



Application Guide

WAN/LAN VLAN Configuration



Contents

Contents.....	2
Revision History.....	2
1 Overview.....	3
2 Description.....	3
2.1 LAN Test Topology.....	3
Hongdian Setup.....	4
Check Ping (From PC)	4
2.2 WAN Test Topology.....	5
Hongdian Setup (DHCP)	5
Hongdian Setup (PPPOE)	6
Check Ping (From PC)	7

Revision History

Updates between document versions are cumulative. Therefore, the latest document version contains all updates made to previous versions.

Doc Version	Product	Release Data	Details
V1.0	Hongdian Router	2017.08.23	First Release
V2.0	Hongdian Router	2020.09.03	

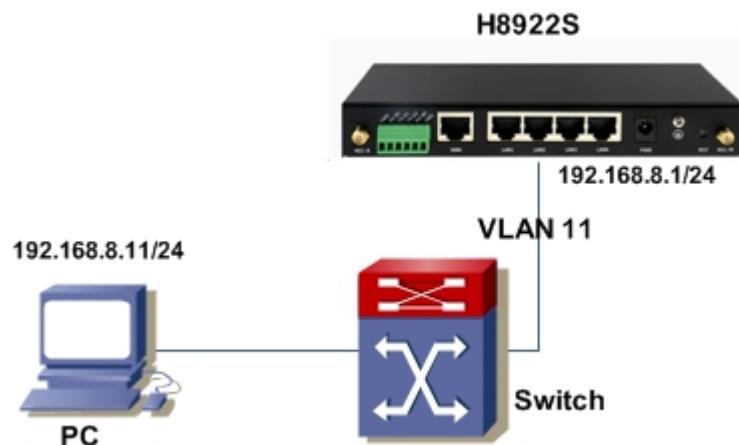
1 Overview

VLAN (Virtual Local Area Network)

VLAN technology is widely used in network networking. In some network networking, we need to connect some switches and routers through the WAN port or LAN port of the Hongdian router to form a network. This article will introduce in detail how Hongdian routers are connected to switches or routers of CISCO and other brands through the WAN port or the LAN port.

