



Configuring Application Resources

This chapter provides information on configuring providers, provider networks, default providers, zones, nodes, and custom image flavors in V2PC.

Configuring Providers

V2PC provides support for the following providers.

- VMware
- Bare Metal Unmanaged

Add a Provider

To configure a new provider:

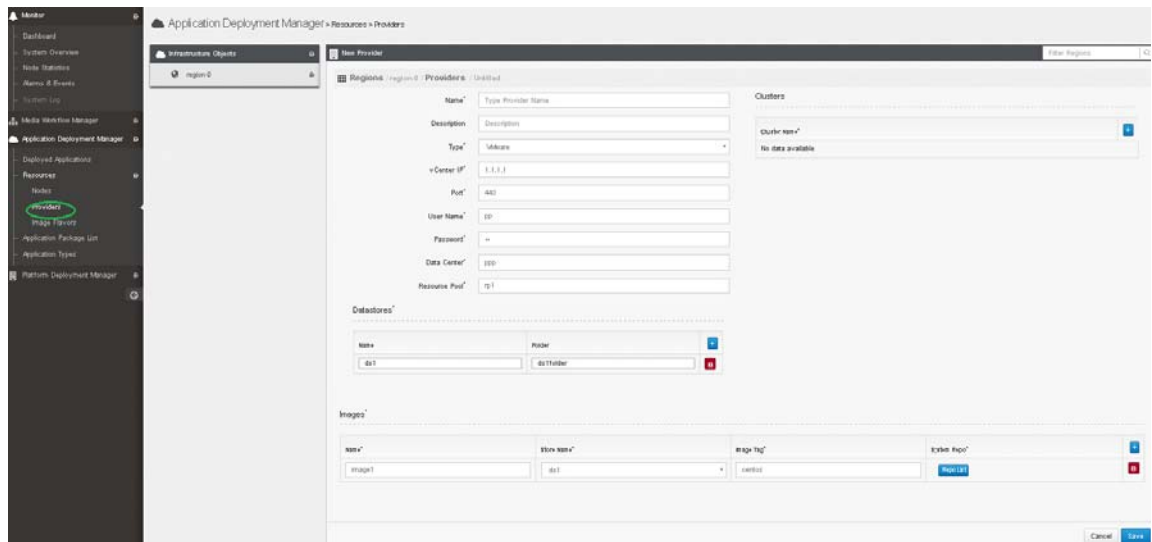
-
- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
- Step 2** Select the desired provider **Type** and enter details for the provider.



Note

- V2PC prepopulates the first provider you configure with default provider data.
 - V2PC populates the DNS servers. Users cannot enter DNS server IP addresses.
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Figure 4-1 *Configuring a New Provider*

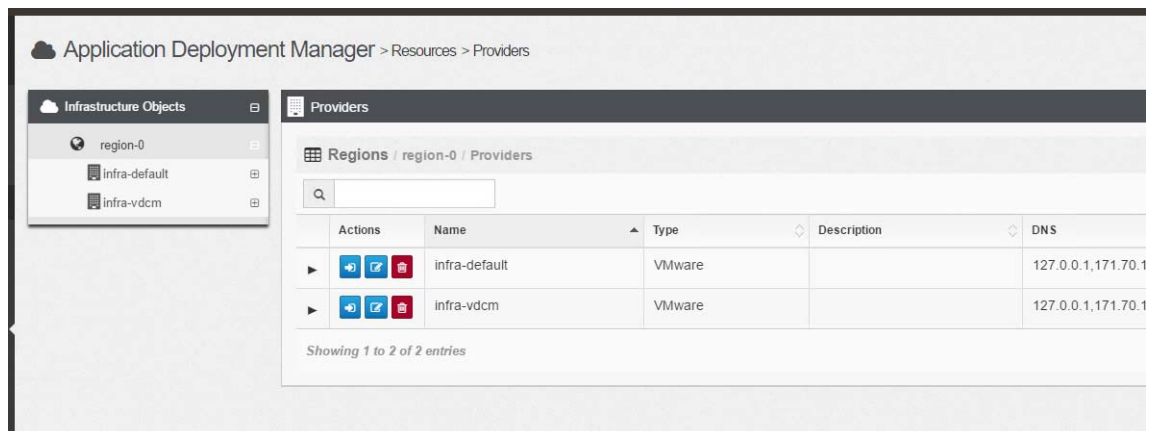


Step 3 When you have finished editing provider details, click **Save**.

