# **How to configure DHCP Local Relay**

Created at 2010/04/26

# **Introduction to DHCP Local Relay**

When DHCP Local Relay enable on the switch, broadcast DHCP request is intercepted by switch and then flood on the same VLAN that contains option 82 filed. The DHCP server can use this information to assign IP addresses, perform access control, security policies (or other parameter-assignment policies) for each subscriber of network.

# Step-by-Step

#### I. Scenario

With DHCP Local Relay enable for VLAN 1 in Figure-1. Broadcast DHCP request receives by switch will be inserted option 82 information then flood to this subnet. The DHCP server receives the packet. If the server is option-82 capable, it might use the remote ID, the circuit ID, or both to assign IP addresses and implement policies, such as restricting the number of IP addresses that can be assigned to a single remote ID or circuit ID. Then the DHCP server echoes the option-82 field in the DHCP reply.

Figure-1

DHCP server

VLAN1

Host A (DHCP Client)

Host B(DHCP Client)

### II. Configuration

The following procedure is required:

#	Command	Description
1	config dhcp_local_relay vlan	Used to enable or disable DHCP local
	<vlan_name 32=""> state enable</vlan_name>	relay function to the vlan.
2	enable dhcp_local_relay	Used to enable the DHCP local relay
		function on the Switch.

The following is the example in this scenario,

Switch:admin#config dhcp\_local\_relay vlan default state enable

Switch:admin#enable dhcp\_local\_relay

## III. Verification

You can verify configuration status of DHCP Local Relay by following example, Switch:admin#show dhcp\_local\_relay

Command: show dhcp\_local\_relay

DHCP/BOOTP Local Relay Status : Enabled

DHCP/BOOTP Local Relay VID List : 1

## Reference

• RFC3046 DHCP Relay Agent Information Option