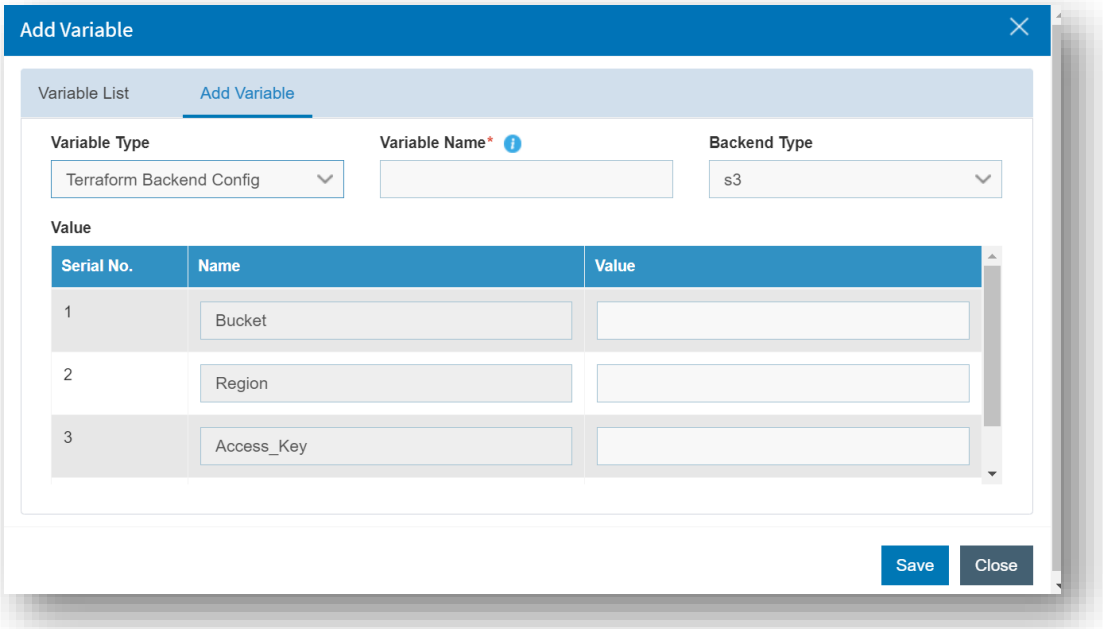


Figure 501 – TF Backend Config with S3 Backend Type

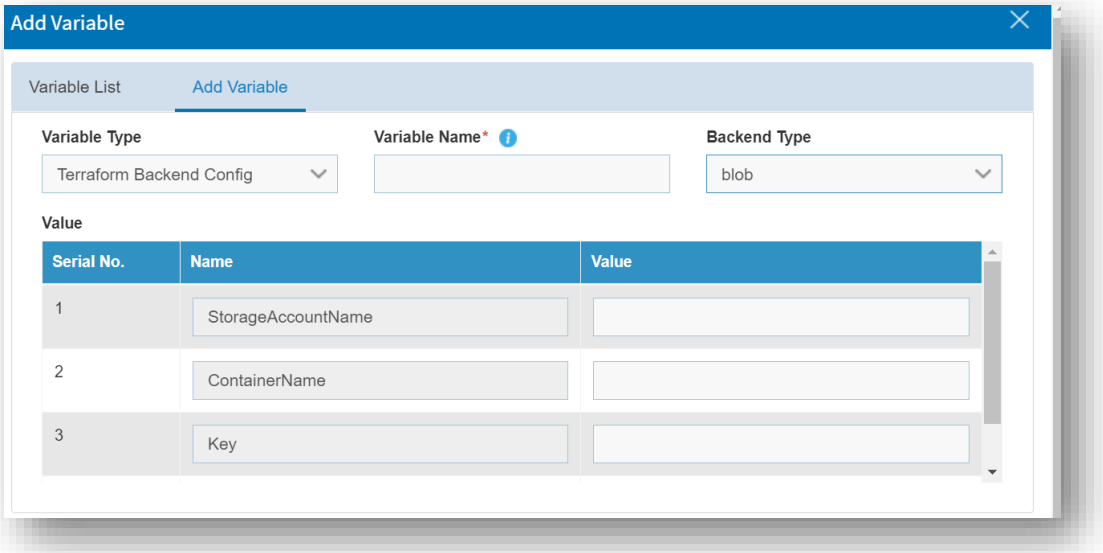


Figure 502 – TF Backend Config with Blob Backend Type

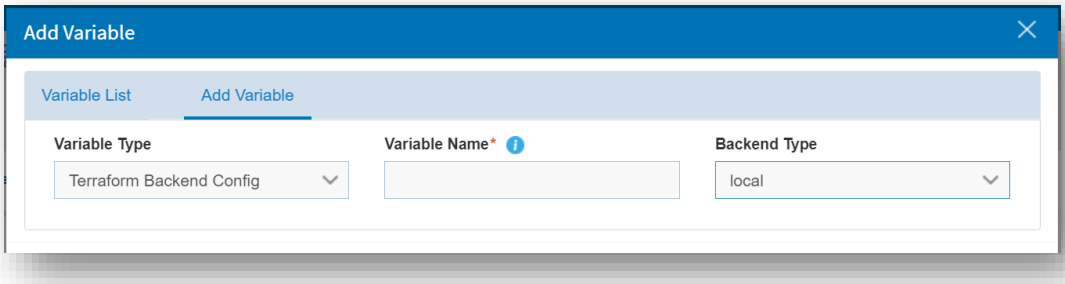


Figure 503 – TF Backend Config with Local Backend Type

After fill all the mandatory fields click on icon to save blueprint, below message appears-

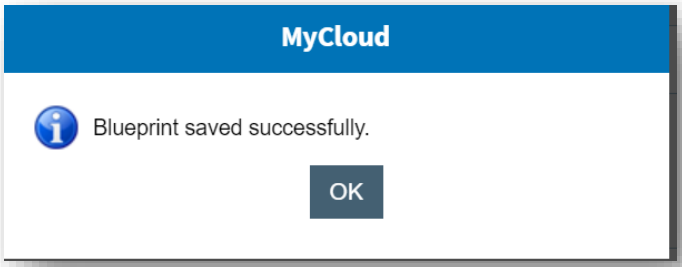


Figure 504 – Success Message

Once blueprint saved successfully then deploy blueprint as mentioned in section "Deploy Blueprint"

3. Support

To get support for this product, drop a mail to MyCloud-ProdSupport-Team@hcl-software.com.

HCLSoftware

hcltechsw.com