How to configure 802.1Q VLAN on TP-Link Easy Smart/Unmanaged Pro Switches

User Application Requirement

Updated 06-28-2022 08:15:57 AM *601158*

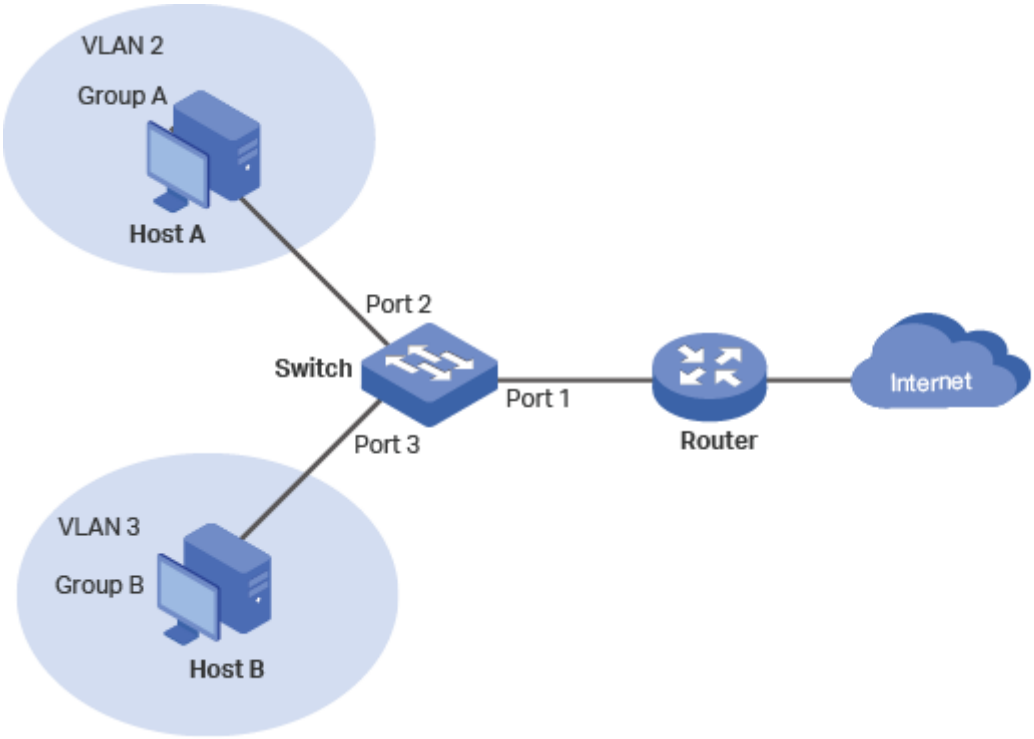
This Article Applies to: -

VLAN (Virtual Local Area Network) is a technology that can solve broadcasting issues. A LAN can be divided into several VLANs logically, and only the hosts in a same VLAN can communicate with each other.

Here are two configuration examples for 802.1Q VLAN.

Example 1:

As the following figure shows, the switch connects to two different groups. It is required that the computers in the two groups cannot communicate with each other, but both of them can access the internet via the router.



Configuration Scheme

To meet the above requirements, you can configure 802.1Q VLAN on the switch.

1) Create VLAN 2. Add port 1, 2 to VLAN 2.

2) Create VLAN 3. Add port 1, 3 to VLAN 3.

3) Keep port 1, 2, 3 in VLAN 1. (By default, all ports belong to VLAN 1.)

VLAN Configurations on the Switch:

	VLAN	Egress Rule	PVID
Port 1	VLAN 1-3	Untagged	1
Port 2	VLAN 1-2	Untagged	2
Port 3	VLAN 1, 3	Untagged	3

