

# **V** Commands

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# vdc

To create or specify a virtual device context (VDC) and enter VDC configuration mode, use the **vdc** command. To delete a VDC, use the **no** form of this command.

 $vdc \ vdc-name \ [ \ ha-policy \ \{ \ dual-sup \ \{ \ bringdown \ | \ restart \ | \ switchover \ \} \ [ \ single-sup \ \{ \ bringdown \ | \ restart \ | \ switchover \ \} \ ] \ ] \ [ \ id \ vdc-id \ ] \ [ \ template \ vdc-template-name \ ] \ [ \ type \ storage \ ]$ 

no vdc vdc-name

### **Syntax Description**

vdc-name	VDC name.
ha-policy	(Optional) Specifies the high availability (HA) policy for the VDC when an unrecoverable error occurs. The default is restart.
dual-sup	Specifies the HA policy for devices with dual supervisor modules.
bringdown	Puts the VDC in a failed state. To recover from the failed state, you must reload the physical device.
restart	Deletes the VDC and recreates it using the startup configuration.
switchover	Initiates a supervisor module switchover.
single-sup	Specifies the HA policy for devices with a single supervisor module.
reload	Reloads the physical device and recreates the VDC using the startup configuration.
id vdc-id	(Optional) Specifies the VDC ID. The default is the first available number.
template vdc-template-name	(Optional) Specifies the VDC resource template. The default is the default VDC resource template.
type	(Optional) Creates VDC with a special set of services.
storage	(Optional) Specifies that the VDC should be used for storage only.

#### **Command Default**

The default HA policy for the default VDC: dual-sup default is switchover single-sup default is reload

The default HA policy for nondefault VDCs: dual-sup default is switchover single-sup default is restart

The default VDC ID is first available. The default VDC resource template is the default template. The default switchover policy is **bringdown**.

#### **Command Modes**

Global configuration

#### **Command History**

Release	Modification
5.2(1)	Added the type and storage keywords.
4.0(1)	This command was introduced.

#### **Usage Guidelines**

You can use this command only in the default VDC (VDC 1).

In the Release 5.2(1) and higher, the type storage VDC allows you to run Fibre Channel over Ethernet (FCoE) in the Cisco NX-OS Nexus 7000 Series switch. Thee VDC type storage cannot be the default VDC, and it can be only one of the VDCs. You cannot have two type storage VDCs on the device. Only FCoE VLANs can be assigned to the storage VLANs. For more information about FCoE, see Cisco NX-OS FCoE Configuration Guide for Cisco Nexus 7000 and Cisco MDS 9500.

When you create a VDC, the Cisco NX-OS software allocates the internal resources for the VDC. This process can take a few minutes to complete depending on the amount of internal resource you have requested for the VDC.

When you delete a non-default vdc, interfaces from that vdc are moved to unallocated pool.

This command requires the Advanced Services license for creating and managing nondefault VDCs. It does not require a license for managing the default VDC.

## **Examples**

This example shows how to create a VDC and enter VDC configuration mode:

This example shows how to delete a VDC:

```
switch# configure terminal
switch(config) # vdc MyDevice
Note: VDC creation is a time consuming process, please wait until the command completes
switch(config-vdc)#
```

This example shows how to create a VDC with a different single supervisor module HA policy than the default and enter VDC configuration mode:

```
switch# configure terminal
switch(config)# vdc MyDevice ha-policy single-sup reload
Note: VDC creation is a time consuming process, please wait until the command completes
switch(config-vdc)#
```

```
switch# configure terminal
switch(config)# no vdc MyDevice
Deleting this vdc will remove its config. Continue deleting this vdc? [no] yes
Note: VDC deletion is a time consuming process, please wait until the command completes
```

Command	Description
show vdc	Displays VDC status information.

# vdc combined-hostname

To change the command-line interface (CLI) prompt for the nondefault virtual device contexts (VDCs) to show both the default VDC name and the hostname, use the **vdc combined-hostname** command. To change the CLI prompt to show only the nondefault VDC name, use the **no** form of this command.

vdc combined-hostname

no vdc combined-hostname

**Syntax Description** This command has no arguments or keywords.

**Command Default** None

**Command Modes** Global configuration

#### **Command History**

Release	Modification
4.2(1)	This command was introduced.

