



某局点终端在两套无线环境移动获取地址异常

wlan接入

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组网及说明

华三和友商各一套无线环境，DHCP服务器为我司路由设备。

问题描述

新终端直接连我们的环境没问题，走到锐捷的环境下可以主动重新拿地址，再回到我们的环境下，必须等待老化或者主动release才能拿到我们环境下的地址。

过程分析

对比终端移动到锐捷环境和华三环境的终端网卡报文发现，移动到我司环境时，终端一直在发DHCP request报文；在锐捷环境是发送request报文后收到服务器回复的NAK报文，后面进行地址获取。终端在之前环境拿到地址之后移动到另一套不同vlan的无线环境是正常流程应该是，终端先发送request报文，收到nak后重新获取地址，目前看在我司环境无法收到广播nak报文。

No.	Time	Source	Destination	Protocol	Length	Info
137	54.431542	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x93d60b6
139	54.460971	10.250.255.254	10.250.245.183	DHCP	342	DHCP ACK - Transaction ID 0x93d60b6
140	54.460971	10.250.255.254	10.250.245.183	DHCP	342	DHCP ACK - Transaction ID 0x93d60b6
277	63.925598	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd70f0ef2
287	65.891464	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd70f0ef2
293	68.490577	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd70f0ef2
306	72.168988	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd70f0ef2
316	77.156397	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc7c05984
323	79.103723	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc7c05984
329	82.467352	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc7c05984
442	102.212201	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x5f4bdf60
456	103.672341	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x5f4bdf60
463	105.687792	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x5f4bdf60
478	109.015583	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x5f4bdf60
516	113.447367	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xf71ba5f0
524	115.951860	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xf71ba5f0
534	119.952102	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xf71ba5f0
543	126.501644	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x1db31b5f
553	128.134951	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x1db31b5f
566	129.431271	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x1db31b5f
587	131.927233	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x1db31b5f
611	137.003942	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd0b5740
652	139.137483	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd0b5740
729	143.105463	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xd0b5740
889	185.809806	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x9cb45f53
923	188.567125	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x9cb45f53
949	191.446756	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x9cb45f53
1005	194.692306	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x9cb45f53
1080	200.442481	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc3fa739e
1189	202.399101	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc3fa739e
1137	206.395821	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc3fa739e
1147	208.704792	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x7bca29f
5944	475.754009	10.247.31.254	10.247.120.199	UDP/L	542	UDP/L ALK - Transaction ID 0xc7c05984
4060	482.095092	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xa0a45a08
4064	482.118300	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0xc3b1fdb0
4066	482.118924	10.250.255.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xc3b1fdb0
4068	482.223621	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover - Transaction ID 0xa0a45a08
4071	482.326466	10.250.255.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xa0a45a08
4073	482.355463	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover - Transaction ID 0xe0e01800
4077	482.838230	0.0.0.0	255.255.255.255	DHCP	374	DHCP Request - Transaction ID 0xa0a45a08
4114	486.349159	0.0.0.0	255.255.255.255	DHCP	342	DHCP Discover - Transaction ID 0xe0e01800
4120	486.949762	10.250.255.254	10.250.232.192	DHCP	342	DHCP Offer - Transaction ID 0xe0e01800
4121	486.950927	0.0.0.0	255.255.255.255	DHCP	374	DHCP Request - Transaction ID 0xe0e01800
4122	486.954540	10.250.255.254	10.250.232.192	DHCP	342	DHCP Offer - Transaction ID 0xe0e01800
4123	486.977489	10.250.255.254	10.250.232.192	DHCP	342	DHCP ACK - Transaction ID 0xe0e01800
4124	486.978601	10.250.255.254	10.250.232.192	DHCP	342	DHCP ACK - Transaction ID 0xe0e01800
4127	486.985320	10.250.255.254	10.250.232.192	DHCP	342	DHCP ACK - Transaction ID 0xe0e01800
4955	506.489313	0.0.0.0	255.255.255.255	DHCP	358	DHCP Discover - Transaction ID 0x80623b24
4971	507.101602	0.0.0.0	255.255.255.255	DHCP	370	DHCP Request - Transaction ID 0x80623b24
5955	534.937393	0.0.0.0	255.255.255.255	DHCP	368	DHCP Request - Transaction ID 0x389dc4b4
5980	535.008880	10.250.255.254	10.250.232.192	DHCP	342	DHCP ACK - Transaction ID 0x389dc4b4
5981	535.010860	10.250.255.254	10.250.232.192	DHCP	342	DHCP ACK - Transaction ID 0x389dc4b4
6190	542.633672	0.0.0.0	255.255.255.255	DHCP	358	DHCP Discover - Transaction ID 0x73c2f7d3
6200	543.258465	0.0.0.0	255.255.255.255	DHCP	370	DHCP Request - Transaction ID 0x73c2f7d3

现场本地转发在AP上行口抓包发现nak发到了AP上

No.	Time	Source	Destination	Protocol	Length	Info
10098	22.374658	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
11196	24.804246	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xb9f42951
11197	24.804246	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xb9f42951
11197	25.230553	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
11198	25.230553	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
12761	26.784004	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xb9f42951
12762	26.784004	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xb9f42951
12770	28.169166	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
12780	28.169166	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
14541	29.719829	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xb9f42951
14542	29.719829	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xb9f42951
15227	31.804059	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
15228	31.804059	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xf0f04c39
16104	32.885655	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xa45ea00
16105	32.885655	10.247.31.254	255.255.255.255	DHCP	342	DHCP NAK - Transaction ID 0xa45ea00
Frame 22410: 342 bytes on wire (2736 bits), 342 bytes captured (2736 bits) on Interface VPP_190E5E8-3F01-4C03-AE35-110373200FC, id 0						
Ethernet II, Src: RealtekC2, R1812 (88:00:00:c2:18:02), Dst: Broadcast (ff:ff:ff:ff:ff:ff)						
Internet Protocol Version 4, Src: 10.247.31.254, Dst: 255.255.255.255						
User Datagram Protocol, Src Port: 67, Dst Port: 68						
Dynamic Host Configuration Protocol (DHCP)						
Message type: BOOTP Reply (2)						
Hardware type: Ethernet (0001)						
Hardware address length: 6						
Hops: 0						
Transaction ID: 0xf751200e						
Seconds elapsed: 6						
Bootp flags: 0x0000, Broadcast flag (Broadcast)						
Client IP address: 0.0.0.0						
Your (client) IP address: 0.0.0.0						
Next server IP address: 10.247.31.254						
Relay agent IP address: 0.0.0.0						
Client MAC address: IntelCor_04:9f:a9 (a8:7e:aa:04:9f:a9)						
Client requested address: 0.0.0.0						
Server host name not given						
Boot file name not given						
Magic cookie: DHCP						
Option: (53) DHCP Message Type (NAK)						
Option: (54) DHCP Server Identifier (10.247.31.254)						
Option: (56) Message						
Option: (60) Vendor class identifier						
Option: (255) End						
Padding: 0000000000000000						

分析到此，问题应该是AP没有把广播nak发送给终端，查看配置，存在

rop anti-bmc network disable

rop anti-bmc default-action deny

这样的配置组合AP不会向终端转发所有广播报文，正常的配置如下，这时会放通一些基础的广播报文比如dhcp

rop anti-bmc network enable

rop anti-bmc default-action deny

解决方法

修改配置为

```
rrop anti-bmc network enable
```

```
rrop anti-bmc default-action deny
```

