

In some **mechanism** of virtual interface, ex:VRRP, the source MAC address and sender MAC address are maybe different in ARP packets.

By default setting, DFL will drop the arp reply packets if the source MAC address and sender MAC address is different.

As below example, the source MAC address and Sender MAC address is different in the ARP reply packet.

The image shows a Wireshark packet capture of an ARP reply. The packet list table is as follows:

No.	Time	Source	Destination	Protocol	Length	Info
9	0.042766	Fujitsu_78:ae:e1	Broadcast	ARP	60	who has 172.31.138.131? Tell 172.31.138.12
10	0.042777	Hewlett_9e:6a:c2	Fujitsu_78:ae:e1	ARP	42	172.31.138.131 is at 64:31:50:9e:6a:c2
57	35.602646	D-Link_49:d8:11	Broadcast	ARP	60	Gratuitous ARP for 172.31.138.51 (Request)
58	35.602719	D-Link_49:d8:11	Broadcast	ARP	60	Gratuitous ARP for 172.31.138.51 (Request)
117	85.790874	Hewlett_9e:6a:c2	Broadcast	ARP	42	who has 172.31.138.51? Tell 172.31.138.131
118	85.791219	D-Link_49:d8:11	Hewlett_9e:6a:c2	ARP	64	172.31.138.51 is at 5c:d9:98:49:d8:11
120	85.791727	D-Link_49:d8:11	Broadcast	ARP	60	who has 172.31.138.131? Tell 172.31.138.51
121	85.791733	Hewlett_9e:6a:c2	D-Link_49:d8:11	ARP	42	172.31.138.131 is at 64:31:50:9e:6a:c2
371	110.924124	Hewlett_9e:6a:c2	Broadcast	ARP	42	who has 172.31.138.11? Tell 172.31.138.131
372	110.924888	Fujitsu_78:ae:e1	Hewlett_9e:6a:c2	ARP	60	172.31.138.11 is at 00:00:5e:00:01:0a
394	113.637319	D-Link_49:d8:11	Broadcast	ARP	60	who has 172.31.138.11? Tell 172.31.138.51
395	113.637796	Fujitsu_78:ae:e1	D-Link_49:d8:11	ARP	60	172.31.138.11 is at 00:00:5e:00:01:0a

The details pane for frame 395 shows the following information:

- Ethernet II, Src: Fujitsu\_78:ae:e1 (00:17:42:78:ae:e1), Dst: D-Link\_49:d8:11 (5c:d9:98:49:d8:11)
- Destination: D-Link\_49:d8:11 (5c:d9:98:49:d8:11)
- Source: Fujitsu\_78:ae:e1 (00:17:42:78:ae:e1)
- Type: ARP (0x0806)
- Trailer: 00000000000000000000000000000000
- Address Resolution Protocol (reply)
- Hardware type: Ethernet (1)
- Protocol type: IP (0x0800)
- Hardware size: 6
- Protocol size: 4
- Opcode: reply (2)
- [is gratuitous: false]
- Sender MAC address: IETF-VRRP-VRID\_0a (00:00:5e:00:01:0a)
- Sender IP address: 172.31.138.11 (172.31.138.11)
- Target MAC address: D-Link\_49:d8:11 (5c:d9:98:49:d8:11)
- Target IP address: 172.31.138.51 (172.31.138.51)

The packet bytes pane shows the following hex data:

```
0000 5c d9 98 49 d8 11 00 17 42 78 ae e1 08 06 00 01
0010 08 00 06 04 00 02 00 00 5e 00 01 0a ac 1f 8a 0b
0020 5c d9 98 49 d8 11 ac 1f 8a 33 00 00 00 00 00 00
0030 00 00 00 00 00 00 00 00 00 00 00 00
```

If you want DFL to accept this kind of packets, you should configure the setting.

Interfaces > ARP > Advanced settings > ARP Match Ethernet Sender.

You can change the parameter from "Droplog" to "log" or "Ignore".

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### ARP-table Settings

Advanced ARP-table settings

General

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ARP Match Ethernet Sender:	Log	The Ethernet Sender address matching the hardware address in the ARP data.
ARP Query No Sender:	DropLog	If the IP source address of an ARP query (NOT response) is "0.0.0.0".
ARP Sender IP:	Validate	The IP Source address in ARP packets.
Unsolicited ARP Replies:	DropLog	Unsolicited ARP replies.
ARP Requests:	Drop	Specifies whether or not the ARP requests should automatically be added to the ARP table.
ARP Changes:	AcceptLog	ARP packets that would cause an entry to be changed.
Static ARP changes:	DropLog	ARP packets that would cause static entries to be changed.
Log ARP Resolve failures:	<input checked="" type="checkbox"/>	Specifies whether or not to log failed ARP Resolves.
ARP Expire:	900	Lifetime of an ARP entry in seconds.
ARP Expire Unknown:	3	Lifetime of an "unknown" ARP entry in seconds.
ARP Multicast:	DropLog	ARP packets claiming to be multicast addresses; may need to be enabled for some load balancers.
ARP broadcast:	DropLog	ARP packets claiming to be broadcast addresses; should never need to be enabled.
ARP cache size:	4096	Number of ARP entries in cache, total.
ARP Hash Size:	512	Number of ARP hash buckets per physical interface.
ARP Hash Size VLAN:	64	Number of ARP hash buckets per VLAN interface.

End of this document.