

# Huawei LAN Switch Instructions for SKA Test

Prepared by	Yu Peng	Date	2010-5-11
Reviewed by		Date	
Approved by		Date	
Authorized by		Date	



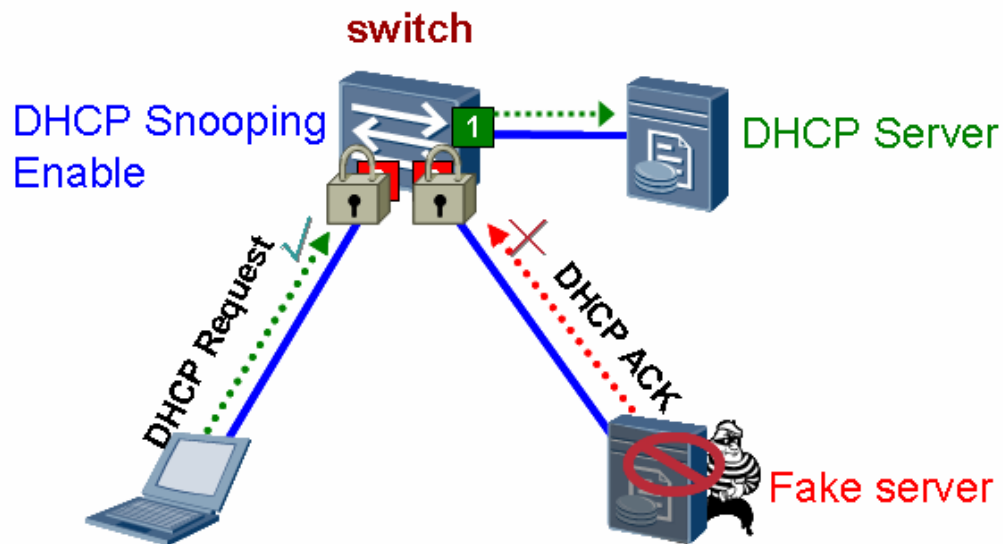
Huawei Technologies Co., Ltd.

## **Contents:**

- A. DHCP Snooping Configuration Procedure**
  - Topology
  - Setup
- B. DHCP option82 Configuration Procedure**
  - Topology
  - Setup
- C. ARP source check Configuration Procedure**
  - Topology
  - Setup
- D. IP source check Configuration Procedure**
  - Topology
  - Setup
- E. Static user binding Configuration Procedure**
  - Topology
  - Setup
- F. Port isolation Configuration Procedure**
  - Topology
  - Setup

## A. DHCP Snooping Configuration Procedure

### Topology:



### Setup:

Step1: Enable dhcp-snooping on global;  
dhcp snooping enable

Step2: Enable dhcp-snooping on vlan and assign uplink port 24 as trusted port;

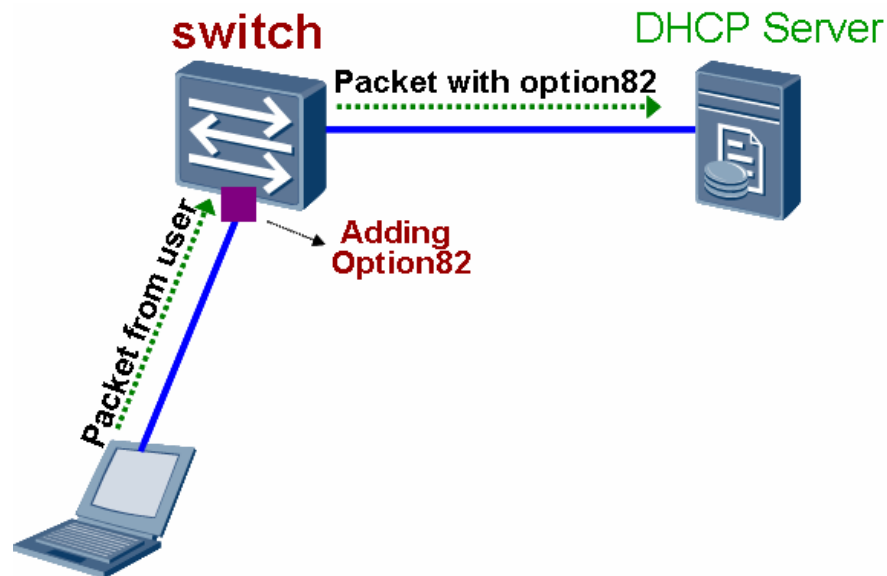
Vlan 10

dhcp snooping enable

dhcp snooping trusted interface GigabitEthernet0/0/24

## B. DHCP option82 Configuration Procedure

### Topology:



### Setup:

Step1: Enable DHCP Snooping function, the same as Test A;