Edit a Provider

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
- Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.
- Step 3** Locate the provider to be edited and click its **Edit Provider** icon to modify its settings.

Figure 4-2 Editing a Provider



Step 4 Make the necessary changes and click **Save**.

Delete a Provider

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- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
 - Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.
 - Step 3** Locate the provider to be deleted and click the **Delete Provider** icon to delete it.
 - Step 4** When prompted, click **Yes** to confirm the deletion.
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Configuring Provider Networks

On the Providers page, click **Add (+)** and configure one or more networks that will be referenced by this provider.

Figure 4-3 Configuring Provider Networks

The screenshot shows a web-based configuration window titled "Network - Untitled". At the top, there are two numbered steps: "1" for "Network Basic Info" and "2" for "Network Interface". The current view is "Step 1 - Network Basic Info". It contains two input fields: "Name*" with a placeholder "Enter Network Object Name" and "Description". Below these fields are "Previous" and "Next" buttons. At the bottom right, there are "Cancel" and "Save" buttons.



Note

The first network of a default provider is prepopulated with network data.

Configuring Default Providers

The V2PC GUI helps to create the first provider by prepopulating the required information, which it retrieves from an XML script file in JavaScript Object Notation (JSON) format named **deployInfo.json**.



Note

The multiJSON file must specify possible images using the provisioning script.

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- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.

- Step 2** Select **Region-0** and confirm that Region-0 has no providers added.
 - Step 3** Click **Add (+)** to create a new default provider. The page loads with prepopulated data.
 - Step 4** Specify a name for the default provider and click **Save**.
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Configuring Zones

Add a Zone

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
 - Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.
 - Step 3** Click the **provider** of interest (for example, **infra-vdcm**) to display the existing zones for the provider.
 - Step 4** Click **Add (+)** to open the configuration wizard for adding a new provider.
 - Step 5** Click **Save**, and then continue with zone configuration as described next.
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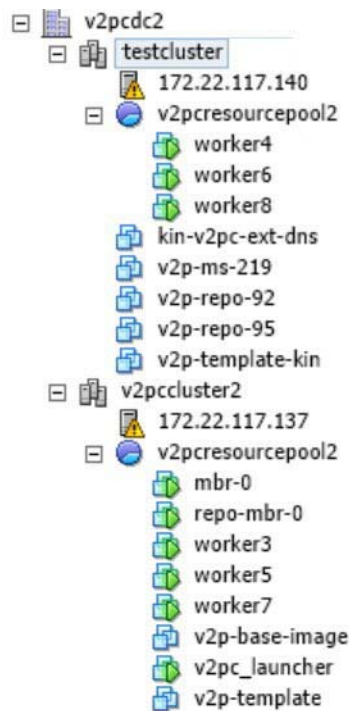
Configure Multiple Zones

Beginning with Release 3.3.3, V2PC supports configuring applications (AICs) to use multiple zones, rather than being limited to a single zone and VMware ESXi cluster (and a single VM) as in earlier releases. Configuring AICs with multiple zones, each with its own ESXi cluster, enables the application to find all available nodes for each cluster when the application is deployed or has its SLA updated.

To configure an AIC to use multiple zones:

- Step 1** Create (or confirm that you have already created) the **ESXi clusters** needed for the AIC. The following example shows two ESXi clusters, each configured with one host:

Figure 4-4 *Confirming Clusters for the AIC*

**Note**

- Use the same resource pool configuration for each cluster. In this example, both resource pool names are called **v2pcresourcepool2**, and this resource pool name would be for any other clusters added.
- Make a record of the datastore folders used by each cluster. You will need this information when configuring the provider in the V2PC GUI.

Step 2

Create a new **provider** as described in [Add a Provider, page 4-1](#). You can use the default values or update the fields as needed to support the multiple-zone feature in your deployment.

**Note**

If you had previously created a provider, you can edit the existing provider by inserting the folder and cluster names from the **Provider** page of the ESXi cluster.

