



Brocade VDX 6730 Switch Configuration for use in an HNAS Cluster



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Introduction

This document describes how to configure a Brocade VDX 6730 switch for use as an ISL (inter-switch link) or an ICC (inter-cluster communication) switch. These instructions do not cover configuring the VDX 6730 for use as a data serving switch or for any other purpose.

This document is for switches running NOS 2.x or 3.x; note that some commands are different in 4.x, and those commands are not contained in this document.

Initial setup

Serial connection

Connect to the switch's serial port using the serial cable supplied with the switch, 96008N1 no flow control. Log in with user name "admin", password "password".

Disable VCS

You should begin by turning off VCS. The switch will then reboot and reset most of its configuration.

Set passwords (optional)

```
sw0# configure terminal
Entering configuration mode terminal
sw0(config)# username user password
(<WORD>): *****
sw0(config)# username admin password
(<WORD>): *****
```

IP settings

```
configure terminal
interface Management 1/0
no ip address dhcp
ip address IPv4-address/length
ip gateway-address gateway

ipv6 address IPv6-address/length
```

Example

```
sw0# configure terminal
Entering configuration mode terminal
sw0(config)# interface Management 1/0
sw0(config-Management-1/0)# no ip address dhcp
sw0(config-Management-1/0)# ip address 192.0.2.123/24
sw0(config-Management-1/0)# ip gateway-address 192.0.2.1
sw0(config-Management-1/0)# ipv6 address 2001:db8:1234::5678/64
```

Cluster-specific configuration

Most other configuration is per port. It is necessary to increase the MTU to allow large enough jumbo frames. The port should be set to trust priority tags on inbound frames. Each port must also be explicitly enabled.

```
sw0(config)# interface TenGigabitEthernet 0/1
sw0(conf-if-te-0/1)# mtu 9216
sw0(conf-if-te-0/1)# switchport
sw0(conf-if-te-0/1)# no shutdown
sw0(conf-if-te-0/1)# qos trust cos
sw0(conf-if-te-0/1)# interface TenGigabitEthernet 0/2
sw0(conf-if-te-0/2)#
```

... and so on for all ports required. Leave unused ports disabled to guard against accidental misconnection.

VLANs for multiple clusters

Where cluster switches are shared by multiple clusters, or for cluster and non-cluster connections, each cluster must have its own VLAN. In this case, no cluster should be assigned to VLAN 1. No per-VLAN configuration is required, but a VLAN must be (trivially) configured before ports can be added to it:

```
sw0(config)# interface Vlan 2
sw0(config-Vlan-2)# exit
sw0(config)# interface TenGigabitEthernet 0/1
sw0(conf-if-te-0/1)# switchport access vlan 2
sw0(conf-if-te-0/1)# interface TenGigabitEthernet 0/2
sw0(conf-if-te-0/2)# switchport access vlan 2
```

ISL

In cases where an inter-switch link is needed, priority tagging must be enabled on its port:

```
sw0(conf-if-te-0/24)# priority-tag
```

This switch has **not** been tested for configurations where link aggregation is needed in order to provide enough bandwidth on an ISL (as opposed to just extra redundancy). This would require further research into the details of the switch's frame distribution algorithms.

Save the configuration

```
sw0(config)# exit
```

```
sw0# copy running-config startup-config
```

```
This operation will modify your startup configuration. Do you want  
to continue? [y/n]:y
```

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