

# 知 防火墙M9K上的debug什么时候显示什么时候不显示

域间策略/安全域 孔梦龙 2022-01-26 发表

## 组网及说明

防火墙M9K上的debug什么时候显示什么时候不显示，  
以有逻辑的板卡为例，分别说明icmp和tcp协议，假设报文是过路报文。

## 配置步骤

(1) icmp过路报文, 这种类型的报文不能走逻辑, 只能全部上CPU处理, 假设有4个debug, 过路报文有10个, 但是能打印第一个request和reply, 因为从第二个是匹配会话了。也就是如果有4个debug, 首包会打印出来5个日志;

(2) tcp报文, 收包SYN上cpu, 回包syn ack也是上cpu, 然后下发会话到逻辑然后, 最后的ACK就走了逻辑的会话;

tcp的debug: (0x2是SYN, 0x12是SYN ACK)

```
<M9006_IRF>*Jan 26 18:17:16:631 2022 M9006_IRF IPFW//IPFW_PACKET: -Chassis=2-Slot=5.1;
Receiving, interface = Ten-GigabitEthernet2/3/0/8
version = 4, headlen = 20, tos = 192
pktlen = 60, pktid = 54101, offset = 0, ttl = 255, protocol = 6
checksum = 46739, s = 14.15.16.1, d = 18.1.1.2
channelID = 0, vpn-InstanceIn = 0, vpn-InstanceOut = 0.
prompt: Receiving IP packet from interface Ten-GigabitEthernet2/3/0/8.
Payload: TCP
  source port = 44728, destination port = 23
  sequence num = 0xded4319b, acknowledgement num = 0x00000000, flags = 0x2
  window size = 64512, checksum = 0x7248, header length = 40.

*Jan 26 18:17:16:631 2022 M9006_IRF FILTER//PACKET: -Chassis=2-Slot=5.1; The packet is permitted. Src-Zone=Trust, Dst-Z
(2085), If-Out=Ten-GigabitEthernet2/3/0/1(2038); Packet Info:Src-IP=14.15.16.1, Dst-IP=18.1.1.2, VPN-Instance=, Src-Mac=
t=23, Protocol=TCP(6), Application=telnet(14), SecurityPolicy=all, Rule-ID=7.

*Jan 26 18:17:16:631 2022 M9006_IRF IPFW//IPFW_PACKET: -Chassis=2-Slot=5.1;
Sending, interface = Ten-GigabitEthernet2/3/0/1
version = 4, headlen = 20, tos = 192
pktlen = 60, pktid = 54101, offset = 0, ttl = 254, protocol = 6
checksum = 46995, s = 14.15.16.1, d = 18.1.1.2
channelID = 0, vpn-InstanceIn = 0, vpn-InstanceOut = 0.
prompt: Sending IP packet received from interface Ten-GigabitEthernet2/3/0/8 at interface Ten-GigabitEthernet2/3/0/1.
Payload: TCP
  source port = 44728, destination port = 23
  sequence num = 0xded4319b, acknowledgement num = 0x00000000, flags = 0x2
  window size = 64512, checksum = 0x7248, header length = 40.

*Jan 26 18:17:16:632 2022 M9006_IRF IPFW//IPFW_PACKET: -Chassis=2-Slot=5.1;
Receiving, interface = Ten-GigabitEthernet2/3/0/1
version = 4, headlen = 20, tos = 192
pktlen = 60, pktid = 37530, offset = 0, ttl = 255, protocol = 6
checksum = 63310, s = 18.1.1.2, d = 14.15.16.1
channelID = 0, vpn-InstanceIn = 0, vpn-InstanceOut = 0.
prompt: Receiving IP packet from interface Ten-GigabitEthernet2/3/0/1.
Payload: TCP
  source port = 23, destination port = 44728
  sequence num = 0x6a518db6, acknowledgement num = 0xded4319c, flags = 0x12
  window size = 4096, checksum = 0xea22, header length = 40.
```

```
*Jan 26 18:17:16:632 2022 M9006_IRF IPFW//IPFW_PACKET: -Chassis=2-Slot=5.1;
Receiving, interface = Ten-GigabitEthernet2/3/0/1
version = 4, headlen = 20, tos = 192
pktlen = 60, pktid = 37530, offset = 0, ttl = 255, protocol = 6
checksum = 63310, s = 18.1.1.2, d = 14.15.16.1
channelID = 0, vpn-InstanceIn = 0, vpn-InstanceOut = 0.
prompt: Receiving IP packet from interface Ten-GigabitEthernet2/3/0/1.
Payload: TCP
  source port = 23, destination port = 44728
  sequence num = 0x6a518db6, acknowledgement num = 0xded4319c, flags = 0x12
  window size = 4096, checksum = 0xea22, header length = 40.

*Jan 26 18:17:16:632 2022 M9006_IRF IPFW//IPFW_PACKET: -Chassis=2-Slot=5.1;
Sending, interface = Ten-GigabitEthernet2/3/0/8
version = 4, headlen = 20, tos = 192
pktlen = 60, pktid = 37530, offset = 0, ttl = 254, protocol = 6
checksum = 63366, s = 18.1.1.2, d = 14.15.16.1
channelID = 0, vpn-InstanceIn = 0, vpn-InstanceOut = 0.
prompt: Sending IP packet received from interface Ten-GigabitEthernet2/3/0/1 at interface Ten-GigabitEthernet2/3/0/8.
Payload: TCP
  source port = 23, destination port = 44728
  sequence num = 0x6a518db6, acknowledgement num = 0xded4319c, flags = 0x12
  window size = 4096, checksum = 0xea22, header length = 40.
```

## 配置关键点

无逻辑的板卡时候:

- (1) ICMP也是全部上cpu, 但是有会话也是不打印, 也就是说打印第一个request和reply
- (2) tcp也是SYN和SYN ACK上CPU, 但是无逻辑的时候, 会话上TCP是全部统计, 有逻辑的时候正向只有一个。