

# **Managing Application Containers**

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# **Managing Application Containers**

As an administrator, you can perform the following management actions on application containers:

- Add VMs
- Open Console
- Clone Template
- Manage Container Power
- Delete Containers
- · View Reports

# **Viewing Container Actions**

Actions available to apply to a container are context-sensitive. You can use the action icons at the top of the **Application Container** tab or the actions drop-down to perform these actions.

 Step 1
 On the menu bar, choose Policies > Application Containers.

 Step 2
 Click the Application Container tab.

 Step 3
 Choose a container or right-click on the container to bring up all of the actions.

 Note
 To enable self-service user to perform actions on a container, you have to give permission by enabling the Enable Self-Service check box (when creating the container template).

 Note
 If there are too many action icons to display across the top of the Application Container tab, you can view the actions drop-down list by clicking the drop-down icon at the top right corner of the tab.

 You can select a container action from the action icons or from the actions drop-down list.

# **Adding VMs**



You cannot add the VMs to the container through the Add VMs to Container workflow. You can add VMs only by clicking Add VMs or by using the API.

- **Step 1** Choose **Policies** > **Application Containers**.
- **Step 2** Click the **Application Containers** tab.
- **Step 3** Choose a container.
- Step 4 Click Add VMs.
- **Step 5** In the Add VMs dialog box, click the Add (+) icon to add a new VM.
- **Step 6** From the **Network** drop-down list, choose the network (tier) to which to add the VM.
- **Step 7** Define the Virtual Machine:

To use a template defined in the application profile, check the Use Predefined Template check box.

If instead you want to define the VM using an image and setting the parameters by hand, skip to Step 9.

**Step 8** In the Add Entry dialog box, complete the following fields:

Name	Description
Network drop-down list	Select the network (tier) on which to add the VM.
VM Name drop-down list	Enter the name of the VM as defined in the application profile.
Select DRS Rule button	Click the button, then select a distributed resource scheduler (DRS) rule (also called an affinity rule) from the list.
No Of Instances drop-down list	The number of VM instances to create. The drop-down list limits your choices so as not to exceed the maximum number of VMs defined in the application profile.

Skip to Step 10.

**Step 9** In the Add Entry dialog box, complete the following fields:

Name	Description
Network drop-down list	Select the network (tier) on which to add the VM.
VM Name text box	The name you want to assign to the VM. During application container deployment, you can update the prefix from what is defined in the application profile.

Name	Description
VM Image drop-down list	The VM image to use. You define these VMs in the vCenter for your cluster.
Number of vCPUs drop-down list	Select the number of virtual CPUs for the VM.
Memory (MB) drop-down list	The size of the VM memory.
Disk Size (GB) text box	The size of the VM disk. If you enter zero, the VM uses the disk size defined in the image.
Select DRS Rule button	Click the button, then select a distributed resource scheduler (DRS) rule (also called an affinity rule) from the list.
Select Storage DRS Rule button (optional)	If you selected a DRS rule using the <b>Select DRS Rule</b> button, the <b>Select Storage DRS Rule</b> button appears. Click the button, then select a storage DRS rule from the list.
VM Password Sharing Option	The password sharing policy for this VM. Default is to not share the root password.
Network Adapter Type drop-down list	The network adapter for the VM.
Initial Quantity	The number of VMs to create on application startup.

#### Step 10 Click Submit.

**Step 11** To create more VMs, repeat the procedure starting with Step 5.

Step 12 When you have defined all the VMs you want, click Submit in the Add VMs dialog.

# **Deleting VMs**

#### **Before You Begin**

- Create and deploy an existing application container with one or more VMs.
- Power off the VMs that you want to delete.

**Step 1** On the menu bar, choose **Policies** > **Application Containers**.

- **Step 2** Choose an application container.
- Step 3 Click Decommission Container.
- **Step 4** From the list of VMs, select the VM or VMs that you want to delete.

	Note	The list shows only VMs that are powered	
		off.	
Step 5	Click	Click Submit.	
Step 6		the confirmation dialog, click <b>OK</b> . e VM is deleted from the selected container.	

## Accessing a VM Console

You can view the console on your VMs if you have the proper access rights.

#### **Before You Begin**

Enable access for VMs that you want to access using VNC. See Enabling VNC Console Access, on page 4.

- **Step 1** On the menu bar, choose **Policies** > **Application Containers**.
- **Step 2** Click the **Application Container** tab.
- **Step 3** Choose a container.
- Step 4 Click Open Console action. The Access Console dialog box appears.
- **Step 5** From the **Select VM** drop-down list, choose a VM.
- **Step 6** Click **Submit**. A console of the selected VM opens in a new browser window.
  - **Note** For automatic configuration of a VNC console on a container, you must provide permission by checking the **Enable VNC Based Console Access** check box when you create the application container template.

### **Enabling VNC Console Access**

To enable console access on an individual VM, follow this procedure:

Step 1		On the m	enu bar,	choose	Virtual	> (	Compute.
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- Step 2 Click the VM tab.
- **Step 3** Choose the VM for which to enable console access.
- **Step 4** Click the **Configure VNC** action.
- Step 5 When the Configure VNC Request dialog box comes up, click Submit.

