Huawei Ethernet Switch Quick Setup Guide

For West Penn Wire AV over IP Devices

Contents

1. Introduction

This document covers the basic setup requirements for a Huawei Ethernet Switch when using in conjunction with WPW 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. WPW Ethernet Switch Setup Requirements

All WPW 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 WPW models operating on a 1G network, as the corresponding WPW 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 WPW AV over IP models below work on a 1G Ethernet Switch. The below table specifies the IGMP and Jumbo Frames requirements per WPW AV over IP Transmitter/Receiver model.

AV over IP Model	**Ethernet Switch BW Required**	**IGMP Required**	
AV-IP-WP772-WH	**1G**	**x**	
AV-IP-RX776	**1G**	**x**	
AV-IP-C8-WH	**1G**	**x**	
AV-IP-AMPTX	**1G**	**x**	
AV-IP-AMPRX	**1G**	**x**	

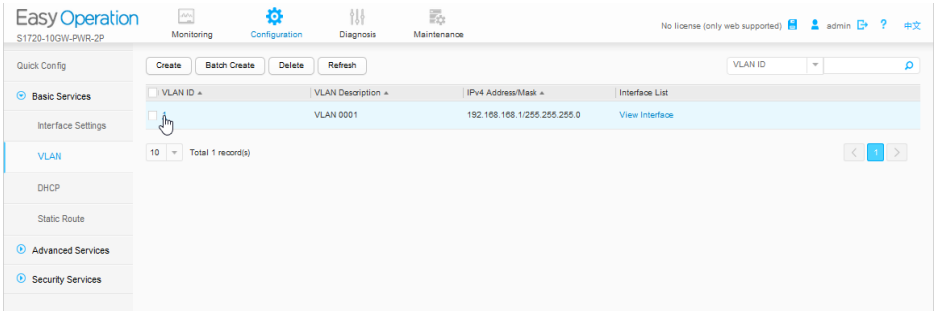
Ethernet Switch Setup

Access the Ethernet Switch web server

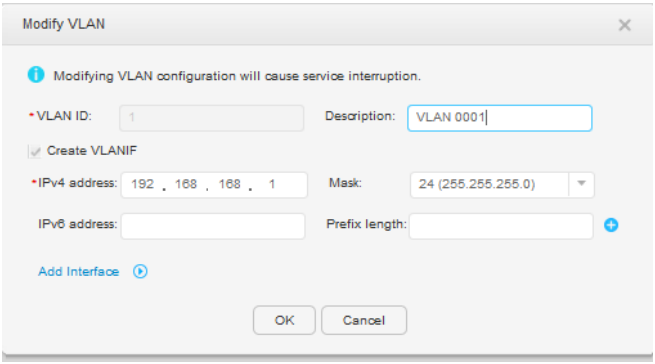
- Locate the Ethernet Switch default IP address
- Make sure your computer is on the same subnet as the Ethernet Switch (your network administration can assist you with this, if required)
- Enter the Ethernet Switch IP address into a browser

2.1. 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



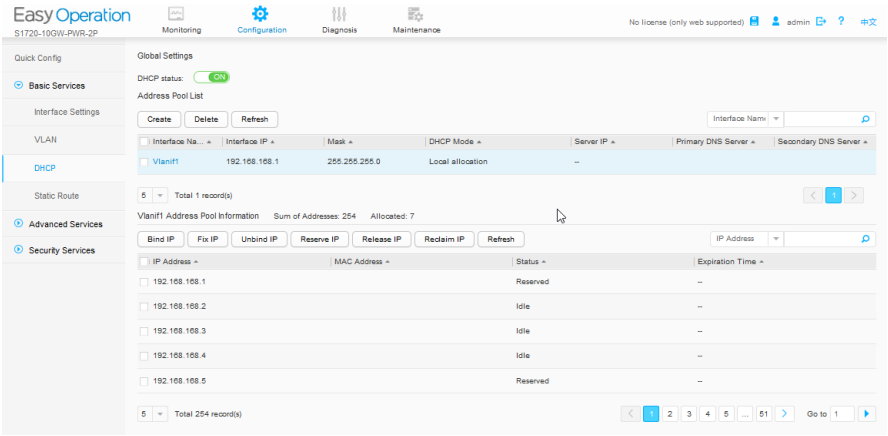
This will change the IP address of the switch and set it to within the default segment

address range of the WPW 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.