2 Description

2.1 LAN Test Topology



Hongdian Setup

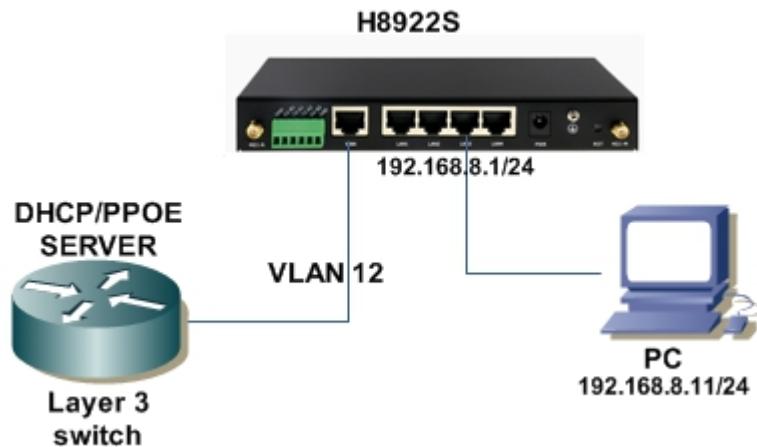
Network		IPv6	Applications		VPN	Forward	Security	System	Status																																																								
LAN	WAN	WLAN	Modem	Parameter Select	Network Type	Link Backup	Link Switch																																																										
<table border="1"> <tr> <td>Host Name</td> <td><input type="text" value="Router"/> * Max length is 32</td> </tr> <tr> <td>IP1</td> <td><input type="text" value="192.168.8.1/24"/> * eg. 192.168.8.1/24</td> </tr> <tr> <td>IP2</td> <td><input type="text"/></td> </tr> <tr> <td>IP3</td> <td><input type="text"/></td> </tr> <tr> <td>IP4</td> <td><input type="text"/></td> </tr> <tr> <td>Loopback Address</td> <td><input type="text"/> eg. 10.1.1.1/24</td> </tr> <tr> <td>Port Attribute</td> <td><input type="button" value="Display"/></td> </tr> </table>										Host Name	<input type="text" value="Router"/> * Max length is 32	IP1	<input type="text" value="192.168.8.1/24"/> * eg. 192.168.8.1/24	IP2	<input type="text"/>	IP3	<input type="text"/>	IP4	<input type="text"/>	Loopback Address	<input type="text"/> eg. 10.1.1.1/24	Port Attribute	<input type="button" value="Display"/>																																										
Host Name	<input type="text" value="Router"/> * Max length is 32																																																																
IP1	<input type="text" value="192.168.8.1/24"/> * eg. 192.168.8.1/24																																																																
IP2	<input type="text"/>																																																																
IP3	<input type="text"/>																																																																
IP4	<input type="text"/>																																																																
Loopback Address	<input type="text"/> eg. 10.1.1.1/24																																																																
Port Attribute	<input type="button" value="Display"/>																																																																
VLAN Configure <table border="1"> <tr> <th>VLAN Interface</th> <th>VID</th> <th>Connection Type</th> <th>Operation</th> </tr> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </table>										VLAN Interface	VID	Connection Type	Operation																																																				
VLAN Interface	VID	Connection Type	Operation																																																														
<table border="1"> <tr> <td><input type="button" value="Save"/></td> <td><input type="button" value="Add VLAN"/> Add VLAN</td> <td><input type="button" value="Refresh"/></td> </tr> </table>										<input type="button" value="Save"/>	<input type="button" value="Add VLAN"/> Add VLAN	<input type="button" value="Refresh"/>																																																					
<input type="button" value="Save"/>	<input type="button" value="Add VLAN"/> Add VLAN	<input type="button" value="Refresh"/>																																																															
<table border="1"> <thead> <tr> <th colspan="2">Network</th> <th>IPv6</th> <th colspan="2">Applications</th> <th>VPN</th> <th>Forward</th> <th>Security</th> <th>System</th> <th>Status</th> </tr> <tr> <td>LAN</td> <td>WAN</td> <td>WLAN</td> <td>Modem</td> <td>Parameter Select</td> <td>Network Type</td> <td>Link Backup</td> <td>Link Switch</td> <td></td> <td></td> </tr> </thead> <tbody> <tr> <td colspan="10"> <table border="1"> <tr> <td colspan="10"> LAN VLAN Configure <table border="1"> <tr> <td>VID</td> <td><input type="text" value="11"/> * 1-4094</td> </tr> <tr> <td>IP</td> <td><input type="text"/> eg. 192.168.8.1/24</td> </tr> </table> </td> </tr> <tr> <td colspan="10"> <table border="1"> <tr> <td><input type="button" value="Save"/> Save</td> <td><input type="button" value="Cancel"/></td> </tr> </table> </td> </tr> </table></td></tr></tbody> </table>										Network		IPv6	Applications		VPN	Forward	Security	System	Status	LAN	WAN	WLAN	Modem	Parameter Select	Network Type	Link Backup	Link Switch			<table border="1"> <tr> <td colspan="10"> LAN VLAN Configure <table border="1"> <tr> <td>VID</td> <td><input type="text" value="11"/> * 1-4094</td> </tr> <tr> <td>IP</td> <td><input type="text"/> eg. 192.168.8.1/24</td> </tr> </table> </td> </tr> <tr> <td colspan="10"> <table border="1"> <tr> <td><input type="button" value="Save"/> Save</td> <td><input type="button" value="Cancel"/></td> </tr> </table> </td> </tr> </table>										LAN VLAN Configure <table border="1"> <tr> <td>VID</td> <td><input type="text" value="11"/> * 1-4094</td> </tr> <tr> <td>IP</td> <td><input type="text"/> eg. 192.168.8.1/24</td> </tr> </table>										VID	<input type="text" value="11"/> * 1-4094	IP	<input type="text"/> eg. 192.168.8.1/24	<table border="1"> <tr> <td><input type="button" value="Save"/> Save</td> <td><input type="button" value="Cancel"/></td> </tr> </table>										<input type="button" value="Save"/> Save	<input type="button" value="Cancel"/>
Network		IPv6	Applications		VPN	Forward	Security	System	Status																																																								
LAN	WAN	WLAN	Modem	Parameter Select	Network Type	Link Backup	Link Switch																																																										
<table border="1"> <tr> <td colspan="10"> LAN VLAN Configure <table border="1"> <tr> <td>VID</td> <td><input type="text" value="11"/> * 1-4094</td> </tr> <tr> <td>IP</td> <td><input type="text"/> eg. 192.168.8.1/24</td> </tr> </table> </td> </tr> <tr> <td colspan="10"> <table border="1"> <tr> <td><input type="button" value="Save"/> Save</td> <td><input type="button" value="Cancel"/></td> </tr> </table> </td> </tr> </table>										LAN VLAN Configure <table border="1"> <tr> <td>VID</td> <td><input type="text" value="11"/> * 1-4094</td> </tr> <tr> <td>IP</td> <td><input type="text"/> eg. 192.168.8.1/24</td> </tr> </table>										VID	<input type="text" value="11"/> * 1-4094	IP	<input type="text"/> eg. 192.168.8.1/24	<table border="1"> <tr> <td><input type="button" value="Save"/> Save</td> <td><input type="button" value="Cancel"/></td> </tr> </table>										<input type="button" value="Save"/> Save	<input type="button" value="Cancel"/>																														
LAN VLAN Configure <table border="1"> <tr> <td>VID</td> <td><input type="text" value="11"/> * 1-4094</td> </tr> <tr> <td>IP</td> <td><input type="text"/> eg. 192.168.8.1/24</td> </tr> </table>										VID	<input type="text" value="11"/> * 1-4094	IP	<input type="text"/> eg. 192.168.8.1/24																																																				
VID	<input type="text" value="11"/> * 1-4094																																																																
IP	<input type="text"/> eg. 192.168.8.1/24																																																																
<table border="1"> <tr> <td><input type="button" value="Save"/> Save</td> <td><input type="button" value="Cancel"/></td> </tr> </table>										<input type="button" value="Save"/> Save	<input type="button" value="Cancel"/>																																																						
<input type="button" value="Save"/> Save	<input type="button" value="Cancel"/>																																																																

