Setting Up the End User Portal

End User Portal

The End User Portal is a self-service portal that includes a catalog of services that you provide to the user. After an end user requests one of the services available, the End User Portal completes the service request workflow that you have configured for the user. This workflow may include approvals of the self-service provisioning request, assignment of the necessary compute, storage and network resources, and configuration of security and performance settings. After the service is provisioned, the end user can track the status of the services using the summary dashlets and summary reports on the landing page and through the reports available within the End User Portal.

Following are tasks that an end user can perform in the End User Portal:

- Provision virtual machines (VMs), application specific infrastructure, and bare metal servers
- Review and manage your service requests
- Upload and deploy OVFs and other images
- Monitor and create reports for your provisioned virtual and physical resources
- Approve service requests to provision infrastructure

Summary of Tasks to Set Up the End User Portal

As an administrator, following are the tasks you must complete to set up the End User Portal:

- Add user groups
- Add user accounts
- Set up end user permissions for specific tasks

- Set up the user interface of the portal

Setting Up User Accounts for the End User Portal

Creating a User Group

Step 1 Choose **Administration** > **Users and Groups**.

Step 2 On the **Users and Groups** page, click **User Groups**.

Step 3 Click **Add**.

Step 4 On the **Add Group** screen, complete the following fields:

Field Name	Description
Name field	The name of the group or the customer organization. You can include special characters such as ( ). & - _ `~ $% ^ {}! '@
Description field	The description of the group or the customer organization, if required.
Code field	A shorter name or code name for the group. This name is used in VM and hostname templates.
Cost Center field	(Optional) The cost center name or number if required. This name or number represents a cost center that a group is associated with. This name can be used in a VMware System policy for the VM naming convention. For more information about using a cost center for naming conventions, see Managing Policies.
Contact Email field	The email used to notify the group owner about the status of service requests and request approvals if necessary.
First Name field	The contact's first name.
Last Name field	The contact's last name.
Phone field	The contact's phone number.
Address field	The contact's address.
Group Share Policy drop-down list	Choose the group share policy for the users in this group. This drop-down list is populated only when you have created group share policies. For more information on creating this policy, see Creating a Group Share Policy.
Allow Resource Assignment To Users check box	If checked, the users of this group can have resources assigned to them and can own these resources. Also, these users can view resources belonging to the group. However, the resources among these users cannot be shared.

Step 5 Click **Add**.

What to do next

Repeat this procedure if you want to add more groups. For each group that you add, you can edit resource limits, manage tags, and customize the logo and application labels.

Adding Users

Before you begin

Ensure that you have created a group before you add a user to it.

Step 1 Choose **Administration** > **Users and Groups**.

Step 2 On the **Users and Groups** page, click **Users**.

The **Users** page displays the following information for all user accounts currently available in the system:

- Status
- Login name and access level
- Email address
- Date when the user account will be disabled
- Current status of the password, and the date on which the password will expire

Step 3 Click **Add**.

Step 4 On the **Add User** screen, complete the required fields, including the following:

Field Name	Description
User Role drop-down list	Choose the role type for the user.
User Group drop-down list	Select the group that the user will have access to. You can either select a group already available, or you can add a new group. **Note** This field is visible only when you select Service End-User or Group Admin as the user role.
MSP Organization drop-down list	Select the MSP organization that the user will manage. You can either select an organization that is currently available, or you can add a new organization. **Note** This field is visible only when you select **MSP Admin** as the user role.

Field Name	Description
Login Name field	The login name. You can include special characters such as ( ). & - _ `~ $% ^ {}! ' @
Password field	The password. **Note** If Lightweight Directory Access Protocol (LDAP) authentication is configured for the user, the password is validated only at the LDAP server, and not at the local server.
Confirm Password field	The password is entered again for confirmation.
User Contact Email field	The email address. **Note** The email address is required to notify the group owner about the service request status and to request approval.
First Name field	The first name.
Last Name field	The last name.
Phone field	The phone number of the user.
Address field	The office address of the user.
Set user disable date check box	Check to set the date and time when the user account must be disabled in the system. Disabling a user account means that the user can no longer log in into the system. A week prior to this date, an email message stating that the account will be disabled is sent to the user. This automatic email message is generated and sent by the **PeriodicNotificationToUserTask** system task. On the specified date and time, the user account is disabled automatically. If the user is logged in to the system on the date specified, then the login session is terminated automatically.
Locale drop-down list	Choose a language for the system specifically for this user. By default, the language is set to English. When this user logs in, the user interface is displayed in the language you selected. This locale selection applies only to this user.