The following example shows the Edit Provider dialog with two datastore folders and two cluster names:

Figure 4-5 *Edit Provider Dialog with Two Clusters*

The screenshot shows the 'Edit Provider' configuration page for a VMware provider. The configuration is as follows:

- Name:** infra1
- Description:** infra1
- Type:** VMware
- vCenter IP:** 22.22.11.143
- Port:** 443
- User Name:** administrator@v2pc.local
- Password:** [Redacted]
- Data Center:** v2pdc2
- Domain:** v2pc.com
- Resource Pool:** v2pcresourcepool2

DNS Servers:

DNS IP Address
12.0.0.1
10.10.10.183

Clusters:

Cluster Name
v2pccluster2
testcluster

Datastores:

Name	Folder
datastore137	v2pc_datastore
v2pdc5_datas	Discovered virt

Networks:

Name	Network Name
network	VM Network

Step 3 Create the required number of **zones**, associating each with a ESXi cluster through its configuration.

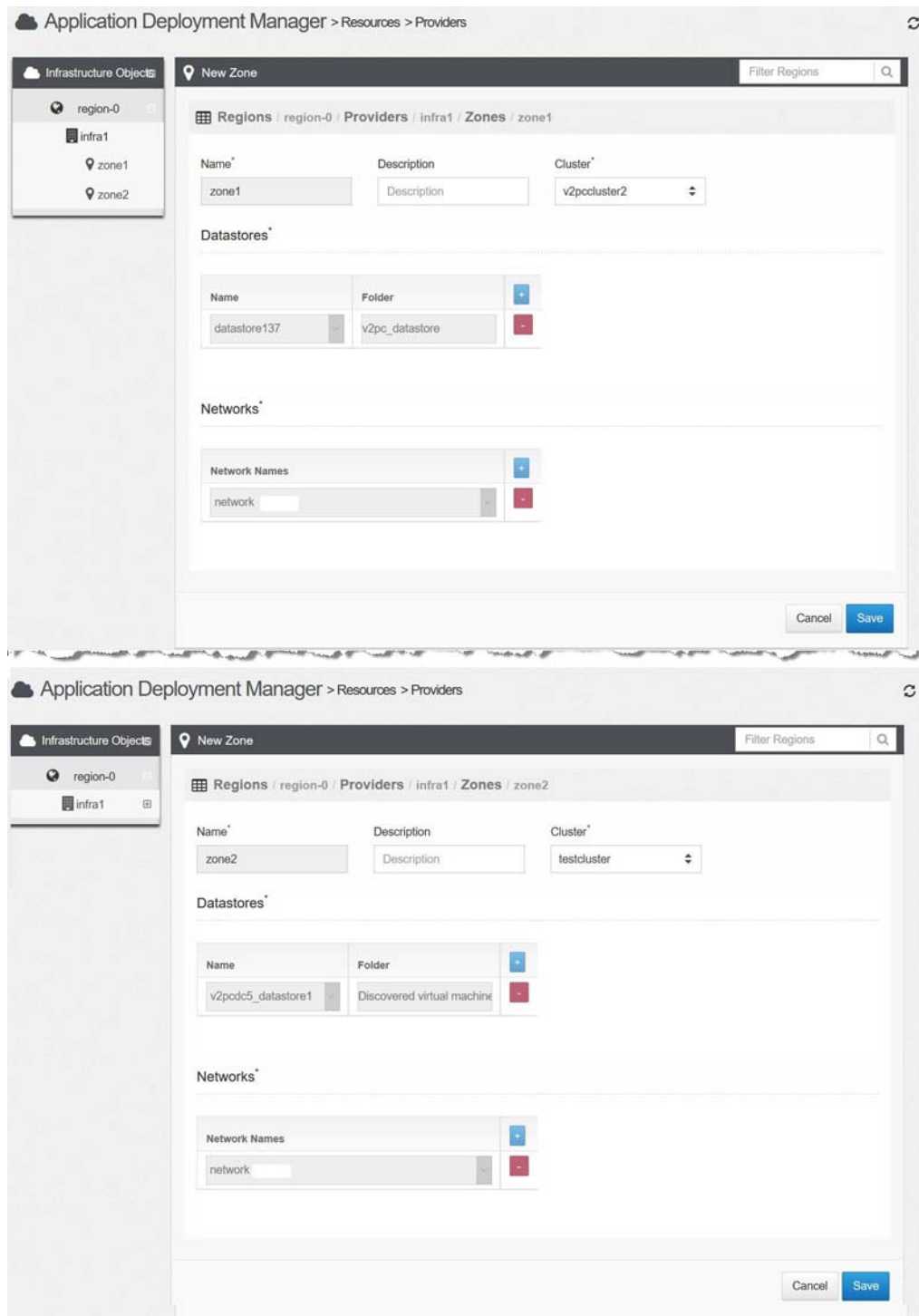


Note

Be sure that the datastore and network names are correctly configured and associated with the ESXi cluster. Otherwise, node creation (performed in Step 4) will fail.