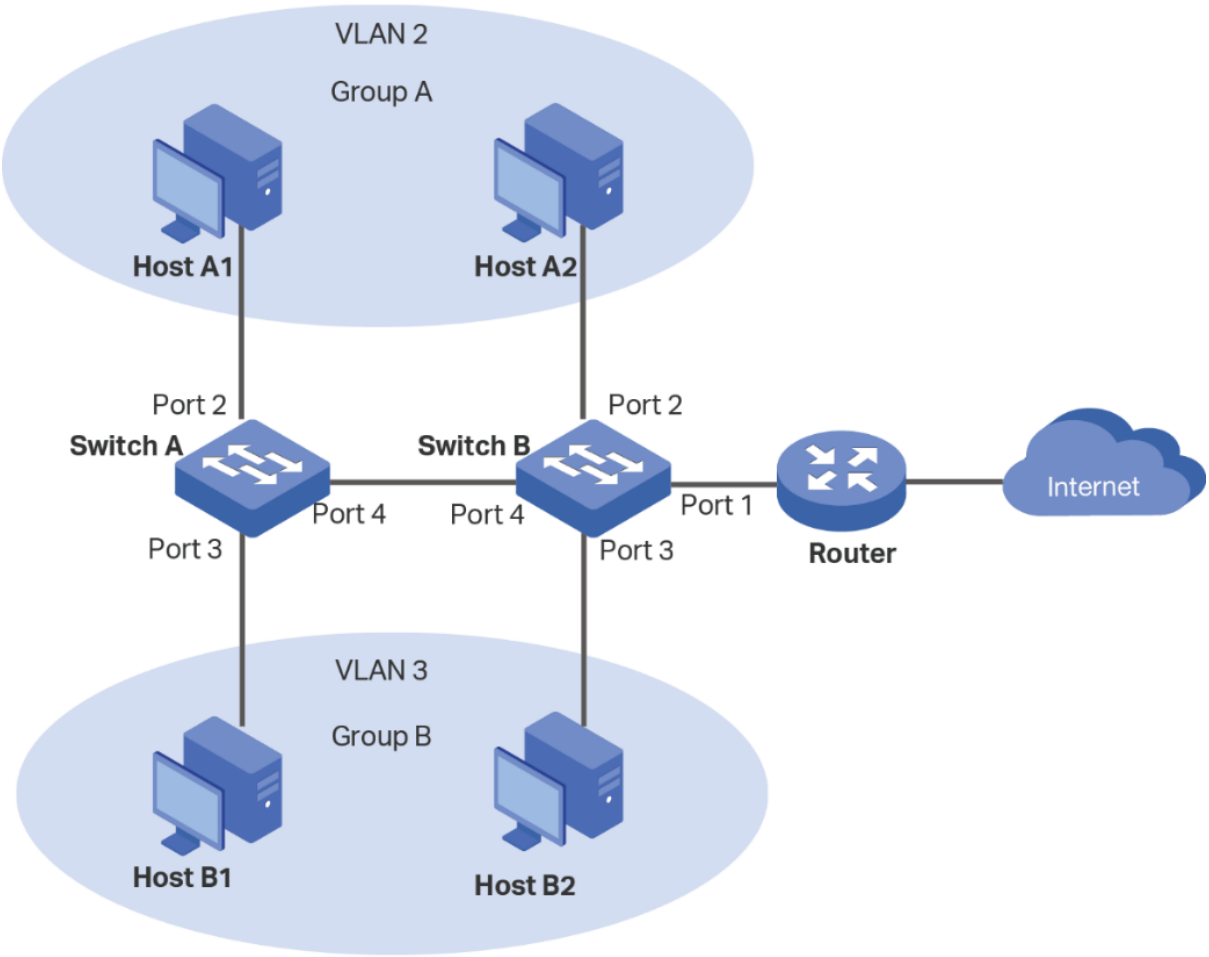
Configuration Steps:

Exampled with TL-SG105E, the following section shows how to configure 802.1Q VLAN on the switch using web GUI and using configuration utility.

- **Using Web GUI**
- **Using Configuration Utility**

Example 2:

As the following figure shows, a company has two groups which connect to two switches. It is required that the two groups cannot communicate with each other, but both of them can access the internet.



Configuration Scheme:

To implement the above requirements, you can configure 802.1Q VLAN on both Switches.

1) Create VLAN 2. Add port 2, 4 of Switch A and port 1,2, 4 of Switch B to VLAN 2.

2) Create VLAN 3. Add port 3, 4 of Switch A and port 1,3, 4 of Switch B to VLAN 3.

3) Configure the default VLAN 1 to make sure the router can communicate with all ports of the two switches.

VLAN Configurations on Switch A and Switch B:

	VLAN 1	VLAN 2	VLAN 3
Switch A	Port 2-4	Port 2,4	Port 3,4
Switch B	Port 1-4	Port 1,2,4	Port 1,3,4

Egress Rules and PVID Settings on Switch A and Switch B:

Switch	Switch A			Switch B			
Port	2	3	4	1	2	3	4
Egress Rule	Untagged	Untagged	Tagged	Untagged	Untagged	Untagged	Tagged
PVID	2	3	1	1	2	3	1

Configuration Steps

Exampled with TL-SG105E, the following section shows how to configure 802.1Q VLAN on both switches using web GUI and using configuration utility.

- **Using Web GUI**
- **Using Configuration Utility**

Looking for More

- [General] What Is a PoE Switch | Power over Ethernet

How to configure IGMP Snooping for IPTV network using L2 switch

User Application Requirement

Updated 06-28-2022 03:08:54 AM

This Article Applies to: -

This FAQ is suitable for Easy Smart Switch, Smart Switch, L2 Managed Switch

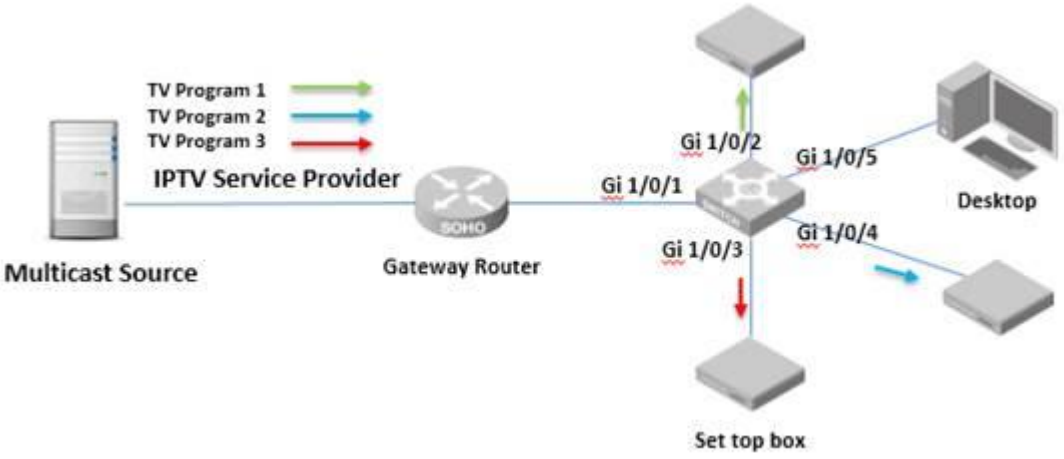
IPTV service consists of three entities-multicast source, client device and multicast network. This Article will focus on the most frequently asked scenarios of IGMP snooping Multicast network in the Access Layer. And give you the corresponding suggested configuration guide.

