

1/21

```

Tx DMO Multicast                29
Tx DMO Invalid                  0
Tx DMO Converted                29
Tx DMO Replicated               0
Tx DMO Dropped                 63
Tx DMO No Client               0
Tx DMO No BSSID                0
Tx Unicast Data Frames         12649395
Tx RTS Success                  12
Tx RTS Failed                   3
Tx CTS Frames                  0
Tx CTS Frames(PPS)             0
Tx Powersave Queue Timeouts    0
Tx Dropped After Retry         2
Tx Dropped No Buffer            0
Tx Missed ACKs                 0
Tx Failed Beacons              4
Tx Multi-Beacon Fail           0
Tx Long Preamble               0
Tx Short Preamble              0
Tx Beacon Interrupts           3871
Tx Interrupts                  0
Tx FIFO Underrun               0
Tx Allocated Desc              0
Tx Freed Desc                  0
Tx EAPOL Frames                11
Tx STBC Frames                 0
Tx LDPC Frames                 11910963
Tx OFDMA Frames                2341
Tx AGGR Good                   11910963
Tx AGGR Unaggr                 875
Tx Data Frames 12 Mbps (Mon)    0
Tx Data Frames 24 Mbps (Mon)   490
Tx Data Frames 36 Mbps (Mon)   0
Tx Data Frames 54 Mbps (Mon)   0
Tx Data Frames 72 Mbps (Mon)   0
Tx Data Frames 108 Mbps (Mon)  0
Tx Data Frames 300 Mbps (Mon)  0
Tx Data Frames 450 Mbps (Mon)  0
Tx Data Frames 1300 Mbps (Mon) 1206921
Tx Data Frames 1300 Mbps+ (Mon) 0
Tx Data Bytes 12 Mbps (Mon)    0
Tx Data Bytes 24 Mbps (Mon)   2079
Tx Data Bytes 36 Mbps (Mon)    0
Tx Data Bytes 54 Mbps (Mon)    0
Tx Data Bytes 72 Mbps (Mon)    0
Tx Data Bytes 108 Mbps (Mon)   0
Tx Data Bytes 300 Mbps (Mon)   0
Tx Data Bytes 450 Mbps (Mon)   0
Tx Data Bytes 1300 Mbps (Mon)  1694833283
Tx Data Bytes 1300 Mbps+ (Mon) 0
Tx WMM [BE]                    11910935
Tx WMM [VO]                     39
Tx UAPSD OverflowDrop           0
Tx Timeouts                     0
Lost Carrier Events             0
Tx HT40 Hang Detected           0
Tx HT40 Hang Stuck              0
Tx HT40 Hang Possible           0
Tx HT40 Dfs IMM WAR             0
Tx HT40 Dfs HT20 WAR           0
Tx MAC/BB Hang Stuck           0
Tx Mgmt Bytes                   84922
Tx Beacons Bytes               1424160
Tx AMSDU pkt count              0
Tx EAPOL Frames Rcvd           0
Tx EAPOL Frames Dropped         0
Tx Data Frames MCS 1 :          875
Tx Data Frames MCS 6 :          228
Tx Data Frames MCS 7 :          769
Tx Data Frames MCS 8 :          54305
Tx Data Frames MCS 9 :          206198
Tx Data Frames MCS 10 :         11229994
Tx Data Frames MCS 11 :         419469
Tx Data Frames Legacy :         875
Tx Data Frames MCS :            11910963
Tx Data Frames NSS1 :           875
Tx Data Frames NSS2 :            11910963
Tx Data Frames GI(0.8) :        11911838
Tx Data Frames BW 20 :           883
Tx Data Frames BW 80 :          11910955
-----
Receive
Rx Last SNR                     61
Rx Last SNR CTL4                66
Rx Last SNR CTL5                68
Rx Last SNR CTL6                63
Rx Last SNR CTL7                61
Rx Last SNR EXT4                43
Rx Last SNR EXT5                50
Rx Last SNR EXT6                38
Rx Last SNR EXT7                36
Rx Last ACK SNR                 47
Rx Frames Received              63041
Rx Good Frames                  0
Rx Bad Frames                   0
Rx Total Data Frames Recvd      24112
Rx Total Mgmt Frames Recvd      1053
Rx Total Control Frames Recvd   5997
Rx Total Bytes Recvd            20769090
Rx Total Data Bytes Recvd       18626567
Rx Total RTS Frames Recvd       5914
Rx Total CTS Frames Recvd       48
Rx Total ACK Frames             239
Rx Total Beacons Received       6

```

```

Rx Total Probe Requests      328
Rx Total Probe Responses     0
Rx Retry Frames              17
Channel Busy 1s              95
Channel Busy 4s              95
Channel Busy 64s             10
Ch Busy perct @ beacon intvl 95 95 95 95 95 95 95 95 95 95 96 96 96 96 96 96 96 96 95 95 95 95 95 95 95 95 95
Rx Time perct @ beacon intvl 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Rx Discarded Events          0
Rx ARM Scan Frames           0
Rx Data Frames Retrieved      8
Rx Data Frames               45687
Rx Data Frames(PPS)          0
Rx Data Bytes                19115451
Rx Time Data                 0
Rx Duplicate Frames          0
Rx Broadcast Data Frames     828
Rx Multicast Data Frames     999
Rx Unicast Data Frames       44688
Rx Null Data Frames          2829
Rx Mgmt Frames               1059
Rx Mgmt Frames(PPS)          0
Rx Auth Frames               0
Rx Assoc Req Frames          0
Rx Control Frames            29299
Rx Control Frames(PPS)       0
Rx Frames To Me              41471
Rx Bytes To Me               20764233
Rx Time To Me                0
Rx Broadcast Frames          0
Rx Probe Requests            328
Rx Probe Requests(PPS)       0
Rx RTS Frames                5913
Rx RTS Frames(PPS)           0
Rx CTS Frames                0
Rx CTS Frames(PPS)           0
Rx PS Poll Frames            0
Rx CRC Errors                0
Rx PLCP Errors                0
Rx Frames Dropped            1
Rx PHY Events                 0
Rx RADAR Events              0
RX Interrupts                 0
RX Overrun                    0
Rx Undecryptable             0
Rx STBC Frames               0
Rx LDPC Frames               0
RX SU Frames                  97159
RX MU MIMO Frames            0
RX MU OFDMA Frames           15498
RX MU OFDMA MIMO Frames      0
Rx Data Frames 12 Mbps (Mon) 0
Rx Data Frames 54 Mbps (Mon) 7528
Rx Data Frames 108 Mbps (Mon) 0
Rx Data Frames 300 Mbps (Mon) 0
Rx Data Frames 450 Mbps (Mon) 0
Rx Data Frames 1300 Mbps (Mon) 28986
Rx Data Frames 1300 Mbps+ (Mon) 0
Rx Data Bytes 12 Mbps (Mon) 0
Rx Data Bytes 54 Mbps (Mon) 2770258
Rx Data Bytes 108 Mbps (Mon) 0
Rx Data Bytes 300 Mbps (Mon) 0
Rx Data Bytes 450 Mbps (Mon) 0
Rx Data Bytes 1300 Mbps (Mon) 15856309
Rx Data Bytes 1300 Mbps+ (Mon) 0
Rx Data Frames MCS 0 :       15328
Rx Data Frames MCS 1 :       31040
Rx Data Frames MCS 2 :        1
Rx Data Frames MCS 3 :        1
Rx Data Frames MCS 6 :        1
Rx Data Frames MCS 7 :        1
Rx Data Frames MCS 8 :        1
Rx Data Frames MCS 9 :        1
Rx Data Frames MCS 10 :       30
Rx Data Frames MCS 11 :      29077
Rx WMM [BE]                  33329
Rx WMM [VI]                   15
Rx WMM [VO]                   69
Rx Data Frames NSS1 :        30998
Rx Data Frames NSS2 :        29111
Rx Data Frames GI(0.8) :      74714
Rx Data Frames GI(1.6) :      704
Rx Data Frames GI(3.2) :       63
Rx Data Frames BW 20 :       1225
Rx Data Frames BW 80 :      74256
RX bad length                 0
Rx Null Src MAC               1
----- SLB
SLB: Probe Requests Sent      0
SLB: Probe Responses Sent     0
SLB: Probe Requests Received  0
SLB: Probe Response Received  0
SLB: Probe Requests Ignored   0
SLB: Auth Requests Refused    0
SLB: Assoc Requests Refused   0
Throttle drops                0
Stop all but Mgmt             0
CCA percentage of our bss      0
CCA percentage of other bss    0
CCA percentage of interference 0
Hotspot2 Action Frame From STM 0
Hotspot2 Action TX Prepare     0
Hotspot2 Action Skip Crypto    0
Hotspot2 Action Process Action 0

