



[Full Product Name] [1.0.0]

[Manual Title]

[Manual Edition Date]

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Adaptive Computing Enterprises, Inc.
1712 S. East Bay Blvd., Suite 300
Provo, UT 84606
+1 (801) 717-3700
www.adaptivecomputing.com



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Welcome

Welcome to *[Full Product Name] [1.0.0]*, which lets you...

This guide is intended for...

The following sections will help you quickly get started with [Product Name]:

About [Product Name]

Gives an overview about [Product Name] basics (see [\[Product Name\] overview on page vii](#)).

Installing [Product Name]

Instructs on how to install [Product Name].

Configuring [Product Name]

Explains how to configure and set up [Product Name].

Common [Product Name] tasks

Contains helpful task-based information for the most common [Product Name] functions.

[Product Name] references

Contains useful examples, configurations, use cases and references relating to [Product Name] use and setup.

About [Product Name]

[Product Name] overview

Related topics

- [Welcome on page v](#)

4 – Images

4.1 About image management

An image is used to track the different types of operating systems and hypervisors available in a data center. It also tracks the virtual machines that are available on the hypervisors. In [Product Name], you can create and manage Moab images and then make them available to users through service templates. (For more information, see [12.1 About service templates on page xxiii](#).)

Associated tasks

The following sections describe how to create, edit, and delete images in [Product Name].

- [Creating a new image on page ix](#)
- [Deleting an image on page x](#)
- [Modifying existing images on page xi](#)

References

These sections contain detailed information about the fields that you can use as references for the image management tasks.

- [Fields: Add New/Edit Image on page xii](#)
- [Fields: Image Management on page xvi](#)

Related topics

- [12.1 About service templates on page xxiii](#)

4.2 Image tasks

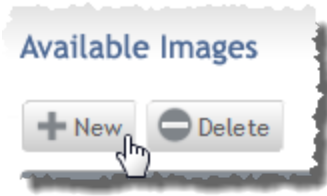
Creating a new image

Context

When you need to create a new Moab image, you can go to the [Product Name] Image Management page. Here, you can specify the image name, type, OS type, and provisioning details (for either xCAT or a custom provisioning manager). For more information, see [4.1 About image management on page ix](#).

To create a new image

1. Go to the Image Management page (**Administration > Image Management**).
2. Select **New**.



The Create New Image page appears.

3. Complete the fields, as necessary. For details, see [Fields: Add New/Edit Image on page xii](#).
4. (Optional) If you want to add any custom attributes, click **Add** under the "Custom Attributes" heading. For details, see [Custom Attributes on page xvi](#).
5. When you are finished, click **Save**.

Your new image now appears in the list of images on the Image Management page (see [Fields: Image Management on page xvi](#)).

Related topics

- [Fields: Add New/Edit Image on page xii](#)
- [Modifying existing images on page xi](#)
- [Deleting an image on page x](#)
- [4.1 About image management on page ix](#)

Deleting an image

Context

When you no longer need a certain image, you can delete it from the catalog.

To delete images

1. Go to the Image Management page (**Administration > Image Management**).
2. Select the image you want to delete. (Click once to select; click again to deselect.)
3. Choose **Delete**.



A confirmation message appears and says that the image was deleted successfully.

Related topics

- [Fields: Image Management](#) on page xvi
- [Creating a new image](#) on page ix
- [Modifying existing images](#) on page xi
- [4.1 About image management](#) on page ix

Modifying existing images

Context

In the case that you make modifications to an existing image, you can go back into the image form to make the changes you need.

To modify an existing image

1. Go to the Image Management page (**Administration > Image Management**).
2. Double-click the image you want to modify.

The Edit Image page opens.

3. Update the fields, as necessary. For details, see [Fields: Add New/Edit Image](#) on page xii.
4. When you are finished, click **Save**.

Related topics

- [Fields: Add New/Edit Image](#) on page xii
- [Fields: Image Management](#) on page xvi
- [Creating a new image](#) on page ix
- [Deleting an image](#) on page x
- [4.1 About image management](#) on page ix

4.3 Image resources

Fields: Add New/Edit Image

Path: Administration > Image Management > New/Edit

Image 5-1: Create New / Edit Image page

The screenshot shows the 'Create New Image' page in Moab Viewpoint 7.0. The page is divided into two main sections: 'Section Title' and 'Provisioning Details'. The 'Section Title' section includes a dropdown for 'Type' (set to 'Stateful'), a text input for 'Image Name' (set to 'New Image'), text inputs for 'OS Type' and 'Features', radio buttons for 'Status' (set to 'Active'), and checkboxes for 'Machine Type' (Virtual Machine, Physical Machine, and Hypervisor). The 'Virtualized Images' section has a dropdown menu showing 'rhels6.2-compute-stateful'. The 'Provisioning Details' section includes a dropdown for 'Provisioning Manager' (set to 'xCAT'), and text inputs for 'Operating System', 'Architecture', 'Profile', 'Hypervisor Type', 'Hypervisor Group Name', and 'VM Group Name'. There is also a 'Custom Attributes' table with columns for 'Name' and 'Value'. The page has a navigation bar at the top with 'New', 'View', 'History', and 'Administration' tabs. At the bottom right, it says 'Moab Viewpoint 7.0'.

The Create New Image (or Edit Image) page lets you make specifications about the image you are creating or editing. You can specify the image name, type, OS type, status, provisioning details (for either xCAT or a custom provisioning manager), etc.

Form fields

Type

Lets you specify the type of the image. You can choose one of the following:

Option	Description
Stateful	<p>Specifies that you want a stateful image.</p> <p>Stateful images are deployed with a distribution-specific installation mechanism (for example, Anaconda or Kickstart for RHEL, WIM or WinPE for Windows Server, AutoYAST for SLES, etc.).</p>
Stateless	<p>Specifies that you want a stateless image.</p> <p>Stateless images are diskless images that boot from a network. When the machine boots, it downloads a compressed root image and expands it into memory; the machine continues booting from the contents of the image.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>i Stateless images will not allow for changes made to the machine's main filesystem to persist across reboots.</p> </div>
Statelite	<p>Specifies that you want a statelite image.</p> <p>A statelite image boots with a layered filesystem consisting of a shared read-only portion and a guest-specific read-write portion. These two portions are combined using a union filesystem.</p>
VM Template	<p>Specifies that you want a VM template image</p> <p>A VM template (linked-clone) image is a single disk image that serves as the basis for cloning. When the new machine is created, disks are made that are read-write layers on top of the original (rather than copies from the original disk). In this way, part of the disk presented to the guest is shared between all clones of the image, and part is individual to each clone.</p> <p>This type is much quicker than stateful provisioning.</p> <p>Choosing "VM Template" will enforce a "Virtual Machine" Machine Type</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>i When you specify "VM Template" as the Type, a new field appears: Template Name.</p> </div>

Template Name

Lets you specify a name used to identify the image VM template. This field is required.

The VM template name must be unique between image templates.

i This field is hidden unless you specify "VM Template" as the image [Type](#).

Image Name

Lets you specify the name (up to 150 characters) used to identify the image. This field is required.

The name you specify must contain no spaces, and must be unique between images.

OS Type


Lets you specify the type of the operating system (for example, "linux" or "windows"). This field is required.

Features

Lets you specify the set of features used by the provisioning manager. This list is comma-delimited.


Status




Lets you specify whether an image is active or inactive. Choose one of these options:

Option	Description
Active	Specifies that the image is active and available for use. This is the default setting.
Inactive	Specifies that the image is not active and should not be used. <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">  If you mark an image as "Inactive," then all service templates that are currently using the image will also become inactive. </div>

Machine Type

Lets you specify whether or not the image can be used to provision a physical machine, virtual machine, or hypervisor.

 You must select either VM or PM (or both) for every image you create/edit.

Option	Description
Virtual Machine	Specifies that you want the image to be able to provision a virtual machine. (An image can be both a virtual machine and a physical machine.) <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">  This option is automatically enforced when you specify "VM Template" as the <u>Type</u>. </div>
Physical Machine	Specifies that you want the image to be able to provision physical machine. (An image can be both a virtual machine and a physical machine.) <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">  This option is automatically enforced when you specify "Hypervisor." </div>
Hypervisor	Specifies that you want the image to be a hypervisor that contains other virtual machine images. If you select "Hypervisor," the "Physical Machine" option will be enforced. [Product Name] will not allow a hypervisor that is not a physical machine. <div style="border: 1px solid black; padding: 5px; margin-top: 5px;">  When you specify "Hypervisor," a new field appears: <u>Virtualized Images</u>. </div>

Virtualized Images

Lets you specify which virtualized images you want to add to your hypervisor.


 This field will not appear unless you specify "Hypervisor" as the [Machine Type](#).

This field is a drop-down that contains all the virtual machine images in your catalog. To add one to the hypervisor, select the image you want and click **Add** (+). To remove a virtualized image, click the **Remove** icon (x).

Provisioning Details

Provisioning Manager

Lets you specify if you want to use xCAT as your provisioning manager, or if you want to use a custom provisioner (with your own custom attributes). Choose one of these options:

Option	Description
xCAT	Specifies that you want to use xCAT as your provisioning manager. Selecting this option will cause several pre-determined attributes to appear on the form. However, you can still add your own custom attributes, if you wish (for details, see Custom Attributes). This option is the default option.
Custom	Specifies that you want to use your own custom provisioning manager. Selecting this option allows you to name your custom provisioner (see Provisioner Name), and to define your own custom attributes (see Custom Attributes). <div style="border: 1px solid black; padding: 5px; margin-top: 5px;"> If you select "Custom," you must specify at least one Custom Attributes field.</div>

Provisioner Name

Lets you specify a text name for your custom provisioning manager. This field is required.

Operating System

Lets you specify the name of the operating system according to xCAT. This field is required.

Architecture

Lets you specify the xCAT architecture (for example, "x86_64"). This field is required.

Profile

Lets you specify the xCAT profile you want to use for the image. This field is required.

Hypervisor Type

Lets you specify the hypervisor type (for example, "esx"). This field is required when the [Machine Type](#) is "Hypervisor."

Hypervisor Group Name

Lets you specify the name of the xCAT hypervisor group. This field is required when the [Machine Type](#) is "Hypervisor."

VM Group Name

Lets you specify the name of the xCAT VM group. This field is required when the [Machine Type](#) is "Hypervisor."

Custom Attributes

Lets you define and add any custom attributes to your image provisioning manager. For example, you may want to add a "Comment" attribute and add helpful text comments as the attribute value.

This field contains two text boxes for each custom attribute you add:

Field	Description
Name	Specifies the name of the custom attribute.
Value	Specifies the value of the custom attribute.

To add a custom attribute click **Add** (+), and specify values for the Name and Value boxes. To remove a custom attribute, click the **Remove** icon (✖).

Save

Lets you save the specifications of your new or modified image.

Cancel

Cancels your action to add/edit the image, and takes you back to the Image Management page.

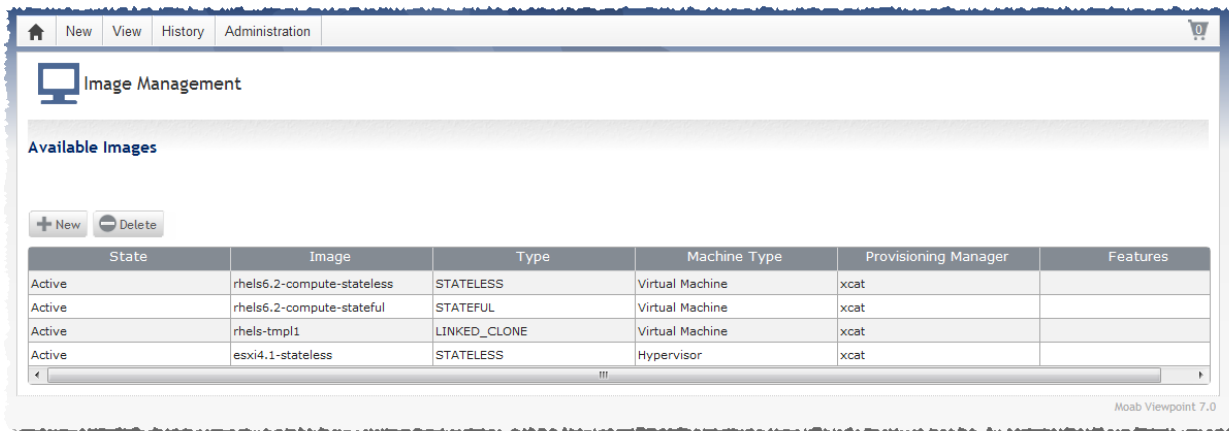
Related topics

- [Creating a new image on page ix](#)
- [Modifying existing images on page xi](#)
- [4.1 About image management on page ix](#)

Fields: Image Management

Path: Administration > Image Management

Image 5-1: Image Management



The Image Management page contains a list of all available images in Moab. From this page, you can create and manage your images (which map to actual xCat image files) so that you can make them available to users through service templates. On this page, you can do the following:

- Create a new image (see [Creating a new image on page ix](#)).
- Modify an existing image (see [Modifying existing images on page xi](#)).
- Delete images you no longer need (see [Deleting an image on page x](#)).

List of available images

Displays a summary of all the images that exist in Moab. The following fields are displayed:

Field	Description
State	Either Active , or Inactive .
Image	Name of the image.
Type	One of Stateful , Stateless , Statelite or VM Template .
Machine Type	Type of machine the image can be used to provision: <ul style="list-style-type: none"> • Virtual Machine • Physical Machine • Hypervisor
Provisioning Manager	Name of the provisioning manager (for example, "xcat").
Features	List of features used by the provisioning manager.

If you want to modify an image, double click it.

4 – Images

New

Lets you create a new image (for details, see [Creating a new image on page ix](#)).

When you click the **New** button, [Product Name] takes you to the Create New Image page.

Delete

Lets you delete a selected image (for details, see [Deleting an image on page x](#)).

You can select an image to delete it. Click once to select an image; click again to deselect.

 This option is grayed out until you have selected an image.

Related topics

- [Creating a new image on page ix](#)
- [Modifying existing images on page xi](#)
- [Deleting an image on page x](#)
- [4.1 About image management on page ix](#)

7 – Roles

7.1 About roles

Delete this text and replace it with your own content.

[Product Name] is delivered with three default roles:

7.2 Role tasks

Creating a new role

Context

(This is the Drop-down text)

To create a new role

1. Go to the Role Management page (**Administration > Role Management**). For more information, see [Fields: Role Management on page xxi](#).
2. Select **New**.


The New Role page appears.
3. Under the **Role Details** tab, specify a name for the role.
4. Complete the fields, as necessary. For details, see [Fields: Role details on page xxi](#).
5. Click **Next**.



