

# 知 无线控制器WX3510H CPU高问题处理案例

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客户采购我司AC管理内网无线，AC旁挂在核心交换机，运行一段时间后巡检发现AC CPU利用率持续在50%左右，由于临近假期，客户担心CPU过高影响无线网络使用，要求排查CPU利用率高原因。

```
=====display cpu=====
Slot 1 CPU 0 CPU usage:
  50% in last 5 seconds
  50% in last 1 minute
  50% in last 5 minutes
=====
=====display cpu-usage history slot 1 =====
100%|
 95%|
 90%|
 85%|
 80%|
 75%|
 70%|
 65%|
 60%|
 55%|
 50%|#####
 45%|#####
 40%|#####
 35%|#####
 30%|#####
 25%|#####
 20%|#####
 15%|#####
 10%|#####
  5%|#####
-----
      10   20   30   40   50   60 (minutes)
      cpu-usage (Slot 1 CPU 0) last 60 minutes (SYSTEM)
```

对于CPU高问题，首先需要检测CPU进程，分析哪个功能模块占用CPU资源，查看CPU进程占用资源，检查发现kdrvfwd进程占用大量CPU进程，kdrvfwd是设备转发进程，负责转发设备收到的流量，kdrvfwd进程正常情况占用CPU 3%左右，目前占用资源高出正常值太多，推断AC处理大量无用流量（广播或组播）

```
=====display process cpu slot 1=====
```

CPU utilization in 5 secs: 50.5%; 1 min: 50.5%; 5 mins: 50.4%

JID	5Sec	1Min	5Min	Name
1	0.0%	0.0%	0.0%	scmd
170	6.2%	6.2%	6.2%	[kdrvfwd8]
171	6.2%	6.2%	6.2%	[kdrvfwd9]
172	6.2%	6.2%	6.2%	[kdrvfwd10]
173	6.2%	6.2%	6.2%	[kdrvfwd11]
174	6.2%	6.2%	6.2%	[kdrvfwd12]
175	6.2%	6.2%	6.2%	[kdrvfwd13]
176	6.2%	6.2%	6.2%	[kdrvfwd14]
177	6.2%	6.2%	6.2%	[kdrvfwd15]

查看CPU处理接口报文统计情况发现设备G1/0/1收到大量广播报文，每秒钟24万PPS左右

```
*****fpl showdpstat: start*****
```

idx	item	stat	speed(pps)
1	GE1/0/1RxUnicast	189886	4
2	GE1/0/1RxBroadcast	2124847907	213984
3	GE1/0/1RxMulticast	637788978	31453
4	GE1/0/1TxUnicast	129582	4

```
5 GE1/0/1TxBroadcast      1962      0
6 GE1/0/1TxMulticast      5          0
```

接口统计记录如方向存在大量广播和组播报文：

```
=====display interface=====
```

```
GigabitEthernet1/0/1
```

```
Current state: UP
```

```
Line protocol state: UP
```

```
Last 300 second input: 240269 packets/sec 19570072 bytes/sec 19%
```

```
Last 300 second output: 12 packets/sec 1129 bytes/sec 0%
```

```
Input (total): 2585524974 packets, 212510013352 bytes
```

```
177007 unicasts, 1982234642 broadcasts, 603113325 multicasts, 0 pauses
```

```
Input (normal): 2585524974 packets, 212510013352 bytes
```

```
177007 unicasts, 1982234642 broadcasts, 603113325 multicasts, 0 pauses
```

通过上面信息判断核心交换机发送大量广播和组播报文，AC将这部分报文上送CPU处理，导致AC的CPU利用率持续很高，现场工程师了解到客户前一天业务变更，将有线和无线业务vlan打通共用，初步怀疑共用vlan透传广播报文引起，在AC上开启基于vlan的二层隔离，并隔离有线到无线的广播报文，配置之后观察CPU使用率下降恢复到割接之前。

在AC上开启基于vlan的二层隔离解决：

```
user-isolation vlan 2 permit-mac 000f-e212-7788
```

```
user-isolation vlan 2 enable
```

```
undo user-isolation permit-broadcast
```