Check Ping (From PC)

```
C:\Users\Administrator>ping 192.168.8.1 -t
```

```
正在 Ping 192.168.8.1 具有 32 字节的数据:
来自 192.168.8.1 的回复: 字节=32 时间<1ms TTL=64
```

2.2 WAN Test Topology



Hongdian Setup (DHCP)

Network								IPv6	Applications		VPN	Forward	Security	System	Status				
LAN	WAN	WLAN	Modem	Parameter Select		Network Type		Link Backup		Link Switch									
Connection Type: static ip ▼ IP: 192.168.10.1/24 * eg. 192.168.10.1/24 Port Attribute: Display																			
VLAN Configure <table border="1"> <thead> <tr> <th>VLAN Interface</th> <th>VID</th> <th>Connection Type</th> <th>Operation</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>												VLAN Interface	VID	Connection Type	Operation				
VLAN Interface	VID	Connection Type	Operation																
Save Add VLAN Refresh																			
Network								IPv6	Applications		VPN	Forward	Security	System	Status				
LAN	WAN	WLAN	Modem	Parameter Select		Network Type		Link Backup		Link Switch									
WAN VLAN Configure <table border="1"> <tr> <td>VID: 12 * 4-4094</td> <td>Connection Type: dhcp ▼</td> </tr> <tr> <td colspan="2"> Save Cancel </td> </tr> </table>												VID: 12 * 4-4094	Connection Type: dhcp ▼	Save Cancel					
VID: 12 * 4-4094	Connection Type: dhcp ▼																		
Save Cancel																			

Hongdian Setup (PPPOE)

Network																
LAN	WAN	WLAN	Modem	Parameter Select	Network Type	Link Backup	Link Switch	Status								
Connection Type: static ip ▼ IP: 192.168.10.1/24 * eg. 192.168.10.1/24 Port Attribute: Display																
VLAN Configure <table border="1"> <thead> <tr> <th>VLAN Interface</th> <th>VID</th> <th>Connection Type</th> <th>Operation</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table> Save Add VLAN Refresh									VLAN Interface	VID	Connection Type	Operation				
VLAN Interface	VID	Connection Type	Operation													
WAN VLAN Configure VID: 12 * 4-4094 Connection Type: pppoe ▼																
Basic Settings Interface Name: vlan12 Service Name: 47.88.148.22 * Max length is 64 Username: Test * Max length is 64 Password: ***** * Max length is 64 Advanced Settings: Display Save Cancel																

After configuring the VLAN function, if you need to use the WAN port as a gateway, you also need to configure the default gateway for the vlan interface and add the MASQ of the VLAN interface.

Network								
LAN	WAN	WLAN	Modem	Parameter Select	Network Type	Link Backup	Link Switch	Status
Default Route: eth0.12 ▼ DNS Type: interface ▼ Interface Name: eth0.12 ▼								
Save Refresh								

The screenshot shows a network configuration interface with the following sections:

- NAT:** Shows a table with columns: Interface, Operation, Mod, Del. It lists two entries: "modem" and "eth0.12". The "eth0.12" entry is highlighted with a red border.
- MASQ:** Shows a table with columns: Interface, Operation, Mod, Del. It lists two entries: "modem" and "eth0.12". The "eth0.12" entry is highlighted with a red border.
- SNAT:** This section is currently empty.

Check Ping (From PC)

```
C:\Users\Administrator>ping 8.8.8.8 -t
```

```
正在 Ping 8.8.8.8 具有 32 字节的数据:  
来自 8.8.8.8 的回复: 字节=32 时间=3ms TTL=58  
来自 8.8.8.8 的回复: 字节=32 时间=2ms TTL=58  
来自 8.8.8.8 的回复: 字节=32 时间=3ms TTL=58  
来自 8.8.8.8 的回复: 字节=32 时间=3ms TTL=58
```



Create smart things



Contact us

F14 - F16, Tower A, Building 14, No.12, Ganli 6th Road, Longgang District, Shenzhen 518112, China.

+86-755-88864288-5

+86-755-83404677

hongdianchina

www.hongdian.com

sales@hongdian.com

[Hongdian_China](https://twitter.com/Hongdian_China)