

Deploy Cisco Catalyst 8000V on OCI

This chapter specifies the step-by-step workflow on how to deploy Cisco Catalyst 8000V on OCI.

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Prerquisites

Before you start the deployment workflow, ensure you have completed the prerequisites mentioned in this section.

- Sign up and create an OCI Account. To know how to do this, see Sign up for a new Oracle account.
- Set up a compartment to organize your resources. For more information on how to do this, see Creating a compartment.
- Set up an SSH client to configure SSH authentication.
- Create a Virtual Cloud Network (VCN). To know how to perform this task, see Creating a VCN.

Deploying a Cisco Catalyst 8000V instance

Summary

This list specifies the step-by-step workflow on how to deploy Cisco Catalyst 8000V on OCI.

Workflow

Follow these steps in the same order to deploy a Cisco Catalyst 8000V instance on OCI.

1. Choose the Cisco Catalyst 8000V image from the OCI marketplace.
2. Configure the image settings.
3. Configure the VCN settings.
4. Add the SSH keys.
5. Configure the day zero settings and launch the instance.
6. Access the instance by using an SSH client.

What's next

To know how to perform these steps in detail, refer to the individual tasks in this chapter.

Choose the Cisco Catalyst 8000V image

Perform these steps to choose the Cisco Catalyst 8000V image from the marketplace and configure the basic settings for the deployment.

Procedure

Step 1 Log in to the OCI marketplace.

Step 2 From the navigation menu, choose **Marketplace** > **All Applications**.

Step 3 Search for and select the **Cisco Catalyst 8000V for SD-WAN and Routing** image.

Step 4 On the top right corner of the landing page, from the **Region** drop-down list, choose your region.

Step 5 From the **Version** drop-down list, select the version, for example, **`17.18.1a`**.

Step 6 From the **Compartment** drop-down list, choose one of the compartments you've already created.

Step 7 Agree to the terms and conditions by selecting the check box.

Step 8 Click **Launch Instance**.

Configure the image settings

Perform this task to configure the image settings such as choosing the instance, memory, and bandwidth for your deployment.

Procedure

Step 1 On the **Create Compute Instance** window, enter a name for your instance in the **Name** field.

Step 2 In the **Placement** area, you can optionally configure the **Availability Domain**, **Capacity Type**, **Fault Domain**, and **Cluster Placement settings**. For more information on these settings, see Create an Instance.

Step 3 From the **Image and Shape** area, configure these image settings:

a) **Image**: Displays the name of the image you've selected. This field should display the **Cisco Catalyst 8000V for SD-WAN and Routing** value.

b) **Shape**: From this field, select a flexible shape that is supported for the Cisco Catalyst 8000V deployment. To know the supported shapes, see the Supported instance types section in this guide.

c) **OCPU**: Since you chose the flexible option under Shapes, you must select the number of OCPUS or the number of virtual CPUs that you want to allocate to this instance. Drag the slider to configure the number of OCUPS. By default, the other resources scale proportionately.

d) **Memory**: Choose the memory that you want to allocate to this instance.

e) **Network Bandwidth**: Specifies the network bandwidth for your instance based on your settings.

Step 4 Click the **Show Advanced OCI Settings** link in the **Image and Shape** area and ensure the **Enable simultaneous multithreading** check box is not checked. This setting is recommended for optimum performance.

Configure the VCN settings

Perform the steps mentioned in this task to configure the network details for your instance.

Procedure

Step 1 On the **Create Instance** page, go to the **Primary vNIC Information** section to configure the network details.

Step 2 Specify a name for your networkin the **vNIC Name** field. This is an optional field.

Step 3 From **Primary Network** > **VCN** drop-down list, choose the VCN for your deployment. Either choose the **Existing virtual cloud network** option and choose a VCN that you've already created or choose the **Create new virtual cloud network** option and create a VCN. You can also enter a subnet OCID to choose the VCN for your deployment.

Step 4 From the **Subnet** field, choose **Select existing subnet** or **Create new public subnet**. If you choose a public subnet, you can also assign the instance a public IPv4 address. A public IP address (with associated security and routing configuration) is required to make this instance accessible from the internet.

Step 5 From the **Primary vNIC IP Address** field, choose either **Automatically assign private IPv4 address** or **Manually assign private IPv4 address**. The automatic option, where the OCI selects an available IP address, is the default option. Both IPv4 and IPv6 are supported.

Add the SSH keys

Perform this task to configure the SSH key pair using which you can access your instance. You can either allow OCI to generate an SSH key pair or use your own. If you want to use your own SSH key to connect to the instance, you need the public key from the SSH key pair that you plan to use. The key must be in OpenSSH format.

Procedure

On the **Create Instance** page, in the **Add SSH Keys** section, configure your SSH keys by choosing one of the following radio buttons:

- **Generate a key pair for me**: Choose this option if you want OCI to generate a key pair for you. Select **Save Private Key** and then save the private key on your computer. Optionally, select **Save Public Key** and then save the public key.
- **Upload public key files (.pub)**: Choose this option upload the public key portion of your key pair. Either browse to the key file that you want to upload or drag and drop the file into the box.
- **Paste public keys**: Choose this option and paste the public key portion of your key pair in the box.

  If the public key has a username appended at the end, access the VM by using:

  ```
  ssh -i <ssh_key>
  <username>@<public_ip_addr>
  ```

  If the public key is not appended with any username, it is defaulted to oci-user. In this case, access the VM by using:

  ```
  ex- ssh -i <ssh_key>
  oci-user@<public_ip_addr>
  ```

- **No SSH keys**: Select this option only if you do not want to connect to the instance using SSH.

Note You can't provide a public key or save the key pair that is generated by OCI after the instance is created.

Configure the day zero settings

This task provides the day zero configuration in the form of User data, which can be used by cloud-init to run custom scripts or provide custom cloud-init configuration.

Procedure

Step 1 On the **Create Instance** page, in the **Advance Settings** section, click the **Management** tab.

Step 2 In the **Initialization script** field, select one of these two options:

- **Cloud-init script file**: Browse to the file that you want to upload or drag the file into the box.
- **Paste cloud-init script**: Paste your script in the Cloud-init script text box.

Step 3 Click **Create** to create the instance.

Verify successful deployment

After you deploy Cisco Catalyst 8000V on OCI, perform these steps to verify successful deployment.

Procedure

On the **Create Instance** page, click **Create**.

The system displays the **New Instance Launch** page with a summary of all the settings you've chosen for the deployment. On the left side, the instance status is displayed as **Provisioning**. Once the instance is created and launched without any issues, this status changes to **Running**.

After the instance is provisioned, the instance details appear in the instance list. To view additional details such as IP addresses and the initial password, click on the instance name.

When the instance is fully provisioned and running, you can connect to the instance.

Disable simultaneous multithreading

To optimize the performance of your instances, we strongly recommend you disable simultaneous multithreading (SMT) on your instances.

Procedure

Step 1 Log in to the marketplace. Click **Compute** > **Instances** to access your instance.

Step 2 Choose the instance for which you want to disable SMT and choose **Stop Instance**.

Step 3 Click **More Actions** > **Edit** > **Edit Shape**.

Step 4 In the **Shape Summary** area, click the **Show Advanced OCI Settings** link.

Step 5 Uncheck the **Enable simultaneous multithreading** check box.

Step 6 Click **Save** to disable SMT.