Scenario:

IGMP snooping on L2 switch for Multicast network in the Access Layer.

Note: The gateway router must support IGMP proxy/query function or IGMP snooping on L2 switch will not work as expected.

Topology:



Target/Requirement:

Using a TP-Link L2 switch's IGMP snooping feature to build up a L2 multicast network to avoid broadcast of multicast data.

Configuration Guidance:

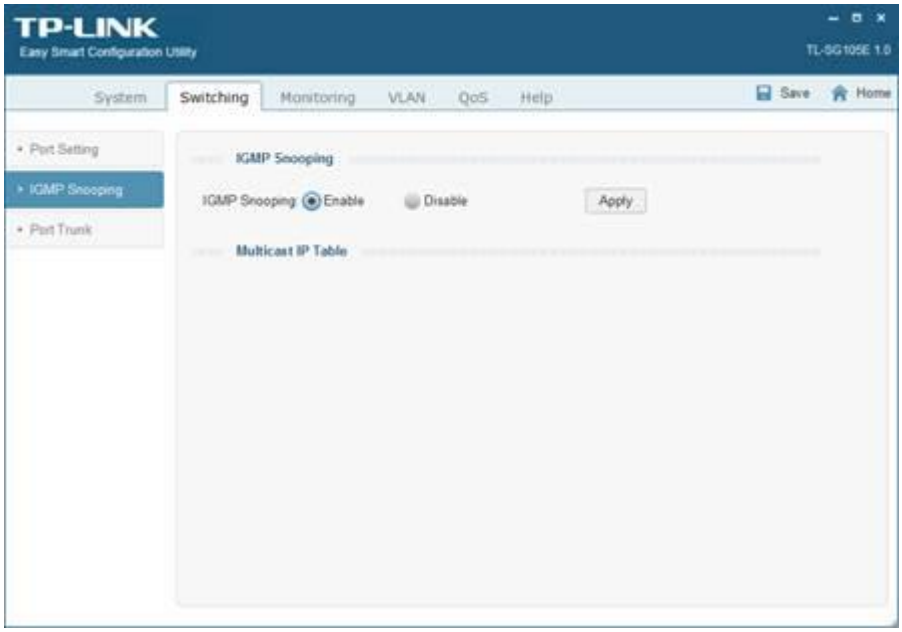
As illustrated in the topology above, Internet Gateway Router is connected to the L2 switch via port 1. "Set top box" is connected to L2 switch via port 2/3/4 for IPTV service, port 5 of the switch is connected with Desktop and there is no IPTV service on it.

Here we take Easy Smart switch TL-SG105E and Smart Switch T1600G-28TS as the instances to show how to enable IGMP snooping. For L2 managed switch and L3 managed switch configuration on IGMP snooping, it is the same with the configuration of T1600G-28TS.

TL-SG105E Utility Configuration:

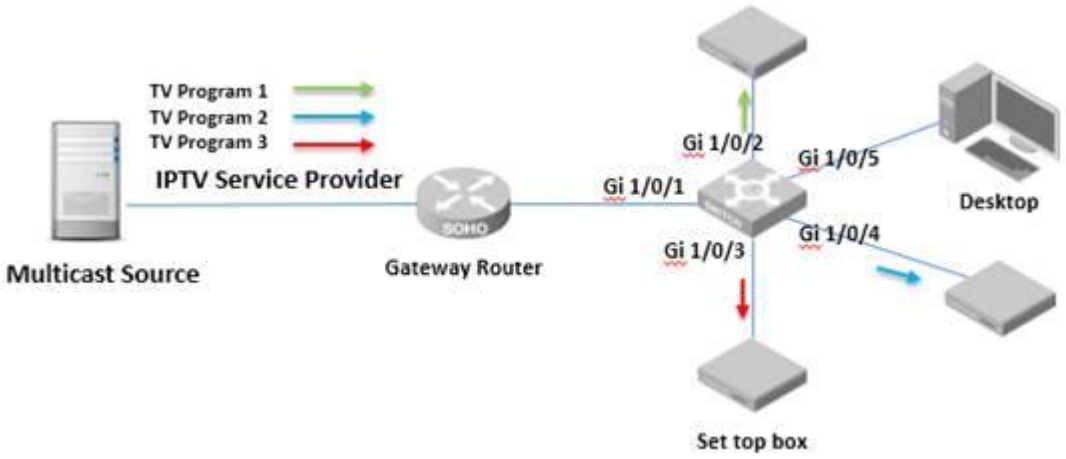
Step 1: log in the Configuration Page of TL-SG105E.