```

```

Hotspot2 Action TXOP ok          0
Hotspot2 Action DMA ok          0
Hotspot2 Action Frame Drop 1    0
Hotspot2 Action Frame Drop 2    0
Hotspot2 Action Frame Drop 3    0
Hotspot2 Action Frame Drop 4    0
Hotspot2 Action Frame Drop 5    0
Hotspot2 Action Frame Drop 6    0
Hotspot2 Action Frame Drop 7    0
Hotspot2 Action Frame Drop 8    0
Deauth pending assoc failed     0
Not authenticated assoc failed   0
AUTH from driver assoc failed   0
AUTH from apstm assoc failed    0
SU-NDPA frames transmitted      2866
SU-NDP frames transmitted       2866
SU-NDPA frames Tx failed        1
SU-NDP frames Tx failed        714
MU-NDPA frames transmitted      40
MU-NDP frames transmitted       40
MU-NDPA frames Tx failed        0
MU-NDP frames Tx failed        0
MU Sequences posted             0
Client swap with pkt drop       0
Client swap pkt drop frames     0
Basic trigger frames            2024
BSR trigger frames              1666
MU-BAR trigger frames           211
MU-RTS trigger frames           0
Basic trigger frames Tx failed   63
BSR trigger frames Tx failed     18
MU-BAR trigger frames Tx failed  0
MU-RTS trigger frames Tx failed  0
Resets Seq Mismatch             0

```

ANUL RADIO Stats

```

-----
Parameter                      Value
-----
ANUL Assoc Rejects             0
ANUL Auth Rejects              0
ANUL Dos STA Rejects           0
ANUL Auth Throttle Rejects     0
ANUL Max STA Rejects           0
ANUL Stale STA Ageouts         0
ANUL Assoc-Disallowed Rejects  0
ANUL Imminent VAP Down Rejects 0

```

```

*****
7/28/2020 14:22:41 PM Target: AP1 (VC) Command: show ap debug radio-info 0
*****

```

Radio Info Script

Script Output

```

-----
aruba_dbg_radio_info_0 Start time: Tue Jul 28 14:22:36 UTC 2020

```

```

wifi0-drop-list:
_anul_tx_skb(1185): 21/212680 0/212505

```

```

wifi0-anul-dump:

```

```

assert_list (both wifi0, wifi1 and wifi2):

```

```

VAP 'aruba000' will be used to display radio statistics.

```

```

===== iwpriv-commands =====

```

```

iwpriv aruba000 txrx_stats 258 - Rx rate and aggregation stats

```

```

=====

```

```

wlan: [8645:F:DP] Rx Rate Info:

```

```

wlan: [8645:F:DP] OFDM 48 Mbps = 0
wlan: [8645:F:DP] OFDM 24 Mbps = 30996
wlan: [8645:F:DP] OFDM 12 Mbps = 1
wlan: [8645:F:DP] OFDM 6 Mbps = 1
wlan: [8645:F:DP] OFDM 54 Mbps = 0
wlan: [8645:F:DP] OFDM 36 Mbps = 0
wlan: [8645:F:DP] OFDM 18 Mbps = 0
wlan: [8645:F:DP] OFDM 9 Mbps = 0
wlan: [8645:F:DP] INVALID = 0
wlan: [8645:F:DP]

```

```

wlan: [8645:F:DP] CCK 11 Mbps Long = 0
wlan: [8645:F:DP] CCK 5.5 Mbps Long = 0
wlan: [8645:F:DP] CCK 2 Mbps Long = 0
wlan: [8645:F:DP] CCK 1 Mbps Long = 0
wlan: [8645:F:DP] CCK 11 Mbps Short = 0
wlan: [8645:F:DP] CCK 5.5 Mbps Short = 0
wlan: [8645:F:DP] CCK 2 Mbps Short = 0
wlan: [8645:F:DP] INVALID = 0
wlan: [8645:F:DP]

```

```

wlan: [8645:F:DP] HT MCS 0 (BPSK 1/2) = 0
wlan: [8645:F:DP] HT MCS 1 (QPSK 1/2) = 0
wlan: [8645:F:DP] HT MCS 2 (QPSK 3/4) = 0
wlan: [8645:F:DP] HT MCS 3 (16-QAM 1/2) = 0
wlan: [8645:F:DP] HT MCS 4 (16-QAM 3/4) = 0
wlan: [8645:F:DP] HT MCS 5 (64-QAM 2/3) = 0
wlan: [8645:F:DP] HT MCS 6 (64-QAM 3/4) = 0

