

Can an IP address be directly assigned to the optical port of a switch



Overview

As mentioned earlier, switches operate at Layer 2 of the OSI model, which means there is no single command to directly map an IP address to a physical port. Instead, we need to follow a two-step process: First, retrieve the MAC addresses of the connected devices using the switch's. Cisco switches generally don't have IP addresses assigned to Layer 2 access ports. If one device is connected to the port it is usually an access port with no IP address so the security panel most likely is assigned the IP. 1- Can I simply connect that Eth. line (with Static IP) into an 8-port unmanaged switch and will the switch work?

2- If the answer is YES, then: If I connect four of my network devices into that unmanaged switch, will those devices work?

What IP addresses they get: DHCP or Static?

3- If the answer. This guide explains how to map the IP address of a device connected to a Cisco switch port. Long: I am building an automated indoor farm (for growing tomatoes). The farm is composed of many (12 for now, but will grow to hundreds) identical 7"x7" rooms. Each room will. Component is plugged into port 1 on the switch. Has a MAC of aaaa:bbbb:cccc and is assigned IP 192.

Article Content

Oct 05, 2025

3 FAQs of Connecting Switches by Fiber Optical Ports

Switch optical port intercommunication means that the optical fiber ports of two switches are connected to each other to achieve the purpose of

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Understanding the Role of an Optical Network Terminal:

However, understanding the workings of internet infrastructure can often feel overwhelming. One such common point of confusion arises in the form

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What Is the Optical Audio Port, and When Should I Use It?

That little oft-neglected port can be a real life saver, though. Let's look at what it is and how you can take advantage of it. What Exactly Is Optical Audio?

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What is a passive optical network (PON) and how does

What is a passive optical network (PON)? A passive optical network (PON) is a system commonly used by telecommunications network providers that

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Switch port based IP Address : r/networking

Our engineering team has been developing some equipment with components that need IP addresses. The components needs to be access by client devices across the network, so we need to assign

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How to Map an IP Address to a Cisco Switch Port (Step

As mentioned earlier, switches operate at Layer 2 of the OSI model, which means there is no single command to directly map an IP address to a

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What Is Passive Optical Networking (PON)?

Passive optical networking (PON) provides Ethernet connectivity from a main data source to endpoints, using a technique called passive optical splitting.

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How to Map an IP Address to a Cisco Switch Port (Step

Learn how to map an IP address to a physical port on a Cisco switch using MAC and ARP tables, or a DHCP server. Step-by-step tutorial for network

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assign IP address to port

Hello do the configuration of the switch as indicated to me (see switch image) with an ip address 192.168.1.10, however, the IP address of the computer

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How to use my own optical endpoint for an ISP?

I would like to use my own device in my home to connect to the optical line from the ISP. I have a TP-Link MC200CM optical to ethernet converter, which in turn should connect to an GL

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What is an Optical Terminal Network and Why Do I

Learn how an Optical Network Terminal — also known as an ONT — plays a vital role in providing fiber optic service to your home.

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VMware Cloud Foundation (VCF) Blog - Home Page

VMware Cloud Foundation (VCF) - The simplest path to hybrid cloud that delivers consistent, secure and agile cloud infrastructure. Read more.

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assign IP address to port

I am something new in networking and I want to find out if a switch of the catalyst line can be configured a port to assign only an IP address? If so,

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What is an optical network terminal (ONT)?

What is an optical network terminal (ONT)? An optical network terminal (ONT) is a device that serves as the endpoint of an optical network,

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If you connect directly to your modem how does the IP address get assigned?

When you connect your computer to a modem, the DHCP request generated by the computer may be handled directly by the modem itself if the modem is running a DHCP server. Static Address

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Internet Protocol

Encapsulation of application data carried by UDP to a link protocol frame The Internet Protocol is responsible for addressing host interfaces, encapsulating data

Jul 08, 2025

How to Assign an IP Address to a Switch

In this article, we will walk you through the process of assigning an IP address to a switch. We'll cover the basics of IP addressing, explain how to find the MAC address of your switch, and show you how

Feb 17, 2026

Passive optical network

Passive optical network A fiber optic cable assembly with SC APC connectors, as commonly used to link optical network terminals to passive optical networks A

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Specify IP address that can use switch port

I installed a new netgear prosafe and I was wondering how I could set it up so that only devices with certain ips can use certain ports. For example, I want to set a static ip for my wireless

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Need advise on unmaganaed switch + static IP

If you have devices that must have DHCP addresses assigned, you will need to put them behind a router. The router can be directly connected to the

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Solved: Assigning an IP to an Access Port

I assigned a static IP on the server's management network, and I tried to assign an IP to the port connected to the PC so they're in the same subnet. However, it is not possible to assign an

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What is an Optical Network Terminal (ONT)? Your

This is where the ONT comes in ☐☐ What is an Optical Network Terminal (ONT)? An Optical Network Terminal (ONT), also known as a fiber

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Is it bad practice to give a switch port a static IP address?

In a week we plan to swap it out for a newer version. An I was thinking of setting that IP address that it currently has under the switch port that its hooked up to. That way when we swap it

Aug 30, 2025

How To Get A Network Switch To Assign IP

Learn how to configure a network switch to assign IP addresses efficiently. Understand the process and optimize your network for seamless

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What is Internet Protocol (IP)?

An IP address is typically assigned via the DHCP (Dynamic Host Configuration Protocol). DHCP can be run at an internet service provider, which will assign a public IP address to a particular

Dec 25, 2025

What Is An ONT & How is it Used in Fiber Networks?

What is an ONT & what is its role in fiber networks? ONT is an interface between the Internet Service Provider (ISP) and the end user of fiber

Contact Us

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