Step 2: Enable IGMP Snooping in “Switching-IGMP Snooping”



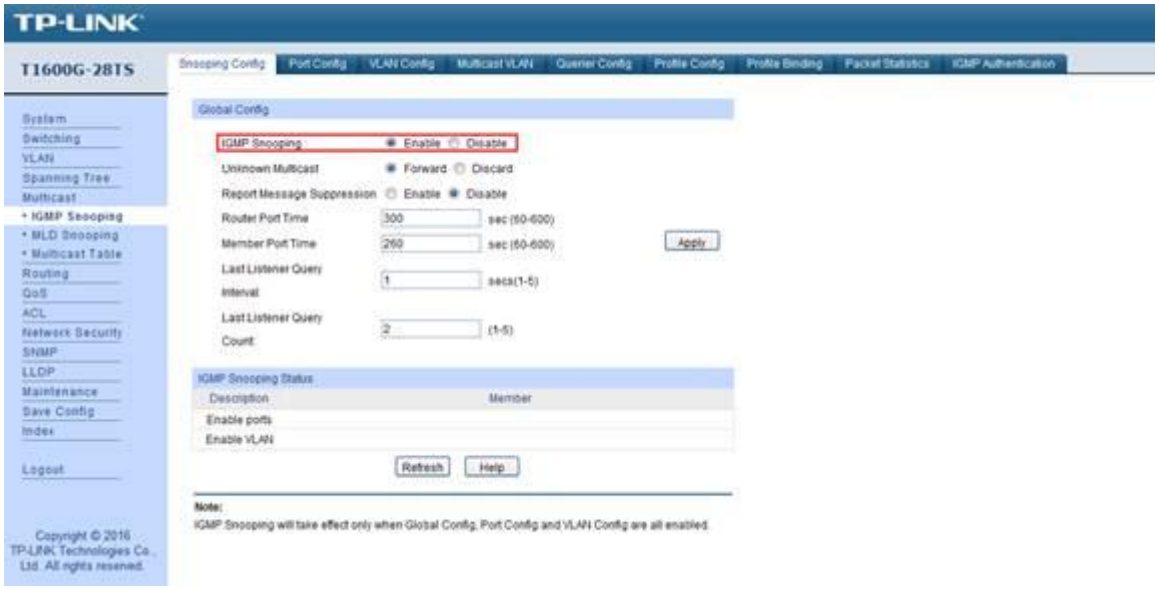
T1600G-28TS Web GUI Configuration：

Note: Set top box and Desktop and Router are in the same VLAN 1, it is the factory default settings.

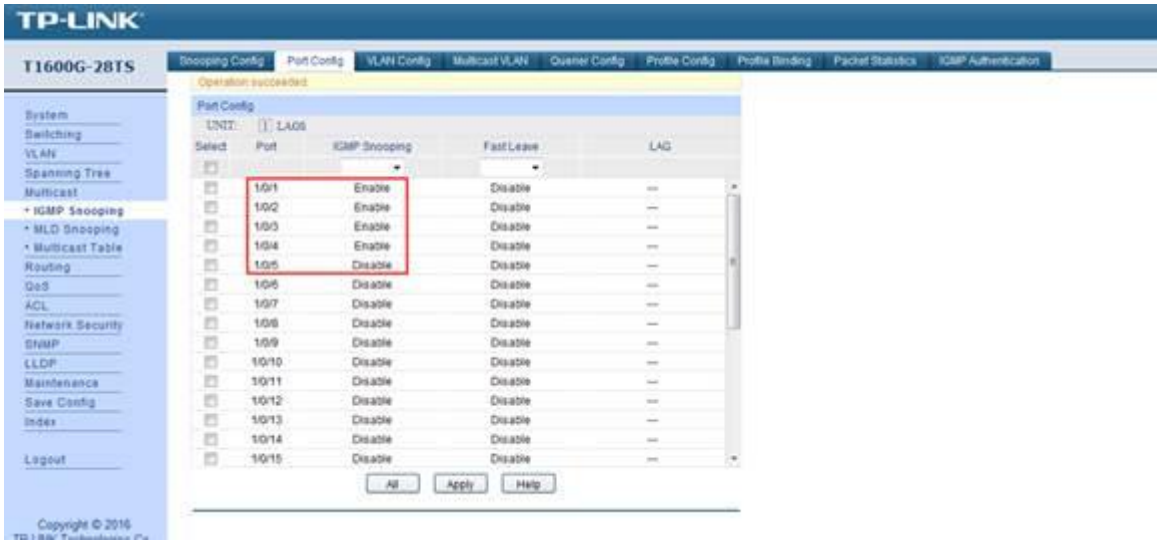


Step 1: Log in the Configuration Page of T1600G-28TS.

