Mathys Domergue

RT2App

TD1

2.

```
pi@pi205-11:~ $ iw wlan1 info
Interface wlan1
        ifindex 11
        wdev 0x700000001
        addr c4:e9:84:18:03:75
        type mesh point
        wiphy 7
        txpower 20.00 dBm
```

3.

```
wlan1               DOWN
pi@pi205-11:~ $ sudo ip a a 192.168.205.11/24 dev wlan1
pi@pi205-11:~ $ sudo iw dev wlan1 set type mesh
pi@pi205-11:~ $ sudo ip link set up dev wlan1
pi@pi205-11:~ $ sudo ip link set down dev wlan1
pi@pi205-11:~ $ sudo iw dev wlan1 set channel 2
```

4.

```
pi@pi205-11:~ $ sudo iw dev wlan1 mesh join rtbz
pi@pi205-11:~ $ iw dev
phy#8
        Interface wlan1
                ifindex 12
                wdev 0x800000001
                addr c4:e9:84:18:03:75
                type mesh point
                channel 2 (2417 MHz), width: 20 MHz (no HT), center1: 2417 MHz
                txpower 20.00 dBm
phy#0
        Interface wlan0
                ifindex 3
                wdev 0x1
                addr b8:27:eb:cd:88:09
                type managed
                channel 1 (2412 MHz), width: 20 MHz, center1: 2412 MHz
```

