

知 某局点WX3510H AP上线异常、拿不到地址

wlan接入 AP管理 wlan优化 曾招维 2021-10-28 发表

组网及说明

AC——思科核心——S5130——AP

集中转发、AP二层注册、网关在思科核心、AP管理的DHCP地址池在AC。

问题描述

现场反馈新增AP管理地址池70、71、72，相关AP上线异常，电脑接到5130上发现无法获取地址，手动写地址后可正常ping通AC、网关。

过程分析

在AC上开启debug发现地址池70、71、72分地址有异常，只有请求报文且显示无可用IP：

```
*Oct 28 09:58:26:530 2021 AC_WX3510H DHCP/7/EVENT: Receive a DHCPDISCOVER message from Vlan-interface70.  
*Oct 28 09:58:26:530 2021 AC_WX3510H DHCP/7/ERROR: No free IP in the network 192.168.70.0.  
*Oct 28 09:58:26:531 2021 AC_WX3510H DHCP/7/EVENT: Failed to allocate a lease to client.  
*Oct 28 09:58:27:315 2021 AC_WX3510H DHCP/7/PACKET:  
From 0.0.0.0 port 68, interface Vlan-interface71  
Message type: REQUEST (1)  
Hardware type: 1, Hardware address length: 6  
Hops: 0, Transaction ID: 4094810419  
Seconds: 42, Broadcast flag: 0  
Client IP address: 0.0.0.0 Your IP address: 0.0.0.0  
Server IP address: 0.0.0.0 Relay agent IP address: 0.0.0.0  
Client hardware address: b845-f40f-97c0  
Server host name: not configured  
Boot file name: not configured  
DHCP message type: DHCPDISCOVER (1)  
命令行查看地址池display DHCP server free-ip未发现地址池70、71、72有可用IP，display DHCP server ip-in-use查看该地址池地址没有被使用，display DHCP server expired无超期地址，display DHCP server conflict无冲突地址。  
dhcp server forbidden-ip 192.168.70.1 192.168.70.220  
dhcp server forbidden-ip 192.168.70.251 192.168.70.255  
dhcp server forbidden-ip 192.168.71.1 192.168.71.220  
dhcp server forbidden-ip 192.168.71.251 192.168.71.255  
dhcp server forbidden-ip 192.168.72.1 192.168.72.220  
dhcp server forbidden-ip 192.168.72.251 192.168.72.255//虽然有禁用IP，但还是有一定数量IP可以分的。  
#  
dhcp server ip-pool 70  
gateway-list 192.168.70.254  
network 192.168.70.0 mask 255.255.255.0  
#  
dhcp server ip-pool 71  
gateway-list 192.168.71.254  
network 192.168.71.0 mask 255.255.255.0  
#  
dhcp server ip-pool 72  
gateway-list 192.168.72.254  
network 192.168.72.0 mask 255.255.255.0  
#  
#  
interface Vlan-interface70  
description to_4F_70  
ip address 192.168.70.250 255.255.255.0  
#  
interface Vlan-interface71  
description to_4F_71  
ip address 192.168.71.250 255.255.255.0  
#  
interface Vlan-interface72  
description to_4F_72  
ip address 192.168.72.250 255.255.255.0  
#
```

现场将DHCP地址池全部移到思科核心后，地址分发正常，ap正常上线。

解决方法

由于现场配置的dhcp server forbidden-ip配置较多，仔细查看配置发现dhcp server forbidden-ip
192.168.50.251 192.168.91.255这个将地址池70、71、72的地址覆盖，所以这些地址池会显示无可用
地址。

优化上诉配置后，AP正常拿到地址上线。

