

Core Switches and Bastion Hosts



AI Overview

A Core Switch Bastion Host is a hardened, secure gateway that provides controlled administrative access to core network switches, often as part of an out-of-band management network.

Overview

A bastion host is a specialized, hardened server designed to withstand attacks while providing controlled access to critical network resources, such as core switches or routers . It typically sits in a demilitarized zone (DMZ) or a secure subnet and acts as a single point of entry for administrators connecting from untrusted networks . By centralizing access, it reduces the attack surface and allows monitoring of all administrative activity.

Functionality for Core Switches

- **SSH Proxy and Access Control:** Administrators connect to the bastion host first, which then proxies SSH or other management protocols to the core switches . This ensures that only authenticated and authorized users can reach the switches.
- **IP Whitelisting and MFA:** Access can be restricted to specific IP addresses, and multi-factor authentication (MFA) can be enforced to enhance security .
- **Network Activity Monitoring:** All traffic through the bastion host can be logged and monitored for suspicious activity, providing an audit trail for compliance and security purposes .
- **Out-of-Band Integration:** In an out-of-band (OoB) network, the bastion host allows administrators to manage core switches even if the primary network is down, ensuri...

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A bastion host is an audited, hardened gateway that enforces secure, least-privilege access to private infrastructure

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When working with the Basic SKU or higher, Bastion uses the following architecture and workflow. The Bastion host is deployed in the virtual network that contains the AzureBastionSubnet

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