

Oracle® Enterprise Manager Ops Center

Create Private Networks in a Virtual Datacenter

12c Release 3 (12.3.0.0.0)

E60045-01

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This guide provides an end-to-end example for how to use Oracle Enterprise Manager Ops Center.

Introduction

Oracle Enterprise Manager Ops Center provides comprehensive network management options that enable secure management of the virtual datacenter.

Private virtual networks are created by cloud users according to their requirements and within the limits of their account quota. A private virtual network is created based on the private network from the network domain of the virtual datacenter. All virtual servers that have membership to a private virtual network in common can communicate freely through that subnet. Private virtual networks are only accessible within an account. An account entitles designated cloud users the right to use computing, network, and storage resources of the virtual data center. The account provides the required capabilities to manage these resources.

When you create a network domain, you can set the network creation limit for each selected fabric. The network creation limit determines how many private virtual networks can be created in an account. You can spread the number of private networks across all of the accounts in the virtual datacenter.

See [Related Articles and Resources](#) for links to related information and articles.

What You Will Need

You can create a private virtual network using an unmanaged fabric or a fully-managed or host-managed fabric. In this document, the network is created on a fully-managed or host-managed fabric to provide its network resources.

Prerequisites for creating an account:

- Estimate the resource quotas to be allocated for the account.
- Identify cloud users to be assigned to the account.

Hardware and Software Configuration

The following configurations have to be in place before you create a private virtual network.

- A user-defined network domain associated with a server pool.
- A vDC assigned to the server pool and its networks.

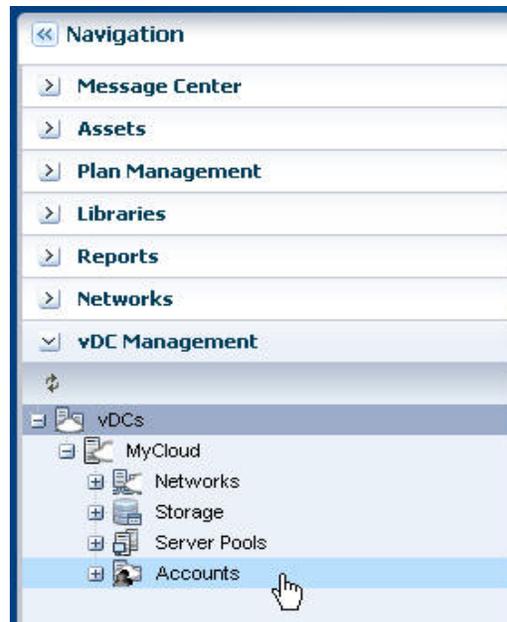
Creating a Private Virtual Network

A private virtual network is set up exclusively for an account. The vServers associated with this network have private virtual IP address for internal communication.

