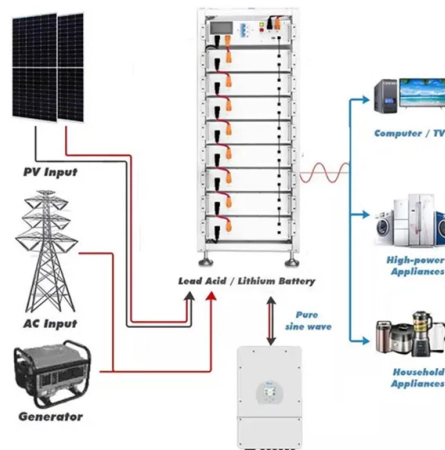


Access layer switches connect to the internet independently



Article Overview

Access layer switches typically do not connect to the internet independently; they forward traffic to distribution or core layer devices that handle routing and external connectivity.

Role of Access Layer Switches

Access layer switches are network edge devices that connect end-user devices such as PCs, IP phones, wireless access points, cameras, and IoT devices to the LAN. They primarily operate at Layer 2, forwarding traffic based on MAC addresses, although some modern models support limited Layer 3 functions like static routing. Their main functions include:

- Providing high port density for multiple devices.
- Delivering Power over Ethernet (PoE) to devices like IP phones and cameras.
- Enforcing security policies such as port security, VLAN tagging, and DHCP snooping.
- Handling local traffic forwarding within the VLAN or broadcast domain.

Connectivity to the Internet

Access switches do not typically provide direct internet access. Instead, they forward traffic upstream to distribution or core layer switches, which are responsible for routing traffic between VLANs and connecting to external networks, including the internet. In hierarchical network designs:...

Article Content

Dec 19, 2025

Network Infrastructure overview | Core, Distribution, & Access Layer ...

In this comprehensive video, we delve into the critical components of network

Mar 20, 2026

Access Layer Compact Switch Deployment Guide

g installed and tested before it is needed. In such circumstances, using an additional compact switch attached directly to the existing

Sep 15, 2025

Data Center Access Layer Design

The loop-free U topology design provides a Layer 2 access solution with active uplinks and redundancy via an inter-switch link

Mar 08, 2026

What is the Access Switch?

What does an Access Layer Switch do? As the physical entity of the access layer, access switches are responsible to connect both

Oct 12, 2025

FS Community

Hier sollte eine Beschreibung angezeigt werden, diese Seite lässt dies jedoch nicht zu.

Jun 21, 2026

Core Switch vs Access Switch | Definitions and Key Differences

Access switches typically have high-density ports because they are located at the access layer and are used to

Nov 01, 2025

Core, Distribution, and Access Layer Explained with Examples ...

The access layer is where end-user devices connect to the network. This includes workstations, phones, printers,

Feb 09, 2026

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

Core Layer: The high-speed backbone, often connecting multiple distribution switches. Distribution Layer: The middle

Jul 24, 2025

1.1.1.5 Access, Distribution, and Core Layers

Traditionally, the primary function of an access layer switch is to provide network access to the user. Access layer switches connect

Feb 03, 2026

Build Your Skills: The three-layer hierarchical model

Core layer Campus networks that contain two or more switch blocks require a Core layer to connect each switch

Jul 25, 2025

Access vs. Distribution vs. Core Switch Comparison Guide

Access Layer Switches: Operating at the network's edge, access switches connect end-user devices like PCs, printers, IP phones,

Apr 13, 2026

What Kind of Access Layer Switch Should You Get?

1. What is Access Layer Switch? As the bottom layer of the hierarchical internetworking model, the access layer is

Feb 07, 2026

What Is an Access Switch? The Definitive Edge Network Guide

An access switch is a network edge device that directly connects end-user hardware such as computers, IP phones,

Sep 16, 2025

Understanding the Hierarchical Switch Layers: Access ...

A strategic look at how Access, Distribution, and Core switch layers define network performance, security, and scalability

Dec 13, 2025

Looking for help understanding Cisco hierarchical model

So this means the parent switch becomes core, distro and access layer. One of the biggest stumbling block with

Jun 08, 2026

Choose access layer switch for the access layer network

In each layer, the enterprise switches are categorized, among which the access switch is a key part in which local end

Mar 17, 2026

Access, Distribution, and Core Layers Explained

Switches in this layer are called access switches. End devices connect to the LAN through

Jul 20, 2026

1.1.1.5 Access, Distribution, and Core Layers

Access layer switches connect to distribution layer switches, which implement network foundation technologies such as routing,

May 31, 2026

Introduction to Switched Networks

Traditionally, the primary function of an access layer switch is to provide network access to the user. Access layer switches connect

Nov 06, 2025

What Is an Access Layer Switch? Guide complet

In a typical enterprise network architecture, the access layer switch is the first point of contact between end-user devices and the rest

Oct 12, 2025

Core vs Distribution vs Access Switch: Architecture Guide

An access switch (often referred to as an edge switch) is a hardware device deployed in local wiring closets designed

Apr 22, 2026

Data Center Access Layer Design

In a Layer 2 looped access topology, a pair of access layer switches are connected to the aggregation layer using 802.1Q trunks.

Jan 11, 2026

Access layer | FortiSwitch 7.4.0 | Fortinet Document Library

Access layer The access layer is where endpoints (such as phones, laptops, video-conferencing sets, printers, IoT sensors, IP

Dec 29, 2025

How to Choose the Right Access Layer Switch?

Learn 8 key factors—ports, PoE, speed, security & TCO—to choose the right access layer switch and future-proof

May 07, 2026

Core Switch vs. Distribution Switch vs. Access Switch

The access layer consists of layer 3 switches, which take routed and switched data packets from the distribution switches and then

May 24, 2026

Core, Aggregation, or Access Switches? Choose the Perfect Fits

Selecting between core, aggregation, and access switches is not only technical — it's strategic. Once you know what

Contact Us

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

Website: <https://iiss.co.za>

Email: sales@iiss.co.za

Phone: +27 63 174 2895

Address: Unit 8, Innovation Park, 15 Rivonia Road, Sandton, Johannesburg, 2196, South Africa

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