```

```

wlan: [8645:F:DP] HT MCS 7 (64-QAM 5/6) = 0
wlan: [8645:F:DP] INVALID = 0
wlan: [8645:F:DP]

wlan: [8645:F:DP] VHT MCS 0 (BPSK 1/2) = 0
wlan: [8645:F:DP] VHT MCS 1 (QPSK 1/2) = 0
wlan: [8645:F:DP] VHT MCS 2 (QPSK 3/4) = 0
wlan: [8645:F:DP] VHT MCS 3 (16-QAM 1/2) = 0
wlan: [8645:F:DP] VHT MCS 4 (16-QAM 3/4) = 0
wlan: [8645:F:DP] VHT MCS 5 (64-QAM 2/3) = 0
wlan: [8645:F:DP] VHT MCS 6 (64-QAM 3/4) = 0
wlan: [8645:F:DP] VHT MCS 7 (64-QAM 5/6) = 0
wlan: [8645:F:DP] VHT MCS 8 (256-QAM 3/4) = 0
wlan: [8645:F:DP] VHT MCS 9 (256-QAM 5/6) = 0
wlan: [8645:F:DP] VHT MCS 10 (1024-QAM 3/4) = 0
wlan: [8645:F:DP] VHT MCS 11 (1024-QAM 5/6) = 0
wlan: [8645:F:DP] INVALID = 0
wlan: [8645:F:DP]

wlan: [8645:F:DP] HE MCS 0 (BPSK 1/2) = 15328
wlan: [8645:F:DP] HE MCS 1 (QPSK 1/2) = 44
wlan: [8645:F:DP] HE MCS 2 (QPSK 3/4) = 0
wlan: [8645:F:DP] HE MCS 3 (16-QAM 1/2) = 0
wlan: [8645:F:DP] HE MCS 4 (16-QAM 3/4) = 0
wlan: [8645:F:DP] HE MCS 5 (64-QAM 2/3) = 0
wlan: [8645:F:DP] HE MCS 6 (64-QAM 3/4) = 1
wlan: [8645:F:DP] HE MCS 7 (64-QAM 5/6) = 1
wlan: [8645:F:DP] HE MCS 8 (256-QAM 3/4) = 1
wlan: [8645:F:DP] HE MCS 9 (256-QAM 5/6) = 1
wlan: [8645:F:DP] HE MCS 10 (1024-QAM 3/4) = 30
wlan: [8645:F:DP] HE MCS 11 (1024-QAM 5/6) = 29077
wlan: [8645:F:DP] INVALID = 0
wlan: [8645:F:DP]

wlan: [8645:F:DP] NSS(1-8) = 30998 29111 0 0 0 0 0 0
wlan: [8645:F:DP] SGI = 0.8us 74714, 0.4us 0, 1.6us 704, 3.2us 63,
wlan: [8645:F:DP] BW Counts = 20MHZ 1225, 40MHZ 0, 80MHZ 74256, 160MHZ 0
wlan: [8645:F:DP] Reception Type = SU: 97146, MU_MIMO:0, MU_OFDMA:15498, MU_OFDMA_MIMO:0

wlan: [8645:F:DP] Aggregation:

wlan: [8645:F:DP] Number of Msdu's Part of Ampdus = 33330
wlan: [8645:F:DP] Number of Msdu's With No Mpdu Level Aggregation : 42151
wlan: [8645:F:DP] Number of Msdu's Part of Amsdu: 8459
wlan: [8645:F:DP] Number of Msdu's With No Msdu Level Aggregation: 45622

iwpriv aruba000 txrx_stats 259 - Tx rate and aggregation stats

=====
wlan: [8656:F:DP] Tx Rate Info:

wlan: [8656:F:DP] OFDM 48 Mbps = 0
wlan: [8656:F:DP] OFDM 24 Mbps = 850
wlan: [8656:F:DP] OFDM 12 Mbps = 0
wlan: [8656:F:DP] OFDM 6 Mbps = 0
wlan: [8656:F:DP] OFDM 54 Mbps = 0
wlan: [8656:F:DP] OFDM 36 Mbps = 0
wlan: [8656:F:DP] OFDM 18 Mbps = 0
wlan: [8656:F:DP] OFDM 9 Mbps = 0
wlan: [8656:F:DP] INVALID = 0
wlan: [8656:F:DP]

wlan: [8656:F:DP] CCK 11 Mbps Long = 0
wlan: [8656:F:DP] CCK 5.5 Mbps Long = 0
wlan: [8656:F:DP] CCK 2 Mbps Long = 0
wlan: [8656:F:DP] CCK 1 Mbps Long = 0
wlan: [8656:F:DP] CCK 11 Mbps Short = 0
wlan: [8656:F:DP] CCK 5.5 Mbps Short = 0
wlan: [8656:F:DP] CCK 2 Mbps Short = 0
wlan: [8656:F:DP] INVALID = 0
wlan: [8656:F:DP]

wlan: [8656:F:DP] HT MCS 0 (BPSK 1/2) = 0
wlan: [8656:F:DP] HT MCS 1 (QPSK 1/2) = 0
wlan: [8656:F:DP] HT MCS 2 (QPSK 3/4) = 0
wlan: [8656:F:DP] HT MCS 3 (16-QAM 1/2) = 0
wlan: [8656:F:DP] HT MCS 4 (16-QAM 3/4) = 0
wlan: [8656:F:DP] HT MCS 5 (64-QAM 2/3) = 0
wlan: [8656:F:DP] HT MCS 6 (64-QAM 3/4) = 0
wlan: [8656:F:DP] HT MCS 7 (64-QAM 5/6) = 0
wlan: [8656:F:DP] INVALID = 0
wlan: [8656:F:DP]

wlan: [8656:F:DP] VHT MCS 0 (BPSK 1/2) = 0
wlan: [8656:F:DP] VHT MCS 1 (QPSK 1/2) = 0
wlan: [8656:F:DP] VHT MCS 2 (QPSK 3/4) = 0
wlan: [8656:F:DP] VHT MCS 3 (16-QAM 1/2) = 0
wlan: [8656:F:DP] VHT MCS 4 (16-QAM 3/4) = 0
wlan: [8656:F:DP] VHT MCS 5 (64-QAM 2/3) = 0
wlan: [8656:F:DP] VHT MCS 6 (64-QAM 3/4) = 0
wlan: [8656:F:DP] VHT MCS 7 (64-QAM 5/6) = 0
wlan: [8656:F:DP] VHT MCS 8 (256-QAM 3/4) = 0
wlan: [8656:F:DP] VHT MCS 9 (256-QAM 5/6) = 0
wlan: [8656:F:DP] VHT MCS 10 (1024-QAM 3/4) = 0
wlan: [8656:F:DP] VHT MCS 11 (1024-QAM 5/6) = 0
wlan: [8656:F:DP] INVALID = 0
wlan: [8656:F:DP]

wlan: [8656:F:DP] HE MCS 0 (BPSK 1/2) = 0
wlan: [8656:F:DP] HE MCS 1 (QPSK 1/2) = 0
wlan: [8656:F:DP] HE MCS 2 (QPSK 3/4) = 0
wlan: [8656:F:DP] HE MCS 3 (16-QAM 1/2) = 0
wlan: [8656:F:DP] HE MCS 4 (16-QAM 3/4) = 0
wlan: [8656:F:DP] HE MCS 5 (64-QAM 2/3) = 0