[note abt trying to leave a tab with unfinished work and how you can't move to the next tab until you finish with this one]

The **Moab Web Services Permissions** tab opens.

6. Specify the MWS permissions you want to include in the role. For details, see [Fields: Moab Web Services Permissions on page xxi](#).
7. Click **Next**.

 [note abt trying to leave a tab with unfinished work and how you can't move to the next tab until you finish with this one]

The **[Product Name] Permissions** tab opens.

8. Specify the [Product Name] permissions you want to include in the role. For details, see [Fields: \[Product Name\] Permissions on page xxi](#).
9. When you are finished with the New Role form, click **Save** to save your changes.

Related topics

Deleting a role

Context

(This is the Drop-down text)

To delete a new role

1. Go to the Role Management page (**Administration > Role Management**). For more information, see [Fields: Role Management on page xxi](#).
2. Select the role(s) you want to delete. (Click once to select; click again to deselect.)
3. Choose **Delete**.
4. [Confirmation???

Related topics

Modifying an existing role

Delete this text and replace it with your own content.

7.3 Role references

Fields: Moab Web Services Permissions

Delete this text and replace it with your own content.

Fields: [Product Name] Permissions

Delete this text and replace it with your own content.

Fields: Role details

Path: Administration > Role Management > New/Modify

On the Role details tab, you can...

Image 6-1: Role details

Name

Description

Next

Save

Cancel

Related topics

Fields: Role Management

Path: Administration > Role Management

Image 6-1: Role Management

The Role Management page... On this page, you can do the following:

- Create a new role (see [Creating a new role on page xix](#)).
- Modify an existing role (see [Modifying an existing role on page xx](#)).
- Delete roles you no longer need (see [Deleting a role on page xx](#)).

New

Delete

Modify

List of available roles

Displays a summary of all the user permission roles that exist in Moab. The following fields are displayed:

Field	Description
Name	Name of the role.
Description	Text description of the role.

Related topics

12 – Service templates

12.1 About service templates

A service is one or more virtual machines or physical machines that are provisioned and managed as a unit. Services can include OS storage, networking, and extra storage.

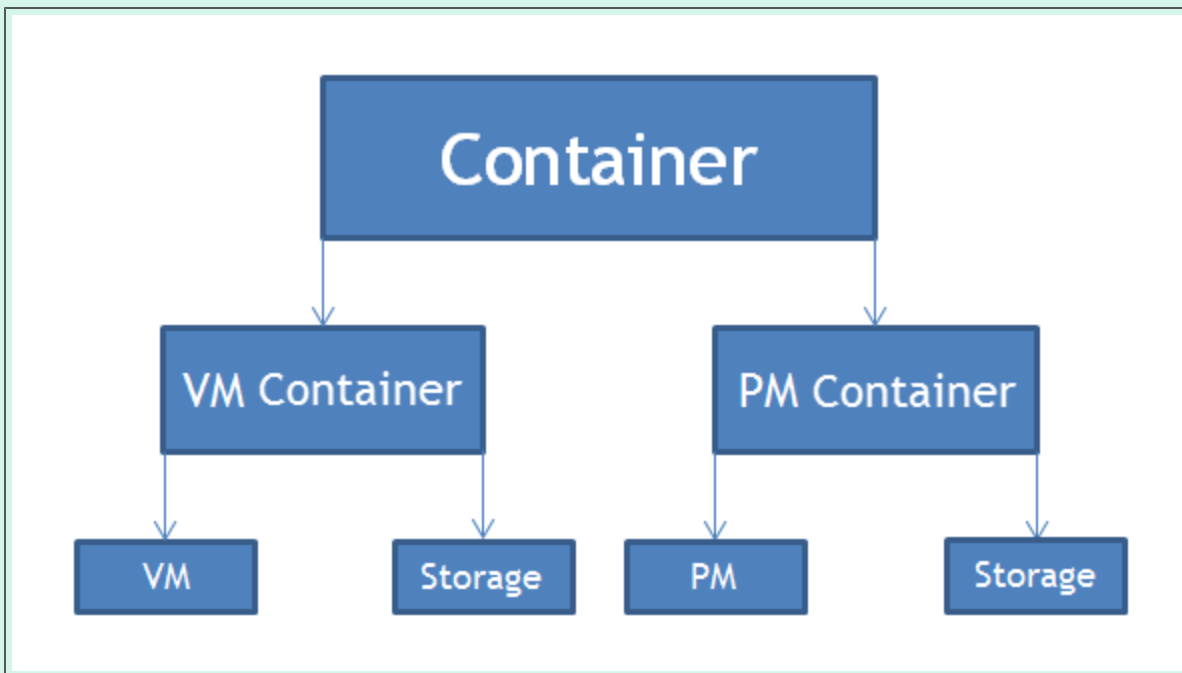
A service template is simply a service with pre-defined parameters and settings that [Product Name] users can use when they request a service. The [Product Name] Catalog Management page is a user interface method of creating and managing service templates (comprised of VMs, PMs, virtual containers, and storage) and submitting them for use.

Service templates must be a container type in order for users to request them. If you want to make a template of another service type (VM, PM, or storage) accessible to users, place it – and any other service templates to be included – inside a separate container template (for details, see [Creating a container template on page xxviii](#)).

Example scenario

Let's say you want to create a LAMP stack service that includes a virtual machine with storage to hold a web server, and a physical machine with storage to hold the corresponding database. In this case, you would want to create the following templates:

- A VM template
- A storage template (for the web server)
- A PM template
- Another storage template (for the corresponding database)
- A container template for the VM template and the web server storage template
- A container for the PM template and the database storage template
- A container to contain the two container templates.



Associated tasks

The following sections describe how to create, edit, copy, and delete service templates.

- [Adding new fields](#) on page xxvi
- [Copying service templates](#) on page xxvii
- [Creating a container template](#) on page xxviii
- [Creating a physical machine template](#) on page xxix
- [Creating a storage template](#) on page xxx
- [Creating a virtual machine template](#) on page xxxi
- [Deleting service templates](#) on page xxxii
- [Modifying existing service templates](#) on page xxxiii
- [Searching and sorting service templates](#) on page xxxiv

References

These sections contain detailed information about the form fields necessary for creating, copying, editing, and deleting service templates in [Product Name]. Use them as references for the service template tasks.

- [Fields: Catalog Management](#) on page xxxv
- [Fields: Catalog options](#) on page xxxvii
- [Fields: Required resources for PMs](#) on page liv
- [Fields: Required resources for storage](#) on page lix
- [Fields: Required resources for VM templates](#) on page lxiii
- [Fields: Sequence](#) on page lxvii
- [Fields: Summary](#) on page lxix
- [Fields: Template properties](#) on page lxxii
- [Fields: Templates included](#) on page lxxiii
- ["ID" field keywords](#) on page lxxvii

Related topics

12.2 Service template tasks

Adding new fields

Context

When you create a VM, PM, or storage template, certain fields are required. You can modify some features of these fields, but you cannot remove the fields from the template. You can, however, add custom fields to your VM, PM, and storage templates. For information about custom field options and configurations, please see [Fields: Catalog options on page xxxvii](#).

To add a new field to your service template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Go to the **Resources** tab for the service template you are creating/editing.

i You will not be able to access the Resources tab unless you have specified "Virtual machine," "Physical machine," or "storage" in the Template properties as the **Template type** (for details, see [Fields: Template properties on page lxxii](#)).

3. Navigate to the bottom of the page, and click **Add field** under the Catalog options heading.
A new field form appears.
4. In the **Field type** field, specify the type of field you want to create. (By default, the **Field type** will be "Text.") For a list of the field types, see [Fields: Catalog options on page xxxvii](#).
5. Complete the other fields, as necessary. For details, see [Fields: Catalog options on page xxxvii](#).
6. To move a new field up or down in order, click the () buttons.
7. If you need to remove a field, click **Delete field**.
8. When you are finished adding fields, go to the **Summary** tab. Do one of the following:
 - If you want to preview the form with your new fields, click **Preview form**.
 - If you are satisfied with your template, click **Save template**.

Related topics

- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [Fields: Catalog options on page xxxvii](#)
- [Fields: Template properties on page lxxii](#)
- [12.1 About service templates on page xxxiii](#)

Copying service templates

Context

If you need to, you can duplicate (copy) existing service templates.

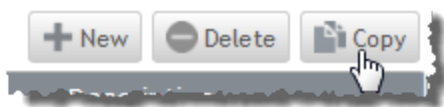
Use case

Let's say you have a complex service template. You need to create another that is almost identical to the first, minus a few small alterations. You can copy the first template. All of the settings from the first template are copied over to a new template that you can then edit to meet your specifications.

Copied templates are given the same name as the template they were copied from plus the copy number in brackets. For example, if you copied a template "myTemplate-01", the first-time copy would produce a duplicate template named "myTemplate-01[1]".

To copy a service template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Select the service template(s) you want to copy. (Click once to select; click again to deselect.)
3. Choose **Copy**.



Duplicated service templates now appear in the list of service templates.

4. (Optional) You can rename the copied template by modifying it (for details, see [Modifying existing service templates on page xxxiii](#)).

Related topics

- [Deleting service templates on page xxxii](#)
- [Modifying existing service templates on page xxxiii](#)
- [Creating a container template on page xxviii](#)
- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [Fields: Catalog Management on page xxxv](#)
- [12.1 About service templates on page xxiii](#)

Creating a container template

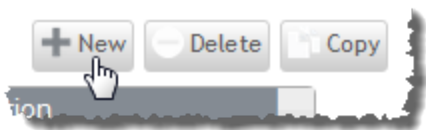
Context

Service templates can contain other service templates. Any template that contains other templates is called a "container" template. Container templates can hold VM, PM, and storage templates, as well as other container templates. For more information, see [12.1 About service templates on page xxiii](#).

i Only container type templates are available for users when they request a service from a template.

To create a container template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Select **New**.



The Create Service Template page appears.

3. Under the **Template properties** tab, specify "Container" as the **Template type**.
4. Complete the other fields, as necessary. For details, see [Fields: Template properties on page lxxii](#).
5. Move to the **Templates included** tab.
6. Select the templates (containers, VMs, PMs, and storage) that you want to include in this container template. For details, see [Fields: Templates included on page lxxiii](#).
7. Move to the **Sequence** tab.
8. Specify the dependencies between the templates. For details, see [Fields: Sequence on page lxvii](#).
9. Move to the **Workload proximity** tab.
10. Specify proximity rules to control the service's setting in relation to other services. For details, see [Fields: Workload proximity on page lxxv](#).
11. Move to the **Summary** tab.
Here you can review the specifications of your container template. For details, see [Fields: Summary on page lxix](#).
12. If you are satisfied with your container template setup, click **Save template**.

Your new container template now appears in the list of service templates on the Catalog Management page (see [Fields: Catalog Management on page xxxv](#)).

Related topics

- [Creating a virtual machine template](#) on page xxxi
- [Creating a physical machine template](#) on page xxix
- [Creating a storage template](#) on page xxx
- [Fields: Template properties](#) on page lxxii
- [Fields: Templates included](#) on page lxxiii
- [Fields: Sequence](#) on page lxvii
- [Fields: Summary](#) on page lxix
- [12.1 About service templates](#) on page xxiii

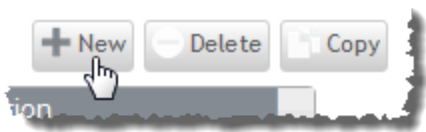
Creating a physical machine template

Context

You can create physical machine templates to add to container templates in order to make them available for users. For more information, see [12.1 About service templates](#) on page xxiii.

To create a physical machine template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Select **New**.



The Create Service Template page appears.

3. Under the **Template properties** tab, specify "Physical machine" as the **Template type**.
4. Complete the other fields, as necessary. For details, see [Fields: Template properties](#) on page lxxii.
5. Move to the **Resources** tab, and do the following:
 - a. Complete the **Required resources** fields, as necessary. For details, see [Fields: Required resources for PMs](#) on page liv.
 - b. (Optional) If you want to add any custom fields to the template, click **Add field** under the Catalog options heading. For details about adding new fields, see [Adding new fields](#) on page xxvi.
6. Move to the **Workload proximity** tab.
7. Specify proximity rules to control the service's setting in relation to other services. For details, see [Fields: Workload proximity](#) on page lxxv.
8. When you are finished adding fields, go to the **Summary** tab. Do one of the following:
 - If you want to preview the form, click **Preview form**.
 - If you are satisfied with your template, click **Save template**.

Your new physical machine template now appears in the list of service templates on the Catalog Management page (see [Fields: Catalog Management on page xxxv](#)).

Related topics

- [Creating a container template on page xxviii](#)
- [Creating a virtual machine template on page xxxi](#)
- [Creating a storage template on page xxx](#)
- [Adding new fields on page xxvi](#)
- [Fields: Required resources for PMs on page liv](#)
- [Fields: Template properties on page lxxii](#)
- [Fields: Summary on page lxix](#)
- [12.1 About service templates on page xxiii](#)

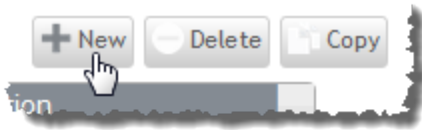
Creating a storage template

Context

You can create storage templates to add to container templates in order to make them available for users. For more information, see [12.1 About service templates on page xxiii](#).

To create a storage template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Select **New**.



The Create Service Template page appears.

3. Under the **Template properties** tab, specify "Storage" as the **Template type**.
4. Complete the other fields, as necessary. For details, see [Fields: Template properties on page lxxii](#).
5. Move to the **Resources** tab, and do the following:
 - a. Complete the **Required resources** fields, as necessary. For details, see [Fields: Required resources for storage on page lix](#).
 - b. (Optional) If you want to add any custom fields to the template, click **Add field** under the Catalog options heading. For details about adding new fields, see [Adding new fields on page xxvi](#).
6. Move to the **Workload proximity** tab.
7. Specify proximity rules to control the service's setting in relation to other services. For details, see [Fields: Workload proximity on page lxxv](#).

8. When you are finished adding fields, go to the **Summary** tab. Do one of the following:
 - If you want to preview the form, click **Preview form**.
 - If you are satisfied with your template, click **Save template**.

Your new storage template now appears in the list of service templates on the Catalog Management page (see [Fields: Catalog Management on page xxxv](#)).