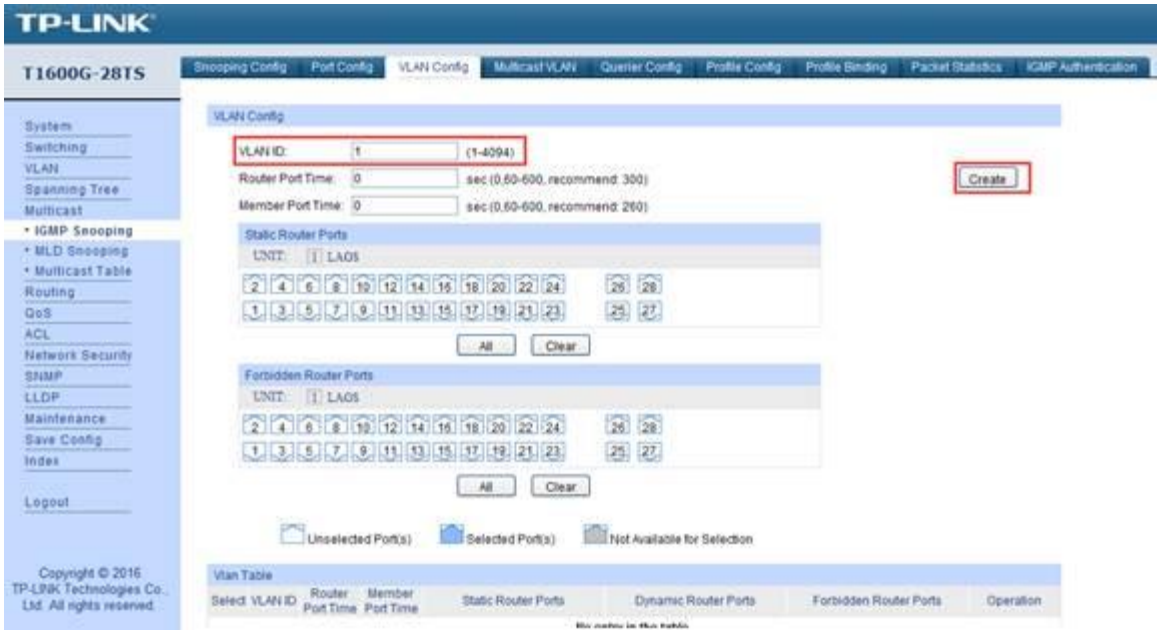
Step 2: Enable IGMP Snooping in “Multicast-IGMP Snooping-Snooping Config”



Step 3: Enable IGMP Snooping for port 1,2,3,4 in “Multicast-IGMP Snooping-Port Config”. Please note port 5 is not needed for IPTV services, so we do not enable port 5 for IGMP snooping. If the desktop computer is also to receive the multicast service, Just Enable port 5.

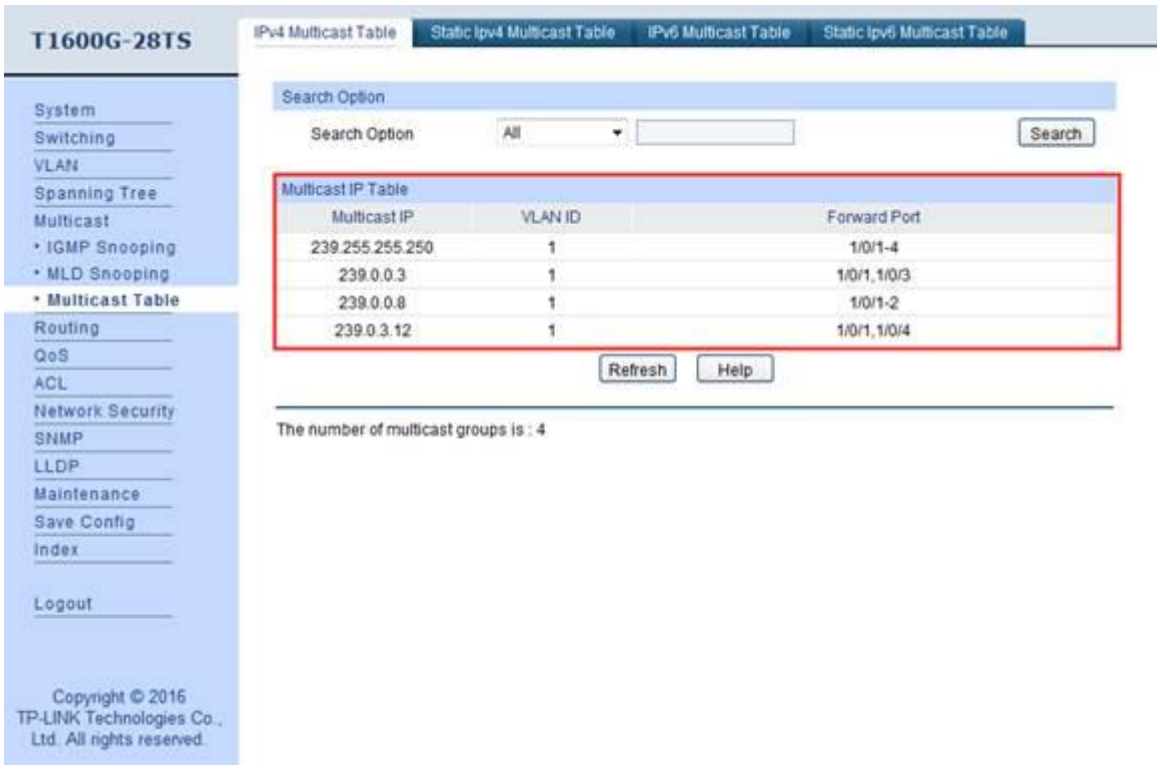


Step 4: Create “VLAN 1” for IGMP snooping VLAN Config. In this instance, all devices are in VLAN1, so we can create VLAN1 and enable the IGMP snooping for VLAN1. Or if your network has more than one VLAN in the multicast network, you should either create the VLAN ID needed for multicast service one by one.



Step 5: Check the Multicast Table in “Multicast-Multicast Table”, from the table, we can clearly see that Port 2 and Port 3 and Port 4 are receiving different Programs (marked by different **multicast IP** address) via Port 1(Gateway Router Port) from the multicast source.

