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Cisco Nexus 7000 Series NX-OS Getting Started with Virtual Device Contexts, Release 4.0

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This document describes the procedure for getting started with virtual device contexts (VDCs) on an NX-OS device.

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Introduction to VDCs

VDCs partition a single physical device into multiple logical devices that provides fault isolation, management isolation, address allocation isolation, service differentiation domains, and adaptive resource management. You can manage a VDC instance within a physical device independently. Each VDC appears as a unique device to the connected users. A VDC runs as a separate logical entity within the physical device, maintains its own unique set of running software processes, has its own configuration, and can be managed by a separate administrator.

For more information about working with VDCs using the NX-OS software, see the [Cisco Nexus 7000 Series NX-OS Virtual Device Context Configuration Guide, Release 4.0](#).



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Creating and Initializing a VDC

This section describes how to create and initialize a VDC.

To create and initialize a VDC, follow these steps:

Step 1 Log in to the default VDC with a username that has the network-admin role.

Step 2 Enter configuration mode and create the VDC using the default settings.

```
switch# configure terminal
switch(config)# vdc MyVDC
```

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

Step 3 (Optional) Allocate interfaces to the VDC.



Note When you allocate an interface to a VDC, the interface configuration is lost.

```
switch(config-vdc)# show vdc membership
```

```
vdc_id: 1 vdc_name: switch interfaces:
Ethernet2/1      Ethernet2/2      Ethernet2/3
  Ethernet2/4      Ethernet2/5      Ethernet2/6
  Ethernet2/7      Ethernet2/8      Ethernet2/9
  Ethernet2/10     Ethernet2/11     Ethernet2/12
  Ethernet2/13     Ethernet2/14     Ethernet2/15
  Ethernet2/16     Ethernet2/17     Ethernet2/18
  Ethernet2/19     Ethernet2/20     Ethernet2/21
  Ethernet2/22     Ethernet2/23     Ethernet2/24
  Ethernet2/25     Ethernet2/26     Ethernet2/27
  Ethernet2/28     Ethernet2/29     Ethernet2/30
  Ethernet2/31     Ethernet2/32     Ethernet2/33
  Ethernet2/34     Ethernet2/35     Ethernet2/36
  Ethernet2/37     Ethernet2/38     Ethernet2/39
  Ethernet2/40     Ethernet2/41     Ethernet2/42
  Ethernet2/43     Ethernet2/44     Ethernet2/45
  Ethernet2/46     Ethernet2/47     Ethernet2/48
```

```
switch(config-vdc)# allocate interface ethernet 2/11-14
```

Moving ports will cause all config associated to them in source vdc to be removed. Are you sure you want to move the ports? [yes] **yes**

Step 4 Verify the VDC configuration.

```
switch(config-vdc)# show vdc MyVDC
```

```
vdc_id  vdc_name      state      mac
-----  -
2       MyVDC             active     00:00:00:00:00:00
```

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Step 5 Switch to the new VDC and enter the VDC admin user account password.

```
switch(config-vdc)# switchto vdc MyVDC
```

```
---- System Admin Account Setup ----
```

```
Enter the password for "admin": <password>
Confirm the password for "admin": <password>
```

Step 6 (Optional) Execute the setup script for your VDC.



Note

You can bypass the setup script and execute it later from within the VDC using the **setup** command.

```
---- Basic System Configuration Dialog VDC: 3 ----
```

This setup utility will guide you through the basic configuration of the system. Setup configures only enough connectivity for management of the system.

Please register Cisco Nexus 7000 Series devices promptly with your supplier. Failure to register may affect response times for initial service calls. Cisco Nexus 7000 Series devices must be registered to receive entitled support services.

Press Enter at anytime to skip a dialog. Use ctrl-c at anytime to skip the remaining dialogs.

```
Would you like to enter the basic configuration dialog (yes/no): yes
```

Step 7 When you finish the setup script, or bypass it, you enter your new VDC.

```
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switch-MyVDC#
```

Obtaining Documentation and Submitting a Service Request

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