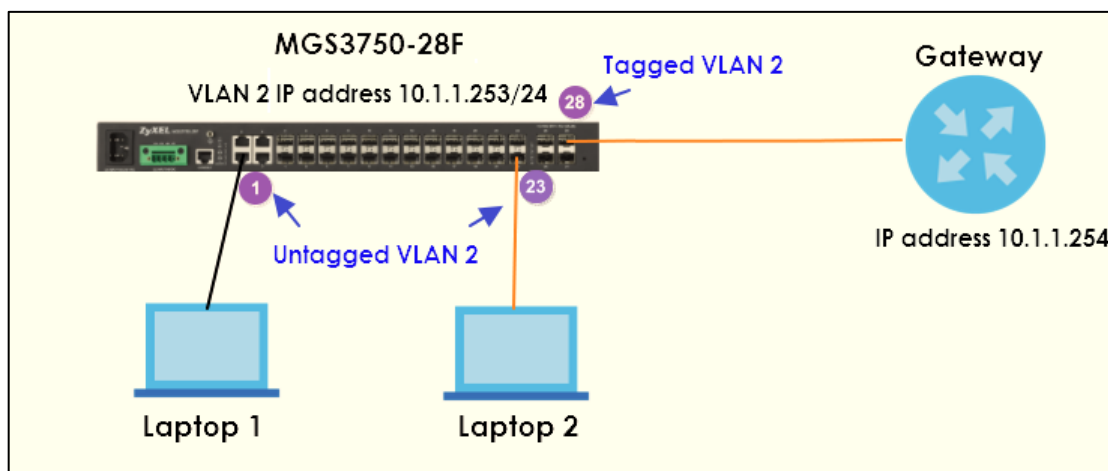


## How to configure the DHCP server via CLI

### 1. Example description:

The DHCP clients (Laptop 1 & 2) can obtain IP address from the MGS3750-28F(DHCP server) on VLAN 2.

### 2. Topology:



### 3. Switch Configuration:

A) Create VLAN 2 and add interface port to the VLAN

```
ZyXEL> enable
ZyXEL# configure terminal
ZyXEL(config)# vlan 2
ZyXEL(config-if-vlan)#exit
ZyXEL(config)#interface range ethernet 0/0/1 ethernet 0/0/23
ZyXEL(config-if-range)#switchport hybrid untagged vlan 2
ZyXEL(config-if-range)#switchport default vlan 2
ZyXEL(config-if-range)#exit
ZyXEL(config)#interface ethernet 0/0/28
```

ZyXEL(config-if-ethernet-0/0/28)#**switchport hybrid tagged vlan 2**

ZyXEL(config-if-ethernet-0/0/28)#**exit**

ZyXEL(config)#**show vlan 2**

```
show VLAN information
VLAN ID           : 2
VLAN status       : static
VLAN member       : e0/0/1,e0/0/23,e0/0/28.
Static tagged ports : e0/0/28.
Static untagged Ports : e0/0/1,e0/0/23.
Dynamic tagged ports :
Total entries: 1 vlan.
```

B) Create the DHCP server

ZyXEL(config)#**dhcp-server 1 ip 10.1.1.253**

ZyXEL(config)#**show dhcp-server 1**

```
DHCP server group : 1
IP address         : 10.1.1.253
```

C) Create VLAN interface 2 and configure its IP address and mask

ZyXEL(config)# **interface vlan-interface 2**

ZyXEL (config-if-vlanInterface-2)#**ip address 10.1.1.253 255.255.255.0**

ZyXEL (config-if-vlanInterface-2)#**exit**

ZyXEL(config)#**show ip interface vlan-interface 2**

```
Show informations of interface
The mac-address of interface is aa:bb:cc:dd:ee:ff
Interface name       : VLAN-IF2
Primary ipaddress    : 10.1.1.253/255.255.255.0
Secondary ipaddress : None
VLAN                 : 2
Address-range        : None
Interface status     : Up
Total entries: 1 interface.
```

D) Add DHCP server to the VLAN interface 2

```
ZyXEL (config-if-vlanInterface-2)#dhp-server 1  
ZyXEL (config-if-vlanInterface-2)#exit  
ZyXEL(config)#show dhcp-server interface vlan-interface 2
```