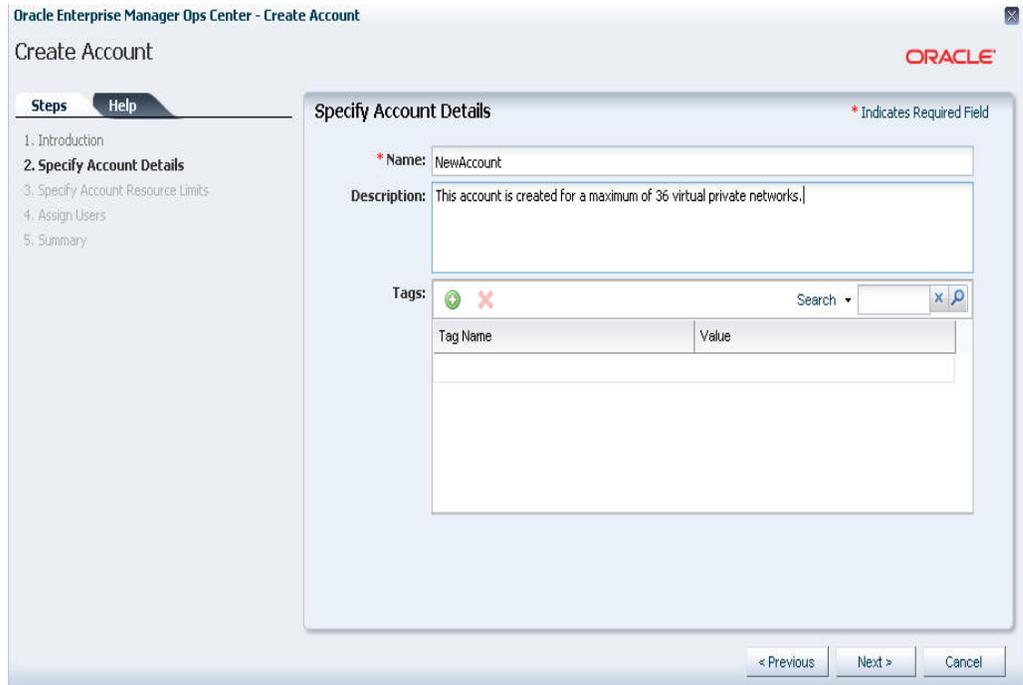
Create an Account

Perform the following steps to create a new account.

1. Expand vDC Management on the Navigation pane.
2. Expand vDCs, click MyCloud, then click Accounts.



3. On the Actions pane, click Create Account.



4. Enter the name and description for the account, then click Next.
Add tags for better identification and classification of the account.
5. Specify the resource quotas for vCPU, Memory, and Storage to be allocated for the account in the respective fields.
As you allocate the resources, the Resource Quota Information displays the number of corresponding vDC resources that are used. It also displays if the vDC resources are oversubscribed or undersubscribed.

Specify Account Resource Limits

Set the quota for each vDC resource that the account can use. The Resource Quota Information displays the usage of the vDC resources.

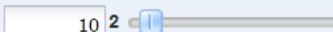
Resource Quota Information

- vCPU is 76% oversubscribed, 900 vCPUs subscribed from vDC capacity of 512
- Memory is 91% oversubscribed, 1949 GB subscribed from a vDC capacity of 1022 GB
- Storage is 75% oversubscribed, 5353 GB subscribed from a vDC capacity of 3075 GB

vCPU:

Memory: GB

Storage: GB

Number of private vNets:  4096

Use the table below to extend public network resource limits.

Public Networks Resource Limits				
	Name	Subnet	Available Addresses	Limit
<input checked="" type="checkbox"/>	10.16.0/22.1	10.16.0/22	82	<input type="text" value="82"/>

- In the Number of private vNets field, enter the number of private vNets that you want to create in this account. The maximum number of private virtual networks that can be created in an account is 4096.
- Click **Next**.
- Select the cloud user that you want to assign to the account. Use the arrow keys to add users to the account and remove users from the account.

Oracle Enterprise Manager Ops Center - Create Account

Create Account

Steps **Help**

- Introduction
- Specify Account Details
- Specify Account Resource Limits
- Assign Users**
- Summary

Assign Users

Assign users to the account.

Available Cloud Users

root

Assigned Cloud Users






- Click **Next**.

10. View the Summary and click **Finish** to create the account.
When the job is completed, a new account is created.

Create a Private Virtual Network

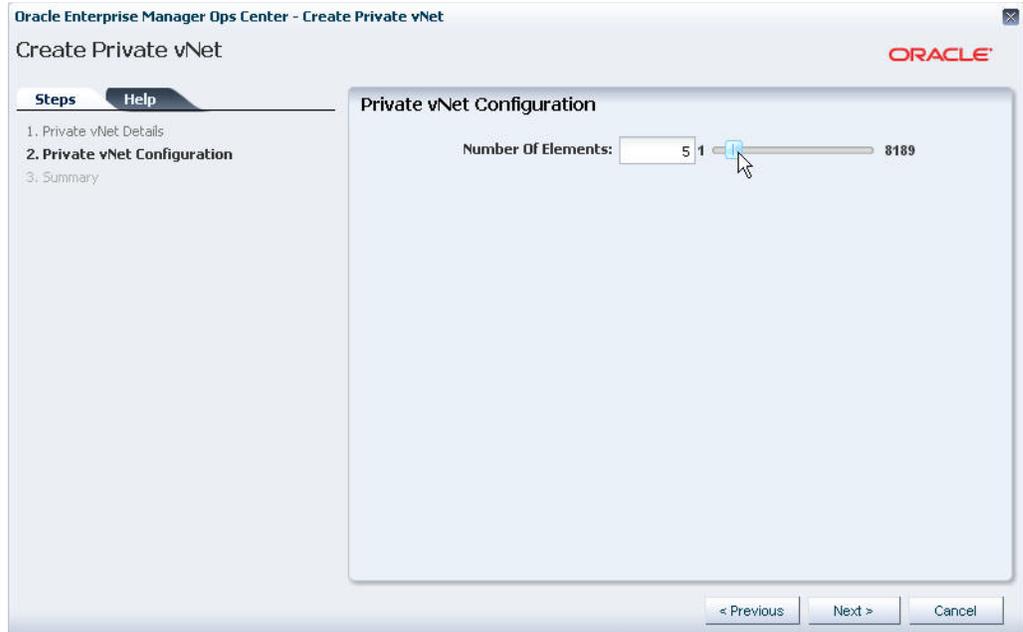
Perform the following steps to create a private virtual network using the account you just created.