Related topics

- [Creating a container template on page xxviii](#)
- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Adding new fields on page xxvi](#)
- [Fields: Required resources for storage on page lix](#)
- [Fields: Template properties on page lxxii](#)
- [Fields: Summary on page lxix](#)
- [12.1 About service templates on page xxiii](#)

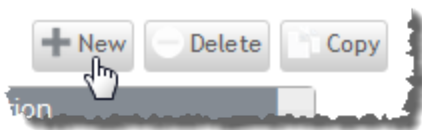
Creating a virtual machine template

Context

You can create virtual machine templates to add to container templates in order to make them available for users. For more information, see [12.1 About service templates on page xxiii](#).

To create a virtual machine template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Select **New**.



The Create Service Template page appears.

3. Under the **Template properties** tab, specify "Virtual machine" as the **Template type**.
4. Complete the other fields, as necessary. For details, see [Fields: Template properties on page lxxii](#).
5. Move to the **Resources** tab, and do the following:
 - a. Complete the **Required resources** fields, as necessary. For details, see [Fields: Required resources for VM templates on page lxiii](#).
 - b. (Optional) If you want to add any custom fields to the template, click **Add field** under the Catalog options heading. For details about adding new fields, see [Adding new fields on page xxvi](#).

6. Move to the **Workload proximity** tab.
7. Specify proximity rules to control the service's setting in relation to other services. For details, see [Fields: Workload proximity on page lxxv](#).
8. When you are finished adding fields, go to the **Summary** tab. Do one of the following:
 - If you want to preview the form, click **Preview form**.
 - If you are satisfied with your template, click **Save template**.

Your new virtual machine template now appears in the list of service templates on the Catalog Management page (see [Fields: Catalog Management on page xxxv](#)).

Related topics

- [Creating a container template on page xxviii](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [Adding new fields on page xxvi](#)
- [Fields: Required resources for VM templates on page lxiii](#)
- [Fields: Template properties on page lxxii](#)
- [Fields: Summary on page lxix](#)
- [12.1 About service templates on page xxiii](#)

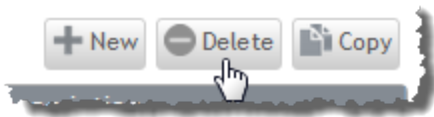
Deleting service templates

Context

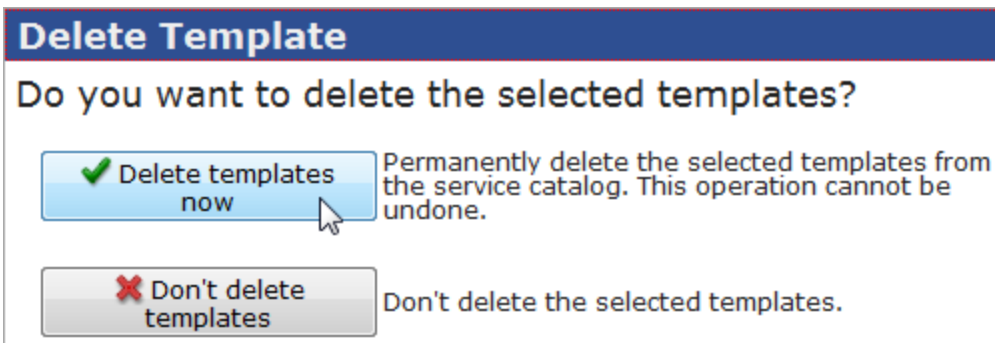
When you no longer need to use a service template, you can delete it from the catalog.

To delete service templates

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Select the service template(s) you want to delete. (Click once to select; click again to deselect.)
3. Choose **Delete**.



When you choose **Delete**, a confirmation message appears.



4. Select **Delete templates now**, and the templates are removed from the table. To cancel, select **Don't delete templates**.

i You will not be allowed to delete a service template that is included in a container type template. You will either have to modify the container template so that it no longer includes the service template you want to delete, or delete the container template entirely.

Related topics

- [Copying service templates](#) on page xxvii
- [Creating a container template](#) on page xxviii
- [Creating a virtual machine template](#) on page xxxi
- [Creating a physical machine template](#) on page xxix
- [Creating a storage template](#) on page xxx
- [Fields: Catalog Management](#) on page xxxv
- [12.1 About service templates](#) on page xxiii

Modifying existing service templates

Context

In the case that you make modifications to an existing template, you can go back into the template form to make the changes you need.

To modify an existing service template

1. Go to the Catalog Management page (**Catalog > Catalog Management**).
2. Double-click the service template you want to modify.

The Modify Service Template page opens.

3. Update the fields, as necessary. For details, see [Fields: Template properties](#) on page lxxii, [Fields: Templates included](#) on page lxxiii, [Fields: Sequence](#) on page lxvii, and [Fields: Required resources for VM templates](#) on page lxiii, [Fields: Required resources for PMs](#) on page liv, or [Fields: Required resources for storage](#) on page lix.

i The fields in the Modify Service Template page are the same as in the Create Service Template page.

4. When you are finished adding fields, go to the **Summary** tab. Do one of the following:
 - If you want to preview the form, click **Preview form**.
 - If you are satisfied with your template, click **Save template**.

Related topics

- [Copying service templates on page xxvii](#)
- [Fields: Required resources for VM templates on page lxiii](#)
- [Fields: Required resources for PMs on page liv](#)
- [Fields: Required resources for storage on page lix](#)
- [Fields: Catalog options on page xxxvii](#)
- [Fields: Template properties on page lxxii](#)
- [Fields: Sequence on page lxvii](#)
- [Fields: Summary on page lxix](#)
- [12.1 About service templates on page xxiii](#)

Searching and sorting service templates

Context

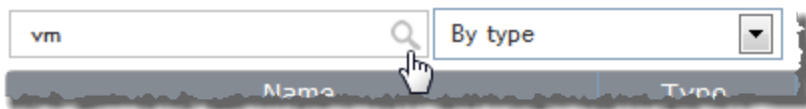
The service template catalog has searching functionality to help you easily find the templates you are looking for. You can also sort the templates by the Name, Type, Tags, Last modified, Created by, or Description fields.

To search for service templates

1. Go to the Catalog Management page (**Catalog > Catalog Management**). For details, see [Fields: Catalog Management on page xxxv](#).
2. Enter your search terms in the text box.

i You can use the wildcard (*) character, or search for a partial word.

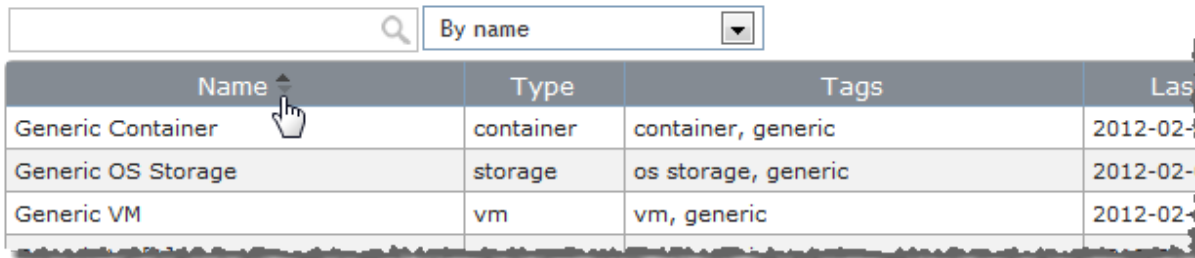
3. Use the drop-down to narrow your search to a specific field (Name, Type, Tags, Last modified, Created by, or Description).
4. Select the **Search** icon or press Enter to do the search.



The catalog updates to show only the service templates that match your search criteria.

To sort service templates in the catalog

1. Go to the Catalog Management page (**Administration > Catalog Management**). For details, see [Fields: Catalog Management on page xxxv](#).
2. (Optional) Search for templates (see [To search for service templates on page xxxiv](#)).
3. Click the sort icon next to the field name you want to sort by. For example, if you want to sort by name, click the sort icon in the **Name** column.



Click once to sort in ascending order; twice to sort descending order.

Related topics

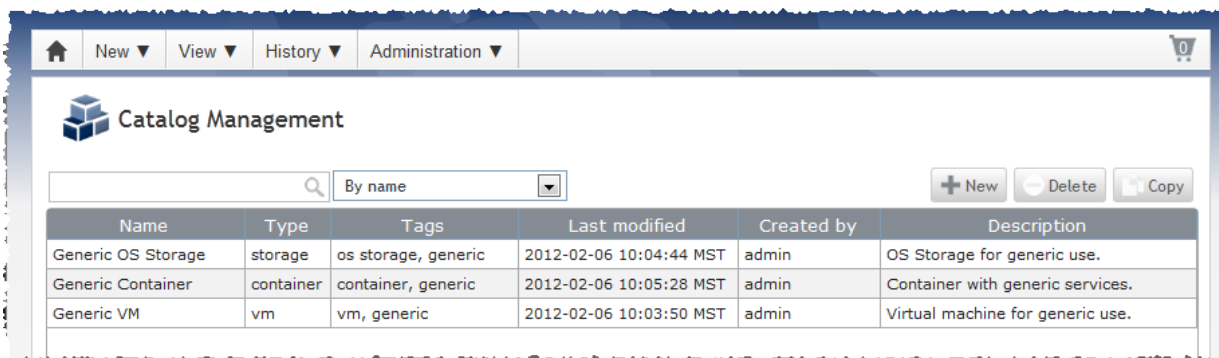
- [Fields: Catalog Management on page xxxv](#)
- [Copying service templates on page xxvii](#)
- [Deleting service templates on page xxxii](#)
- [12.1 About service templates on page xxiii](#)

12.3 Service template references

Fields: Catalog Management

Path: Catalog > Catalog Management

Image 7-1: Catalog Management



The Catalog Management page contains a list of all your service templates. On this page, you can do the following:

- Create a new service template (see [Creating a container template on page xxviii](#), [Creating a virtual machine template on page xxxi](#), [Creating a physical machine template on page xxix](#), and [Creating a storage template on page xxx](#))
- Modify an existing template (see [Modifying existing service templates on page xxxiii](#))
- Duplicate (copy) templates (see [Copying service templates on page xxvii](#))
- Delete templates you no longer need (see [Deleting service templates on page xxxii](#))

Search bar

Lets you specify a term to search in the service template catalog (for example, a term that would appear in a template name or description).

Search filter drop-down

Lets you narrow your search to a specific field (Name, Type, Tags, Last modified, Created by, or Description).

List of service templates

Displays a summary of all the service templates that have already been created and saved to the catalog. The following sortable fields are displayed:

Field	Description
Name	Name of the service template
Type	One of container , vm , pm , or storage
Tags	Tag or list of tags applied to the service template
Last modified	Date and time of the last modification saved to the service template, in this format: YYYY-MM-DD HH:MM:SS (time zone), for example: "2012-05-16 17:03:31 MDT"
Created by	Username of the person that created the service template
Description	Text description applied to the service template

You can select a service template to perform an action to it (delete or copy it). Click once to select; click again to deselect. If you want to modify a service template, double click it.

New

Lets you create a new service template (for details, see [Creating a container template on page xxviii](#), [Creating a virtual machine template on page xxxi](#), [Creating a physical machine template on page xxix](#), or [Creating a storage template on page xxx](#)).

When you click the **New** button, [Product Name] takes you to the Create Service Template page and displays the **Template properties** tab (for details, see [Fields: Template properties on page lxxii](#)).


Delete

Lets you delete a selected template (for details, see [Deleting service templates on page xxxii](#)).

 This option is grayed out until you have selected a template.

Copy

Lets you duplicate (copy) a selected template (for details, see [Copying service templates on page xxvii](#)).

 This option is grayed out until you have selected a template.

Related topics

- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [Creating a container template on page xxviii](#)
- [Searching and sorting service templates on page xxxiv](#)
- [Modifying existing service templates on page xxxiii](#)
- [Copying service templates on page xxvii](#)
- [Deleting service templates on page xxxii](#)

Fields: Catalog options

Path: Catalog > Catalog Management > New/Edit > Resources > Add field

Path: Catalog > New Service Template > Resources > Add field

The "Catalog options" section of the **Resources** tab lets you add custom fields to your service template. You can add one of several field types. (The options and associated fields change depending on the field type you select.)

Common fields

Standard fields

These three fields are standard in every new field you add:

Field type

Lets you specify a which type of field you want to add to your service template. You can choose from the following options:

- [Text](#)
- [Numeric](#)
- [Drop down list](#)
- [Checkbox](#)
- [Header](#)
- [Open](#)
- [Autocomplete](#)
- [Date picker](#)
- [Multi-line text area](#)

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

This field is not required.

ID

Lets you specify the unique identifier for the field. The value you specify should correspond to one of the following:

- One of the keyword values recognized by Moab Web Services (for details, see ["ID" field keywords on page lxxvii](#)).
- A Moab generic resource value (for details, see the "Moab Managing Consumable Generic Resources" documentation in the [Moab Workload Manager Administrator Guide](#).)
- A Moab variable value



If the value you specify in the **ID** field does not match one of the Moab Web Services keywords *and* you select the **Schedulable resource** option, [Product Name] assumes the field is a Moab generic resource. Otherwise, [Product Name] assumes the **ID** value is a variable.

If you want to specify a generic resource ID, the **ID** field value must match the *exact* name of the generic resource configured in Moab. (See the "Moab Managing Consumable Generic Resources" documentation in the [Moab Workload Manager Administrator Guide](#) for more information on generic resource configuration.)



The ID value must be unique for every new field you add.

Additional options

Some fields have the one or more of the following additional options:

Editable by user

Lets you specify whether or not the user will be allowed to modify the specifications of the resource.

i If you select this option, you must be sure you specify a default value. Failing to do this will leave a blank field that the user will not be able to do anything with.

Schedulable resource

Lets you specify whether the field represents a schedulable resource. When a field is marked as a schedulable resource, its value must be an integer. If you do not select this option, [Product Name] assumes the field is a variable, and its value can be non-numeric.

The **Schedulable resource** option is, in essence, an attribute that allows you to define the type of data being written. For example, if you select **Schedulable resource** when defining a text field with the **ID** set to "bob" and the **Value** set to "5", then the service request would have an "attributes" section like this (with the "bob" key-value pair written to the `resources` object in the service request):

```
attributes: {
  moab: {
    job: {
      resources: {
        bob: "5"
      },
      variables: {
      }
    }
  }
}
```

If you left the **Schedulable resources** option unchecked, then the same input field would be interpreted as a variable (written in the `variable` object):

```
attributes: {
  moab: {
    job: {
      resources: {
      },
      variables: {
        bob: "5"
      }
    }
  }
}
```

Visible to user

Lets you specify whether or not the field will appear in the user service template form.

i When you select this option, the **Editable by user** option will automatically clear. (If a user cannot see the field, they cannot edit it.)

