

Layer 3 switch connected to a fixed IP address



Overview

Basically, to assign a static IP address, use 'ip address', you can do this for a VLAN in a L2 or L3 switches. Layer 3 interfaces forward packets to another device using static or dynamic routing protocols. You can configure a port as a Layer 2 interface or a Layer 3 interface. It is possible use L3 Routing with a UniFi Gateway or third-party gateway. Note: Traffic Identification and features that rely on it are not supported on networks managed by an L3. I want to assign static ip addresses to the layer 3 switches and i want to use them as a default gateway for the layer 2 switches. SVI's of the layer 3 switches ip address 192. 33 mac-address. But at the same time, switches can connect devices within the same network, but they can't connect different IP networks, as shown in the diagram below.



Article Content

Dec 09, 2025

FortiLink mode over a layer-3 network

Starting in FortOS 6.4.3, you can now configure a FortiLink-over-layer-3 network to use the FortiLink interface as the source IP address for the communication between the FortiGate unit and the

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Solved: Layer3 switch and router

I have a network that I need to connect to the internet. All internal vlans point to a couple of layer 3 switches. On the layer 3 switch I connected a router for internet access. On the inside

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Fundamentals of Operations on a Layer 3 Switch

*Click on the image to enlarge The Assumption SW-1 is a Layer 3 switch SW-1 has the command SW-1 (config)#ip routing applied on to it Explanation of certain terms 1. SVI - Switched virtual interface -

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Cisco Layer3 Switch Basic Configuration Example | N

On a Layer 3 switch, configure IP addresses on the SVI/routed ports to interconnect the network (VLAN). Then, enable EIGRP so that it can exchange route

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Configuring Layer 3 Interfaces

You can route across VLAN interfaces to provide Layer 3 inter-VLAN routing by configuring a VLAN interface for each VLAN that you want to route traffic to and assigning an IP address on the VLAN

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Switch (L2/L3) Vs Router: Comparison and Differences

The key difference between routers and switches in TCP/IP networks is that Switches primarily function to provide Layer 2 connectivity and Routers provide

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Why Would A Layer 2 Switch Need An IP Address

Discover the reasons why a layer 2 switch would need an IP address and how it helps in network communication and management. Uncover the

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Example for Configuring a Layer 3 Switch to Work with a Router for ...

Sx300 Series Switches Typical Configuration Examples (V200) Example for Configuring a Layer 3 Switch to Work with a Router for Internet Access Layer 3 Switch Layer 3 switches provide

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Layer 3 Switches

The switch has its own IP interface on VLAN 1, with its own IP address Imagine the switch's CPU is plugged into VLAN 1 (but without using up a physical port) You use this to manage the switch (ssh,

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How to configure a Cisco Layer 3 Switch-InterVLAN

For example, some switch models that support layer 3 routing are the 3550, 3750, 3560 etc. On a Layer3-capable switch, the port interfaces work as Layer 2 access

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how to assign static IP on a switch

Basically, to assign a static IP address, use "ip address", you can do this for a VLAN in a L2 or L3 switches. In MLS, you can convert a port to L3 port using "no switchport" then configure an IP

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Complete Guide: In What Situation Would a Layer 2 Switch Have an IP ...

Conclusion While a Layer 2 switch does not require an IP address for its core switching functions, there are several situations where assigning one is necessary. Remote management,

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Best Practices for Setting Static IP Addresses on Cisco

This article gives the reader general information about static IP addresses and some recommended best practices when using Cisco Business

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Routers and L3 Switches | NetworkAcademy.IO

Figure 7. What is a Layer 3 Switch? Like a regular switch, it can forward frames at Layer 2 based on MAC addresses. At the same time, it can perform Layer 3 routing between VLANs or IP subnets

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Layer 3 Routing

Layer 3 Routing allows a UniFi Switch to route traffic between VLANs and to other destinations using static routes. It is possible use L3 Routing with a UniFi

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how to assign static IP on a switch

Hi Rishi, As you may know there are layer 2 and layer 3 switches. A layer 2 switch only does layer 2 forwarding, as such it doesn't have any additional ip interfaces. On a layer 2 switch the ip address is

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How To Use A Layer 3 Switch In A Small Network

The IP address of 192.168.199.254 was not used, so I'm going to use that as a VLAN interface address on the Layer 3 switch. VLAN 7 and 8, along with the

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Example for Configuring a Layer 3 Switch to Work with a Router for ...

Layer 3 switches provide the routing function, which indicates a network-layer function in the OSI model. Layer 3 switches can work at Layer 2 and Layer 3 and be deployed at the access

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Layer 3 Switches in Cisco

Cut-through Switching: In this method, the Layer 3 switch will look into the first packet of the total series of packets to check the destination IP address of the packet and then switches all the

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Configuring Layer 3 Interfaces

Information About Layer 3 Interfaces Layer 3 interfaces forward packets to another device using static or dynamic routing protocols. You can use Layer 3 interfaces for IP routing and inter-VLAN routing of

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Layer 3 Switch (network address and physical address)

Definition of Layer 3 switch in Network Encyclopedia. What is Layer 3 switch? Layer 3 switch is an Ethernet switch that switches packets by looking at

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InterVLAN routing using Layer 3 switch

Multilayer switches can forward frames based on MAC address information and can also forward IP packets based on IP destination. That is why they are also

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Layer 3 Switch Example

This article will cover a basic example of how layer 3 routing functionality on MS series switches could be implemented. Before proceeding, please refer to the Layer 3 Switch Overview for general

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