Step 5 Click **Add**.

What to do next

Click a row with a user and click **Manage Profiles**, to optionally assign multiple roles for that user.

Setting Permissions for the End User Portal

After you create user accounts for the End User Portal, you must provide these accounts with permissions to perform specific tasks. The subsequent sections list out the permissions that you need to able for end users to perform tasks such as managing catalogs or managing VMs.

Permissions Required for Approvals

The following table shows a list of the available approval actions and permissions required:

Task	End User Permissions
Viewing Service Request Details	Default
Approving a Service Request	Default
Rejecting a Service Request	Default
Canceling a Service Request	Default
Resubmitting a Service Request	Default
Archiving a Service Request	Default
Adding Notes to a Service Request	Default
Rolling Back a Service Request	Default

Permissions Required for Catalogs

The following table shows a list of the available catalog actions and permissions required:

Task	End User Permissions
Viewing Catalog Details	Default
Creating a Service Request for a Standard Catalog	Default
Creating a Service Request for an Advanced Catalog	Default
Creating a Service Request for a Service Container Catalog	Default
Creating a Service Request for a Bare Metal Catalog	Default
Running a Deployability Assessment	Default
Adding a Standard Catalog Item	Additional permissions required

Task	End User Permissions
Adding an Advanced Catalog Item	Additional permissions required
Adding a Service Container Catalog Item	Additional permissions required
Adding a Bare Metal Catalog Item	Additional permissions required
Cloning a Catalog Item	Additional permissions required
Editing a Catalog	Additional permissions required
Deleting a Catalog	Additional permissions required

Permissions Required for Budget Entries

You can perform actions on the budget entries. For some actions, additional permissions are required. The following table shows a list of the available budget entry management actions and permissions required:

Task	End User Permissions
Adding a Budget Entry	Additional permissions required
Viewing a Budget Entry	Additional permissions required

Physical Resources

Permissions Required for CloudSense Reports

The following table shows a list of the available CloudSense management actions and permissions required:

Task	End User Permissions
Generating a CloudSense Report	Default
Opening a CloudSense Report	Additional permissions required
Emailing a CloudSense Report	Additional permissions required
Deleting a CloudSense Report	Additional permissions required

Permissions Required for Rack Servers

The following table shows a list of the available rack server management actions and permissions required:

Task	End User Permissions
Powering a Rack Server On or Off	Additional permissions required
Shutting Down a Rack Server	Additional permissions required
Performing a Hard Reset on a Rack Server	Additional permissions required

Task	End User Permissions
Power Cycling a Rack Server	Additional permissions required
Launching the KVM Console for a Rack Server	Additional permissions required

Permissions Required for Servers

The following table shows a list of the available server management actions and permissions required:

Task	End User Permissions
Powering a Server On or Off	Additional permissions required
Associating a Server with a Service Profile	Additional permissions required
Disassociating a Server	Additional permissions required
Launching the KVM Console for a Server	Additional permissions required

Permissions Required for Service Profiles

The following table shows a list of the available service profile management actions and permissions required:

Task	End User Permissions
Viewing Service Profile Details	Default
Disassociating a Service Profile from a Server	Additional permissions required
Requesting an Inventory Collection	Additional permissions required

Permissions Required for SnapMirrors

The following table shows a list of the available SnapMirror actions and permissions required:

Task	End User Permissions
Viewing SnapMirror Details	Default

Permissions Required for Storage Virtual Machines

The following table shows a list of the available SVM management actions and permissions required:

Task	End User Permissions
Viewing SVM Details	Default

Permissions Required for vFilers

The following table shows a list of the available NetApp vFiler actions and permissions required:

Task	End User Permissions
Viewing vFiler Details	Default
Setting up a vFiler	Additional permissions required
Setting up CIFS on a vFiler	Additional permissions required

Permissions Required for SVM Initiator Groups

The following table shows a list of the available SVM initiator group actions and permissions required:

Task	End User Permissions
Creating an SVM Initiator Group	Additional permissions required
Renaming an SVM Initiator Group	Additional permissions required
Binding a Port Set to an SVM Initiator Group	Additional permissions required
Unbinding a Port Set from an SVM Initiator Group	Additional permissions required

Permissions Required for SVM LUNs

The following table shows a list of the available SVM LUN actions and permissions required:

Task	End User Permissions
Viewing SVM LUN details	Default
Creating an SVM LUN	Additional permissions required
Resizing an SVM LUN	Additional permissions required
Cloning an SVM LUN	Additional permissions required
Taking an SVM LUN Offline or Online	Additional permissions required
Mapping an SVM LUN to an Initiator Group	Additional permissions required
Unmapping an SVM LUN from an Initiator Group	Additional permissions required
Toggling the Space Reservation on an SVM LUN	Additional permissions required

Permissions Required for SVM CIFS Shares

The following table shows a list of the available CIFS share actions and permissions required:

Task	End User Permissions
Creating a CIFS Share on an SVM	Additional permissions required

Task	End User Permissions
Setting CIFS Share Access on an SVM	Additional permissions required

Permissions Required for SVM Export Policies

The following table shows a list of the available SVM export policy actions and permissions required:

Task	End User Permissions
Creating an Export Policy for an SVM	Additional permissions required

Permissions Required for SVM Export Rules

The following table shows a list of the available SVM export rule actions and permissions required:

Task	End User Permissions
Creating an SVM Export Rule	Additional permissions required

Permissions Required for SVM Initiators

The following table shows a list of the available SVM initiator actions and permissions required:

Task	End User Permissions
Creating an SVM Initiator	Additional permissions required

Permissions Required for SVM Port Sets

The following table shows a list of the available SVM port set actions and permissions required:

Task	End User Permissions
Creating an SVM Port Set	Additional permissions required
Destroying an SVM Port Set	Additional permissions required
Adding a Port to an SVM Port Set	Additional permissions required
Removing a Port from an SVM Port Set	Additional permissions required

Permissions Required for SVM SIS Policies

The following table shows a list of the available SVM SIS policy actions and permissions required:

Task	End User Permissions
Creating an SIS Policy for an SVM	Additional permissions required

Permissions Required for SVM Snapshot Policies

The following table shows a list of the available SVM snapshot policy actions and permissions required:

Task	End User Permissions
Viewing SVM Snapshot Policy Details	Default
Creating a Snapshot Policy on an SVM	Additional permissions required
Enabling and Disabling a Snapshot Policy on an SVM	Additional permissions required
Creating a Snapshot Policy Schedule for an SVM Snapshot Policy	Additional permissions required

Permissions Required for SVM WWPN Aliases

The following table shows a list of the available SVM WWPN alias actions and permissions required:

Task	End User Permissions
Creating a WWPN Alias on an SVM	Additional permissions required

Permissions Required for SVM Volume Snapshots

The following table shows a list of the available SVM volume snapshot actions and permissions required:

Task	End User Permissions
Creating a Snapshot for an SVM Volume	Additional permissions required
Restoring an SVM Volume from a Snapshot	Additional permissions required
Using a Snapshot to Restore a File on an SVM Volume	Additional permissions required
Using a Snapshot to Partially Restore a File on an SVM Volume	Additional permissions required

Permissions Required for SVM Volumes

The following table shows a list of the available SVM volume actions and permissions required:

Task	End User Permissions
Viewing SVM Volume Details	Default
Creating an SVM Volume	Additional permissions required
Taking an SVM Volume Offline or Online	Additional permissions required
Resizing an SVM Volume	Additional permissions required
Cloning an SVM Volume	Additional permissions required

Task	End User Permissions
Creating a Multi-Volume Snapshot	Additional permissions required
Moving an SVM Volume	Additional permissions required
Mounting and Unmounting an SVM Volume	Additional permissions required
Enabling and Disabling Deduplication on an SVM Volume	Additional permissions required
Starting Deduplication on an SVM Volume	Additional permissions required
Stopping Deduplication on an SVM Volume	Additional permissions required
Creating a Qtree on an SVM Volume	Additional permissions required
Running Inventory Collection on an SVM Volume	Additional permissions required
Setting the Snapshot Reserve for an SVM Volume	Additional permissions required
Assigning an SVM Volume to a Group	Additional permissions required
Unassigning an SVM Volume from a Group	Additional permissions required

