

# Should we use a core switch or a router



## Overview

This guide dives deep into the difference between router and switch, explaining their core functions, how they operate at different layers of the OSI model, and why you absolutely need both (or devices combining their features) for a functional network. It likely has more ports, and thus can interconnect more devices, but it's probably not loaded with enough memory to hold the entire internet's BGP tables, or the sheer amount of processing power needed to perform. My plan is to leave the existing switches as distribution layer switches and have them all connect to one layer 3 core switch, each with 10GB fiber, and then have that core switch connected to the router for WAN traffic with 1GB Ethernet. (We don't move too much data over the WAN).

depending on how the network is set up and if you have a. The core switch performs as a router and bridges the devices. It is. Confusing them is common, but understanding "router vs switch" is crucial for anyone designing, troubleshooting, or simply optimizing a network - whether it's a sprawling enterprise setup or your cozy home office.

## Article Content

Sep 26, 2025

Router vs Network Switch Key Differences Explained

This guide dives deep into the difference between router and switch, explaining their core functions, how they operate at different layers of the OSI

Oct 15, 2025

Should I add a layer 3 core switch or just use the router I

My question is whether this is a good idea, and whether I should just scrap the idea of a ~\$5,000 core switch and just let the Cisco 2921 Router handle the inter-vlan

Nov 09, 2025

Do I need a core switch?

Do I need a core switch? The simple answer is "yes." Every complex network comprises multiple computers and devices. To route the traffic and

May 21, 2026

Is a core switch the same as a router?

Perform routine functions for safe traffic Today, we are having a detailed discussion about the routing aspects of the core switch. What is a core

Dec 05, 2025

Why does a core switch need to be behind a router? : r/ccna

I noticed in most topologies there is a L3 switch at the distribution layer and the core layer. why would it need to run to a router after if the switch has routing capabilities? Also why would it even need

Mar 14, 2026

What Is a Core Switch?

A core switch is the backbone of a large-scale network, designed to handle massive volumes of traffic with ultra-low latency and maximum reliability. Sitting at the top of the hierarchical model, core

Nov 15, 2025

What is Core Switch and How to Choose

In this article, we will provide an overview of the core switch, its significance, and offer guidance on how to choose the right core switch for your

May 01, 2026

### Access vs. Distribution vs. Core Switch Comparison Guide

The most common model is the three-tier hierarchy: Access Layer, Distribution Layer, and Core Layer. Each layer is served by specialized switches, with the access switch connecting end-user devices,

Mar 18, 2026

### What is the best practices for Users Getaway! Core Switch or Firewall

Dear Experts, I am wondering what is the best practices for the user getaway. is Core Switch preferred to be the getaway for all user after this the traffic go to the firewall Or the Firewall

Dec 07, 2025

### Switch vs Router: Understanding the Core Differences

Both types have their merits depending on your needs. Wired routers excel in speed and security, while wireless models shine in accessibility and ease of setup. Understanding these

Apr 24, 2026

### What is a Core Switch | Functions and Difference over Normal Switch

This is done via a high-speed communication forwarding route and as a result, the core layer switch application has improved in terms of reliability, performance, and throughput. The major

Jun 05, 2026

### What Is the Core Switch?

The core switch is the central, high-capacity switching point within a network, responsible for forwarding data between different parts of the network and often connecting to multiple

Feb 12, 2026

### WAN Switch vs Core Routers in ISPs

Core router/multilayer switch: A router or multilayer switch that resides within the middle or backbone of the WAN rather than at its periphery.

Mar 24, 2026

### What is a Core Switch?

While both core switches and routers can perform routing functions, they are designed for different purposes. Core switches primarily focus on high-speed switching within a network, while

Jan 26, 2026

Core Switch & Edge Switch: How to Make a Decision?

Has our network grown to the point where we need a switch with more advanced management capabilities? And here is an important decision you are

Feb 18, 2026

Core Switch vs. Distribution Switch vs. Access Switch

Comprehensive guide to Core, Distribution, and Access Switches. Roles in the network and important parameters explained.

Jun 26, 2026

SMB Network Design: Core vs. Distribution vs. Access Switches

Don't overspend on network hardware. Our expert guide explains core, distribution, and access switches so you can design the right network for your SMB.

Jun 07, 2026

What Is a Core Switch?

Explore what a core switch does, why it's essential for enterprise networks, and how to choose the right model. Includes real-world applications and Cisco/Huawei/Aruba model comparison.

Sep 05, 2025

networking

These are the questions that come to my mind: Using only one router or a switch + router has an impact on the speed, or latency? Do all switches need to be plugged in to electricity? I am

Nov 24, 2025

What Do I Need: Router vs. Switch

In doing designs lately, I've been increasingly running into situations where I have to think hard about using a traditional router or an L3 switch. I've made some

Oct 22, 2025

Is a core switch the same as a router?

Therefore, if you have a complex network, you should use the core switches to simplify it. You should employ a core switch in a complex network

Jan 30, 2026

Why does a core switch need to be behind a router? : r/ccna

You can, and many people do, use a MLS as the core, you can connect the switch directly to the internet, and this might be fine for a smaller network, but at a certain point you're not allowing the

Apr 07, 2026

Difference between a Core Switch and Router

Whether you can use them the same way you would an edge router really depends on the specific model of core switch. Many of them are modular and have WAN capabilities like routers do

Feb 22, 2026

What is a Switch vs a Router?

What is a router? Just as a switch connects multiple devices to create a network, a router connects multiple switches, and their respective networks, to form an even larger network. These networks

## Contact Us

For more information, pricing, or custom solutions, please contact us:

Website: <https://elagage-lorrain.fr>

Email: [sales@elagage-lorrain.fr](mailto:sales@elagage-lorrain.fr)

Phone: +33 6 47 82 19 35

Address: 15 Rue de la République, 69002 Lyon, France

This document is for informational purposes only. Specifications subject to change without notice.

