

How to configure a core switch with network cables

Article Overview

To configure a core switch, connect it physically using console and network cables, then access its CLI to set hostnames, VLANs, and IP addresses for network management.

Physical Setup

- o Inspect the switch and cables: Ensure the switch is powered off initially and check all network and console cables for damage. Identify the console port (Serial or USB) and network ports on the switch .
- o Connect the console cable: Attach one end of a console cable to the switch's console port and the other end to your PC's serial port. If your PC lacks a serial port, use a USB-to-serial adapter .
- o Connect network cables: Use Ethernet cables to connect the switch ports to other switches, routers, or servers. For uplinks to other core switches, use high-speed ports (e.g., Gigabit or 10G) to ensure optimal performance .
- o Power on the switch: Plug in the power cable and wait for the system LEDs to indicate the switch is operational (green for normal operation), .

Accessing the Switch CLI

- o Open terminal software: Use PuTTY, Tera Term, or similar software to access the switch via the console connection .
- o Configure serial connection: Select the correct COM port and set the speed to 9600 bps. Click "Open" to access the CLI .
- o Enter privileged mode: Type enable to enter privileged EXEC mode, then configure terminal to enter Global Configuration Mode .

Basic Configuration Steps

- o Set hostname: Assign a recognizable name for the switch using hostname Switch1 to simplify network management .
- o Assign management IP: Configure an IP address on the management VLAN to allow remote access via SSH or Telnet. Example:
`interface vlan 1 ip address 192.168.1.10 255.255.255.0 no shutdown`
- o Configure VLANs: Create VLANs for different network segments using vlan and assign ports to VLANs with switchport access vlan .
- o Enable SSH for secure remote management: Generate RSA keys and enable SSH version 2 to secure remote access .
- o Verify connectivity: Use ping and show vlan brief commands to ensure devices are reachable and VLANs are correctly assigned .

Testing and Optimization

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- o Check link lights: Ensure all connected devices show active link LEDs.
- o Test network traffic: Connect client devices and verify they can communicate across VLANs and reach the gateway.
- o Document configuration: Record IP addresses, VLAN IDs, and port assignments for future reference and troubleshooting . By following these steps, your core switch will be physically connected, properly configured, and ready to manage network traffic efficiently.

This document outlines the configuration steps for a core switch in a server room, including connecting via serial cable, assigning

Learn how to setup a network switch with ease. Switches allow you to send and receive information efficiently and securely. Get

In this guide, we'll walk through the basic steps of setting up a switch using a console cable, perfect for beginners

This detailed guide will walk you through the process of installing and upgrading a network switch, including the necessary tools,

When you deploy a new switch, it's important to configure it properly to ensure optimal performance, security, and functionality. This

We will cover everything from understanding the basics of network switches to choosing the right switch for your

Learn how to configure a network switch for optimal performance and security. Follow these

Whether the configuration deployment of a switch is completed all at once or done in phases, the basic switch settings must first be

You'll learn how to: ? Connect to your Cisco switch using a console cable ? Perform basic

Learn how to set up a base configuration for network switches. Secure, optimize, and enable remote access with our step-by-step

The differences are the cable types (Multimode= MM - Singlemode = SM) which need to match the structured fibre

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The switch 10/100/1000 port configuration changes to operate at the speed of the attached device. If the attached ports do not

Learn how to connect a network switch to another network switch with this comprehensive guide. Understand the

Cisco switch configuration guide. Step-by-step setup instructions for efficient network performance.

Hi all, complete newbie here. I am following the CBT Nuggets CCNA course and am trying to connect all my

A switch that functions as part of a router and operates at the third layer of the OSI network standard model, the network layer. The

Web: <https://www.millstraining.co.za>

