



Huawei Ethernet Switch Quick Setup Guide

For MuxLab AV over IP Devices



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1. Introduction

This document covers the basic setup requirements for a Huawei Ethernet Switch when using in conjunction with MuxLab AV over IP products.

The setup examples and screen shots shown here are for the Huawei model S1720-10GW-PWR-2P, but these instructions should be similar and applicable to other Huawei Ethernet Switch models.

2. MuxLab Ethernet Switch Setup Requirements

All MuxLab AV over IP Transmitters and Receivers require IGMP support to be enabled on the Ethernet Switch, and a select number of models also require Jumbo Frames to be enabled. PoE is also expected on most MuxLab models operating on a 1G network, as the corresponding MuxLab AV over IP models do not ship with power supplies by default. However, power supplies can be purchased separately for cases where PoE is not supported by the Ethernet Switch. Also note that most MuxLab AV over IP models below work on a 1G Ethernet Switch, except for the 500760, which requires a 10G Ethernet Switch. The below table specifies the IGMP and Jumbo Frames requirements per MuxLab AV over IP Transmitter/Receiver model.

AV over IP Model	Ethernet Switch BW Required	IGMP Required	Jumbo Frame Required
500752	1G	X	
500753	1G	X	
500754	1G	X	
500755	1G	X	
500755-AMP	1G	X	
500756	1G	X	
500757	1G	X	
500758	1G	X	X
500759	1G	X	X
500760	10G	X	X
500761	10G	X	X
500762	1G	X	
500770	1G	X	X
500771	1G	X	X

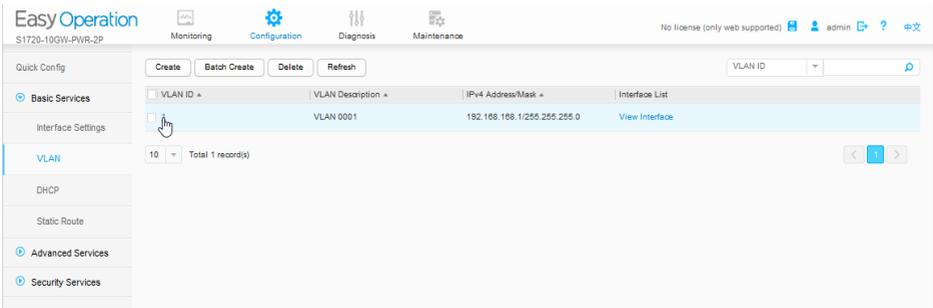
3. Ethernet Switch Setup

Access the Ethernet Switch web server

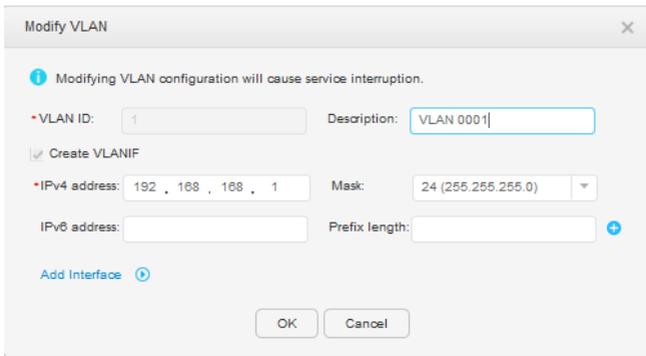
- Locate the Ethernet Switch default IP address
- Make sure your computer is on the same subnet as the Ethernet Switch (your network administration can assist you with this, if required)
- Enter the Ethernet Switch IP address into a browser

3.1. Configuring Ethernet Switch IP Address and DHCP

- Navigate to [configuration → VLAN]
- Click the on VLAN ID



- Set the IPv4 address to 192.168.168.1



This will change the IP address of the switch and set it to within the default segment address range of the MuxLab AV over IP devices.

- Reconnect to the Ethernet Switch using IP address 192.168.168.1 , in order to continue below.
- Navigate to [Configuration → DHCP]
- Set the DHCP status to “ON”.
- Click on the Vlan1 check-box

This will display a number of IP addresses.

- Set the status of IP addresses 192.168.168.1 and 192.168.168.50 to reserved.

