

1. Nexus Core Switch

- [1. Installation](#)
- [2. Current VLAN Configuration](#)
- [2. Configure VLANs](#)
- [2. SSH](#)

1. Installation

2. Current VLAN Configuration

Port Configuration

This section outlines which ports are connected to what. Since, we only use the top 24 ports it will only have the odd numbers inside the set [1,47].

Ethernet1/1 <----> Patch-01 <----> WAP1 <----> Trunk port <----> VLAN: ALL <----> Native
VLAN: MGMT

Ethernet1/3 <----> Patch-02 <----> EMPTY

Ethernet1/5 <----> Patch-03 <----> TV1 <----> Access port <----> VLAN: IOT

Ethernet1/7 <----> Patch-04 <----> TV2 <----> Access port <----> VLAN: IOT

Ethernet1/9 <----> Patch-05 <----> Envoy <----> Access port <----> VLAN: IOT

Ethernet1/11 <----> Patch-06 <----> EMPTY <----> Access port <----> VLAN: IOT

Ethernet1/13 <----> Patch-07 <----> EMPTY

Ethernet1/15 <----> Patch-08 <----> EMPTY

Ethernet1/17 <----> Patch-09 <----> EMPTY

Ethernet1/19 <----> Patch-10 <----> EMPTY

Ethernet1/21 <----> Patch-11 <----> EMPTY

Ethernet1/23 <----> Patch-12 <----> EMPTY

Ethernet1/25 <----> Patch-13 <----> MGMT PVE 1 <----> Access port <----> VLAN: MGMT

Ethernet1/27 <----> Patch-14 <----> IPMI PVE 1 <----> Access port <----> VLAN: MGMT

Ethernet1/29 <----> Patch-15 <----> MGMT R1 <----> Access port <----> VLAN: MGMT

Ethernet1/31 <----> Patch-16 <----> PC1 <----> Access port <----> VLAN: MGMT

Ethernet1/33 <----> Patch-17 <----> BackupNas <----> Access port <----> VLAN:MGMT

Ethernet1/35 <----> Patch-18 <----> EMPTY

Ethernet1/37 <----> Patch-19 <----> EMPTY

Ethernet1/39 <----> Patch-20 <----> EMPTY

Ethernet1/41 <----> Patch-21 <----> PVE1 1Gig

Ethernet1/43 <----> Patch-22 <----> VLANs PVE2 <----> Trunk port <----> VLAN: All <----> Native
VLAN: MGMT

Ethernet1/45 <----> Patch-23 <----> VLANs Backup PVE1 <----> Trunk port <----> VLAN: All

Ethernet1/47 <----> NOT CONNECTED

10GEthernet1/49 <----> NOT CONNECTED

10GEthernet1/50 <----> Patch-24 <----> VLANs PVE1 <----> Trunk port <----> VLAN: All

10GEthernet1/51 <----> NOT CONNECTED

10GEthernet1/52 <----> Port Router R1 (ix0) <----> Trunk port <----> VLAN: All

For example, if you have VLAN 1 with devices in the 192.168.1.0/24 subnet and VLAN 2 with devices in the 192.168.2.0/24 subnet, the router will have two sub-interfaces configured: one with an IP address in the 192.168.1.0/24 subnet for VLAN 1 and another with an IP address in the 192.168.2.0/24 subnet for VLAN 2.

It's important to note that VLANs are layer 2 constructs, and routing between VLANs is a layer 3 function handled by the router. The router uses these IP addresses to route traffic between VLANs and to external networks.

Make sure that management interface is only accessible at a specific IP address

2. Configure VLANs

2. SSH

To login into the Cisco Nexus server with SSH you need to use the following adjusted ssh command. Assuming you are on a linux computer. In this specific case this works for Debian Gnome.

```
ssh -o HostKeyAlgorithms=+ssh-rsa dpasn@10.18.81.151
```

Passsword: Groustercoreswitch13

To allow multiple VLANs on a Cisco Nexus switch, use the command: switchport trunk allowed vlan <vlan-list> where <vlan-list> can be a range or specific VLAN IDs. For example, to allow VLANs 10, 20, and 30, you would enter switchport trunk allowed vlan 10,20,3