Network security equipment server types



Overview

Network Security Devices Explained: Types, Examples & Protection Explore the most important network security devices—firewalls, intrusion prevention system.

Key Takeaways

Network security equipment includes firewalls, intrusion prevention systems, VPN gateways, unified threat management devices, and web application firewalls, deployed as hardware, software, or cloud-based servers to protect networks from cyber threats.

Key Types of Network Security Equipment

Firewalls act as barriers between internal networks and external traffic, filtering data based on IP addresses, ports, and protocols. They are available as hardware appliances, software solutions, or integrated within routers or servers, and can include next-generation firewalls (NGFWs) with application-layer inspection and advanced threat protection. Intrusion Detection Systems (IDS) and Intrusion Prevention Systems (IPS) monitor network traffic for suspicious activity.

ID

S alerts administrators, while IPS actively blocks malicious traffic in real time, reducing exposure to attacks. Unified Threat Management (UTM) devices combine multiple security functions—firewall, antivirus, intrusion detection/prevention, and content filtering—into a single platform, often used by small and medium businesses for simplified management. Network Access Control (NAC) enforces endpoint compliance before granting network access, verifying device health, user identity, and security posture, which is critical for BYOD and zero-trust environments.

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Web Application Firewalls (WAFs) protect web applications by filtering HTTP/S traffic, defending against SQL injection, cross-site scripting, and other OWASP Top 10 attacks. They can be host-based, network-based, or cloud-based.

VP

N Gateways encrypt remote-access traffic, creating secure tunnels for distributed teams and remote workers.

Antivirus and Anti-

Malware Software scan systems for malicious software, including viruses, ransomware, and spyware, and can be deployed on endpoints or servers.

Server Types for Network Security

Network security servers can be categorized based on deployment and function: Hardware Security Appliances: Dedicated physical servers running firewall, UTM, or IPS software, optimized for high throughput and low latency.

Software-

Based Security Servers: Installed on general-purpose servers, providing flexibility and integration with existing infrastructure. Virtual Security Appliances: Deployed on virtual machines or hypervisors, allowing scalable and cost-effective security in cloud or data center environments.

Cloud-

Based Security Services: Security functions delivered as a service (SaaS), including cloud firewalls, WAFs, and VPN gateways, ideal for hybrid and remote networks.

Summary

Network security relies on a multi-layered defense strategy, combining hardware, software, and cloud-based servers to protect against unauthorized access, malware, and cyberattacks. Key equipment includes firewalls, IPS/IDS, UTM devices, NAC, WAFs, VPN gateways, and antivirus solutions, deployed across physical, virtual, and cloud servers to ensure comprehensive protection and compliance with modern cybersecurity standards.

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Article Content

Network Security Devices Explained: Types, Examples & Protection

Explore the most important network security devices—firewalls, intrusion prevention systems, VPNs, and more. Learn how each protects your business network and keeps your data secure.

Top 16 Network Security Devices [Updated 2025]

In this article, we will explore common types of network security devices, appliances and technologies that form a robust, multi-layered security strategy, including firewalls, intrusion

18 Types of Network Security Solutions to Implement

Secure your network with the right devices. A guide to firewalls, IDS/IPS, SIEM, and how identity governance fits in the picture.

The Most Common Types of Network Security Devices to Protect

While there are multiple ways to categorize the various network security components, some of the more common network security device types include firewalls, access control, intrusion

Types of Network Security Explained

This article explains everything you need to know about the different types of network security and how businesses can incorporate them to protect their operations.

Types of Network Security Devices You Need to Know

Explore types of network security devices and protect your assets with the right tools. Learn about firewalls, intrusion detection systems, and more.

Common Types of Network Devices and Their Functions

Understanding the different types of network devices is important for optimizing and securing your organization''s network infrastructure. Below, we provide a list of network device

Network Security Devices

A proxy server protects the identity of a client machine by acting as an intermediary, whereas a WAF is a form of reverse proxy that shields the server from exposure by requiring clients

What Is a Security Server? Types, Features, and Benefits

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Learn what a security server is and how it protects your business. Discover the types, features, and benefits of securing your digital assets.

Common Types of Network Devices and Their Functions

Common types of network devices include repeater, hub, bridge, switch, routers, gateway, brouter & network interface card. Learn more about

Top 5 Network Security Solutions: A Complete Guide for 2025

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Network Server: Definitions, Types and Features Explained

Network servers are designed to guarantee higher stability, security, and performance compared to those in a client-server network; therefore, they are typically equipped with more

Network Engineer''s Guide to Servers: Types, Uses, Network

In this guide, we''re going to demystify servers, running through server types, server use cases, network design considerations, and much more.

Types of Server Equipment: An Overview

Explore various server equipment types—from rack and blade servers to GPUs and edge microservers—to optimize performance, efficiency, and scalability.

Network Infrastructure Security: Definition, Types, Benefits

Our latest blog post explains how network infrastructure security works and shows how to protect your networking equipment from both external and internal threats.

A Complete Guide to Network Devices: Types, Functions & Examples

Network devices are hardware components that enable communication between computers, servers, and other equipment within a network. They transmit, receive, and manage data securely to ensure

Understanding Network Security: Tools & Protection | IR

Network security is vital in protecting your networks from threats such as data breaches or intrusions. Find out about the types of protection available.

Server Types and Their Use in Data Center Environments: A

Choosing the wrong server form factor for a workload wastes rack space, power, and budget while underperforming. This guide covers every major server type deployed in enterprise and

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