Easy Operation
S1720-10G(VL)PWR-2P
Monitoring Configuration Diagnosis Maintenance
No license (only web supported) admin ? 中文

Quick Config
Basic Services
Interface Settings
VLAN
DHCP
Static Route
Advanced Services
Security Services

Global Settings
DHCP status: ON
Address Pool List

Interface Name	Interface IP	Mask	DHCP Mode	Server IP	Primary DNS Server	Secondary DNS Server
Vlan1	192.168.168.1	255.255.255.0	Local allocation	--	--	--

Vlan1 Address Pool Information
Sum of Addresses: 254 Allocated: 7

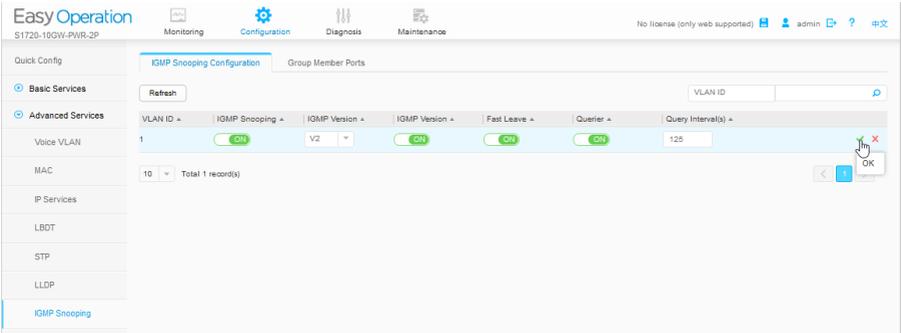
IP Address	MAC Address	Status	Expiration Time
<input type="checkbox"/> 192.168.168.1		Reserved	--
<input type="checkbox"/> 192.168.168.2		Idle	--
<input type="checkbox"/> 192.168.168.3		Idle	--
<input type="checkbox"/> 192.168.168.4		Idle	--
<input type="checkbox"/> 192.168.168.5		Reserved	--

3.2. Enabling IGMP

Follow the steps below to enable the IGMP feature on the Ethernet Switch. For further details on navigating through the Ethernet Switch web server menus, please refer to the Ethernet Switch manual.

- Navigate to the menu:
[Configuration → Advanced Services → IGMP Snooping → IGMP Snooping Configuration]

- Click on the VLAN ID of the VLAN used with the MuxLab products.
- Set “IGMP version”, “Fast Leave” and “Querier” to “ON”. Press “OK”.



3.3. Enabling Jumbo Frames

Normally Jumbo frames are enabled by default.

- Navigate to [configuration → basic services → interface settings → view configuration]
- Click on the Ethernet port icons.
- Make sure that the “Jumbo” value is set to 9216 on each port.

Easy Operation S1720-10GW-PWR-2P Monitoring Configuration Diagnosis Maintenance No Icon

Quick Config

Basic Services View Configuration Connect to PC Connect to IP Phone Connect to Switch Enable/Disable Interface Detect Link

Interface Settings

VLAN DHCP Static Route

Advanced Services Voice VLAN MAC IP Services

LBBDT STP LLDAP

Step 1: Select Task

Step 2: Select Interface

Slot 0

Step 3: View

Interface:	GigabitEthernet0/0/2	Jumbo:	9216
Interface Status:	Up	Combo:	--
Auto-Negotiation:	Enable	Flow Control:	Disable
Duplex Mode:	Full-duplex	EEE:	Disable
Interface Rate:	1000Mbit/s	Power Saving Mode:	Disable

4. Preparing for System Installation

The Ethernet Switch is now properly configured to support MuxLab AV over IP devices with respect to IGMP and Jumbo Frames.

Note that MuxLab AV over IP Transmitters and Receivers are set by default with DHCP enabled, and the MuxLab 500811 ProDigital Network Controller has DHCP disabled by default and is set to a default Static IP address of 192.168.168.50. It is recommended that you operate your system with the Transmitters and Receivers with DHCP enable and the 500811 Network Controller with DHCP disabled.

If however you intend to disable the DHCP on the Transmitters and Receivers, then please take note that the default Static IP address for the Transmitters is 192.168.168.55, and for the Receivers is 192.168.168.56. If you are using more than one, you need to change these values so that each transmitter and receiver has a unique Static IP address.

Note that in order for the entire system to operate correctly, the Ethernet Switch, MuxLab Transmitters and Receivers, and the MuxLab ProDigital Network Controller must all be on the same subnet. Devices with DHCP enabled will adjust automatically to the correct subnet, while devices with DHCP disabled, may need to be set by the user to the correct subnet, if not already set correctly. Your network administrator can assist with this configuration if you are not familiar with how to accomplish this task.

5. Support

If you are having issues which require further assistance, please contact the respective device manufacturer for the device in question. For MuxLab device related questions, please contact MuxLab Customer Technical Support at 877-689-5228 (toll-free in North America) or (+1) 514-905-0588 (International).



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