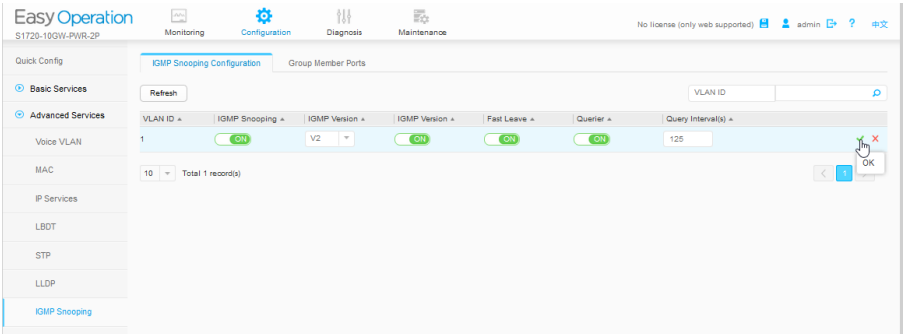


2.2. Enabling IGMP

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 WPW products.

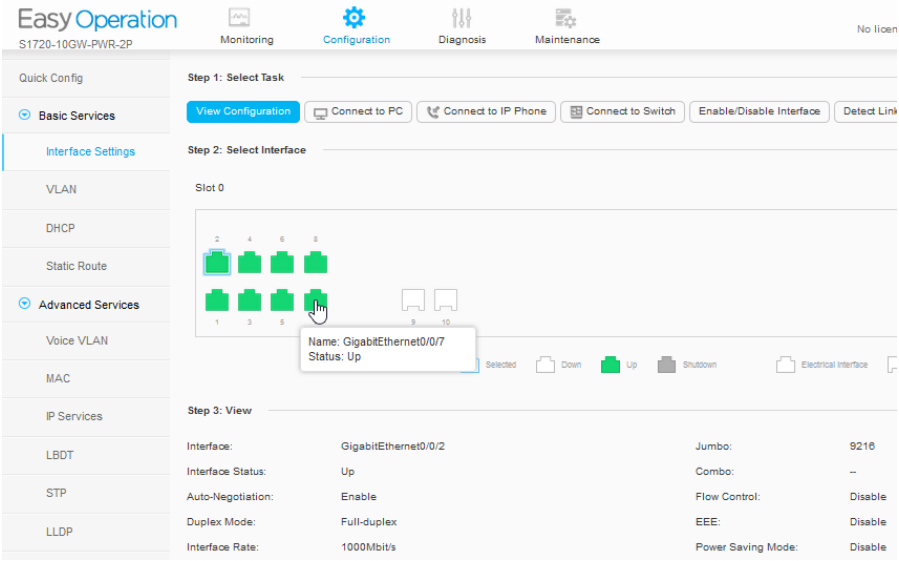
- Set “IGMP version”, “Fast Leave” and “Querier” to “ON”. Press “OK”.



2.3. 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.



3. Preparing for System Installation

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

Note that WPW AV over IP Transmitters and Receivers are set by default with DHCP enabled, and the West Penn AV-IP-NC811 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 AV-IP-NC811 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, WPW Transmitters and Receivers, and the WPW 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.

4. Support

If you are having issues which require further assistance, please contact the respective device manufacturer for the device in question. For WPW device related questions, please contact WPW Customer Technical Support at 800-245-4964

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