Text

Catalog options

Field type: Text

Label:

ID: New Field - 4

Validation:

Default value:

Schedulable resource

Visible to user Editable by user

Delete field

Creates a field in which a user can specify any string data. For example:

Text Box Field

Sample text

Validation

Lets you specify a regular expression (using JavaScript regex syntax) that will check and validate the user input on this field.

This validation causes [Product Name] to notify users when they enter something invalid in the field. (For information about regular expressions, please see <http://www.regular-expressions.info/>.)

Default value

Lets you specify a value that will be pre-populated in the field when the user opens the form.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Numeric

The screenshot shows a 'Catalog options' window with the following fields and controls:

- Field type: Numeric (dropdown)
- Label: (empty text box)
- ID: New Field - 4 (text box)
- Default value: (spinner)
- Minimum: (spinner)
- Maximum: (spinner)
- Schedulable resource:
- Visible to user:
- Editable by user:
- Delete field: (button)
- Navigation: (up/down arrows)

Creates a number spinner in which a user inputs numeric data. For example:

The example shows a form with a label 'Numeric field' and a spinner control containing the number '3'.

Default value

Lets you specify a number value that will be pre-populated in the field when the user opens the form.

i You must make sure that the **Default value** is greater than or equal to the **Minimum** value and less than or equal to the **Maximum** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Minimum

Lets you specify the minimum value that will appear in the number spinner. In other words, it lets you specify the smallest number that the user may request of the resource.

Maximum

Lets you specify the maximum value that will appear in the number spinner. In other word, it lets you specify the largest number that the user may request of the resource.

Drop down list

The screenshot shows the 'Catalog options' dialog box. It contains the following fields and controls:

- Field type:** A dropdown menu set to 'Drop down list'.
- Label:** An empty text input field.
- ID:** A text input field containing 'New Field - 4'.
- Validation:** An empty text input field.
- Checkboxes:** Three checkboxes are checked: 'Schedulable resource', 'Visible to user', and 'Editable by user'.
- List Contents:** A section with an 'Item:' label and an empty text input field.
- Buttons:** An 'Add list item' button is located below the 'Item' field. At the bottom right, there is a 'Delete field' button and two arrow buttons (up and down).

Creates a list field in which the user may choose from one or more predefined options. For example:

The screenshot shows a 'Drop down list field' with a dropdown menu open. The menu contains four items: 'Sample item 3', 'Sample item 3', 'Sample item 1', and 'Sample item 2'. The first 'Sample item 3' is highlighted in blue. A mouse cursor is pointing at the dropdown arrow.

Validation

Lets you specify a regular expression (using JavaScript regex syntax) that will check and validate the user input on this field.

This validation causes [Product Name] to notify users when they enter something invalid in the field. (For information about regular expressions, please see <http://www.regular-expressions.info/>.)

Item

Lets you specify an option that will appear in the drop down list. The content you provide for this field is simply a predetermined value (as in a key-value pair).

When you have populated the **Item** field with the value you want, click [Add list item](#).

i The first item you add to the list (the top item) will be the default value.

Add list item

Lets you add the content of the **Item** field to the drop down list. If you want to remove an item from the list, click [Remove](#).

Remove

Lets you remove an item from the drop down list.

Checkbox

The screenshot shows the 'Catalog options' dialog for a checkbox field. The 'Field type' is set to 'Checkbox'. The 'Label' field is empty. The 'ID' is 'New Field - 4'. There are three checked options: 'Schedulable resource', 'Visible to user', and 'Editable by user'. At the bottom right, there is a 'Delete field' button and two arrow buttons for navigation.

Creates a checkbox that the user clicks to indicate that a value is true. For example:

The example shows a rectangular field containing a small square checkbox on the left and the text 'Checkbox field' on the right.

Header

The screenshot shows the 'Catalog options' dialog for a header field. The 'Field type' is set to 'Header'. The 'Header caption' field is empty. There is one checked option: 'Visible to user'. At the bottom right, there is a 'Delete field' button and two arrow buttons for navigation.

Creates a display-only, organizational header to categorize fields and set them apart from others. For example:

The example shows a rectangular field containing the text 'Sample Form Header' in a bold, dark font.

i Because this field is for display only, there is no **Label** field or **ID** field associated with it.

Header caption

Lets you specify the text that will appear in a field group heading.

Open

The screenshot shows a window titled "Catalog options" with a close button in the top right corner. The window contains the following fields and controls:

- Field type:** A dropdown menu with "Open" selected.
- Label:** An empty text input field.
- ID:** A text input field containing "New Field - 9".
- Options:** A horizontal row of three checkboxes: "Schedulable resource" (checked), "Visible to user" (checked), and "Editable by user" (unchecked).
- Open text:** A large, empty text area for entering HTML or JavaScript code.
- Buttons:** A "Delete field" button with a minus sign icon, and two small arrow buttons (down and up) for field ordering.

Creates a custom field that you configure with HTML, JavaScript, etc.

Open text

Lets you specify HTML, JavaScript, etc. for a custom field.

i You must take special care when using the **Open** field, because the code you provide can be executed by the end user.

In the case that you use JavaScript, it is recommended that you use jQuery. However, there are two things that you should be aware of:

1. Where you would normally use the `jQuery(document).ready()` function, you will need to instead use an **onTemplateLoad** function, in this manner:

```
onTemplateLoad (function(event, currentTemplate) {
  // code
});
```

2. If you want to use a jQuery selector in the form of `jQuery("#id")`, you will need to instead use a **findLocally** function in the form of `findLocally("id", currentTemplate)`.

The reason for this is that [Product Name] will cause the ID to be unique (alter it) across all the templates on the form.

For example, if you were to construct an input with the ID of "alpha" and then turn it into a number-spinner input, normally you would use the following JavaScript:

```
<input id="alpha" name="alpha" />
<script type="text/javascript">
  jQuery(document).ready(function() {
    jQuery("#alpha").spinner();
  });
</script>
```

However, to have this same functionality in a [Product Name] **Open** field, you should use the **onTemplateLoad** and **findLocally** methods, as follows:

```
<input id="alpha" name="alpha"/>
<script type="text/javascript">
  onTemplateLoad(function(event, currentTemplate) {
    findLocally("alpha", currentTemplate).spinner();
  });
</script>
```

Here is a list of some things you can do with the **Open** field:

- You can use a script to send field values to a web service for validation. Here is a generic example of what this script would look like (with the returned JSON).

```

<label>Input A</label>
<input id="alpha" name="alpha" class="required"/>
<br clear="all" />
<label>Input B</label>
<input id="beta" name="beta" class="required" />
<script type="text/javascript">

onTemplateLoad(function(event,currentTemplate){

    var nodeA = findLocally("alpha", currentTemplate);
    var nodeB = findLocally("beta", currentTemplate);

    var updateValidation = function(){
        jQuery.ajax({
            type : "GET",
            url : "/moab/serviceTemplate/validateInput",
            data :{ nodeA: nodeA.val(), nodeB: nodeB.val() },
            contentType : "application/json; charset=utf-8",
            async: false,
            error : function(xhr, status, error) {
                nodeA.rules("add",{required:true});
                nodeA.rules("add",{regex:"$^"});
                nodeB.rules("add",{required:true});
                nodeB.rules("add",{regex:"$^"});
            },
            success : function(responseStr) {
                var response = eval("(" + responseStr + ")");
                if (response.result){
                    nodeA.rules("remove"); nodeB.rules("remove");
                }
                else {
                    var validationConfig = {
                        regex:"$^",
                        messages:{ regex: response.message }
                    }
                    nodeA.rules("add",{required:true});
                    nodeA.rules("add", validationConfig);
                    nodeB.rules("add",{required:true});
                    nodeB.rules("add",validationConfig);
                }
            }
        });
        nodeA.change(updateValidation);
        nodeB.change(updateValidation);
    });
});

```

```

</script>

//Example JSON to send to web service
{
  nodeA : "<value>",
  nodeB : "<value>"
}

// Example JSON response from web service
{
  success : false,
  message : "<message>"
}

```

- If you want to create an input that is not saved to the service (such as filtering lists or radio buttons that toggle other sections), add the **noSave** class to the input. Inputs containing the **noSave** class are not sent to the service generation system as a variable or resource. For example:

```
<input ID='myInput' class='noSave'>
```

- If you want an open field to be a schedulable resource, you can set the **isresource** attribute to "true". For example:

```
<input id='bob' value='5' isresource='true' />
```

This input would result in a service request like the following:

```

attributes: {
  moab: {
    job: {
      resources: {
        bob: "5"
      },
      variables: {
      }
    }
  }
}

```

- If you want to create an input that saves custom data to a service request (for example, because you wanted a web service plug in to find the data and execute additional actions), you can set the **shareddata** attribute in the input to "true". For example:

```
<input ID='bob' value='5' shareddata='true' />
```

This input would result in a service request like the following:


```
attributes: {  
  moab: {  
    job: {  
      resources: {  
      },  
      variables: {  
      }  
    }  
  },  
  sharedData: {  
    bob: "5"  
  }  
}
```

You can also pass JSON objects via the input field. For example:

```
<input ID='bob' value='{ "hello": "there" }' shareddata='true' />
```

This input would result in a service request like the following:

```
attributes: {  
  moab: {  
    job: {  
      resources: {  
      },  
      variables: {  
      }  
    }  
  },  
  sharedData: {  
    bob: {  
      hello: "there"  
    }  
  }  
}
```

 The ID values you specify must be unique from other field ID values, including those in the Required resources section of the template form.

Autocomplete

Catalog options

Field type: Autocomplete

Label:

ID: New Field - 9 Schedulable resource

Enforce Selection:

Default value: Visible to user Editable by user

Source:

Creates a text box in which the user begins typing and suggestions appear beneath the box. The user clicks, or uses the arrow keys to navigate to, a pre-determined suggestion to insert into the field. For example:

Autocomplete Field

I

- Item 1
- Item 2
- Item 3

Enforce Selection

Specifies that you want to ensure the user input matches one of your suggested values. In other words, when you check this option, the user will not be allowed to submit a value that is different than one of your suggested values.

Default value

Lets you specify a value that will be pre-populated in the field when the user opens the form.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Source

Lets you specify the JSON array that determines the autocomplete field suggestions. You can specify the JSON array in one of two ways:

- Manually enter the JSON array.
- Specify a web service URL that returns a JSON array.

The JSON array (whether entered manually or returned from a web service URL) should consist of a series of objects, each of which has a "label" and "value" entry. For example:

```
[
  {"label": "1", "value": "1"},
  {"label": "2", "value": "2"},
  {"label": "2a", "value": "2a"},
  {"label": "2b", "value": "2b"},
  {"label": "2c", "value": "2c"},
  {"label": "3", "value": "3"},
  {"label": "31", "value": "31"}
]
```

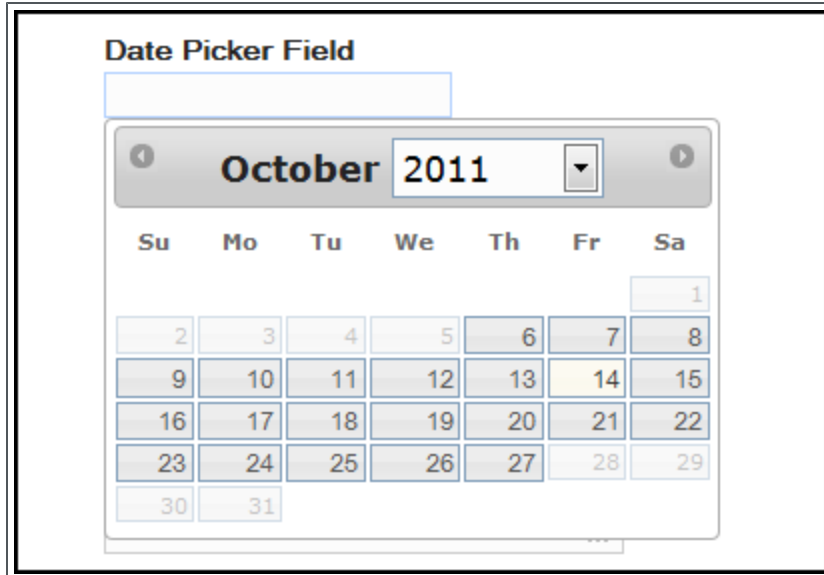
Date picker

The screenshot shows a 'Catalog options' dialog box for configuring a 'Date picker' field. The dialog has a title bar with up and down arrows. The main area contains several input fields and checkboxes:

- Field type:** A dropdown menu set to 'Date picker'.
- Label:** An empty text input field.
- ID:** A text input field containing 'New Field - 9'.
- Schedulable resource:** A checkbox that is checked.
- Default value:** An empty text input field.
- Visible to user:** A checkbox that is checked.
- Editable by user:** A checkbox that is unchecked.
- Earliest Date:** An empty text input field.
- Latest Date:** An empty text input field.

At the bottom right, there is a 'Delete field' button with a left-pointing arrow, and two small vertical arrow buttons (up and down).

Creates a field in which the user specifies a date value by navigating to the date in a pop-up calendar and selecting it. For example:



Default value

Lets you specify the date that appears in the field by default. You select the date from a pop-up calendar.

i You must make sure that the **Default value** is before or equal to the **Latest Date** value and after or equal to the **Earliest Date** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

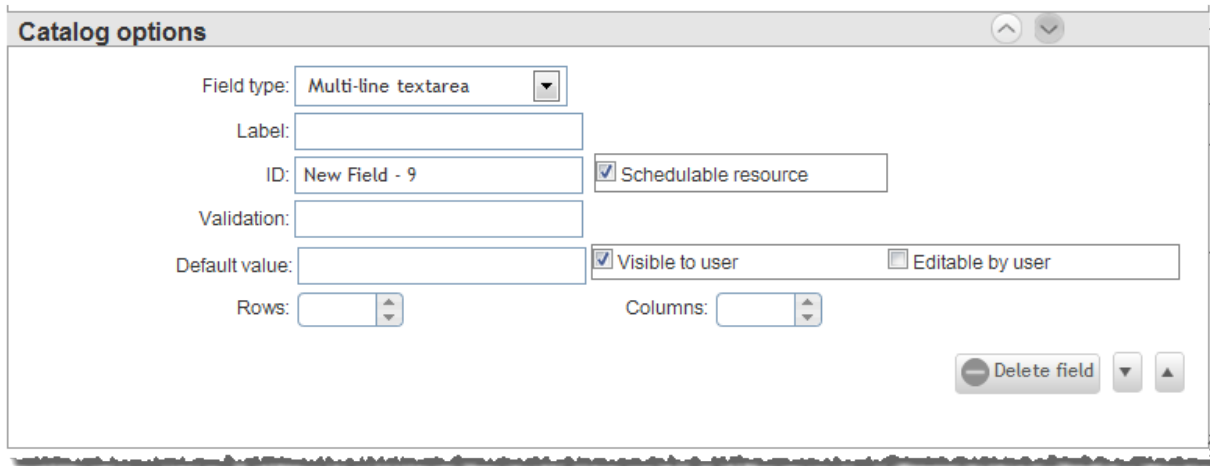
Earliest Date

Lets you specify the earliest date possible the user can select. You select the date from a pop-up calendar.