The following illustration shows an example of two-zone creation:

Figure 4-6 *Creating Two Zones for a Provider*




- Step 4** Create **nodes** in each zone as described in [Add a Node, page 4-9](#).
- Step 5** Create the **AIC** as described in [Configuring Application Instances, page 5-2](#).
- Step 6** In the **Zone** field of the AIC, configure the number of zones needed to provide the required number of nodes that the AIC can use.

The following illustration shows an AIC configured with two zones:

Figure 4-7 AIC Configured with Two Zones

Edit Application Instance : sampleaic



Name * s1

Version * 1.1.20

Description

Region * region-0

Provider * infra1

Zone *

+ x	
<input type="checkbox"/>	* Zone
<input type="checkbox"/>	zone1
<input type="checkbox"/>	zone2

Image Template Name * v2p-base-image

Finish Cancel Previous Next



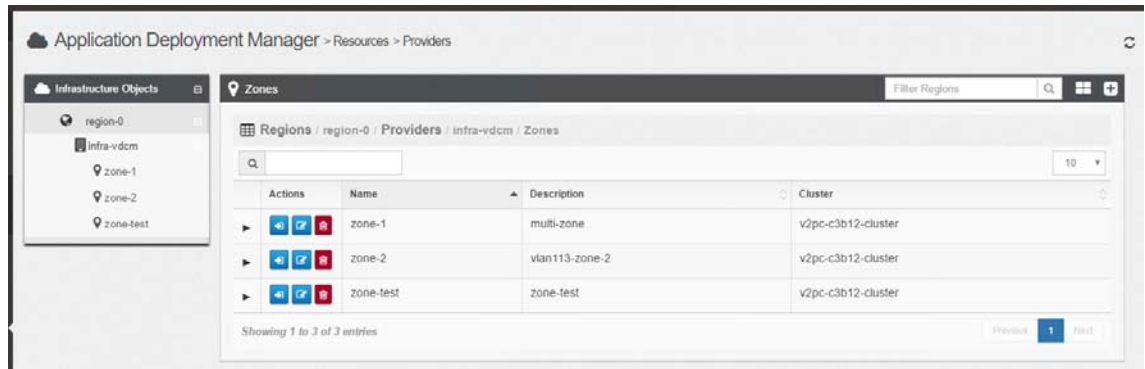
Note

Zones are *accretive*, meaning that you can add a zone but not delete or change it after it has been saved and used by the application.

Edit a Zone

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
- Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.
- Step 3** Click the **provider** of interest (for example, **infra-vdcm**) to display the existing zones for the provider.
- Step 4** Click **Edit Zone** beside the zone to be edited to open the configuration wizard for the zone.

Figure 4-8 Editing a Zone



Step 5 Make the necessary changes and click **Save**.

Delete a Zone



Note Before deleting a zone, be sure that the zone is not being referenced by any applications.

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
- Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.
- Step 3** Click the **provider** of interest (for example, **infra-vdcm**) to display the existing zones for the provider.
- Step 4** Click **Delete Zone** beside the zone to be deleted.
- Step 5** When prompted, click **Yes** to confirm the deletion.

Configuring Nodes

From the navigation menu, choose **Application Deployment Manager > Resources > Nodes**. This page displays the list of all deployed worker nodes.



Note V2PC supports bulk creation of worker nodes. For details, see [Creating Workers in Bulk, page 11-1](#).

Add a Node

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
- Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.

- Step 3** Click the **provider** of interest (for example, **infra-vdcm**) to display the existing zones for the provider.
- Step 4** From the navigation menu, choose the zone of interest (for example, **zone-1**) to display the existing nodes for the zone.
- Step 5** Click **Add (+)** to open the configuration wizard for adding a new node.

Figure 4-9 Adding a New Node

Type	Network Name	IP Address
Data In	-- Select Network --	
Data Out	-- Select Network --	
Management	-- Select Network --	

- Step 6** Click **Save** to save the new node.
- Step 7** From the navigation menu, choose **Application Deployment Manager > Resources > Nodes** and confirm that all nodes are in **Idle** state.