5.

```
pi@pi205-11:~ $ iw dev wlan1 station dump
Station c4:e9:84:18:0c:65 (on wlan1)
    inactive time:  920 ms
    rx bytes:    92855
```

```
        rx packets: 2219
        tx bytes:   166
        tx packets: 3
        tx retries: 0
        tx failed:  0
        rx drop misc:   98
        signal:     -51 [-51] dBm
        signal avg: -55 [-55] dBm
        Toffset:    247892644 us
        tx bitrate: 24.0 MBit/s
        rx bitrate: 24.0 MBit/s
        rx duration:    0 us
        mesh llid:  34657
        mesh plid:  9005
        mesh plink: ESTAB
        mesh local PS mode: ACTIVE
        mesh peer PS mode:  ACTIVE
        mesh non-peer PS mode:  ACTIVE
        authorized: yes
        authenticated:  yes
        associated: yes
        preamble:   long
        WMM/WME:    yes
        MFP:        no
        TDLS peer:  no
        DTIM period:    2
        beacon interval:1000
        short slot time:yes
        connected time: 1111 seconds
    Station c4:e9:84:13:e6:9b (on wlan1)
        inactive time:  232270 ms
        rx bytes:   81633
        rx packets: 1880
        tx bytes:   2343
        tx packets: 24
        tx retries: 0
        tx failed:  0
        rx drop misc:   89
        signal:     -41 [-41] dBm
        signal avg: -45 [-45] dBm
        Toffset:    2688007310 us
        tx bitrate: 54.0 MBit/s
        rx bitrate: 54.0 MBit/s
        rx duration:    0 us
        mesh llid:  42510
        mesh plid:  16781
        mesh plink: ESTAB
        mesh local PS mode: ACTIVE
        mesh peer PS mode:  ACTIVE
        mesh non-peer PS mode:  ACTIVE
        authorized: yes
        authenticated:  yes
        associated: yes
        preamble:   long
```

```
     WMM/WME:     yes
     MFP:         no
     TDLS peer:  no
     DTIM period:    2
     beacon interval:1000
     short slot time:yes
     connected time: 1111 seconds
  Station c4:e9:84:18:67:e1 (on wlan1)
     inactive time:  260 ms
     rx bytes:   78239
     rx packets: 1799
     tx bytes:   2856
     tx packets: 30
     tx retries: 0
     tx failed:  0
     rx drop misc:   127
     signal:     -33 [-33] dBm
     signal avg: -35 [-35] dBm
     Toffset:    18446744072638942067 us
     tx bitrate: 48.0 MBit/s
     rx bitrate: 54.0 MBit/s
     rx duration:    0 us
     mesh llid:  55917
     mesh plid:  37295
     mesh plink: ESTAB
     mesh local PS mode: ACTIVE
     mesh peer PS mode:  ACTIVE
     mesh non-peer PS mode:  ACTIVE
     authorized: yes
     authenticated:  yes
     associated: yes
     preamble:   long
     WMM/WME:     yes
     MFP:         no
     TDLS peer:  no
     DTIM period:    2
     beacon interval:1000
     short slot time:yes
     connected time: 1111 seconds
  Station 30:b5:c2:18:5a:26 (on wlan1)
     inactive time:  260 ms
     rx bytes:   95156
     rx packets: 2247
     tx bytes:   736
     tx packets: 10
     tx retries: 0
     tx failed:  0
     rx drop misc:   94
     signal:     -60 [-60] dBm
     signal avg: -54 [-54] dBm
     Toffset:    2555531121 us
     tx bitrate: 48.0 MBit/s
     rx bitrate: 36.0 MBit/s
     rx duration:    0 us
```

```
      mesh llid:  60760
      mesh plid:  48399
      mesh plink: ESTAB
      mesh local PS mode: ACTIVE
      mesh peer PS mode:  ACTIVE
      mesh non-peer PS mode:  ACTIVE
      authorized: yes
      authenticated:  yes
      associated: yes
      preamble:   long
      WMM/WME:    yes
      MFP:        no
      TDLS peer:  no
      DTIM period:    2
      beacon interval:1000
      short slot time:yes
      connected time: 1111 seconds
  Station c4:e9:84:13:e1:e5 (on wlan1)
      inactive time:  154280 ms
      rx bytes:   81360
      rx packets: 1921
      tx bytes:   166
      tx packets: 3
      tx retries: 0
      tx failed:  0
      rx drop misc:   98
      signal:     -55 [-55] dBm
      signal avg: -53 [-53] dBm
      Toffset:    737240199 us
      tx bitrate: 24.0 MBit/s
      rx duration:    0 us
      mesh llid:  38745
      mesh plid:  52956
      mesh plink: ESTAB
      mesh local PS mode: ACTIVE
      mesh peer PS mode:  UNKNOWN
      mesh non-peer PS mode:  ACTIVE
      authorized: yes
      authenticated:  yes
      associated: yes
      preamble:   long
      WMM/WME:    yes
      MFP:        no
      TDLS peer:  no
      DTIM period:    2
      beacon interval:1000
      short slot time:yes
      connected time: 1111 seconds
  Station 30:b5:c2:18:e3:64 (on wlan1)
      inactive time:  483590 ms
      rx bytes:   58123
      rx packets: 1295
      tx bytes:   2498
      tx packets: 24
```

```
     tx retries: 0
     tx failed:  0
     rx drop misc:   97
     signal:     -35 [-35] dBm
     signal avg: -36 [-36] dBm
     Toffset:    27188398 us
     tx bitrate: 54.0 MBit/s
     rx bitrate: 54.0 MBit/s
     rx duration:    0 us
     mesh llid:  0
     mesh plid:  0
     mesh plink: LISTEN
     mesh local PS mode: UNKNOWN
     mesh peer PS mode:  ACTIVE
     mesh non-peer PS mode:  ACTIVE
     authorized: yes
     authenticated:  yes
     associated: yes
     preamble:   long
     WMM/WME:    yes
     MFP:        no
     TDLS peer:  no
     DTIM period:    2
     beacon interval:1000
     short slot time:yes
     connected time: 1111 seconds
  Station c4:e9:84:18:62:d1 (on wlan1)
     inactive time:  180 ms
     rx bytes:   95469
     rx packets: 2256
     tx bytes:   166
     tx packets: 3
     tx retries: 0
     tx failed:  0
     rx drop misc:   119
     signal:     -46 [-46] dBm
     signal avg: -48 [-48] dBm
     Toffset:    248198932 us
     tx bitrate: 24.0 MBit/s
     rx bitrate: 24.0 MBit/s
     rx duration:    0 us
     mesh llid:  6939
     mesh plid:  64796
     mesh plink: ESTAB
     mesh local PS mode: ACTIVE
     mesh peer PS mode:  ACTIVE
     mesh non-peer PS mode:  ACTIVE
     authorized: yes
     authenticated:  yes
     associated: yes
     preamble:   long
     WMM/WME:    yes
     MFP:        no
     TDLS peer:  no
```

```
    DTIM period:    2
    beacon interval:1000
    short slot time:yes
    connected time: 1111 seconds



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```

6. En fonction du déplacement, la metrique du réseau maillé change, plus on s'éloigne plus la metrique augmente.