#### **Usage Guidelines**

This command does not require a license. When the prompt string length is more than 64 characters, only the first 64 characters is displayed.

# **Examples**

This example shows how to change the CLI prompt for the nondefault VDCs to include the hostname:

switch# configure terminal
switch(config)# vdc combined-hostname

This example shows how to change the CLI prompt for the nondefault VDCs to not include the hostname:

switch# configure terminal
switch(config)# no vdc combined-hostname

# vdc resource template

To create or specify a virtual device context (VDC) resource template and enter VDC resource template configuration mode, use the **vdc** command. To delete a VDC resource template, use the **no** form of this command.

vdc resource template vdc-template-name
no vdc resource template vdc-template-name

#### **Syntax Description**

vdc-template-name	VDC resource template name. The name has a
	maximum length of 32 characters and is not
	case-sensitive.

#### **Command Default**

Resource	Minimum	Maximum
IPv4 multicast route map memory <sup>1</sup>	8	8
IPv6 multicast route map memory 1	2	2
IPv4 unicast route map memory 1	8	8
IPv6 unicast route map memory 1	4	4
Port channels	0	768
SPAN sessions	0	2
VLANs	16	4094
VRFs	16	8192

<sup>1</sup> Route map memory limits are in megabytes.

**Command Modes** 

Global configuration

#### **Command History**

Release	Modification
4.1(2)	• The default maximum limit for the IPv4 unicast resource changed from 256 MB to 8 MB.
	<ul> <li>The default maximum limit for he IPv4 unicast resource changed from 256 MB to 4 MB.</li> </ul>
	• Added the IPv4 and IPv6 multicast resources.
4.0(1)	This command was introduced.

### **Usage Guidelines**

You can use this command only in the default VDC (VDC 1).

You cannot change the default VDC resource template provided by the Cisco NX-OS software.

You can create up to 64 VDC resource templates.

This command does not require a license.

#### **Examples**

This example shows how to create or specify a VDC resource template and enter VDC resource template configuration mode:

```
switch# configure terminal
switch(config)# vdc resource template MyTemplate
switch(config-vdc-template)#
This example shows how to delete a VDC resource template:
```

This example shows now to defect a VDC resource template.

switch# configure terminal
switch(config)# no vdc resource template MyTemplate

Command	Description
show vdc resource template	Displays VDC status information.

# vdc restart

To restart a virtual device context (VDC) that is in the failed state due to a high availability (HA) failure, use the **vdc restart** command.

vdc vdc-name restart

#### **Syntax Description**

vdc-name	VDC name.

#### **Command Default**

None

#### **Command Modes**

Global configuration

#### **Command History**

Release	Modification
4.2(4)	This command was replaced by the <b>reload vdc</b> command.
4.2(1)	This command was introduced.

#### **Usage Guidelines**

You can use this command only from the default VDC (VDC 1).

This command requires the Advanced Services license.



# Caution

Restarting a VDC disrupts all traffic on the VDC.

#### **Examples**

This example shows how to restart a VDC:

switch# configure terminal
switch(config)# vdc TestVDC restart

Command	Description
reload vdc	Restarts the current VDC.
show vdc	Displays the information and status for all VDCs on the physical device.

# vdc suspend

To suspend virtual device context (VDC) operation, use the **vdc suspend** command. To resume the VDC operation, use the **no** form of this command.

vdc vdc-name suspend

no vdc vdc-name suspend

#### **Syntax Description**

vdc-name	VDC name.

**Command Default** 

None

**Command Modes** 

Global configuration

#### **Command History**

Release	Modification
4.2(1)	This command was introduced.

### **Usage Guidelines**

You can use this command only from the default VDC (VDC 1).

You can only suspend a nondefault VDC.

This command requires the Advanced Services license.



Caution

Suspending a VDC disrupts all traffic on the VDC.

#### **Examples**

This example shows how to suspend VDC operation:

switch# configure terminal

switch (config) # vdc TestVDC suspend

This example shows how to resume VDC operation:

switch# configure terminal

switch(config)# no vdc TestVDC suspend

Command	Description
show vdc	Displays the information and status for all VDCs on the physical device.