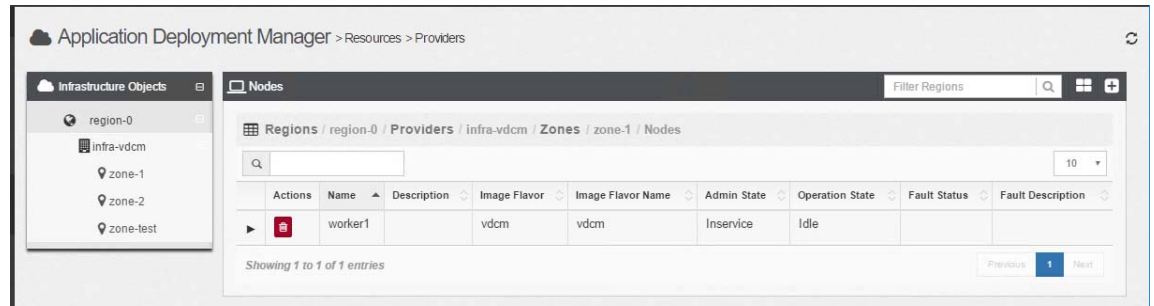


Note It may take some time for this page to populate.

Delete a Node

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Providers**.
- Step 2** From the navigation menu, choose the region of interest (for example, **region-0**) from the **Infrastructure Objects** menu. The Regions page opens listing all providers for the region.
- Step 3** Click the **provider** of interest (for example, **infra-vdcm**) to display the existing zones for the provider.
- Step 4** From the navigation menu, choose the zone of interest (for example, **zone-1**) to display the existing nodes for the zone.

Figure 4-10 Deleting a Node



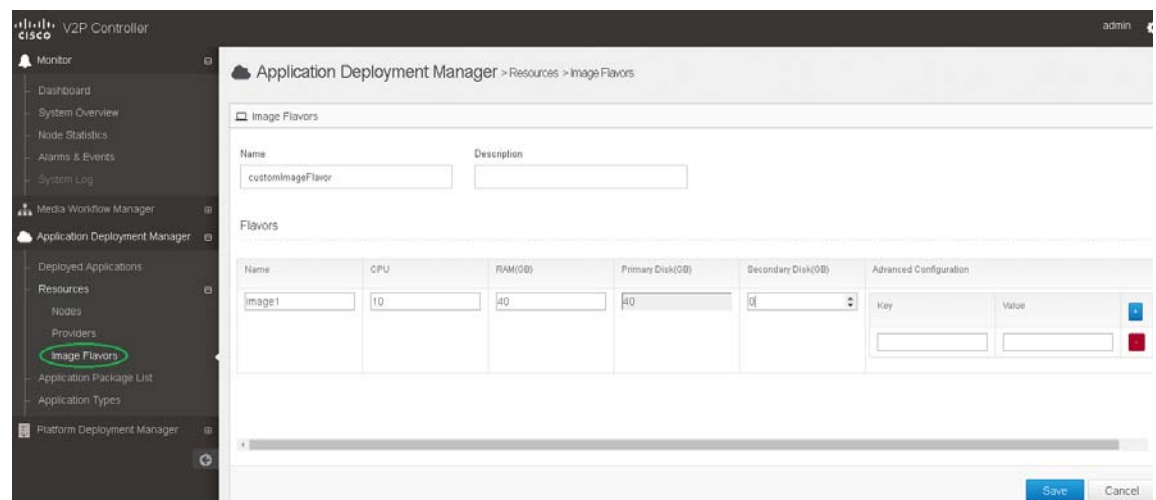
- Step 5** Click **Delete** beside the node to be deleted.
- Step 6** When prompted, click **Yes** to confirm the deletion.

Configuring Custom Image Flavors

In addition to predefined image flavors, V2PC supports configuration of custom image flavors. To configure a custom image flavor:

- Step 1** From the navigation menu, choose **Application Deployment Manager > Resources > Image Flavors**. The Image Flavors page opens listing the default image flavors.
- Step 2** Click **Add (+)** to create a new image flavor. The Image Flavors dialog opens.
- Step 3** Specify a **Name** and **Description** to identify the image flavor.
- Step 4** Click **Add (+)** and specify additional details for the image flavor per system requirements.

Figure 4-11 Configuring a Custom Image Flavor



- Step 5** Click **Save** to save the new image flavor.