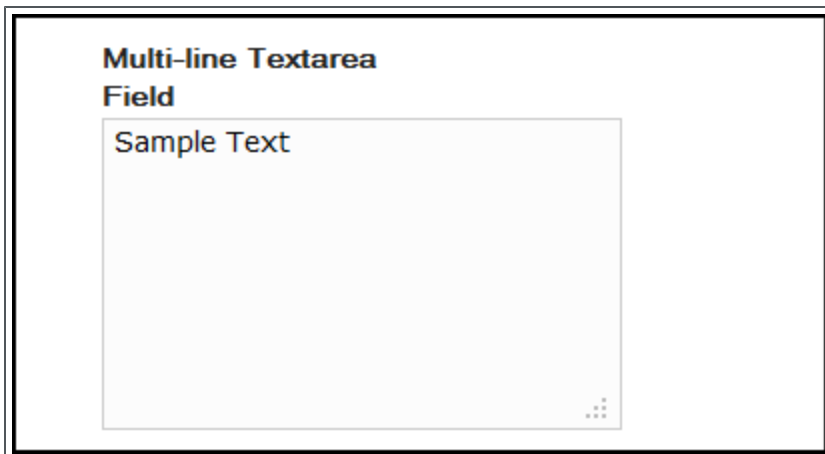
Latest Date

Lets you specify the latest date possible the user can select. You select the date from a pop-up calendar.

Multi-line text area



Creates a custom-sized field in which the user can input any string data. For example:



Validation

Lets you specify a regular expression (using JavaScript regex syntax) that will check and validate the user input on this field.

This validation causes [Product Name] to notify users when they enter something invalid in the field. (For information about regular expressions, please see <http://www.regular-expressions.info/>)

Default value

Lets you specify a value that will be pre-populated in the field when the user opens the form.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the **only** option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Rows

Lets you specify the number of rows the multi-line text field will have.

Columns

Lets you specify the number or columns the multi-line text field will have.

Related topics

- [Adding new fields on page xxvi](#)
- [Modifying existing service templates on page xxxiii](#)
- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [Creating a container template on page xxviii](#)

Fields: Required resources for PMs

Path: Catalog > Catalog Management > New/Edit > Resources

Path: Catalog > New Service Template > Resources

The **Resources** tab is populated with different fields based on the template type you specify in the **Template properties** (see [Fields: Template properties on page lxxii](#)). When you choose "Physical machine" as the template type, the **Resources** tab is populated with the following required resource fields.


 You will notice that many of the **Field type** and **ID** fields are already filled and cannot be edited. The reason for this is that each of these fields are required and must be included in every physical machine template. If you want to add additional fields to the template, you can click **Add field** under the "Catalog options" heading (for more information, see [Adding new fields on page xxvi](#)).

Image 7-1: Required resources for PM templates

Header

Header caption

Lets you specify the text that will appear in a field group heading.

Image

Default OS type

Lets you specify which OS type will appear in the user form as the default. Only the available OS types for the PM will appear in the options.

i If you want to enforce that users are only able choose one OS type, then choose the default OS type and clear the **Editable by user** option.

Default image

Lets you specify which image will appear in the user form as the default. Only the available images for the PM will appear in the options.

i If you want to enforce that users are only able choose one image, then choose the default image and clear the **Image editable by user** option.

Node List**Label**

Lets you specify the label of the node selection field in the user form.

By default, the label is "Physical Node."

i If you clear the **Editable by user** option for this field, then the user will not be allowed to select the node they wish to use. Instead, Moab will automatically select the node.

Processors**Label**

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Processors."

Default value

Lets you specify a number value that will be pre-populated in the field when the user opens the form.

i You must make sure that the **Default value** is greater than or equal to the **Minimum** value and less than or equal to the **Maximum** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Minimum

Lets you specify the minimum value that [Product Name] will accept from the user.

For example, if you specify a minimum value of 1, the user will not be allowed to request fewer than 1 processor.

Maximum

Lets you specify the maximum value that [Product Name] will accept from the user.

For example, if you specify a maximum value of 4, the user will not be allowed to request more than 4 processors.

Memory

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Memory (MB)."

Default value

Lets you specify a number value that will be pre-populated in the field when the user opens the form.

i You must make sure that the Default value is greater than or equal to the **Minimum** value and less than or equal to the **Maximum** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Minimum

Lets you specify the minimum value that [Product Name] will accept from the user.

For example, if you specify a minimum value of 1024 MB, the user will not be allowed to request less than 1024 MB of memory.

Maximum

Lets you specify the maximum value that [Product Name] will accept from the user.

For example, if you specify a maximum value of 4096 MB, the user will not be allowed to request more than 4096 MB of memory.

Additional options

Some fields have the one or more of the following additional options:

Editable by user

Lets you specify whether or not the user will be allowed to modify the specifications of the resource.

i If you select this option, you must be sure you specify a default value. Failing to do this will leave a blank field that the user will not be able to do anything with.

Schedulable resource

Lets you specify whether the field represents a schedulable resource. When a field is marked as a schedulable resource, its value must be an integer. If you do not select this option, [Product Name] assumes the field is a variable, and its value can be non-numeric.

The **Schedulable resource** option is, in essence, an attribute that allows you to define the type of data being written. For example, if you select **Schedulable resource** when defining a text field with the **ID** set to "bob" and the **Value** set to "5", then the service request would have an "attributes" section like this (with the "bob" key-value pair written to the `resources` object in the service request):

```
attributes: {
  moab: {
    job: {
      resources: {
        bob: "5"
      },
      variables: {
      }
    }
  }
}
```

If you left the **Schedulable resource** option unchecked, then the same input field would be interpreted as a variable (written in the `variable` object):

```
attributes: {
  moab: {
    job: {
      resources: {
      },
      variables: {
        bob: "5"
      }
    }
  }
}
```

Visible to user

Lets you specify whether or not the field will appear in the user service template form.

i When you select this option, the **Editable by user** option will automatically clear. (If a user cannot see the field, they cannot edit it.)

Related topics

- [Creating a physical machine template on page xxix](#)
- [Fields: Catalog options on page xxxvii](#)
- [12.1 About service templates on page xxiii](#)

Fields: Required resources for storage

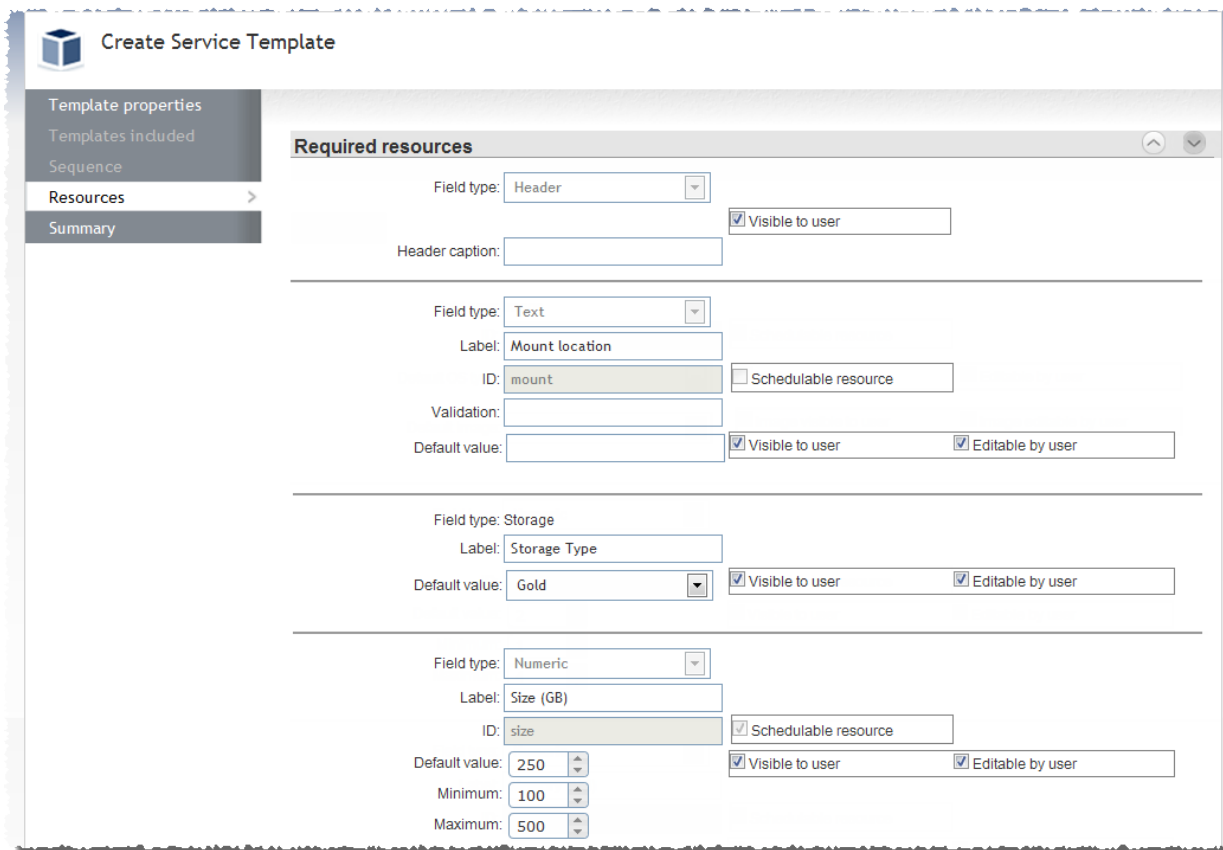
Path: Catalog > Catalog Management > New/Edit > Resources

Path: Catalog > New Service Template > Resources

The **Resources** tab is populated with different fields based on the template type you specify in the **Template properties** (see [Fields: Template properties on page lxxii](#)). When you choose "Storage" as the template type, the **Resources** tab is populated with the following required resource fields.

i You will notice that many of the **Field type** and **ID** fields are already filled and cannot be edited. The reason for this is that each of these fields are required and must be included in every storage template. If you want to add additional fields to the template, you can click **Add field** under the "Catalog options" heading (for more information, see [Adding new fields on page xxvi](#)).

Image 7-1: Required resources for storage templates



Header

Header caption

Lets you specify the text that will appear in a field group heading.

Mount

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Mount location."

Validation

Lets you specify a regular expression (using JavaScript regex syntax) that will check and validate the user input on this field.

For example, if you want users to stop providing invalid drive letters for mount points, you can enter a regular expression like this:

```
[a-zA-Z]{1}[\:]{0,1}
```

This validation causes [Product Name] to notify users when they enter something invalid in the field. (For information about regular expressions, please see <http://www.regular-expressions.info/>.)

Default value

Lets you specify a value that will be pre-populated in the field when the user opens the form.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Storage

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Storage Type."

Default value

Lets you specify which storage type will be pre-populated in the field when the user opens the form. The possible storage types that you can choose from are pulled from Moab Web Services.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Size

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Size (GB)."

Default value

Lets you specify a number value that will be pre-populated in the field when the user opens the form.

i You must make sure that the **Default value** is greater than or equal to the **Minimum** value and less than or equal to the **Maximum** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Minimum

Lets you specify the minimum value that [Product Name] will accept from the user.

For example, if you specify a minimum value of 100 GB, the user will not be allowed to request less than 100 GB of storage.

Maximum

Lets you specify the maximum value that [Product Name] will accept from the user.

For example, if you specify a maximum value of 400 GB, the user will not be allowed to request more than 400 GB of storage.

Additional options

Some fields have the one or more of the following additional options:

Editable by user

Lets you specify whether or not the user will be allowed to modify the specifications of the resource.

i If you select this option, you must be sure you specify a default value. Failing to do this will leave a blank field that the user will not be able to do anything with.

Schedulable resource

Lets you specify whether the field represents a schedulable resource. When a field is marked as a schedulable resource, its value must be an integer. If you do not select this option, [Product Name] assumes the field is a variable, and its value can be non-numeric.

The **Schedulable resource** option is, in essence, an attribute that allows you to define the type of data being written. For example, if you select **Schedulable resource** when defining a text field with the **ID** set to "bob" and the **Value** set to "5", then the service request would have an "attributes" section like this (with the "bob" key-value pair written to the `resources` object in the service request):

```
attributes: {
  moab: {
    job: {
      resources: {
        bob: "5"
      },
      variables: {
      }
    }
  }
}
```

If you left the **Schedulable resource** option unchecked, then the same input field would be interpreted as a variable (written in the `variable` object):

```
attributes: {
  moab: {
    job: {
      resources: {
      },
      variables: {
        bob: "5"
      }
    }
  }
}
```

Visible to user

Lets you specify whether or not the field will appear in the user service template form.

i When you select this option, the **Editable by user** option will automatically clear. (If a user cannot see the field, they cannot edit it.)