```

```

wlan: [8656:F:DP] HE MCS 6 (64-QAM 3/4) = 228
wlan: [8656:F:DP] HE MCS 7 (64-QAM 5/6) = 769
wlan: [8656:F:DP] HE MCS 8 (256-QAM 3/4) = 54305
wlan: [8656:F:DP] HE MCS 9 (256-QAM 5/6) = 205558
wlan: [8656:F:DP] HE MCS 10 (1024-QAM 3/4) = 10292684
wlan: [8656:F:DP] HE MCS 11 (1024-QAM 5/6) = 419079
wlan: [8656:F:DP] INVALID = 0
wlan: [8656:F:DP]

wlan: [8656:F:DP] SGI = 0.8us 10973473 0.4us 0 1.6us 0 3.2us 0
wlan: [8656:F:DP] BW Counts = 20MHZ 858, 40MHZ 0, 80MHZ 10972615, 160MHZ 0
wlan: [8656:F:DP] OFDMA = 2341
wlan: [8656:F:DP] STBC = 0
wlan: [8656:F:DP] LDPC = 10972623
wlan: [8656:F:DP] Retries = 37122
wlan: [8656:F:DP] Last ack rssi = 47

wlan: [8656:F:DP] Aggregation:

wlan: [8656:F:DP] Number of Msdu's Part of Ampdus = 10972623
wlan: [8656:F:DP] Number of Msdu's With No Mpdu Level Aggregation : 850
wlan: [8656:F:DP] Number of Msdu's Part of Amsdu = 10956252
wlan: [8656:F:DP] Number of Msdu's With No Msdu Level Aggregation = 684598

iwpriv aruba000 txrx_stats 260 - PDEV TX stats

=====
wlan: [8665:F:DP] PDEV Tx Stats:

wlan: [8665:F:DP] Received From Stack:
wlan: [8665:F:DP] Packets = 11655888
wlan: [8665:F:DP] Bytes = 16282970330
wlan: [8665:F:DP] Processed:
wlan: [8665:F:DP] Packets = 11655960
wlan: [8665:F:DP] Bytes = 16282882114
wlan: [8665:F:DP] Total Completions:
wlan: [8665:F:DP] Packets = 10976033
wlan: [8665:F:DP] Bytes = 15690223304
wlan: [8665:F:DP] Successful Completions:
wlan: [8665:F:DP] Packets = 10968052
wlan: [8665:F:DP] Bytes = 15328937876
wlan: [8665:F:DP] Dropped:
wlan: [8665:F:DP] Total = 0
wlan: [8665:F:DP] Dma_map_error = 0
wlan: [8665:F:DP] Ring Full = 0
wlan: [8665:F:DP] Descriptor Not available = 0
wlan: [8665:F:DP] HW enqueue failed= 0
wlan: [8665:F:DP] Resources Full = 0
wlan: [8665:F:DP] FW removed Pkts = 672806
wlan: [8665:F:DP] FW removed bytes= 0
wlan: [8665:F:DP] FW removed transmitted = 0
wlan: [8665:F:DP] FW removed untransmitted = 0
wlan: [8665:F:DP] FW removed untransmitted fw_reason1 = 0
wlan: [8665:F:DP] FW removed untransmitted fw_reason2 = 0
wlan: [8665:F:DP] FW removed untransmitted fw_reason3 = 0
wlan: [8665:F:DP] Aged Out from msdu/mpdu queues = 0
wlan: [8665:F:DP] headroom insufficient = 0
wlan: [8665:F:DP] Multicast:
wlan: [8665:F:DP] Packets: 839
wlan: [8665:F:DP] Bytes: 38096
wlan: [8665:F:DP] Scatter Gather:
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0
wlan: [8665:F:DP] Dropped By Host = 0
wlan: [8665:F:DP] Dropped By Target = 0
wlan: [8665:F:DP] TSO:
wlan: [8665:F:DP] Number of Segments = 0
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0
wlan: [8665:F:DP] Dropped By Host = 0
wlan: [8665:F:DP] Mcast Enhancement:
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0
wlan: [8665:F:DP] Dropped: Map Errors = 0
wlan: [8665:F:DP] Dropped: Self Mac = 0
wlan: [8665:F:DP] Dropped: Send Fail = 0
wlan: [8665:F:DP] Unicast sent = 0
wlan: [8665:F:DP] Raw:
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0
wlan: [8665:F:DP] DMA map error = 0
wlan: [8665:F:DP] Reinject:
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0

wlan: [8665:F:DP] Inspected:
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0
wlan: [8665:F:DP] Nawds Multicast:
wlan: [8665:F:DP] Packets = 0
wlan: [8665:F:DP] Bytes = 0
wlan: [8665:F:DP] CCE Classified:
wlan: [8665:F:DP] CCE Classified Packets: 854
wlan: [8665:F:DP] RAW CCE Classified Packets: 0
wlan: [8665:F:DP] Mesh stats:
wlan: [8665:F:DP] frames to firmware: 0
wlan: [8665:F:DP] completions from fw: 0
wlan: [8665:F:DP] PPDU stats counter
wlan: [8665:F:DP] Tag[0] = 136282
wlan: [8665:F:DP] Tag[1] = 138497
wlan: [8665:F:DP] Tag[2] = 126574
wlan: [8665:F:DP] Tag[3] = 124053
wlan: [8665:F:DP] Tag[4] = 0
wlan: [8665:F:DP] Tag[5] = 136282

```

```

wlan: [8665:F:DP] Tag[6] = 138056
wlan: [8665:F:DP] Tag[7] = 111046
wlan: [8665:F:DP] Tag[8] = 0
wlan: [8665:F:DP] Tag[9] = 121698
wlan: [8665:F:DP] Tag[10] = 0
wlan: [8665:F:DP] Tag[11] = 0
wlan: [8665:F:DP] Tag[12] = 0
wlan: [8665:F:DP] Tag[13] = 13887
wlan: [8665:F:DP] BA not received for delayed_ba: 18
wlan: [8665:F:DP] tx_ppdu_proc: 0

```

```

wlan: [8665:F:DP] Wdi msgs received from fw[0]:0
wlan: [8665:F:DP] Wdi msgs received from fw[1]:0
wlan: [8665:F:DP] Wdi msgs received from fw[2]:0
wlan: [8665:F:DP] Wdi msgs received from fw[3]:0
wlan: [8665:F:DP] Wdi msgs received from fw[4]:0
wlan: [8665:F:DP] Wdi msgs received from fw[5]:0
wlan: [8665:F:DP] Wdi msgs received from fw[6]:0
wlan: [8665:F:DP] Wdi msgs received from fw[8]:0
wlan: [8665:F:DP] Wdi msgs received from fw[11]:0
wlan: [8665:F:DP] Wdi msgs received from fw[15]:0
wlan: [8665:F:DP] Wdi msgs received from fw[16]:0
wlan: [8665:F:DP] Wdi msgs received from fw[18]:0
wlan: [8665:F:DP] Wdi msgs received from fw[23]:0
wlan: [8665:F:DP] Wdi msgs received from fw[24]:0
wlan: [8665:F:DP] Wdi msgs received from fw[25]:0
wlan: [8665:F:DP] Wdi msgs received from fw[26]:0
wlan: [8665:F:DP] SOC Tx Stats:

```

```

wlan: [8665:F:DP] Tx Descriptors In Use = 0
wlan: [8665:F:DP] Tx Invalid peer:
wlan: [8665:F:DP]     Packets = 0
wlan: [8665:F:DP]     Bytes = 0
wlan: [8665:F:DP] Packets dropped due to TCL ring full = 0 0 0
wlan: [8665:F:DP] Tx invalid completion release = 0
wlan: [8665:F:DP] Tx comp wbm internal error = 0

```

```
iwpriv aruba000 txrx_stats 261 - PDEV RX stats
```

```
=====
wlan: [8674:F:DP] PDEV Rx Stats:
```

```

wlan: [8674:F:DP] Received From HW (Per Rx Ring):
wlan: [8674:F:DP]     Packets = 45628 0 0 0
wlan: [8674:F:DP]     Bytes = 19110383 0 0 0
wlan: [8674:F:DP] Replenished:
wlan: [8674:F:DP]     Packets = 134491
wlan: [8674:F:DP]     Bytes = 275437568
wlan: [8674:F:DP]     Buffers Added To Freelist = 0
wlan: [8674:F:DP]     Low threshold intr = 0
wlan: [8674:F:DP] Dropped:
wlan: [8674:F:DP]     msdu_not_done = 0
wlan: [8674:F:DP]     wifi parse = 0
wlan: [8674:F:DP]     mon_rx_drop = 2
wlan: [8674:F:DP]     mon_radiotap_update_err = 0
wlan: [8674:F:DP]     mec_drop = 0
wlan: [8674:F:DP]     Bytes = 0
wlan: [8674:F:DP] Sent To Stack:
wlan: [8674:F:DP]     Packets = 45628
wlan: [8674:F:DP]     Bytes = 19110383
wlan: [8674:F:DP]     vlan_tag_stp_cnt = 0
wlan: [8674:F:DP] Multicast/Broadcast:
wlan: [8674:F:DP]     Packets = 976
wlan: [8674:F:DP]     Bytes = 51018
wlan: [8674:F:DP] Errors:
wlan: [8674:F:DP]     Rxdma Ring Un-initializd = 0
wlan: [8674:F:DP]     Desc Alloc Failed: = 0
wlan: [8674:F:DP]     IP checksum error = 0
wlan: [8674:F:DP]     TCP/UDP checksum error = 0
wlan: [8674:F:DP] BAR Received Count: = 0
wlan: [8674:F:DP] No of AST Entries = 8
wlan: [8674:F:DP] SOC Rx Stats:

wlan: [8674:F:DP] Fragmented packets: 0
wlan: [8674:F:DP] Reo reinjected packets: 0
wlan: [8674:F:DP] Errors:

wlan: [8674:F:DP] Rx Decrypt Errors = 1
wlan: [8674:F:DP] Invalid RBM = 0
wlan: [8674:F:DP] Invalid Vdev = 0
wlan: [8674:F:DP] Invalid sa_idx or da_idx = 0
wlan: [8674:F:DP] Invalid Pdev = 0
wlan: [8674:F:DP] Invalid Peer = 0
wlan: [8674:F:DP] HAL Ring Access Fail = 0
wlan: [8674:F:DP] MSDU Done failures = 0
wlan: [8674:F:DP] RX frags: 0
wlan: [8674:F:DP] RX frag wait: 0
wlan: [8674:F:DP] RX frag err: 0
wlan: [8674:F:DP] RX DESC invalid magic: 0
wlan: [8674:F:DP] RX DUP DESC: 0
wlan: [8674:F:DP] RX REL DUP DESC: 0
wlan: [8674:F:DP] RXDMA ERR DUP DESC: 0
wlan: [8674:F:DP] RXDMA Error (0-31): 0 0 23 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
wlan: [8674:F:DP] REO Error(0-14): 7 0 0 0 0 0 0 2 0 0 0 0 0 0 0