1. Expand vDC Management on the Navigation pane.
2. Expand vDCs, click MyCloud, then click Accounts.
3. Select NewAccount (the newly created account).



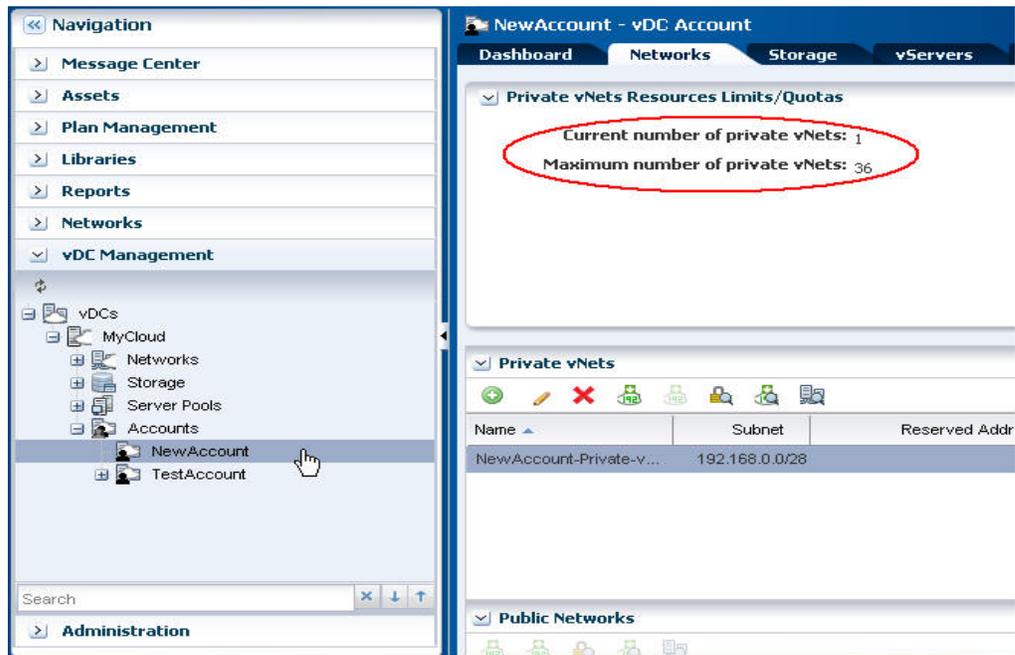
4. On the Actions pane, click Create Private vNet.
5. Enter the name and description for the private virtual network.
6. Click Next.
7. Enter the number of elements.

This is the maximum number of virtual servers that can be part of this vNet. Use the slide bar to set the value. The values entered are rounded up to the next value of 1, 5, 13, 29, 61, 125, 253, 509, 1021, 2045, 4093, and 8189.



8. Click Next.
9. Review the Summary, then click Finish to create the private virtual network.

The newly created private virtual network is listed in the Networks and vDC sections of the Navigation pane.



What's Next?

You can assign the IP address from this newly created private virtual network to the vServer.

Related Articles and Resources

The Oracle Enterprise Manager Ops Center 12c Release 3 documentation is available at http://docs.oracle.com/cd/E59957_01/index.htm.

For information about network resources and virtual datacenters, see the *Oracle Enterprise Manager Virtualization Reference*.

For current discussions, see the product blog at <https://blogs.oracle.com/opscenter>.

See the Deploy How To library at http://docs.oracle.com/cd/E59957_01/nav/deploy.htm and the Operate How To library at http://docs.oracle.com/cd/E59957_01/nav/operate.htm for deployment and operational examples.

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