Related topics

- [Creating a storage template on page xxx](#)
- [Fields: Catalog options on page xxxvii](#)
- [12.1 About service templates on page xxiii](#)

Fields: Required resources for VM templates

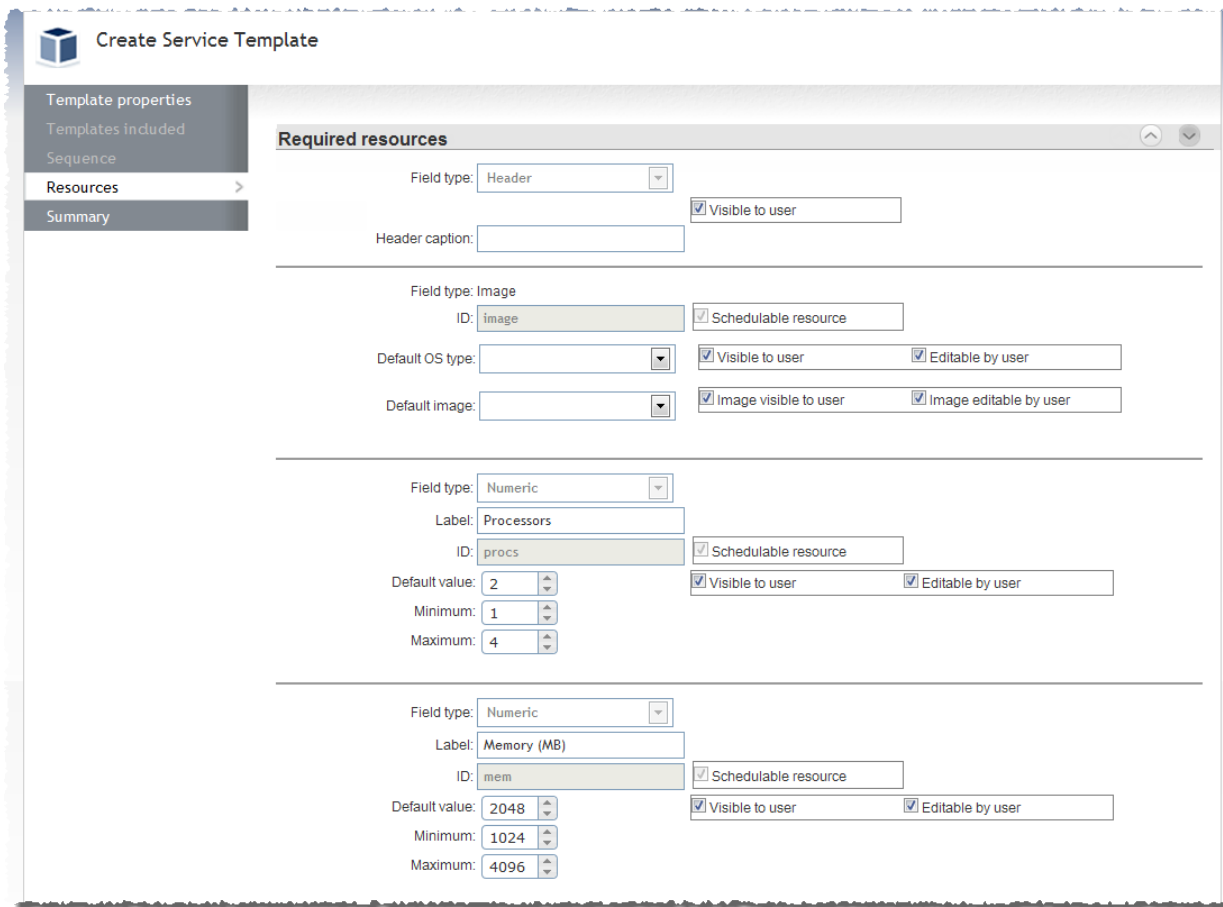
Path: Catalog > Catalog Management > New/Edit > Resources

Path: Catalog > New Service Template > Resources

The **Resources** tab is populated with different fields based on the template type you specify in the **Template properties** (see [Fields: Template properties on page lxxii](#)). When you choose "Virtual machine" as the template type, the **Resources** tab is populated with the following required resource fields.

i You will notice that many of the **Field type** and **ID** fields are already filled and cannot be edited. The reason for this is that each of these fields are required and must be included in every virtual machine template. If you want to add additional fields to the template, you can click **Add field** under the "Catalog options" heading (for more information, see [Adding new fields on page xxvi](#)).

Image 7-1: Required resources for VM templates



Header

Header caption

Lets you specify the text that will appear in a field group heading.

Image

Default OS type

Lets you specify which OS type will appear in the user form as the default. Only the available OS types for the VM will appear in the options.

i If you want to enforce that users are only able choose one OS type, then choose the default OS type and clear the **Editable by user** option.

Default image

Lets you specify which image will appear in the user form as the default. Only the available images for the VM will appear in the options.

i If you want to enforce that users are only able choose one image, then choose the default image and clear the **Image editable by user** option.

Processors

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Processors."

Default value

Lets you specify a number value that will be pre-populated in the field when the user opens the form.

i You must make sure that the **Default value** is greater than or equal to the **Minimum** value and less than or equal to the **Maximum** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Minimum

Lets you specify the minimum value that [Product Name] will accept from the user.

For example, if you specify a minimum value of 1, the user will not be allowed to request fewer than 1 processor.

Maximum

Lets you specify the maximum value that [Product Name] will accept from the user.

For example, if you specify a maximum value of 4, the user will not be allowed to request more than 4 processors.

Memory

Label

Lets you specify the descriptive label (or name) of the field. What you specify in this field is what the user will see in the form.

By default, the label is "Memory (MB)."

Default value

Lets you specify a number value that will be pre-populated in the field when the user opens the form.

i You must make sure that the **Default value** is greater than or equal to the **Minimum** value and less than or equal to the **Maximum** value.

i If you have not selected the **Editable by user** option (meaning the user cannot edit the field), then the default value will be the only option for the user. If you want the user to be able to choose from more than the default value, make sure you select the **Editable by user** option.

Minimum

Lets you specify the minimum value that [Product Name] will accept from the user.

For example, if you specify a minimum value of 1024 MB, the user will not be allowed to request less than 1024 MB of memory.

Maximum

Lets you specify the maximum value that [Product Name] will accept from the user.

For example, if you specify a maximum value of 4096 MB, the user will not be allowed to request more than 4096 MB of memory.

Additional options

Some fields have the one or more of the following additional options:

Editable by user

Lets you specify whether or not the user will be allowed to modify the specifications of the resource.

i If you select this option, you must be sure you specify a default value. Failing to do this will leave a blank field that the user will not be able to do anything with.

Schedulable resource

Lets you specify whether the field represents a schedulable resource. When a field is marked as a schedulable resource, its value must be an integer. If you do not select this option, [Product Name] assumes the field is a variable, and its value can be non-numeric.

The **Schedulable resource** option is, in essence, an attribute that allows you to define the type of data being written. For example, if you select **Schedulable resource** when defining a text field with the **ID** set to "bob" and the **Value** set to "5", then the service request would have an "attributes" section like this (with the "bob" key-value pair written to the `resources` object in the service request):

```
attributes: {
  moab: {
    job: {
      resources: {
        bob: "5"
      },
      variables: {
      }
    }
  }
}
```

If you left the **Schedulable resource** option unchecked, then the same input field would be interpreted as a variable (written in the `variable` object):

```
attributes: {
  moab: {
    job: {
      resources: {
      },
      variables: {
        bob: "5"
      }
    }
  }
}
```

Visible to user

Lets you specify whether or not the field will appear in the user service template form.

i When you select this option, the **Editable by user** option will automatically clear. (If a user cannot see the field, they cannot edit it.)

Related topics

- [Creating a virtual machine template](#) on page xxxi
- [Fields: Catalog options](#) on page xxxvii
- [12.1 About service templates](#) on page xxiii

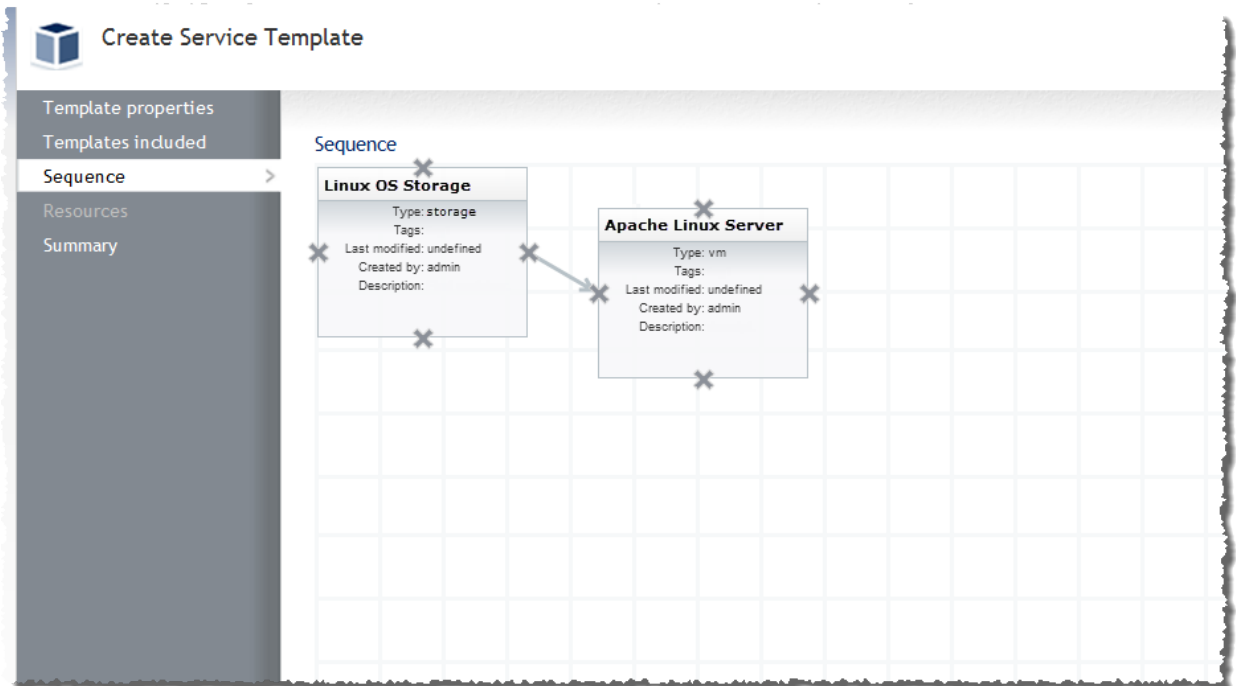
Fields: Sequence

Path: Catalog > Catalog Management > New/Edit > Sequence

Path: Catalog > New Service Template > Sequence

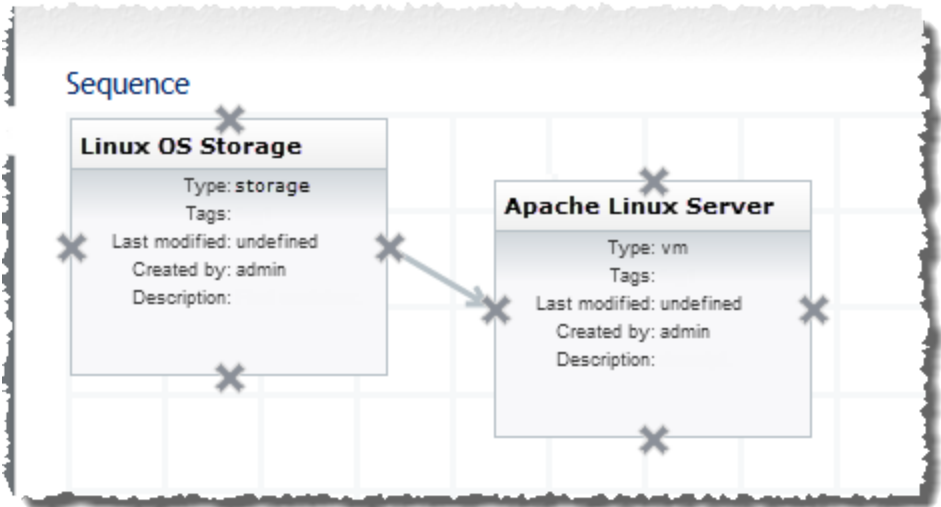
The **Sequence** tab is only active when you are creating or editing a container template. On this tab, you can establish dependencies between the templates that you are including inside a container template. (In other words, if one service template must be dependent on another, you can specify that here.) The **Sequence** tab is populated with tiles that represent the service templates that you specify in the **Templates included** tab.

Image 7-1: Sequence



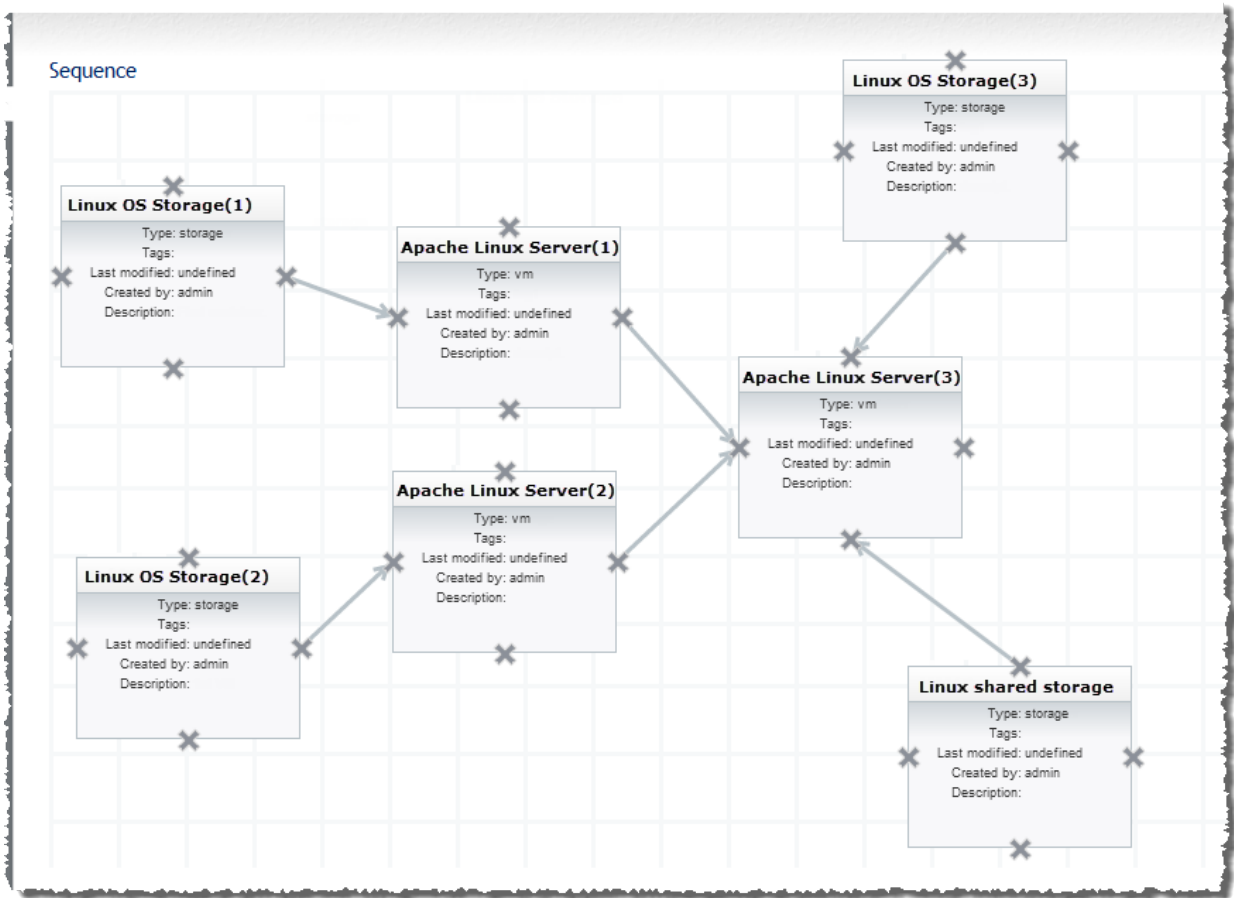
You can drag and drop the service template boxes to arrange them any way you would like to.