# **Cloning an Existing Container**

As an administrator you can clone an existing container. Cloning transfers all of the settings and configuration data from the VMs that are contained in the original container.

**Step 1** On the menu bar, choose **Policies** > **Application Containers**.

**Step 2** Click the **Application Containers** tab.

**Step 3** Choose a container.

**Step 4** Click the **Clone Container** icon. Complete the following fields:

Name	Description
Container Name field	The name of the container.
Container Label field	The container label. This label should be unique.

Step 5 Click Submit.

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# **Managing Container Power**

Administrators have the ability to disable and enable the power to containers.

Step 1	Choose Policies > Application Containers.
Step 2	Click the Application Containers tab.
Step 3	Choose a container.
Step 4	Click the Power On Container icon or Power Off Container icon.
Step 5	From the list, select the VMs to power on or off.
Step 6	Click Submit.
Step 7	On the confirmation dialog box, click <b>OK</b> .

# **Viewing Application Containers**

To view application containers in Cisco UCS Director, do the following:

On the menu bar, choose **Policies** > **Application Containers**.

Application containers use a color scheme to identify the container's status:

- Green—All VMs and bare metal servers (BMs) are powered on, including the gateway (GW) if the container configuration includes a GW.
- Yellow—Any of the requested BMs are still in progress/failed or any of the application VMs is down.
- Blue—Container provisioning is in progress.
- · Grey-VMs and BMs are not present in the container.
- Red—All VMs and BMs, including the GW, are powered off.

# **Deleting Application Containers**

When you delete a container, you also delete the resources that are provisioned for that container. When the **delete container** action is initiated, Cisco UCS Director rolls back the application container setup. A service request is created, reflecting the rollback status.

Step 1 On the menu bar, choose **Policies** > **Application Containers**. Step 2 Click the Application Containers tab. Step 3 Choose a container. Step 4 Click the Delete Container icon. Note If you choose to delete an application container with associated L4-L7 services, the L4-L7 services are deleted as well. If L4-L7 services are associated with the application container, you are prompted to confirm that you want to delete all resources provisioned for the container. Step 5 If prompted, and if you want to delete the L4-L7 services along with the container, click **Submit**. A notice appears confirming that a service request has been generated. Step 6 Choose Organization > Service Request.

- **Step 7** Click the **Service Request** tab.
- **Step 8** Choose the deletion service request.
- Step 9 Click View Details.

## **Viewing Reports**

You can generate summary reports, a detailed report with credentials, and a detailed report without credentials for each container.

- **Step 1** On the menu bar, choose **Policies** > **Application Containers**.
- **Step 2** Click the **Application Container** tab.
- **Step 3** Choose a container or right-click on the container to bring up all of the actions.
- Step 4 Click View Reports.
- Step 5From the Select Report Type drop-down list, choose the report you want to view.<br/>Reports "with Credentials" show passwords in plain text. Reports "without Credentials" hide passwords in the report.

Reports for Administrators contain policy information not given in reports for Self-Service Users.

A dialog box appears with a report detailing the application container. The report displays the ID of the Service Request used to create the container, in the report header.

# **Viewing Application Container Information**

The application container dashboard displays complete information for the application container. There are various tabs you can view for a selected application container.

- **Step 1** On the menu bar, choose **Policies** > **Application Containers**.
- **Step 2** Click the **Application Containers** tab, and choose an application container.
- Step 3 Click View Details.
- **Step 4** You can view the following information:

Tab	Description
Summary	<ul> <li>Container—This pane displays the summary for the application container, such as, name of the container, group, and tenant, number of tiers, number of BMs and VMs per tier, and resource limits for the container.</li> <li>Tier—This pane displays the summary for the tier, such as, number of VMs and BMs, and Virtual Routing and Forwarding (VRF) instance.</li> </ul>

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Tab	Description		
Virtual Machines	<ul> <li>Displays the VMs provisioned for the application container. This tab displays the VM name, VM Type, status, IP address, Guest OS, and the time when the VM was provisioned.</li> <li>Note Specific naming convention is followed for the VM names for the following actions:</li> </ul>		
	• Application provisioning for private network— <vm during<br="" name="" specified="">container creation time&gt;<index of="" per<br="" vms="">tier&gt;</index></vm>		
	• Adding VMs to an APIC container— <vm name specified in Add VM action&gt;<index of VMs per tier&gt;</index </vm 		
Bare Metals	Baremetals are physical servers provisioned as part of the application container. This tab displays the baremetal name, OS type, and Service Request ID for each baremetal.		
Tier Mapping	Tiers correspond to the networks that you defined when you created the application container template. Tiers in a typical application include web, application, and database The tiers contain VMs and BMs. This tab displays the VM and BMs contained in each tier, along with its name and an IP address.		
L4 L7 Services	<ul> <li>Displays the information about L4-L7 services, including service request ID, service name, IP address, service type, device type, and consumer and provider tiers.</li> <li>Note If you drill down the service name, you can view the list of real servers.</li> </ul>		
Contracts	Displays the information about the contracts that define the rule for communication in multi-tier applications. You can drill down each contract to view the security rules.		