```

```
iwpriv aruba000 txrx_stats 262 - AST stats
```

```
=====
wlan: [8683:F:DP] AST Stats:
wlan: [8683:F:DP]     Entries Added = 8
wlan: [8683:F:DP]     Entries Deleted = 0
wlan: [8683:F:DP]     Entries Agedout = 0
wlan: [8683:F:DP]     Entries MAP ERR = 0
wlan: [8683:F:DP] AST Table:

```

```

wlan: [0:F:DP] 1 mac_addr = bc:9f:e4:05:ac:d0 peer_mac_addr = bc:9f:e4:05:ac:d0 peer_id = 3 type = STATIC next_hop = 0 is_active = 1 is_bss = 0
wlan: [0:F:DP] 2 mac_addr = 6c:c7:ec:f6:f1:69 peer_mac_addr = 6c:c7:ec:f6:f1:69 peer_id = 4 type = STATIC next_hop = 0 is_active = 1 is_bss = 0
wlan: [0:F:DP] 3 mac_addr = 8c:b8:4a:94:87:5d peer_mac_addr = 8c:b8:4a:94:87:5d peer_id = 5 type = STATIC next_hop = 0 is_active = 1 is_bss = 0
wlan: [0:F:DP] 4 mac_addr = 9a:80:14:38:c1:f2 peer_mac_addr = 9a:80:14:38:c1:f2 peer_id = 6 type = STATIC next_hop = 0 is_active = 1 is_bss = 0
wlan: [0:F:DP] 5 mac_addr = 9a:37:90:b9:7f:21 peer_mac_addr = 9a:37:90:b9:7f:21 peer_id = 7 type = STATIC next_hop = 0 is_active = 1 is_bss = 0
wlan: [0:F:DP] 6 mac_addr = 0e:b9:2f:cb:78:0c peer_mac_addr = 0e:b9:2f:cb:78:0c peer_id = 8 type = STATIC next_hop = 0 is_active = 1 is_bss = 0
wlan: [8683:F:DP] Dumping Peer Table Stats:
wlan: [8683:F:DP] peer_mac_addr = bc:9f:e4:05:ac:d0 nawds_enabled = 0 bss_peer = 1 wapi = 0 wds_enabled = 0 tx_cap_enabled = 0 rx_cap_enabled = 0
wlan: [8683:F:DP] peer_mac_addr = 6c:c7:ec:f6:f1:69 nawds_enabled = 0 bss_peer = 0 wapi = 0 wds_enabled = 0 tx_cap_enabled = 0 rx_cap_enabled = 0
wlan: [8683:F:DP] peer_mac_addr = 8c:b8:4a:94:87:5d nawds_enabled = 0 bss_peer = 0 wapi = 0 wds_enabled = 0 tx_cap_enabled = 0 rx_cap_enabled = 0
wlan: [8683:F:DP] peer_mac_addr = 9a:80:14:38:c1:f2 nawds_enabled = 0 bss_peer = 0 wapi = 0 wds_enabled = 0 tx_cap_enabled = 0 rx_cap_enabled = 0
wlan: [8683:F:DP] peer_mac_addr = 9a:37:90:b9:7f:21 nawds_enabled = 0 bss_peer = 0 wapi = 0 wds_enabled = 0 tx_cap_enabled = 0 rx_cap_enabled = 0
wlan: [8683:F:DP] peer_mac_addr = 0e:b9:2f:cb:78:0c nawds_enabled = 0 bss_peer = 0 wapi = 0 wds_enabled = 0 tx_cap_enabled = 0 rx_cap_enabled = 0

```

iwpriv aruba000 txrx_stats 1 - Firmware radio-level TX stats

```

=====
wlan: [4:F:DP] HTT_TX_PDEV_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] hw_queued = 139256
wlan: [4:F:DP] hw_reaped = 139253
wlan: [4:F:DP] underrun = 58
wlan: [4:F:DP] hw_paused = 18437
wlan: [4:F:DP] hw_flush = 8931
wlan: [4:F:DP] hw_filt = 8878
wlan: [4:F:DP] tx_abort = 0
wlan: [4:F:DP] mpdu_requeued = 98489
wlan: [4:F:DP] tx_xretry = 2208
wlan: [4:F:DP] data_rc = 42
wlan: [4:F:DP] mpdu_dropped_xretry = 2
wlan: [4:F:DP] illegal_rate_phy_err = 0
wlan: [4:F:DP] cont_xretry = 0
wlan: [4:F:DP] tx_timeout = 0
wlan: [4:F:DP] pdev_resets = 11
wlan: [4:F:DP] phy_underrun = 0
wlan: [4:F:DP] txop_ovf = 0
wlan: [4:F:DP] seq_posted = 51511
wlan: [4:F:DP] seq_failed_queueing = 8998
wlan: [4:F:DP] seq_completed = 42571
wlan: [4:F:DP] seq_restarted = 0
wlan: [4:F:DP] mu_seq_posted = 2091
wlan: [4:F:DP] seq_switch_hw_paused = 14
wlan: [4:F:DP] next_seq_posted_dsr = 1772
wlan: [4:F:DP] seq_posted_isr = 31711
wlan: [4:F:DP] seq_ctrl_cached = 30619
wlan: [4:F:DP] mpdu_count_tqm = 5501126
wlan: [4:F:DP] msdu_count_tqm = 10990457
wlan: [4:F:DP] mpdu_removed_tqm = 0
wlan: [4:F:DP] msdu_removed_tqm = 0
wlan: [4:F:DP] mpdus_sw_flush = 21
wlan: [4:F:DP] mpdus_hw_filter = 0
wlan: [4:F:DP] mpdus_truncated = 117
wlan: [4:F:DP] mpdus_ack_failed = 37268
wlan: [4:F:DP] mpdus_expired = 0
wlan: [4:F:DP] mpdus_seq_hw_retry = 2
wlan: [4:F:DP] ack_tlv_proc = 111181
wlan: [4:F:DP] coex_abort_mpdu_cnt_valid = 113251
wlan: [4:F:DP] coex_abort_mpdu_cnt = 5604672

wlan: [4:F:DP] HTT_TX_PDEV_STATS_URRN_TLV_V:
wlan: [4:F:DP] urrn_stats = 0:0, 1:0, 2:0,

wlan: [4:F:DP] HTT_TX_PDEV_STATS_SIFS_TLV_V:
wlan: [4:F:DP] sifs_status = 0:0, 1:93828, 2:14147, 3:1651, 4:120, 5:0, 6:7023, 7:7884, 8:0,

wlan: [4:F:DP] HTT_TX_PDEV_STATS_FLUSH_TLV_V:
wlan: [4:F:DP] flush_errs = 0:0, 1:0, 2:0, 3:0, 4:0, 5:162, 6:29, 7:644, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0, 20:0,
8096, 39:0, 40:0, 41:0, 42:0, 43:0, 44:0, 45:0, 46:0, 47:0, 48:0, 49:0, 50:0, 51:0, 52:0, 53:0, 54:0, 55:0, 56:0, 57:0, 58:0, 59:0, 60:0, 61:0, 62:0,