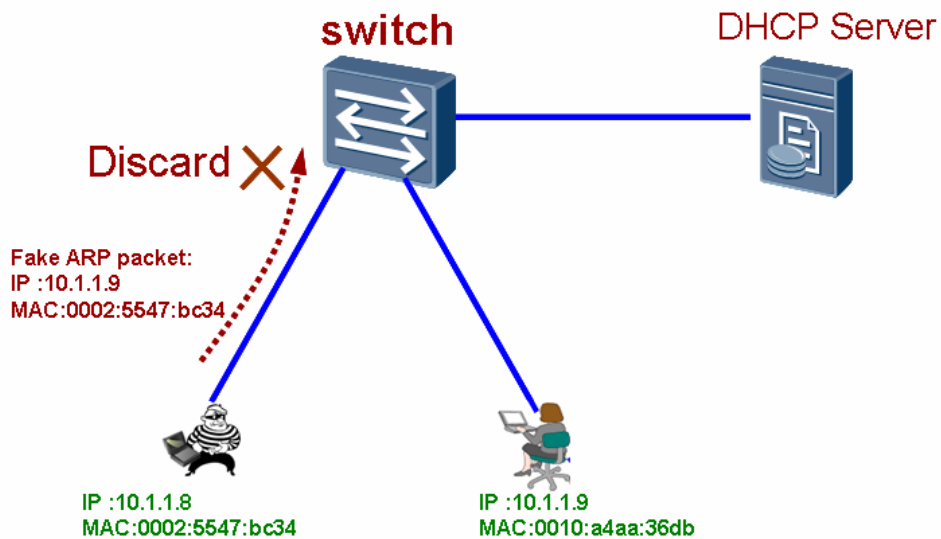
Step2: Enable option82 insert on vlan;

Vlan 10

dhcp option82 insert enable interface GigabitEthernet0/0/1

## C. ARP check Configuration Procedure

### Topology:



Dhcp snooping binding table					
MacAddress	IpAddress	Lease(sec)	Type	VLAN	Interface
0002:5547:bc34	10.1.1.8	3000	dynamic	10	0/0/1
0010:a4aa:36db	10.1.1.9	2598	dynamic	10	0/0/2

### Setup:

Step 1: Enable DHCP Snooping function, the same as Test A;

Step 2: Enable ARP check on access port;

```
interface GigabitEthernet0/0/1
```

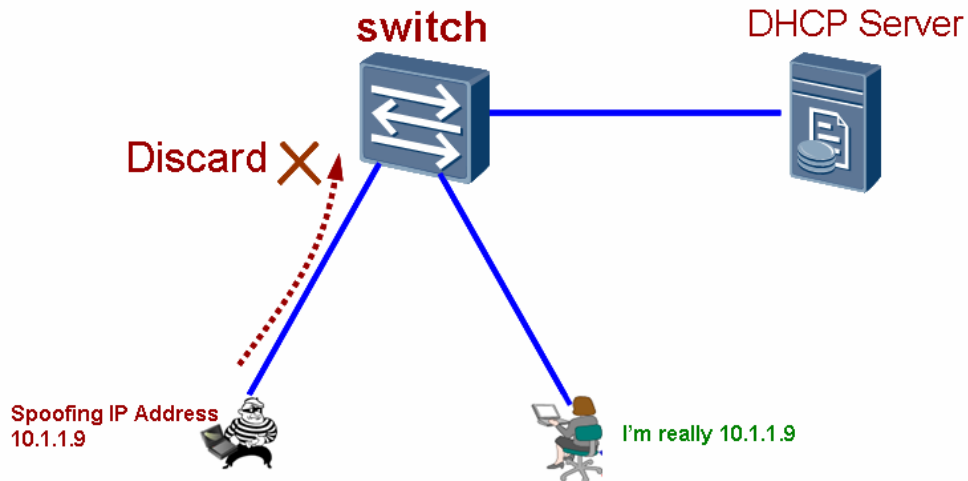
```
port link-type access
```

```
port default vlan 40
```

```
dhcp snooping check arp enable alarm arp enable threshold 50
```

## D. IP source check Configuration Procedure

### Topology:



Dhcp snooping binding table

MacAddress	IpAddress	Lease(sec)	Type	VLAN	Interface
0010:a4aa:36db	10.1.1.9	2598	dynamic	10	0/0/2

### Setup:

Step1: Enable DHCP Snooping function, the same as Test A;