Note: Port 5 is not going to receive any multicast data, so port 5 is not in the multicast table list.



Get to know more details of each function and configuration please go to Download Center to download the manual of your product.

What should I do if I cannot access the web management page of my TP-Link switch?

Troubleshooting

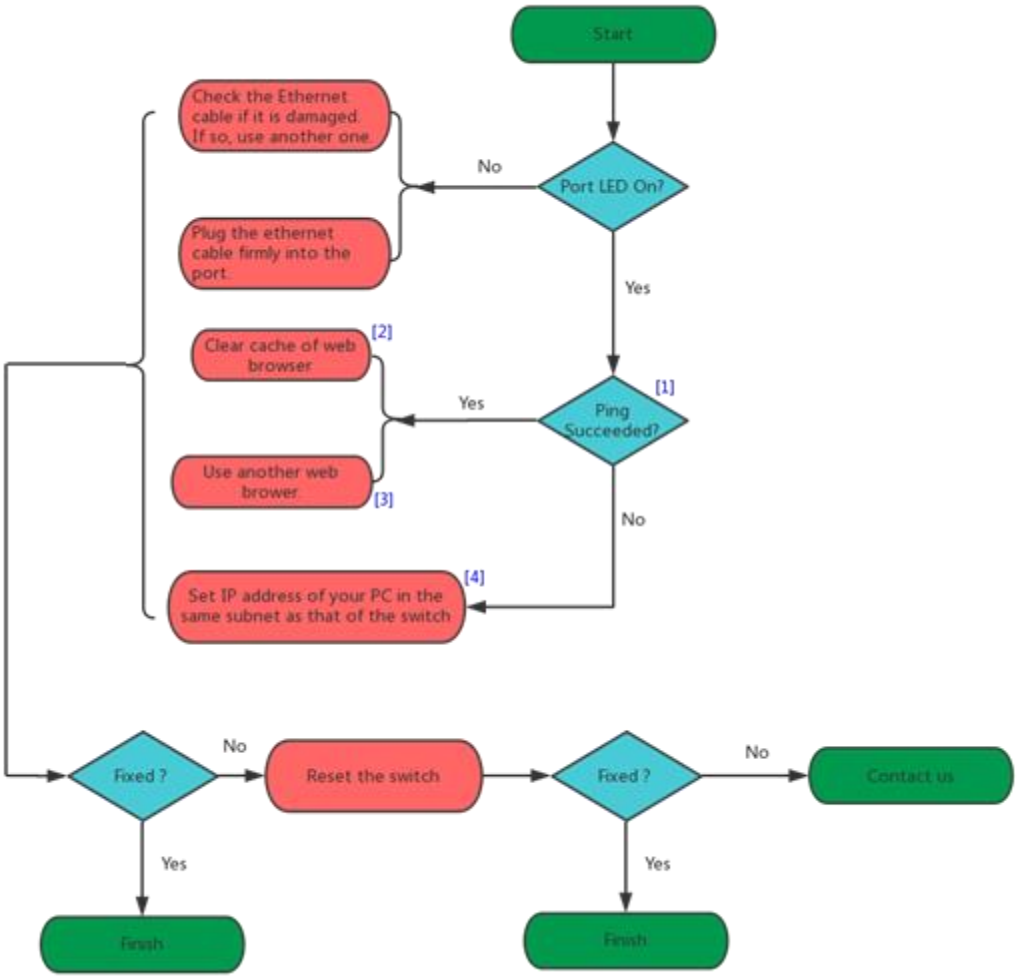
Updated 07-20-2021 09:30:03 AM 268887

This Article Applies to: -

First of all, check the model of your switch to verify it is web-manageable. Until now, only TP-Link Easy Smart/Unmanaged Pro/Smart/Managed switches are web-manageable.

