

Android8.1_MiWifiScanTestTools(IperfTools)标准操作流程

一 准备工作:

1) 客户端/服务端 iperf 版本一致:

案例:客户端用 3.1.3,服务端用 2.06 不能用,MiWifiScanTestTools 集成 iperf 版本为 2.06,压缩包提供 iperf 版本 2.06,需要请下载,使用前先确认。

2) Client 端与 Server 端同一网段:

```
user@user-OptiPlex-7040:~/matrix$ ifconfig
eth0      Link encap:以太网 硬件地址 48:4d:7e:a4:a5:d5
          inet 地址:10.235.170.225 广播:10.235.170.255 掩码:255.255.255.0
          inet6 地址: fe80::4a4d:7eff:fea4:a5d5/64 Scope:Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  跃点数:1
          接收数据包:7360836 错误:0 丢弃:0 过载:0 帧数:0
          发送数据包:2106158 错误:0 丢弃:0 过载:0 载波:0
          碰撞:0 发送队列长度:1000
          接收字节:7562576627 (7.5 GB) 发送字节:494350061 (494.3 MB)
          中断:19 Memory:f7000000-f7020000

lo        Link encap:本地环回
          inet 地址:127.0.0.1 掩码:255.0.0.0
          inet6 地址: ::1/128 Scope:Host
          UP LOOPBACK RUNNING  MTU:65536  跃点数:1
          接收数据包:4869232 错误:0 丢弃:0 过载:0 帧数:0
          发送数据包:4869232 错误:0 丢弃:0 过载:0 载波:0
          碰撞:0 发送队列长度:0
          接收字节:6198935922 (6.1 GB) 发送字节:6198935922 (6.1 GB)
```

例如: PC 端 IPAddress

```
user@user-OptiPlex-7040:~/matrix$ adb shell
dangalUHD:/ $ ifconfig
lo        Link encap:Local Loopback
          inet addr:127.0.0.1 Mask:255.0.0.0
          inet6 addr: ::1/128 Scope: Host
          UP LOOPBACK RUNNING  MTU:65536  Metric:1
          RX packets:107 errors:0 dropped:0 overruns:0 frame:0
          TX packets:107 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1
          RX bytes:16146 TX bytes:16146

eth0      Link encap:Ethernet HWaddr 02:a5:8e:3f:59:2a Driver meson6-dwmac
          UP BROADCAST MULTICAST  MTU:1500  Metric:1
          RX packets:0 errors:0 dropped:0 overruns:0 frame:0
          TX packets:0 errors:0 dropped:0 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:0 TX bytes:0
          Interrupt:35

wlan0     Link encap:Ethernet HWaddr ac:35:ee:e4:77:b7 Driver rtl8723ds
          inet addr:10.235.222.168 Bcast:10.235.223.255 Mask:255.255.254.0
          inet6 addr: fe80::37f0:3a37:a5fc:4324/64 Scope: Link
          UP BROADCAST RUNNING MULTICAST  MTU:1500  Metric:1
          RX packets:24332 errors:0 dropped:184 overruns:0 frame:0
          TX packets:20152 errors:0 dropped:1 overruns:0 carrier:0
          collisions:0 txqueuelen:1000
          RX bytes:6411351 TX bytes:7770858
```

例如: 设备端 IPAddress

3) 关闭 SELinux:设备为可以 root 的 debug 版本:

```
dangalUHD:/ # getenforce
Enforcing
```

图:查看命令和结果

```
dangalUHD:/ # setenforce 0
dangalUHD:/ # getenforce
Permissive
```

图: 修改并查看结果

二 开始测试:

4) 启动 Server 端

安装并启动 MiWifiScanTestTools 工具,底部提示展示完毕,点击界面"生效参数"

确认:UI 界面弹出"已生效,请等待 60 秒后秒后 iperf 端显示结果"

目的:保证 MiWifiScanTestTools iperf server 启动成功

5) 启动 Client 端

注意: -c 参数后为 Server 端 IP Address

```
user@user-OptiPlex-7040:~/matrix$ iperf -c 10.235.222.168 -i 1 -t 60
-----
Client connecting to 10.235.222.168, TCP port 5001
TCP window size: 45.0 KByte (default)
-----
[ 3] local 10.235.170.225 port 43926 connected with 10.235.222.168 port 5001
```

图: 输入 Client 端测试命令

三 测试结果

6) Client 查看测试结果

```
-----
Client connecting to 10.235.222.168, TCP port 5001
TCP window size: 45.0 KByte (default)
-----
[ 3] local 10.235.170.225 port 43926 connected with 10.235.222.168 port 5001
[ ID] Interval           Transfer             Bandwidth
[ 3] 0.0- 1.0 sec      384 KBytes          3.15 Mbits/sec
[ 3] 1.0- 2.0 sec      128 KBytes          1.05 Mbits/sec
[ 3] 2.0- 3.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 3.0- 4.0 sec      128 KBytes          1.05 Mbits/sec
[ 3] 4.0- 5.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 5.0- 6.0 sec      128 KBytes          1.05 Mbits/sec
[ 3] 6.0- 7.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 7.0- 8.0 sec      256 KBytes          2.10 Mbits/sec
[ 3] 8.0- 9.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 9.0-10.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 10.0-11.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 11.0-12.0 sec      256 KBytes          2.10 Mbits/sec
[ 3] 12.0-13.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 13.0-14.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 14.0-15.0 sec      384 KBytes          3.15 Mbits/sec
[ 3] 15.0-16.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 16.0-17.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 17.0-18.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 18.0-19.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 19.0-20.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 20.0-21.0 sec      256 KBytes          2.10 Mbits/sec
[ 3] 21.0-22.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 22.0-23.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 23.0-24.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 24.0-25.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 25.0-26.0 sec      384 KBytes          3.15 Mbits/sec
[ 3] 26.0-27.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 27.0-28.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 28.0-29.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 29.0-30.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 30.0-31.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 31.0-32.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 32.0-33.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 33.0-34.0 sec      256 KBytes          2.10 Mbits/sec
[ 3] 34.0-35.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 35.0-36.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 36.0-37.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 37.0-38.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 38.0-39.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 39.0-40.0 sec       0.00 Bytes          0.00 bits/sec
[ 3] 40.0-41.0 sec      384 KBytes          3.15 Mbits/sec
```

四 常见问题

7) 报"connect failed: No route to host"可能原因如下

- 1:client 端与 server 端不在同一网段
- 2:客户端和服务端 iperf 版本不一致
- 3:网络环境太差