Layer-2 Tunnel Configuration

Table of Contents

Chapter 1 **Layer-2 (L2) Tunnel Configuration**

1.1 Overview

The tunnel of layer-2 protocol allows users who connect the two terminals of a switch to transmit the designated layer-2 protocol packets transparently in their own networks through the switch without the affection of the corresponding layer-2 protocol module of this switch. The switch here is just a transparent transmission medium for users.

1.2 Layer-2 (L2) Tunnel Configuration

Run the following commands to set the L2 tunnel function on a L2 protocol:

Command	Remarks
configure	Enters the global configuration mode.
interface *<intf_name>*	Enters the interface configuration mode of a switch port. Only the switch ports support the L2 tunnel (including physical ports and aggregation ports)
[**no**] **l2protocol-tunnel** *[stp]*	Sets the L2 protocol, which is used to enable the tunnel function, on this switch port. Currently only the tunnel function of the STP protocol is supported.
no spanning-tree	Shut down the port spanning tree agreement.
exit	Goes back to the global mode.
write	Saves the settings.

Note:
This command is used to disable STP on the port on which the tunnel function is enabled, preventing this port from influencing the devices that access the tunnel by sending the STP packets.

1.3 L2 Tunnel Configuration Example

The network topology is shown in the following figure:
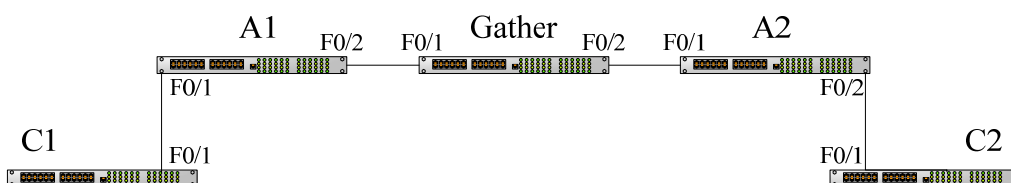
A1/A2/Gather belongs to a core network. C1/C2 stands for two switches locating in two branches of a customer. The customer wants the two networks to be managed as an independent network, that is, the core network is just like a transparent transmission channel for this customer. To realize STP transparent transmission, the customer needs to make the following settings on each switch:

(1)   Set port f0/2 of switch A1, port f0/1 of switch Gather and port f0/1 of switch A2 to the trunk mode respectively.

(2)   Set port f0/1 of switch A1 and port f0/2 of switch A2 to **access**, disable STP, and then enable the tunnel function of the STP protocol on the two ports.