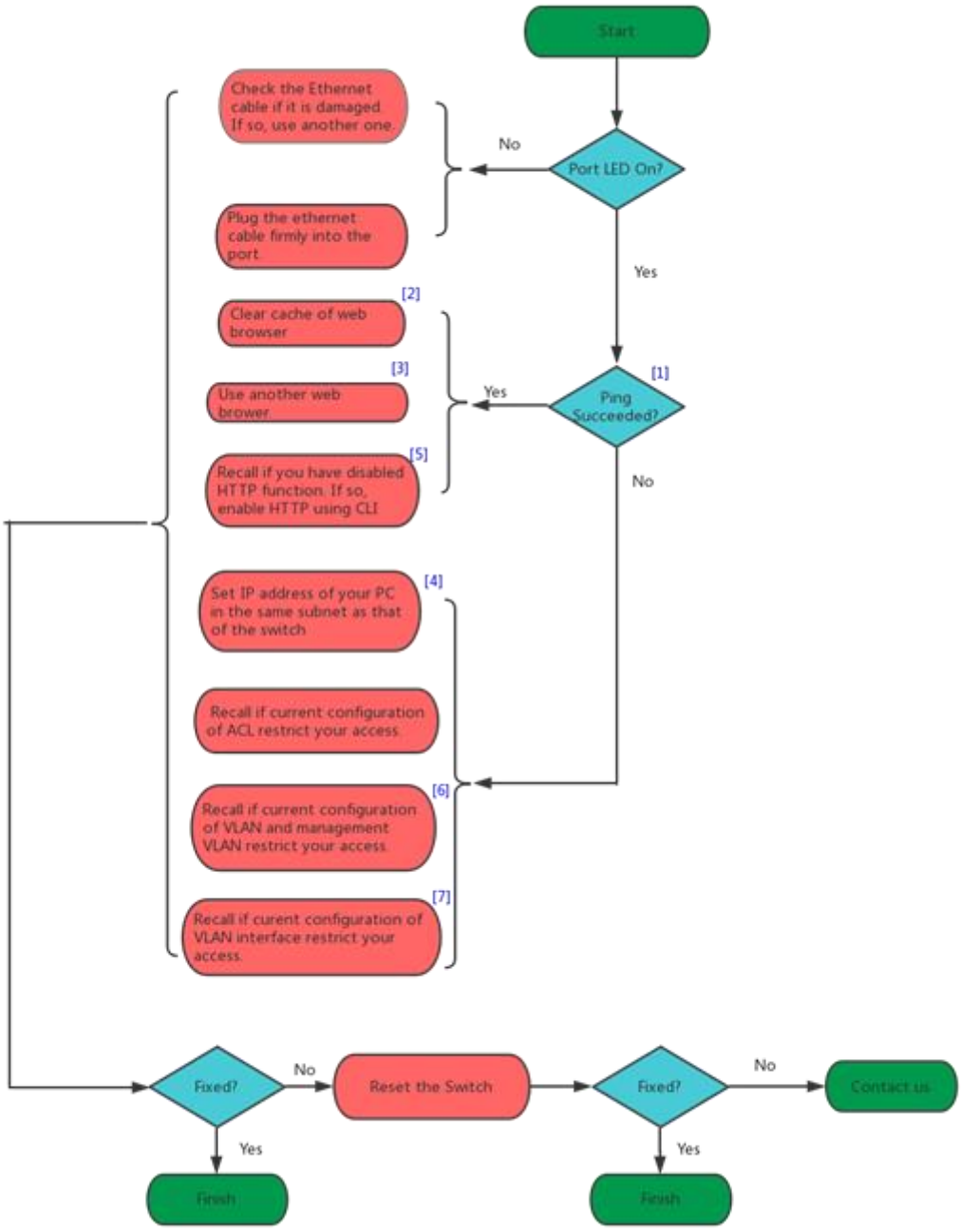
The troubleshooting for Easy Smart and Unmanaged Pro switches is shown below:

Figure 1 Troubleshooting for Easy Smart and Unmanaged Pro Switches



The troubleshooting for Smart and Managed switches is shown below:

Figure 2 Troubleshooting for Smart and Managed Switches



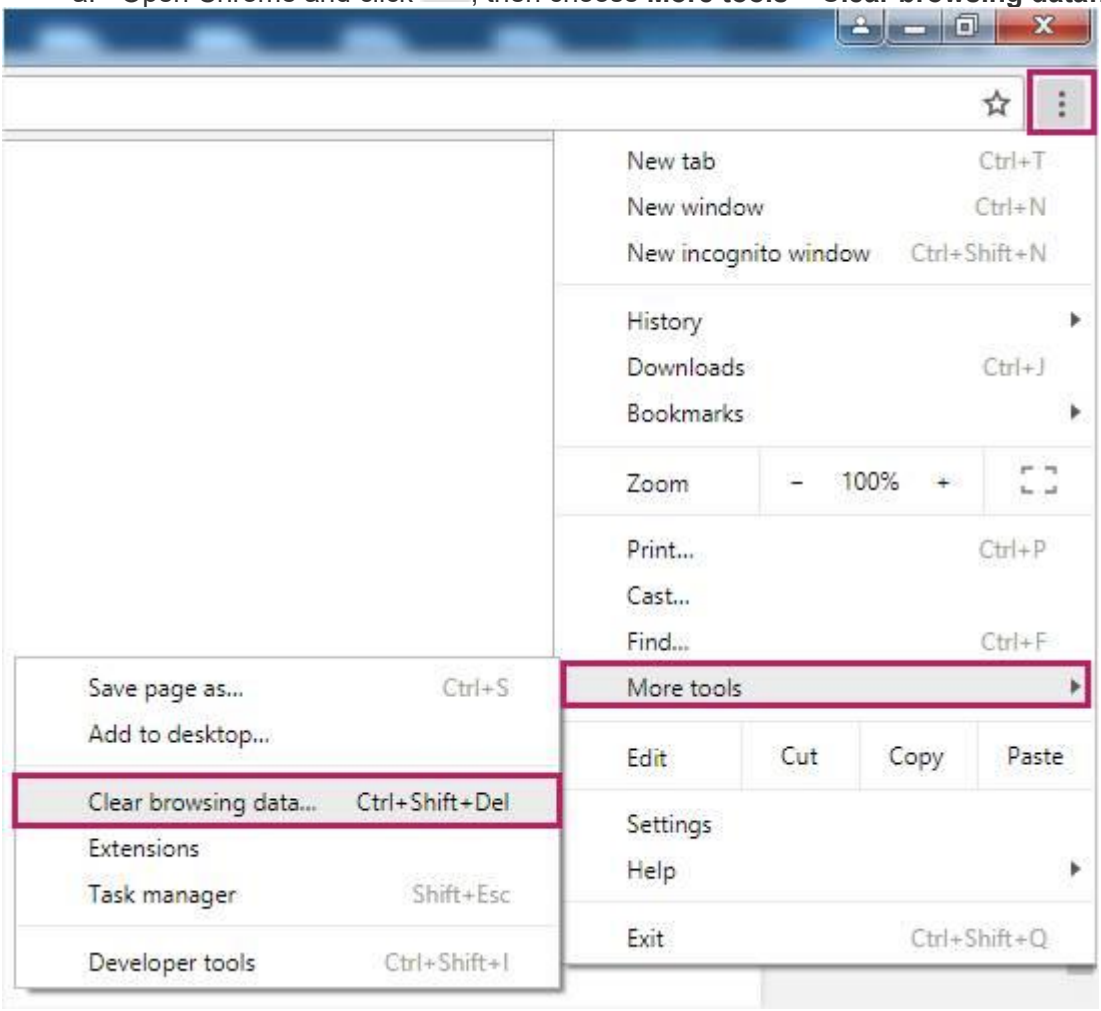
Explanations:

[1] The default IP address of the switch is 192.168.0.1. If you had changed the default IP address, then ping the new IP address.

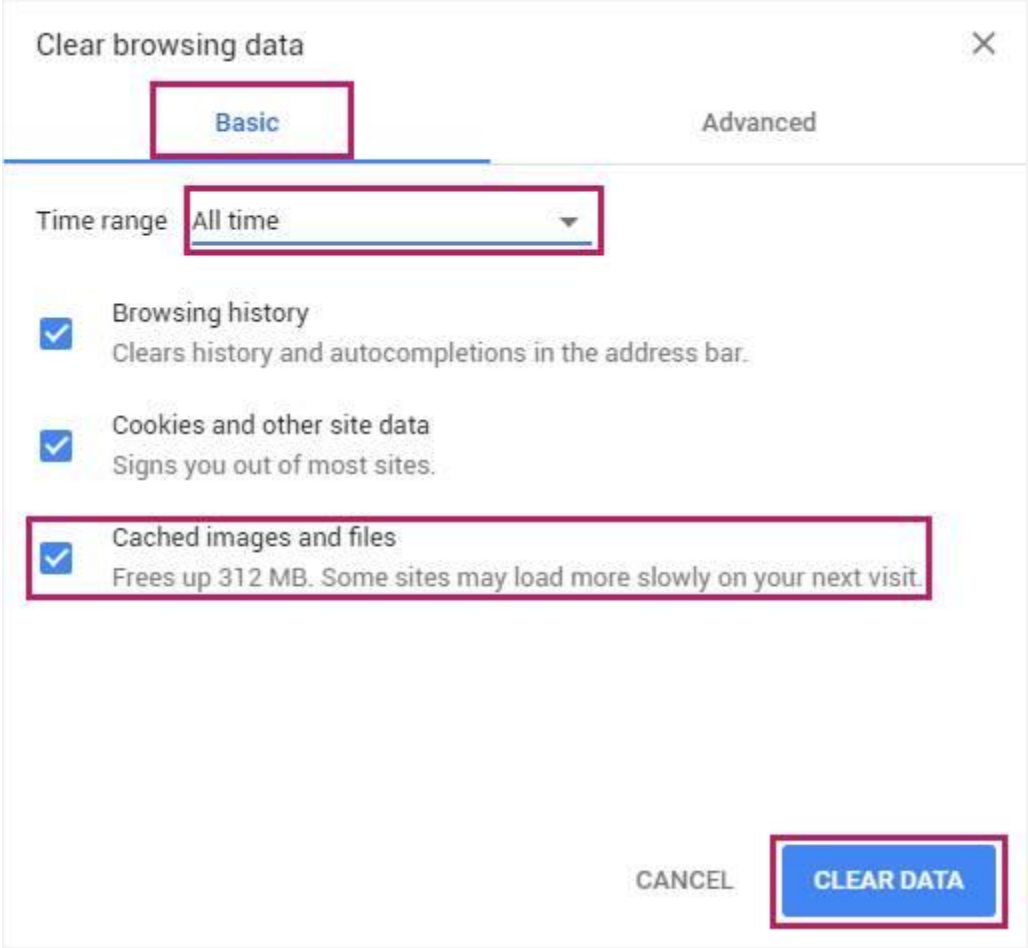
For how to ping IP addresses, please refer to: https://www.tp-link.com/support/faq/425/.

[2] Here introduces how to clear cache demonstrated with **Chrome**:

a. Open Chrome and click , then choose **More tools > Clear browsing data…**



b. In the **Basic** tab, select the time range and check the **Cached Images and files**, then click **CLEAR DATA.**



[3] It is recommended to use **Google Chrome** or **Internet Explorer** browser.

[4] For how to find the IP address of your computer, please refer to: https://www.tp-link.com/support/faq/838/.

[5] If HTTP function of the switch is disabled, the switch will not be accessible from the web browser. But you can still use the command line ***ip http server*** to enable HTTP and then access the switch using the browser again. For how to use the command line, please refer to the User Guide of the switch.

[6] Management VLAN is only supported on T1500 series switches;

[7] Check if the VLAN that your computer belongs to have a VLAN interface. For example, if your computer only belongs to VLAN 2, which does not have a VLAN interface, then you cannot visit the switch. If VLAN 2 has a VLAN interface with its own IP address, then you need to visit the switch using the IP address of VLAN interface 2.