Permissions Required for vFiler Volumes

The following table shows a list of the available vFiler volume actions and permissions required:

Task	End User Permissions
Viewing vFiler Volume Details	Default
Creating a vFiler Volume	Additional permissions required
Resizing a vFiler Volume	Additional permissions required
Taking a vFiler Volume Offline or ONline	Additional permissions required
Enabling and Disabling Deduplication on a vFiler Volume	Additional permissions required
Exporting a vFiler Volume using NFS	Additional permissions required
Creating a vFiler Volume Snapshot	Additional permissions required
Resizing the Snapshot Reserve for a vFiler Volume	Additional permissions required
Creating a CIFS Share on a vFiler Volume	Additional permissions required
Setting CIFS Share Access on a vFiler Volume	Additional permissions required
Creating a Qtree on a vFiler Volume	Additional permissions required

Services

Permissions Required for Payment Information

The following table shows a list of the available payment actions and permissions required:

Task	End User Permissions
Viewing Payment Information Details	Additional permissions required
Making a Payment	Additional permissions required
Updating Payment Details	Additional permissions required
Checking Funds	Additional permissions required

Permissions Required for Service Requests

The following table shows a list of the available service request actions and permissions required:

Task	End User Permissions
Viewing Service Request Details	Default
Creating a Service Request for a Standard Catalog	Default
Creating a Service Request for an Advanced Catalog	Default
Creating a Service Request for a Service Container	Default
Creating a Service Request for a Bare Metal Catalog	Default
Canceling a Service Request	Default
Resubmitting a Service Request	Default
Archiving a Service Request	Default
Adding Notes to a Service Request	Default
Rolling Back a Service Request	Default

Permissions Required for User OVF Management

The following table shows a list of the available OVF management actions and permissions required:

Task	End User Permissions
Uploading an OVF File	Default
Deploying an OVF File	Default

Virtual Resources

Permissions Required for Application Containers

The following table shows a list of the available application container actions and permissions required:

Task	End User Permissions
Viewing Application Container Details	Default
Viewing Application Container Reports	Default
Managing an Application Container's Power	Default
Decommissioning an Application Container	Default
Cloning an Application Container	Default
Adding a VM to an Application Container	Default
Adding a Bare Metal Server to a Deployed APIC Application Container	Default
Deleting an Application Container	Default
Accessing a VM Console	Default
Editing Resource Limits	Default
Editing a Cost Model	Default
Adding an Application Container Contract	Default

Permissions Required for VMs

The following table shows a list of the available VM lifecycle management actions and permissions required:

Task	End User Permissions
Viewing VM Details	Default
Requesting Inventory Collection on a VM	Default
Launching the VM Client	Additional permissions required
Launching the VNC Console	Additional permissions required
Launching the VMRC HTML5 Console	Additional permissions required
Configuring the Lease Time for a VM	Additional permissions required
Managing a VM's Power	Additional permissions required
Creating a Snapshot	Additional permissions required

Task	End User Permissions
Reverting a Snapshot	Additional permissions required
Marking a Snapshot as Golden	Additional permissions required
Cloning a VM	Additional permissions required
Resizing a VM	Additional permissions required
Resynchronizing a VM	Additional permissions required
Creating a VM Disk	Additional permissions required
Adding a vNIC to a VM	Additional permissions required
Assigning a VM to a VDC	Additional permissions required
Moving a VM to a VDC	Additional permissions required
Cloning a VM as an Image	Additional permissions required
Converting a VM as an Image	Additional permissions required
Enabling and Disabling the VMRC Console on a VM	Additional permissions required
Mounting an ISO Image as a CD/DVD Drive	Additional permissions required
Unmounting an ISO Image as a CD/DVD Drive	Additional permissions required

Permissions Required for Images

The following table shows a list of the available image actions and permissions required:

Task	End User Permissions
Converting an Image to a VM	Additional Permissions Required
Deploying a VM from a Template	Additional Permissions Required

Setting Up the User Interface of the End User Portal

In addition to enabling permissions for end users, you can also enable certain elements in the End User Portal. These include:

- Configuring dashlets
- Configuring colors of dashlet reports
- Selecting catalogs

Configuring Dashlets

A dashlet is a report that you can display on the dashboard of End User Portal.