Establishing dependencies is accomplished graphically in the user interface by drawing connectors between the service template tiles. The connector line will have an arrow between the two service templates. The arrow represents a direction of dependency. If "A" points to "B," and "B" points to "C," then "C" is dependent on "B," and "B" is dependent on "A." For example:



In this example, "Apache Linux Server" is dependent on "Linux OS Storage" (meaning the "Apache Linux Server" VM cannot start until the "Linux OS Storage" storage is first set up).

Here is an example of an entire workflow sequence with dependencies between 7 service templates:

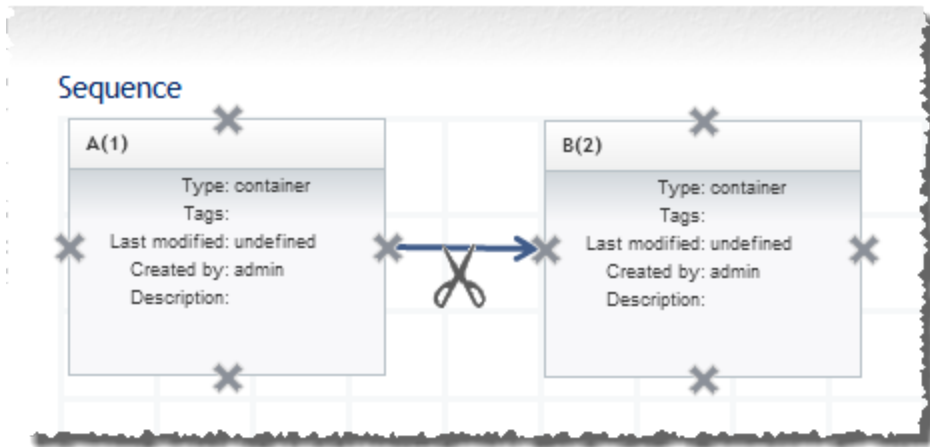


You can establish a dependency connector by clicking the service template tile that is the first dependency (for example, "A"). (When you select it, it will have a blue border.) Next, click the service template tile that is the second dependency (for example, "B"). You will note that a connector line points from "A" to "B." Repeat this process to complete your sequence of dependency.

i A service template can have multiple dependencies.

Removing a dependency

To remove a dependency between service templates, hover your mouse pointer over the connector line. Once the scissors image appears, click to remove the connection. For example:



i When a logical error, such as a circular dependency, is made in the workflow, the connector lines turn red. Resolve the issue by removing the conflicting connection.

Related topics

- [Creating a container template on page xxviii](#)
- [Fields: Templates included on page lxxiii](#)
- [12.1 About service templates on page xxiii](#)

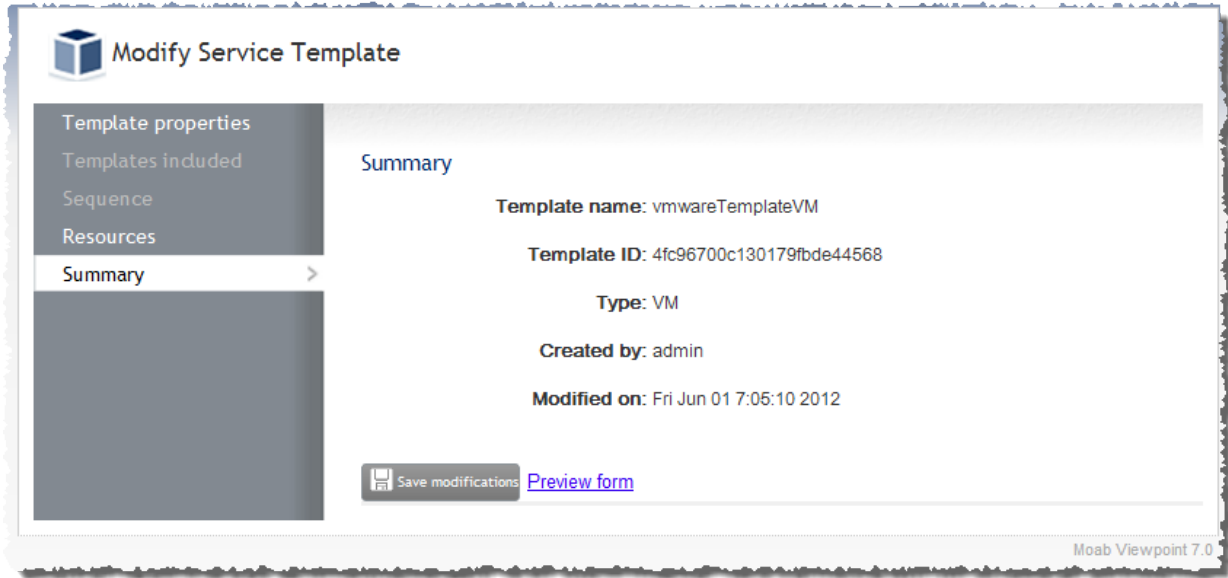
Fields: Summary

Path: Catalog > Catalog Management > New/Edit > Summary

Path: Catalog > New Service Template > Summary

The **Summary** tab is where you can review and save the settings of your service template. If your template is a virtual machine, physical machine, or storage template, you can even preview the user form so that you can make sure that everything appears and functions the way you want it to before you save it.

Image 7-1: Summary

**Template name**

Displays the name of the template.

Template ID

Displays the ID key assigned to the template.

Type

Displays the service template type (one of **Container**, **Virtual Machine**, **Physical Machine**, or **Storage**).

Created by

Displays the username of the person who created the service template.

Modified on

Displays the date and time the last modification was made to the service template.

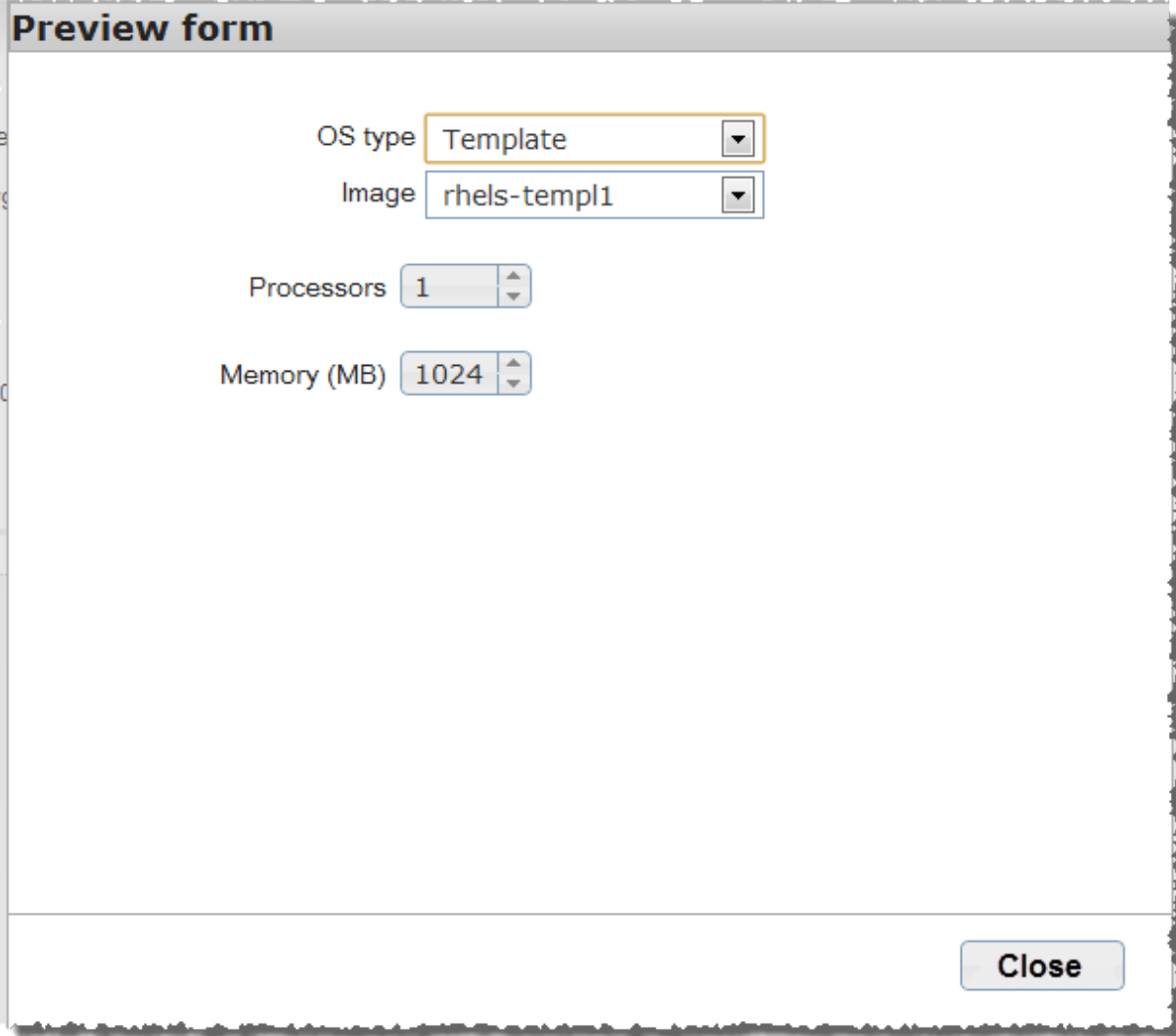
Save template / Save modifications

Lets you save your template (or save the modifications you have made to an existing template).

Preview form

Lets you view a preview of the user form you have created.

The preview is what the user will see when he/she requests a service from this template. For example:



The screenshot shows a window titled "Preview form" with a "Close" button in the bottom right corner. The form contains the following fields:

- OS type: Template (dropdown menu)
- Image: rhels-templ1 (dropdown menu)
- Processors: 1 (spinner)
- Memory (MB): 1024 (spinner)

i The Preview form option is not available for Container type service templates.

i Depending on your web browser, the form preview may not exactly replicate what the actual form functionality will be. It is recommended that you save the service template and then request a service from the template to validate proper functionality.

Related topics

- [Fields: Template properties](#) on page lxxii
- [Creating a container template](#) on page xxviii

- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [12.1 About service templates on page xxiii](#)

Fields: Template properties

Path: Catalog > Catalog Management > New/Edit > Template properties

Path: Catalog > New Service Template > Template properties

On the **Template properties** tab, you can specify the basic properties of your service template. Here, you name your service template, specify the type of template, and assign any tags or description metadata to your service template.

Image 7-1: Template properties

Template name

Lets you specify the name of the template. This field is required.

Template type

Lets you specify what type of service template you want to create. This field is required.

Choose one of the following:

Option	Description
Container	Specifies you want to create a container template.
Virtual machine	Specifies you want to create a virtual machine template.
Physical machine	Specifies you want to create a physical machine template.
Storage	Specifies you want to create a storage template.


Tags

Lets you specify tag values for the service template. Separate multiple tags with commas.

Job template

Lets you specify which Moab job template you want to use to provision new instances of the service. The drop-down is populated via Moab Web Services with all Moab job templates that specify `SELECT=TRUE`. (See the Cloud Workflow example in the [Moab Workload Manager Administrator Guide](#) for service template workflow requirements.)

This field is required.

 This field is not available when you select "Container" as the template type.

Description

Lets you specify a text description for the service template. The description will help your users easily identify which template they want to use when requesting a service.

Related topics

- [Creating a virtual machine template on page xxxi](#)
- [Creating a physical machine template on page xxix](#)
- [Creating a storage template on page xxx](#)
- [Creating a container template on page xxviii](#)
- [12.1 About service templates on page xxiii](#)

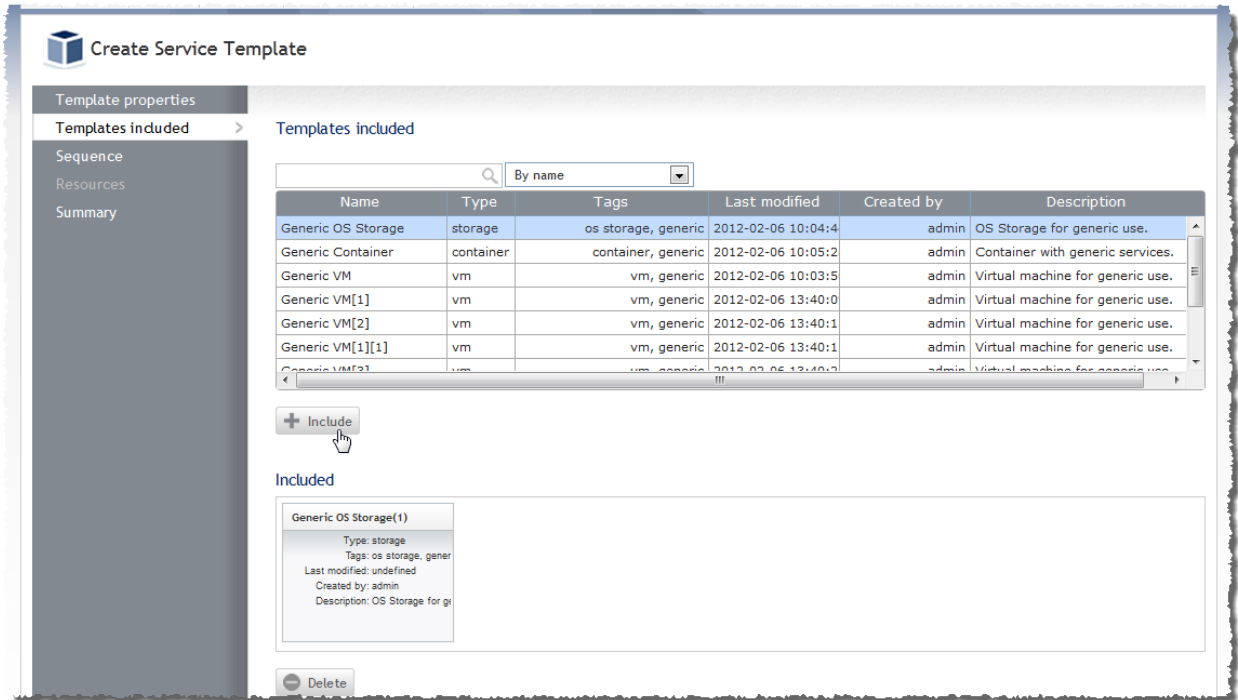
Fields: Templates included

Path: Catalog > Catalog Management > New/Edit > Templates included

Path: Catalog > New Service Template > Templates included

The **Templates included** tab is only active when you are creating a service container. On this tab, you can choose which of the service templates (that you have already created) you want to include in the service container.