```

iwpriv aruba000 txrx_stats 2 - Firmware radio-level RX stats

```

=====
wlan: [4:F:DP] HTT_RX_PDEV_FW_STATS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] ppdu_rcvd = 46061
wlan: [4:F:DP] mpdu_cnt_fcs_ok = 45307
wlan: [4:F:DP] mpdu_cnt_fcs_err = 625
wlan: [4:F:DP] tcp_msdu_cnt = 407
wlan: [4:F:DP] tcp_ack_msdu_cnt = 40155
wlan: [4:F:DP] udp_msdu_cnt = 4005
wlan: [4:F:DP] other_msdu_cnt = 15944
wlan: [4:F:DP] fw_ring_mpdu_ind = 523
wlan: [4:F:DP] fw_ring_mgmt_subtype = 0:5, 1:0, 2:0, 3:0, 4:419, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:5, 12:0, 13:72, 14:0, 15:0,
wlan: [4:F:DP] fw_ring_ctrl_subtype = 0:0, 1:0, 2:0, 3:0, 4:0, 5:22, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,
wlan: [4:F:DP] fw_ring_mcast_data_msdu = 0
wlan: [4:F:DP] fw_ring_bcast_data_msdu = 0
wlan: [4:F:DP] fw_ring_ucast_data_msdu = 0
wlan: [4:F:DP] fw_ring_null_data_msdu = 0
wlan: [4:F:DP] fw_ring_mpdu_drop = 15174
wlan: [4:F:DP] ofld_local_data_ind_cnt = 0
wlan: [4:F:DP] ofld_local_data_buf_recycle_cnt = 0
wlan: [4:F:DP] drx_local_data_ind_cnt = 0
wlan: [4:F:DP] drx_local_data_buf_recycle_cnt = 0
wlan: [4:F:DP] local_nondata_ind_cnt = 523
wlan: [4:F:DP] local_nondata_buf_recycle_cnt = 522
wlan: [4:F:DP] fw_status_buf_ring_refill_cnt = 46061
wlan: [4:F:DP] fw_status_buf_ring_empty_cnt = 0
wlan: [4:F:DP] fw_pkt_buf_ring_refill_cnt = 15733
wlan: [4:F:DP] fw_pkt_buf_ring_empty_cnt = 1
wlan: [4:F:DP] fw_link_buf_ring_refill_cnt = 15697
wlan: [4:F:DP] fw_link_buf_ring_empty_cnt = 0
wlan: [4:F:DP] host_pkt_buf_ring_refill_cnt = 49894
wlan: [4:F:DP] host_pkt_buf_ring_empty_cnt = 2

```



```

wlan: [4:F:DP] mon_pkt_buf_ring_refill_cnt = 84838
wlan: [4:F:DP] mon_pkt_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_status_buf_ring_refill_cnt = 45171
wlan: [4:F:DP] mon_status_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_desc_buf_ring_refill_cnt = 72402
wlan: [4:F:DP] mon_desc_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_dest_ring_update_cnt = 633908694
wlan: [4:F:DP] mon_dest_ring_full_cnt = 0
wlan: [4:F:DP] rx_suspend_cnt = 154
wlan: [4:F:DP] rx_suspend_fail_cnt = 0
wlan: [4:F:DP] rx_resume_cnt = 154
wlan: [4:F:DP] rx_resume_fail_cnt = 0
wlan: [4:F:DP] rx_ring_switch_cnt = 0
wlan: [4:F:DP] rx_ring_restore_cnt = 0
wlan: [4:F:DP] rx_flush_cnt = 0

wlan: [4:F:DP] HTT_RX_PDEV_FW_RING_MPDU_ERR_TLV_V:
wlan: [4:F:DP] fw_ring_mpd_err = 0:0, 1:599, 2:14, 3:0, 4:0, 5:14561, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,

wlan: [4:F:DP] HTT_RX_PDEV_FW_MPDU_DROP_TLV_V:
wlan: [4:F:DP] fw_mpd_drop = 0:613, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,

wlan: [4:F:DP] HTT_RX_SOC_FW_STATS_TLV:
wlan: [4:F:DP] fw_reo_ring_data_msdu = 0
wlan: [4:F:DP] fw_to_host_data_msdu_bcmc = 0
wlan: [4:F:DP] fw_to_host_data_msdu_uc = 0
wlan: [4:F:DP] ofld_remote_data_buf_recycle_cnt = 0
wlan: [4:F:DP] ofld_remote_free_buf_indication_cnt = 0
wlan: [4:F:DP] ofld_buf_to_host_data_msdu_uc = 0
wlan: [4:F:DP] reo_fw_ring_to_host_data_msdu_uc = 0
wlan: [4:F:DP] wbm_sw_ring_reap = 0
wlan: [4:F:DP] wbm_forward_to_host_cnt = 0
wlan: [4:F:DP] wbm_target_recycle_cnt = 0
wlan: [4:F:DP] target_refill_ring_recycle_cnt = 0
wlan: [4:F:DP] HTT_RX_SOC_FW_REFILL_RING_EMPTY_TLV_V:
wlan: [4:F:DP] refill_ring_empty_cnt = 0:0, 1:0, 2:0,

wlan: [4:F:DP] HTT_RX_SOC_FW_REFILL_RING_NUM_REFILL_TLV_V:
wlan: [4:F:DP] refill_ring_num_refill = 0:0, 1:0, 2:0,

wlan: [4:F:DP] HTT_RX_SOC_FW_REFILL_RING_NUM_RXDMA_ERR_TLV_V
wlan: [4:F:DP] rxdma_err = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,

wlan: [4:F:DP] HTT_RX_SOC_FW_REFILL_RING_NUM_REO_ERR_TLV_V
wlan: [4:F:DP] reo_err = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,

wlan: [4:F:DP] HTT_RX_PDEV_FW_STATS_PHY_ERR_TLV
wlan: [4:F:DP] mac_id_word: 0
wlan: [4:F:DP] total_phy_err_cnt: 0
wlan: [4:F:DP] phy_errs: 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0, 20:0, 21:0, 22:0, 23:0, 24:0, 25:0, 26:0, 27:0, 28:0, 29:0, 30:0, 31:0, 32:0, 33:0, 34:0, 35:0, 36:0, 37:0, 38:0, 39:0, 40:0, 41:0, 42:0,

wlan: [4:F:DP] HTT_RX_REO_RESOURCE_STATS_TLV
wlan: [4:F:DP] sample_id: 1
wlan: [4:F:DP] total_max: 53
wlan: [4:F:DP] total_avg: 0
wlan: [4:F:DP] total_sample: 195580
wlan: [4:F:DP] non_zeros_avg: 7
wlan: [4:F:DP] non_zeros_sample: 593
wlan: [4:F:DP] last_non_zeros_max: 2
wlan: [4:F:DP] last_non_zeros_min: 2
wlan: [4:F:DP] last_non_zeros_avg: 2
wlan: [4:F:DP] last_non_zeros_sample: 1

wlan: [4:F:DP] HTT_RX_REO_RESOURCE_STATS_TLV
wlan: [4:F:DP] sample_id: 3
wlan: [4:F:DP] total_max: 55
wlan: [4:F:DP] total_avg: 0
wlan: [4:F:DP] total_sample: 195580
wlan: [4:F:DP] non_zeros_avg: 6
wlan: [4:F:DP] non_zeros_sample: 593
wlan: [4:F:DP] last_non_zeros_max: 1
wlan: [4:F:DP] last_non_zeros_min: 1
wlan: [4:F:DP] last_non_zeros_avg: 1
wlan: [4:F:DP] last_non_zeros_sample: 1

wlan: [4:F:DP] HTT_RX_REO_RESOURCE_STATS_TLV
wlan: [4:F:DP] sample_id: 7
wlan: [4:F:DP] total_max: 1
wlan: [4:F:DP] total_avg: 0
wlan: [4:F:DP] total_sample: 195580
wlan: [4:F:DP] non_zeros_avg: 1
wlan: [4:F:DP] non_zeros_sample: 593
wlan: [4:F:DP] last_non_zeros_max: 1
wlan: [4:F:DP] last_non_zeros_min: 1
wlan: [4:F:DP] last_non_zeros_avg: 1
wlan: [4:F:DP] last_non_zeros_sample: 1

iwpriv aruba000 txrx_stats 3 - Firmware HW queue stats

=====
wlan: [4:F:DP] fes_result = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0,
wlan: [4:F:DP] HTT_TX_HWQ_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_hwq_id_word = 768
wlan: [4:F:DP] xretry = 0
wlan: [4:F:DP] underrun_cnt = 0
wlan: [4:F:DP] flush_cnt = 0
wlan: [4:F:DP] filt_cnt = 0
wlan: [4:F:DP] null_mpd_bmap = 0
wlan: [4:F:DP] user_ack_failure = 0
wlan: [4:F:DP] ack_tlv_proc = 0
wlan: [4:F:DP] sched_id_proc = 0
wlan: [4:F:DP] null_mpd_tx_count = 0