VLAN interface name : VLAN-IF2 DHCP server group : 1,  Total entries: 1
--

E) Configure the IP pool to the DHCP server 1

```
ZyXEL(config)#ip pool dhcpserver1  
ZyXEL(config-ip-pool-dhcpserver1)#gateway 10.1.1.253 255.255.255.0  
ZyXEL(config-ip-pool- dhcpserver1)#section 0 10.1.1.1 10.1.1.50  
ZyXEL(config-ip-pool- dhcpserver1)# lease 001:00:00  
ZyXEL(config-ip-pool- dhcpserver1)#router 10.1.1.254  
ZyXEL(config-ip-pool- dhcpserver1)#dns primary-ip 8.8.8.8  
ZyXEL(config-ip-pool- dhcpserver1)#dns second-ip 8.8.4.4  
ZyXEL(config-ip-pool- dhcpserver1)#exit  
ZyXEL(config)#show ip pool-brief
```

name	total	used/idle	gateway/mask	pri-dns	sec-dns	lease-time
dhcpserver1	50	0/50	10.1.1.253/32	8.8.8.8	8.8.4.4	1 day 0 hour 0 minute 0 second
Total entries: 1						

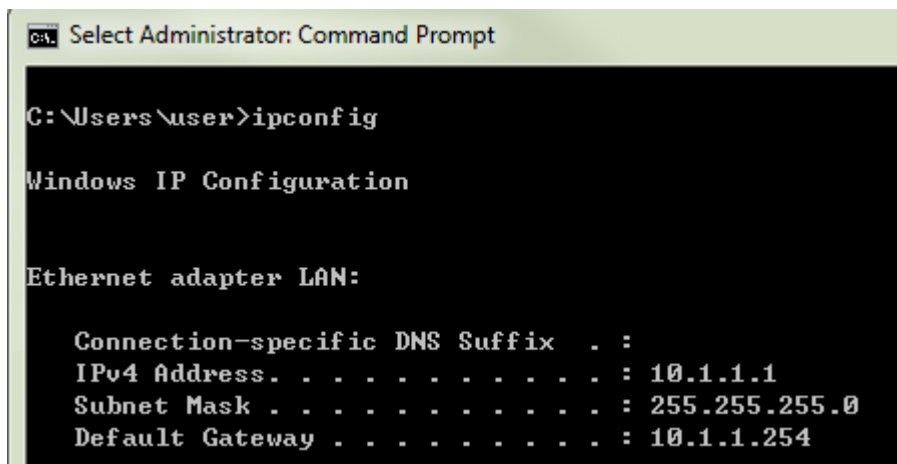
F) Enable the DHCP server feature

```
ZyXEL(config)# dhcp-relay  
ZyXEL#show ip pool dhcpserver1
```

IP pool name : dhcpserver1 GateWay : 10.1.1.253 Mask : 255.255.255.0 Router : 10.1.1.254 Lease time : 1 day 0 hour 0 minute 0 second
--

Primary DNS	:	8.8.8.8		
Second DNS	:	8.8.4.4		
Third DNS	:	0.0.0.0		
Fourth DNS	:	0.0.0.0		
Primary wins	:	0.0.0.0		
Second wins	:	0.0.0.0		
Option43	:	NULL		
DNS Suffix	:	N/A		
SectionNo	StartIp	EndIp	Total	Used/Idle
0	10.1.1.1	10.1.1.50	50	2/49
1	N/A	N/A	N/A	N/A
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	N/A	N/A	N/A	N/A
5	N/A	N/A	N/A	N/A
6	N/A	N/A	N/A	N/A
7	N/A	N/A	N/A	N/A
Total entries: 1 pool(s), printed 1 pool(s)				

#### 4. Check whether the DHCP client can obtain an IP



```
CA Select Administrator: Command Prompt

C:\Users\user>ipconfig

Windows IP Configuration

Ethernet adapter LAN:

    Connection-specific DNS Suffix . . :
    IPv4 Address. . . . . : 10.1.1.1
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 10.1.1.254
```