Step 2: Enable IP source check on access port;

interface GigabitEthernet0/0/1

port link-type access

port default vlan 40

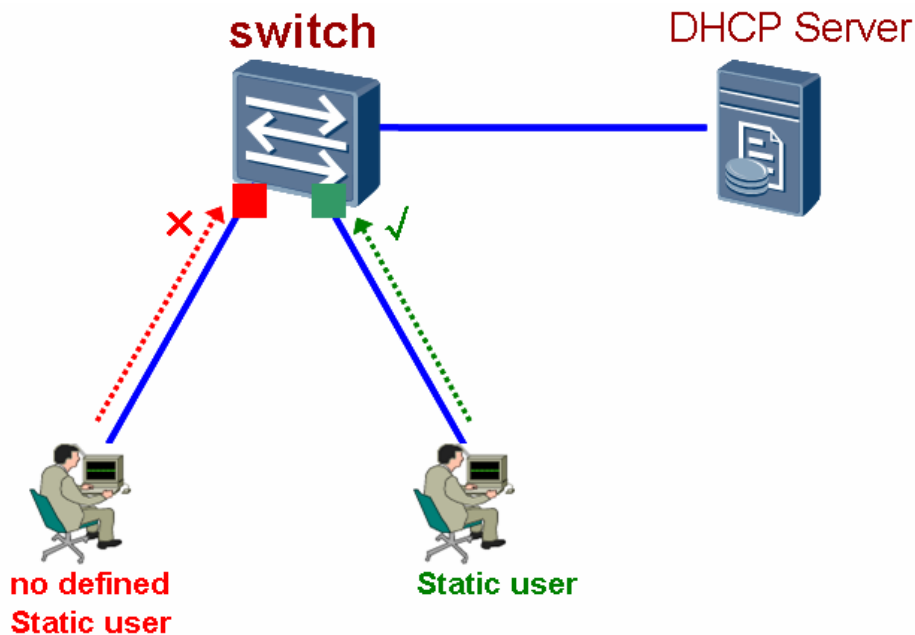
dhcp snooping check ip enable alarm ip enable threshold 50

## E. Static user binding Configuration Procedure

### Description:

If fixed IP addresses are used, the switch port should only permit the IP address defined for that port as a source address in TCP/IP and ARP packets.

### Topology:



Dhcp snooping binding table					
MacAddress	IpAddress	Lease(sec)	Type	VLAN	Interface
0010:a4aa:36db	10.1.1.9	2598	Static	10	0/0/2

### Setup:

Step1: Enable DHCP Snooping function, the same as Test A;

Step 2: Enable IP source check and ARP check on access port, the same as Test C and D;

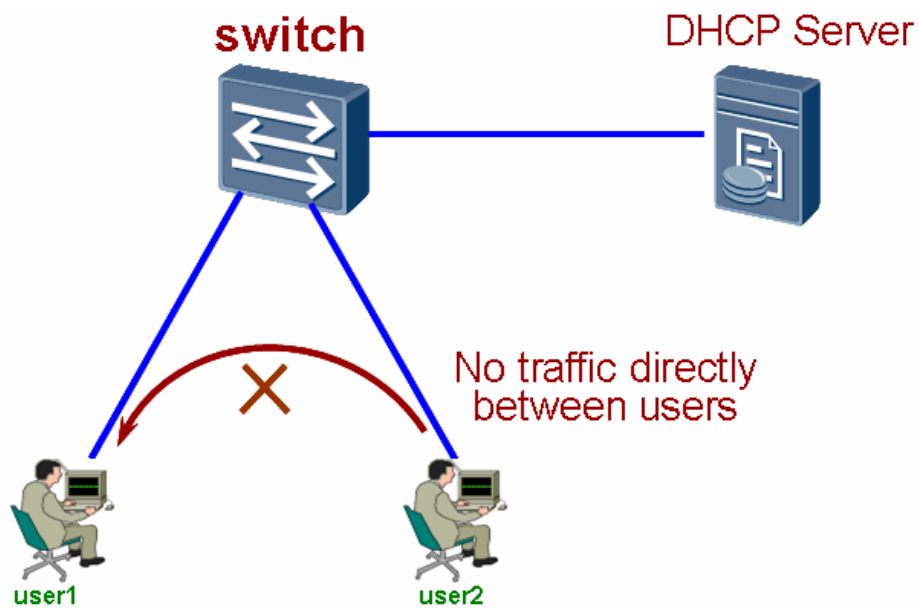
Step 3: Configure static user binding table on vlan;

Vlan 40

```
dhcp snooping bind-table static ip-address 10.1.1.9 mac-address 0010-
a4aa-36db interface gigabitethernet 0/0/2
```

## F. Port isolation Configuration Procedure

### Topology:



### Setup:

Step1: Enable port isolation on access port;

```
interface GigabitEthernet0/0/1  
    port-isolate enable
```

#

```
interface GigabitEthernet0/0/2  
    port- isolate enable
```