```

```
wlan: [4:F:DP] mpdu_bmap_not_recvd = 0
wlan: [4:F:DP] num_bar = 0
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 0
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] mpdu_tried_cnt = 0
wlan: [4:F:DP] mpdu_queued_cnt = 0
wlan: [4:F:DP] mpdu_ack_fail_cnt = 0
wlan: [4:F:DP] mpdu_filt_cnt = 0
wlan: [4:F:DP] false_mpdu_ack_count = 0

wlan: [4:F:DP] HTT_TX_HWQ_CMD_RESULT_STATS_TLV_V:
wlan: [4:F:DP] cmd_result = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0,
wlan: [4:F:DP] HTT_TX_HWQ_CMD_STALL_STATS_TLV_V:
wlan: [4:F:DP] cmd_stall_status = 0:0, 1:0, 2:0, 3:0, 4:0,

wlan: [4:F:DP] HTT_TX_HWQ_FES_RESULT_STATS_TLV_V:
wlan: [4:F:DP] fes_result = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0,
wlan: [4:F:DP] HTT_TX_HWQ_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_hwq_id_word = 1024
wlan: [4:F:DP] xretry = 0
wlan: [4:F:DP] underrun_cnt = 0
wlan: [4:F:DP] flush_cnt = 0
wlan: [4:F:DP] filt_cnt = 0
wlan: [4:F:DP] null_mpdu_bmap = 0
wlan: [4:F:DP] user_ack_failure = 0
wlan: [4:F:DP] ack_tlv_proc = 0
wlan: [4:F:DP] sched_id_proc = 0
wlan: [4:F:DP] null_mpdu_tx_count = 0
wlan: [4:F:DP] mpdu_bmap_not_recvd = 0
wlan: [4:F:DP] num_bar = 0
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 0
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] mpdu_tried_cnt = 0
wlan: [4:F:DP] mpdu_queued_cnt = 0
wlan: [4:F:DP] mpdu_ack_fail_cnt = 0
wlan: [4:F:DP] mpdu_filt_cnt = 0
wlan: [4:F:DP] false_mpdu_ack_count = 0

wlan: [4:F:DP] HTT_TX_HWQ_CMD_RESULT_STATS_TLV_V:
wlan: [4:F:DP] cmd_result = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0,
wlan: [4:F:DP] HTT_TX_HWQ_CMD_STALL_STATS_TLV_V:
wlan: [4:F:DP] cmd_stall_status = 0:0, 1:0, 2:0, 3:0, 4:0,

wlan: [4:F:DP] HTT_TX_HWQ_FES_RESULT_STATS_TLV_V:
wlan: [4:F:DP] fes_result = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0,
wlan: [4:F:DP] HTT_TX_HWQ_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_hwq_id_word = 1280
wlan: [4:F:DP] xretry = 2
wlan: [4:F:DP] underrun_cnt = 0
wlan: [4:F:DP] flush_cnt = 0
wlan: [4:F:DP] filt_cnt = 0
wlan: [4:F:DP] null_mpdu_bmap = 0
wlan: [4:F:DP] user_ack_failure = 0
wlan: [4:F:DP] ack_tlv_proc = 0
wlan: [4:F:DP] sched_id_proc = 0
wlan: [4:F:DP] null_mpdu_tx_count = 0
wlan: [4:F:DP] mpdu_bmap_not_recvd = 0
wlan: [4:F:DP] num_bar = 0
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 0
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] mpdu_tried_cnt = 104
wlan: [4:F:DP] mpdu_queued_cnt = 104
wlan: [4:F:DP] mpdu_ack_fail_cnt = 2
wlan: [4:F:DP] mpdu_filt_cnt = 0
wlan: [4:F:DP] false_mpdu_ack_count = 0

wlan: [4:F:DP] HTT_TX_HWQ_CMD_RESULT_STATS_TLV_V:
wlan: [4:F:DP] cmd_result = 0:102, 1:0, 2:0, 3:0, 4:2, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0,
wlan: [4:F:DP] HTT_TX_HWQ_CMD_STALL_STATS_TLV_V:
wlan: [4:F:DP] cmd_stall_status = 0:0, 1:0, 2:0, 3:0, 4:0,

wlan: [4:F:DP] HTT_TX_HWQ_FES_RESULT_STATS_TLV_V:
wlan: [4:F:DP] fes_result = 0:102, 1:0, 2:2, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0,
wlan: [4:F:DP] HTT_TX_HWQ_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_hwq_id_word = 1536
wlan: [4:F:DP] xretry = 8
wlan: [4:F:DP] underrun_cnt = 0
wlan: [4:F:DP] flush_cnt = 0
wlan: [4:F:DP] filt_cnt = 0
wlan: [4:F:DP] null_mpdu_bmap = 0
wlan: [4:F:DP] user_ack_failure = 0
wlan: [4:F:DP] ack_tlv_proc = 0
wlan: [4:F:DP] sched_id_proc = 0
wlan: [4:F:DP] null_mpdu_tx_count = 0
wlan: [4:F:DP] mpdu_bmap_not_recvd = 0
wlan: [4:F:DP] num_bar = 0
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 0
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] mpdu_tried_cnt = 220
wlan: [4:F:DP] mpdu_queued_cnt = 220
wlan: [4:F:DP] mpdu_ack_fail_cnt = 8
wlan: [4:F:DP] mpdu_filt_cnt = 0
wlan: [4:F:DP] false_mpdu_ack_count = 0

wlan: [4:F:DP] HTT_TX_HWQ_CMD_RESULT_STATS_TLV_V:
wlan: [4:F:DP] cmd_result = 0:212, 1:0, 2:0, 3:0, 4:8, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0,
wlan: [4:F:DP] HTT_TX_HWQ_CMD_STALL_STATS_TLV_V:
wlan: [4:F:DP] cmd_stall_status = 0:0, 1:0, 2:0, 3:0, 4:0,

wlan: [4:F:DP] HTT_TX_HWQ_FES_RESULT_STATS_TLV_V:
```

```

wlan: [4:F:DP] fes_result = 0:212, 1:0, 2:8, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0,
wlan: [4:F:DP] HTT_TX_HWQ_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_hwq_id_word = 1792
wlan: [4:F:DP] xretry = 21
wlan: [4:F:DP] underrun_cnt = 0
wlan: [4:F:DP] flush_cnt = 20
wlan: [4:F:DP] filt_cnt = 19
wlan: [4:F:DP] null_mpdu_bmap = 0
wlan: [4:F:DP] user_ack_failure = 557
wlan: [4:F:DP] ack_tlv_proc = 37
wlan: [4:F:DP] sched_id_proc = 1185570
wlan: [4:F:DP] null_mpdu_tx_count = 0
wlan: [4:F:DP] mpdu_bmap_not_recvd = 157
wlan: [4:F:DP] num_bar = 0
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 0
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] mpdu_tried_cnt = 480
wlan: [4:F:DP] mpdu_queued_cnt = 579
wlan: [4:F:DP] mpdu_ack_fail_cnt = 403
wlan: [4:F:DP] mpdu_filt_cnt = 0
wlan: [4:F:DP] false_mpdu_ack_count = 0

wlan: [4:F:DP] HTT_TX_HWQ_CMD_RESULT_STATS_TLV_V:
wlan: [4:F:DP] cmd_result = 0:495, 1:0, 2:0, 3:0, 4:21, 5:0, 6:0, 7:20, 8:0, 9:0, 10:0, 11:0, 12:0,
wlan: [4:F:DP] HTT_TX_HWQ_CMD_STALL_STATS_TLV_V:
wlan: [4:F:DP] cmd_stall_status = 0:0, 1:26, 2:0, 3:15, 4:0,

wlan: [4:F:DP] HTT_TX_HWQ_FES_RESULT_STATS_TLV_V:
wlan: [4:F:DP] fes_result = 0:594, 1:0, 2:21, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0,

