

Article Overview

You can configure DHCP on an H3C access layer switch by enabling the DHCP service, creating IP address pools, assigning VLAN interfaces, and optionally configuring DHCP relay for clients on different subnets.

Enabling DHCP on the Switch

To start, enable the DHCP service on the H3C switch using the command:

```
dhcp enable
```

This activates the DHCP functionality on the device, allowing it to assign IP addresses to clients within configured VLANs .

Creating IP Address Pools

Define IP address pools for each subnet that the switch will serve. For example, to create a pool for VLAN 5:

```
dhcp      server      ip-pool      VLAN5[Switch-dhcp-pool-VLAN5]      network      192.168.5.0
255.255.255.0[Switch-dhcp-pool-VLAN5]      gateway-list      192.168.5.1[Switch-dhcp-pool-VLAN5]
excluded-ip-address 192.168.5.100
```

Repeat this process for other VLANs/subnets, specifying the network, gateway, and any IP addresses to exclude from dynamic allocation .

Assigning VLAN Interfaces

Each VLAN interface must have an IP address to act as the gateway for DHCP clients:

```
interface      Vlan-interface5[Switch-Vlan-interface5]      ip      address      192.168.5.1
255.255.255.0[Switch-Vlan-interface5] dhcp select global
```

For VLANs where the switch acts as a relay, use:

```
[Switch-Vlan-interface6] dhcp select relay[Switch-Vlan-interface6] dhcp relay server-address 192.168.7.100
```

This ensures clients on different subnets can obtain IP addresses from a centralized DHCP server .

Configuring DHCP Relay (Optional)

If the DHCP server is on a different subnet, configure the switch as a relay agent:

```
interface Vlan-interfaceX[Switch-Vlan-interfaceX] dhcp select relay[Switch-Vlan-interfaceX] dhcp relay
```



H3C Access Layer Switch DHCP

server-address

This forwards DHCP requests from clients to the server and returns the responses appropriately .

Verifying DHCP Operation

Check the DHCP bindings and active leases with:

display dhcp server ip-in-use display dhcp server statistics

These commands help confirm that clients are receiving IP addresses correctly and that the DHCP service is functioning as expected .

Best Practices

- o Exclude static IP addresses (e.g., servers, printers) from dynamic pools to avoid conflicts.
- o Ensure VLAN interfaces are up and reachable from clients.
- o Use DHCP relay only when necessary to centralize DHCP services.
- o Save the configuration after changes:

save

This ensures the DHCP configuration persists after a reboot . By following these steps, an H3C access layer switch can effectively provide DHCP services to clients within its VLANs or relay requests to a centralized DHCP server.

08-LLDP configuration 09-Layer 2 forwarding configuration 10-L2TP configuration 11-ARP configuration 12-IP addressing

In this video, I have explained the basic configurations of an H3C switch, including: Setting the hostname

Introduction This document details the configuration method for connecting a layer 3 switch to a router.

Prerequisites This document

Learn how to create users, VLANs, enable Telnet and SSH, configure Spanning Tree Protocol, enable

The features and functions provided the Device menu vary by switch. Use Table 3 to navigate to the tasks you can perform from the

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As shown in Figure 15, configure the DHCP relay agent on Switch A so that DHCP clients can obtain IP

09-Layer 2 forwarding configuration 10-PPP configuration 11-ARP configuration 12-IP addressing configuration 13-DHCP

Switch B is connected to the authorized DHCP server through Ethernet port 1, to the unauthorized DHCP server through Ethernet

DHCP uses the same message format as BOOTP, but DHCP uses the Option field to carry information about dynamic address

H3c DHCP Pdf User Manuals. View online or download H3c DHCP Quick Start Configuration Manual

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Users must pass 802.1X authentication to access the Internet. They use the H3C iNode client to initiate 802.1X

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04-Layer 3-IP Services Configuration Guide Home Support Switches S5130 Series Configure & Deploy Configuration Guides H3C

· Configure VLANs on Layer 2 and Layer 3 switches, and configure a DHCP server on the Layer 3 switch to automatically allocate IP

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