

Can core switches automatically assign IP addresses



Article Overview

Yes, a core switch can automatically assign IP addresses using DHCP, acting as a DHCP server for devices on the network.

How It Works

A core switch can be configured to provide Dynamic Host Configuration Protocol (DHCP) services, which automatically assign IP addresses to devices that connect to the network. This eliminates the need for manual IP configuration on each device and ensures that every host receives a unique and valid IP address within the correct subnet range. DHCP on a core switch can also provide additional network configuration information, such as the default gateway, DNS servers, and other DHCP options.

Configuration Essentials

To enable DHCP on a core switch:

- Enable the DHCP service on the switch.
- Create DHCP pools for each subnet or VLAN, specifying the network range and default gateway.
- Ensure VLANs exist on the core switch and that trunk links to access switches are properly configured.
- Bind VLAN interfaces (SVIs) to the DHCP pools so that devices in each VLAN receive...

Article Content

Sep 19, 2025

Trying to configure switch

I am trying to educate myself with regard to switches and routers. Trying to understand how to add a switch to my

Dec 23, 2025

Why assign IP addresses to router/switch interfaces?

But why assign IP addresses to the interfaces? Is it so the router/switch knows which port to send the packet out?

Aug 19, 2025

Assigning the Switch IP Address and Default Gateway

Use a DHCP server for centralized control and automatic assignment of IP information after the server is configured. If you are using

Dec 22, 2025

Giving static IP to wireless AP from core switch

Long story short. currently, APs are getting IP from the core switch where the DHCP server is created. I have noticed

Jul 22, 2026

Core layer switches IP address for routing

For routing process I add a IP address of each Vlan's subnet that active on each Access and Distribution switches

Aug 07, 2025

How to Assign an IP Address to a Switch

Learn how to assign an IP address to a switch with detailed steps and screenshots. This guide covers all major switch brands,

Dec 17, 2025

Assigning IP Addresses to VLANs on Cisco Switch

Learn how to assign IP addresses to VLANs on a Cisco switch to enable inter-VLAN communication and improve

Oct 09, 2025

Configure IP Address for Interface in Cisco Switches

To configure an IP Address on a switch interface, first, we must change the interface from a layer 2 interface to a layer

Feb 15, 2026

Assigning static IPs via DHCP for PORTS on a switch (instead of MAC ...

I'm looking for a switch to do the following, but I'm unsure which specs to look for (Layer2? Layer3? VLAN? Etc.). -A

Mar 28, 2026

Assign IP Address to Each Port : r/networking

Assign IP Address to Each Port I'm trying to figure out how to setup networking for an array of industrial devices. There are 200 of

Oct 20, 2025

networking

Davidgo addressed (2), but I'll note that you can sidestep this problem if you make such assignments via the DHCP

Feb 22, 2026

Assign an IP address based on switch port

Short: I want DHCP server to assign a preconfigured IP address based on a port (on a switch, ideally) a device is

Apr 04, 2026

Configure IP Address Settings on a Switch using the CLI

The IP address of the switch can be manually configured or automatically received from a Dynamic Host Configuration

May 24, 2026

How do routers assign IP addresses?

How does a router assign an IP address? Is this random or is there a set method? It seems that the same device - regardless of the

Sep 01, 2025

Configure an IP address on a switch

This article describes how to configure an IP address on a Cisco switch in order to connect over the network for management.

Jul 16, 2026

DHCP: How Automatic IP Address Assignment Works

Learn how DHCP leases IP addresses, gateways, and DNS automatically so devices connect instantly. Understand

Feb 10, 2026

Native AC Solution: Core Switches Function as the Gateway for Wired

Configure the core switches to function as the DHCP server to assign IP addresses to APs and users. # Configure the function of

Apr 04, 2026

Assigning IP Address And Default Gateway To A Switch

If you don't have chance to the same location of switch, you need to connect the devices remotely and manage them via SSH or

Jan 22, 2026

Software Configuration Guide, Cisco IOS Release 15.2 (2)E (Catalyst ...

To avoid a conflict by having two devices with the same IP address in your network, change the IP address of the switch that you

Feb 10, 2026

Which Service Can You Use On Your Network To Automatically Assign IP ...

Learn about the different services available to automatically assign IP addresses on your network, ensuring seamless

Jan 09, 2026

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

Sep 02, 2025

Solved: Configure Core Switch | Experts Exchange

If you're licensed for OSPF/EIGRP on the core and edge switches, then you can skip the statics and just let the routing

Jul 12, 2026

Assigning IP addresses to multiple switches

Apart from that, there are countless methods to organize addresses. Layer-2 switches only require IP addresses for

Oct 21, 2025

Does a Switch Have an IP Address?

Can I use DHCP to assign an IP address to a switch? Yes, many managed switches support DHCP (Dynamic Host

Dec 21, 2025

IP address assignment by using Dynamic Host Configuration Protocol

Dynamic Host Configuration Protocol (DHCP) is a service that takes a range of IP addresses from a subnet and automatically

Feb 06, 2026

Assigning IP addresses to multiple switches

I am in need of help on IP assigning to 4 brand NEW Araknis switches that I am replacing with the current netgear/tp

Sep 21, 2025

Do Network Switches and Wi-Fi Access Points Have IP Addresses?

Explore whether network switches and wireless ap require IP addresses, understand their roles in network

Jul 23, 2026

IP Addressing: IPv4 Addressing Configuration Guide

The auto-IP feature automatically provides IP addresses to the nodes inserted into a ring. In ring topology, when a

Jan 16, 2026

How to assign an IP address to a device

Alternatively, you can set the device to use Dynamic Host Configuration Protocol (DHCP) to automatically obtain an

Jul 06, 2026

Understanding the Core Switch: Key Differences and Uses

Explore the core switch's role as the backbone of your network. Discover key differences,

Aug 28, 2025

networking

In fact, DHCP is primarily mapping the MAC address associated with hardware and

May 22, 2026

Configuring the Core Switch

Context In this scenario, IP addresses of the interfaces connecting the core switch to the BRASs and firewalls and

Sep 08, 2025

Making a Managed Network Switch assign IP Addresses within

1) When I'm offline/no internet, I want a network switch that will assign IP addresses, or have it's own IP addresses

Oct 28, 2025

Assigning IP addresses

In our network devices, IP addresses can be assigned in 2 ways, statically or via DHCP. Static IP address assignment

Aug 22, 2025

How do you assign sequential IP addresses to individual ports on a ...

Closed 2 years ago. I am looking for a non-complicated way to set up a network of 50 interchangeable devices such that whenever I

Mar 17, 2026

Does an unmanaged switch deal with IP addresses at all

L3 switches use IP addresses for L3 forwarding = routing as well. When computer A on a local network wants to

Dec 04, 2025

networking

VLANs are not IP layer; they operate at Layer 2. With most Layer 2+3 switches, however, you can assign an IP address to a VLAN

Oct 27, 2025

DHCP: How Networks Automatically Assign IP Addresses | Javith

Learn how DHCP works from first principles - the DORA process, lease management, IP reservations, and production

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.