Image 7-1: Templates included



Search bar

Lets you specify a term to search in the service template catalog. The templates that appear in the list will update to match the search terms.

Search filter drop-down

Lets you narrow your search to a specific field (Name, Type, Tags, Last modified, Created by, or Description).

List of available templates

By default, displays all the available service templates in the catalog. This list updates to match any search terms you search by. You can select one or more service templates for inclusion in the container. Click once to select; click again to deselect.

Include

Lets you add service templates to the container template.

When you have selected the service templates you want to add to the container and click **Include**, tiles representing each service template appear in the **Included** box.

Included

Displays all the service templates that you have selected to be added in the container template.

If you want to remove service templates from inclusion in the container, you can select one or more service templates. Click once to select; click again to deselect.

Delete

Lets you remove service templates you have selected in the [Included](#) box.

Related topics

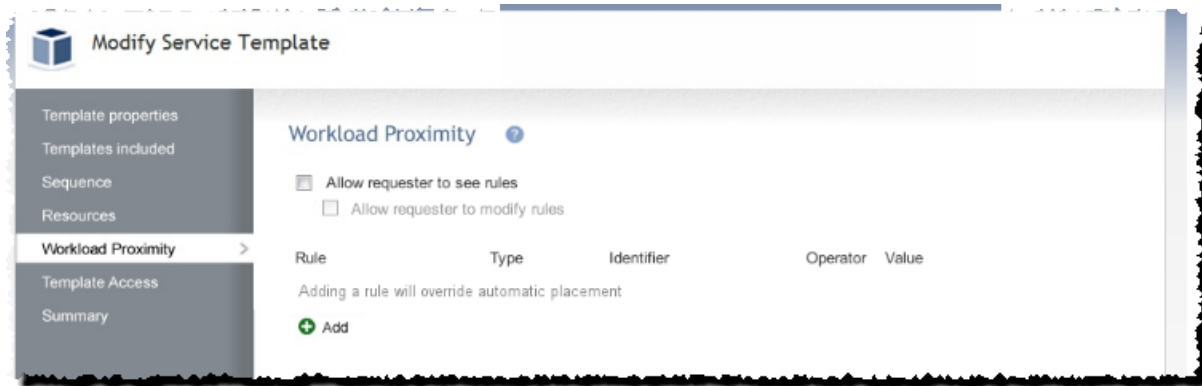
- [Creating a container template on page xxviii](#)
- [Fields: Sequence on page lxvii](#)
- [12.1 About service templates on page xxiii](#)

Fields: Workload proximity

Path: Catalog > Catalog Management > New/Edit > Workload proximity

Path: Catalog > New Service Template > Workload proximity

The **Workload proximity** tab allows you, if a service should run with related services on the same hypervisor, to define rules to encourage or force a service to run in a desired setting.



You can specify whether the user requesting the service can see the rules applied to the template; additionally, you can also specify whether the user can modify those rules when requesting a service. Both of these options are turned off by default.

Configuring a proximity rule

You must fill in the following fields to create a rule:

Rule

A drop-down list that defines the service's affinity to the attribute or variable and the strictness of the rule. The options are:

- **Must run with** - The service is required to run on the same hypervisor as a service or services with the specified attribute or variable.
- **Should run with** - The service ideally runs on the same hypervisor as a service or services with the specified attribute or variable; however, if no place exists that satisfies all of the rules, this one may be ignored.
- **Must not run with** - The service is required not to run on the same hypervisor as a service or services with the specified attribute or variable.
- **Should not run with** - The service ideally does not run on a hypervisor near a service or services with the specified attribute or variable; however, if no place exists that satisfies all of the service's rules, this one may be ignored.

Type

A drop-down list that allows you to specify the feature's resource type. The options are:

- **Attribute** - An physical resource, such as memory.
- **Variable** - A custom variable given to a service.

Identifier

The attribute or variable being addressed. The field type depends on your Type selection. For an Attribute, you will see a drop-down list that includes the following options:

- **Processors**
- **Memory**
- **OS**
- **Feature**

For a Variable, you will see a text field where you must type the name of the variable.

Operator

A drop-down list of comparative symbols that will compare the Identifier with its value. The options vary based on the selected Identifier.

For Processors and Memory attributes and all variables, the following are options:

- **>** - The feature's value is greater than the specified comparative value.
- **<** - The feature's value is less than the specified comparative value.
- **=** - The feature's value is equal to the specified comparative value.
- **≠** - The feature's value is not equal to the specified comparative value.

For OS and Feature attributes, the following are options:

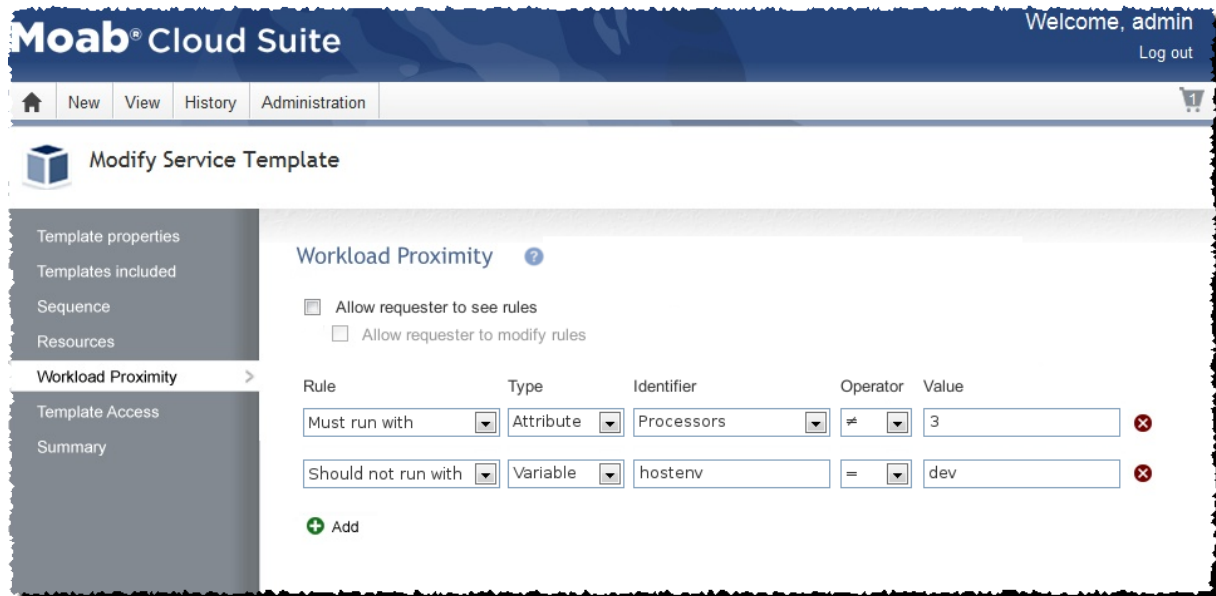
- **=** - The feature's value is equal to the specified comparative value.
- **≠** - The feature's value is not equal to the specified comparative value.

Value

A text field where you specify the threshold for Processors, Memory, or variable or the exact name of the OS, Feature, or variable.

Workload proximity rule sample

Image 7-1:



The image above displays 2 proximity rules set up for the new service.

The first rule specifies that the service is required to run on a hypervisor near a service or services that do not run on 3 processors.

The second rule specifies that, if possible, the service should not run on a hypervisor near a service or services that have their hostenv variable(s) set to dev (that it should not run near a developer's machine).

"ID" field keywords

Moab Web Services recognizes certain keyword values (listed below). When you specify an **ID** value that matches one of those keywords, MWS will use certain predefined behavior.

i If your **ID** value does not match one of these keyword values, *and* you select the **Schedulable resource** option, [Product Name] assumes the field is a Moab generic resource. Otherwise, [Product Name] assumes the ID is a variable.

Keyword	Resource
disk	Disk per task (MB)
image	OS image
mem	Memory (GB)
node	Node to provision (used by physical machines)
procs	Processors per node (ppn)

Related topics

- [Fields: Catalog options on page xxxvii](#)
- [Adding new fields on page xxvi](#)

13 – User groups

13.1 About user group management

User groups are a way for administrators to assign roles (for details, see [7.1 About roles on page xix](#)) to groups comprised of individual users. As administrators, you can create a group, specify which users the group includes, and assign specific roles to the group. You can also modify existing groups (by adding and removing users or by changing role assignments, for instance) and delete groups that you no longer need.

You can manage user groups on the User Group Management page (**Administration > User Group Management**).

Associated tasks

The following topics describe how to create, edit, and delete user groups in [Product Name].

- [Creating a new user group on page lxxx](#)
- [Deleting a user group on page lxxx](#)
- [Modifying an existing user group on page lxxxi](#)

References

These topics contain detailed information about the fields you will use when completing user group management tasks.

- [Fields: New/Edit User Group on page lxxxi](#)
- [Fields: User Group Management on page lxxxiii](#)

Related topics

- [7.1 About roles on page xix](#)

13.2 User group tasks

Creating a new user group

Context

You can create user groups on the [Product Name] User Group Management page. When you create a new user group, you can specify which users are part of the group. You can also assign roles to the user group. For more information, see [13.1 About user group management on page lxxix](#).

To create a new user group

1. Go to the User Group Management page (**Administration > User Group Management**). For more information, see [Fields: User Group Management on page lxxxiii](#)
2. Select **New**.

The New User Group page appears.
3. Complete the fields, as necessary. For details, see [Fields: New/Edit User Group on page lxxxi](#).
4. When you are finished, choose **Save**.

Your new user group now appears in the list of user groups on the User Group Management page (see [Fields: User Group Management on page lxxxiii](#)).

Related topics

- [Fields: New/Edit User Group on page lxxxi](#)
- [13.1 About user group management on page lxxix](#)
- [Modifying an existing user group on page lxxxi](#)
- [Deleting a user group on page lxxx](#)

Deleting a user group

Context

If you no longer need a certain user group, you can delete it.

To delete user groups

1. Go to the User Group Management page (**Administration > User Group Management**). For more information, see [Fields: User Group Management on page lxxxiii](#).
2. Select the user group you want to delete. (Click once to select. Click again to deselect.)
3. Choose **Delete**.

A confirmation message appears and says that the user group was deleted successfully.

Related topics

- [Fields: User Group Management on page lxxxiii](#)
- [Creating a new user group on page lxxx](#)
- [Modifying an existing user group on page lxxxi](#)
- [13.1 About user group management on page lxxix](#)

Modifying an existing user group

Context

Perhaps you need to add users to or remove users from a user group. Maybe you need to assign a new role to a group. When you need to make modifications to a user group, you can go back into the user group form to make the changes you need.

To modify an existing user group

1. Go to the User Group Management page (**Administration > User Group Management**). For more information, see [Fields: User Group Management on page lxxxiii](#).
2. Select the user group you want to delete. (Click once to select. Click again to deselect.)
The Edit User Group page opens.
3. Update the fields, as necessary. For more information, see [Fields: New/Edit User Group on page lxxxi](#).
4. When you are finished, choose **Save**.

Related topics

- [Fields: New/Edit User Group on page lxxxi](#)
- [Creating a new user group on page lxxx](#)
- [Deleting a user group on page lxxx](#)
- [13.1 About user group management on page lxxix](#)

13.3 User group references

Fields: New/Edit User Group

Path: Administration > User Group Management > New/Modify

Image 8-1: New User Group

The New User Group (or Edit User Group) page lets you make specifications about the user group you are creating or editing.

Properties

Group name

Lets you specify the name of the user group. This field is required. [kbrad: character limits?] The name you specify will appear in the list of user groups on the User Group Management page (see [Fields: User Group Management on page lxxxiii](#)).

Description

Lets you provide a text description of the user group. This description will appear in the list of user groups on the User Group Management page (see [Fields: User Group Management on page lxxxiii](#)).

Members

Name

Lets you specify... This field is required.

To add additional users to the group, choose [Add member](#)

Type

Lets you specify the user type... This field is required.

Option	Description
LDAP User	
LDAP Group	
OU	

Add member

(+) Lets you add a new user to the user group. When you click **Add member**, new [Name](#) and [Type](#) box fields appear.

Remove

(x) Lets you remove a user from the user group.

Roles

Role

Lets you select (from the drop-down menu) the role you want to apply to the user group. This field is required. To add additional roles to the user group, choose [Add role](#).

Add role

(+) Lets you add assign an additional role to the user group. When you click Add role, a new [Role](#) field appears.

Remove

(x) Lets you remove a role from the user group.

Save

Lets you save the specifications of your new or modified user group. This button takes you to the User Group Management page (see [Fields: User Group Management on page lxxxiii](#)).

Cancel

Lets you cancel your action to add/edit the user group. This button takes you back to the User Group Management page (see [Fields: User Group Management on page lxxxiii](#)).

Related topics

- [Creating a new user group on page lxxx](#)
- [Modifying an existing user group on page lxxxi](#)
- [13.1 About user group management on page lxxix](#)

Fields: User Group Management

Path: Administration > User Group Management

Image 8-1: User Group Management

The User Group Management page lists all Moab user groups and displays each group's name and description. On this page, you can do the following:

- Create a new user group (see [Creating a new user group on page lxxx](#)).
- Modify an existing user group (see [Modifying an existing user group on page lxxxi](#)).
- Delete user groups you no longer need (see [Deleting a user group on page lxxx](#)).

New

Lets you create a new user group. For more information, see [Creating a new user group on page lxxx](#).

When you click **New**, [Product Name] takes you to the New User Group page.

Delete

Lets you delete a selected user group. For more information, see [Deleting a user group on page lxxx](#).

You can select a user group to delete it. Click once to select a user group; click again to deselect.

 This option is grayed out until you have selected a user group.

Modify

Lets you modify a selected user group. For more information, see [Modifying an existing user group on page lxxxi](#).

You can select a user group to modify it. Click once to select a user group; click again to deselect.

 This option is grayed out until you have selected a user group.

List of available user groups

Displays a summary of all the user groups that exist in Moab. The following fields are displayed:

Field	Description
Name	Name of the user group.
Description	Text description of the user group.
Role(s)	List of roles assigned the user group.

Related topics

- [13.1 About user group management on page lxxix](#)
- [Creating a new user group on page lxxx](#)
- [Modifying an existing user group on page lxxxi](#)
- [Deleting a user group on page lxxx](#)