The available dashlets include:

- VMs
- UCS Servers
- Orders
- Catalogs
- Approvals

As an administrator, you can choose to display some or all of dashlets on the End User Portal to all users in all groups in the system, or to all users in specific user groups in the system. This procedure describes how to configure the dashlets for users within a specific group. To configure dashlets for all user groups, see Using the Global Dashlet Setup Option.

Note All available dashlets are added to a user group only when the user group contains a user. When a user group does not have even one user, dashlets do not appear for the user group.

To configure dashlets for a specific user group, do the following:

Step 1 Choose **Administration** > **Users and Groups**.

Step 2 On the **Users and Groups** page, click **User Groups**.

Step 3 Click the row with the user group for which you want to configure the dashlets.

Step 4 From the **More Actions** drop-down list, choose **Dashlet Setup**.
The **Dashlets Report** screen appears with all the available dashlets.

Note When the user group does not have any users, dashlets do not appear in the **Dashlets Report** screen. Add a user to the user group to configure the dashlets.

Step 5 On the **Dashlets Report** screen, select the dashlet you do not want for the user group and click the **X (Delete)** icon.

Step 6 To add a dashlet to the user group, click the **+ (Add)** icon. On the **Add Entry** screen, do the following:

a) From the Dashlet Name list, select the dashlet type.
b) In the Dashlet Data Report section, click the **+ (Add)** icon.
c) In the Add Entry to Dashlet Data Report, select the entry (status, type, or state depending on the dashlet type you chose), assign a color to the entry, and click **Submit**.
d) Assign colors to the rest of the entries.
e) After assigning colors to the entries for the dashlet, click **Submit**.

Step 7 On the **Dashlets Report** screen, make sure the **Publish to end users** box is checked.

This option enables the dashlets to appear on the End User Portal for users of this group.

Step 8 Click **Submit**.

Changing Colors of Dashlet Reports

As an administrator, you can choose to change the color for each entry in the dashlet reports that appear on the End User Portal. An entry might be a status (In Progress or Completed), a category type (Standard or Advanced), or a power state (on or off) depending on the dashlet. For example, for the VMs dashlet, you can assign red for the ON state and gray for the Off state.

To change colors for entries in a dashlet report, do the following:

Step 1 Choose **Administration** > **Users and Groups**.

Step 2 On the **Users and Groups** page, click **User Groups**.

Step 3 Click the row with the user group for which you want to configure the dashlet.

Step 4 From the **More Actions** drop-down list, choose **Dashlet Setup**.
The **Dashlets Report** screen appears with all the available dashlets.

Step 5 On the **Dashlets Report** screen, select the dashlet and click **Edit**.
The **Add Entry screen** appears.

Step 6 On the **Add Entry** screen, do the following:

a) In the Add Entry to Dashlet Data Report area, select the entry, assign a color to the entry, and click **Submit**.
b) Assign colors for the rest of the entries.
c) After assigning colors to the entries for the dashlet, click **Submit**.

Step 7 Make sure the **Publish to end users** box is checked.

This option enables the changes in the dashlet to appear on the End User Portal for users of this group.

Step 8 Click **Submit**.

Selecting Catalogs for End User Portal

As an administrator, you can enable folders and catalogs within these folders to appear on the dashboard of the end user portal. You can enable a maximum of 25 catalog folders and a maximum of 25 catalogs within a folder to appear on the dashboard of the end user portal.

To configure catalogs to appear on the dashboard of the end user portal, do the following:

Step 1 Choose **Administration** > **Users and Groups**.

Step 2 On the **Users and Groups** page, click **User Groups**.

Step 3 If you have MSP-mode enabled, then choose the **Customer Organizations** tab.

Step 4 Click the row with the user group for which you want to configure the catalogs.

Step 5 From the **More Actions** drop-down list, choose **Catalog Setup**.
The **Configure Catalog** screen appears with the list of catalogs available for the user group.

Note If catalogs have not been assigned to the user group, the **Configure Catalog** screen is empty.

Step 6 On the **Configure Catalog** screen, check the catalogs that must appear on the End User Portal dashboard.

Step 7 Click **Submit**.

When users that belong to the group login to the end user portal, the dashboard is populated with the selected catalogs and catalog folders.