```

Radio Info Script

Script Output

iwpriv aruba000 txrx_stats 4 - Firmware TX scheduler stats

```

=====
wlan: [4:F:DP] sched_cmds_pending = 0
wlan: [4:F:DP] num_tid_register = 3920
wlan: [4:F:DP] num_tid_unregister = 3920
wlan: [4:F:DP] num_qstats_queried = 81
wlan: [4:F:DP] qstats_update_pending = 0
wlan: [4:F:DP] last_qstats_query_timestamp = 607214393
wlan: [4:F:DP] num_tqm_cmdq_full = 0
wlan: [4:F:DP] num_de_sched_algo_trigger = 0
wlan: [4:F:DP] num_rt_sched_algo_trigger = 5
wlan: [4:F:DP] num_tqm_sched_algo_trigger = 37
wlan: [4:F:DP] notify_sched = 0

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_POSTED_TLV_V:
wlan: [4:F:DP] sched_cmd_posted = 0:81, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:285, 1:0, 2:109, 3:294,

wlan: [4:F:DP] HTT_STATS_TX_SCHED_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] current_timestamp = 620712674

wlan: [4:F:DP] HTT_TX_PDEV_STATS_SCHED_PER_TXQ_TLV:
wlan: [4:F:DP] mac_id_txq_id_word = 1024
wlan: [4:F:DP] sched_policy = 1
wlan: [4:F:DP] last_sched_cmd_posted_timestamp = 569608984
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 569609459
wlan: [4:F:DP] sched_2_tac_lwm_count = 0
wlan: [4:F:DP] sched_2_tac_ring_full = 0
wlan: [4:F:DP] sched_cmd_post_failure = 0
wlan: [4:F:DP] num_active_tids = 0
wlan: [4:F:DP] num_ps_schedules = 0
wlan: [4:F:DP] sched_cmds_pending = 0
wlan: [4:F:DP] num_tid_register = 994
wlan: [4:F:DP] num_tid_unregister = 963
wlan: [4:F:DP] num_qstats_queried = 0
wlan: [4:F:DP] qstats_update_pending = 0
wlan: [4:F:DP] last_qstats_query_timestamp = 0
wlan: [4:F:DP] num_tqm_cmdq_full = 0
wlan: [4:F:DP] num_de_sched_algo_trigger = 0
wlan: [4:F:DP] num_rt_sched_algo_trigger = 217
wlan: [4:F:DP] num_tqm_sched_algo_trigger = 0
wlan: [4:F:DP] notify_sched = 0

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_POSTED_TLV_V:
wlan: [4:F:DP] sched_cmd_posted = 0:220, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:220, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_STATS_TX_SCHED_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] current_timestamp = 620712679

wlan: [4:F:DP] HTT_TX_PDEV_STATS_SCHED_PER_TXQ_TLV:
wlan: [4:F:DP] mac_id_txq_id_word = 1280
wlan: [4:F:DP] sched_policy = 1
wlan: [4:F:DP] last_sched_cmd_posted_timestamp = 620632332
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 620637818
wlan: [4:F:DP] sched_2_tac_lwm_count = 0
wlan: [4:F:DP] sched_2_tac_ring_full = 0
wlan: [4:F:DP] sched_cmd_post_failure = 0
wlan: [4:F:DP] num_active_tids = 0
wlan: [4:F:DP] num_ps_schedules = 0

```

```

wlan: [4:F:DP] sched_cmds_pending = 0
wlan: [4:F:DP] num_tid_register = 3956
wlan: [4:F:DP] num_tid_unregister = 3916
wlan: [4:F:DP] num_qstats_queried = 0
wlan: [4:F:DP] qstats_update_pending = 0
wlan: [4:F:DP] last_qstats_query_timestamp = 0
wlan: [4:F:DP] num_tqm_cmdq_full = 0
wlan: [4:F:DP] num_de_sched_algo_trigger = 0
wlan: [4:F:DP] num_rt_sched_algo_trigger = 3954
wlan: [4:F:DP] num_tqm_sched_algo_trigger = 0
wlan: [4:F:DP] notify_sched = 0

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_POSTED_TLV_V:
wlan: [4:F:DP] sched_cmd_posted = 0:3915, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:3915, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_STATS_TX_SCHED_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] current_timestamp = 620712684

wlan: [4:F:DP] HTT_TX_PDEV_STATS_SCHED_PER_TXQ_TLV:
wlan: [4:F:DP] mac_id_txq_id_word = 1536
wlan: [4:F:DP] sched_policy = 1
wlan: [4:F:DP] last_sched_cmd_posted_timestamp = 620637692
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 620646768
wlan: [4:F:DP] sched_2_tac_lwm_count = 0
wlan: [4:F:DP] sched_2_tac_ring_full = 0
wlan: [4:F:DP] sched_cmd_post_failure = 0
wlan: [4:F:DP] num_active_tids = 0
wlan: [4:F:DP] num_ps_schedules = 663
wlan: [4:F:DP] sched_cmds_pending = 0
wlan: [4:F:DP] num_tid_register = 0
wlan: [4:F:DP] num_tid_unregister = 1326
wlan: [4:F:DP] num_qstats_queried = 0
wlan: [4:F:DP] qstats_update_pending = 0
wlan: [4:F:DP] last_qstats_query_timestamp = 0
wlan: [4:F:DP] num_tqm_cmdq_full = 0
wlan: [4:F:DP] num_de_sched_algo_trigger = 0
wlan: [4:F:DP] num_rt_sched_algo_trigger = 0
wlan: [4:F:DP] num_tqm_sched_algo_trigger = 0
wlan: [4:F:DP] notify_sched = 0

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_POSTED_TLV_V:
wlan: [4:F:DP] sched_cmd_posted = 0:682, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:682, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_STATS_TX_SCHED_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] current_timestamp = 620712696

wlan: [4:F:DP] HTT_TX_PDEV_STATS_SCHED_PER_TXQ_TLV:
wlan: [4:F:DP] mac_id_txq_id_word = 1792
wlan: [4:F:DP] sched_policy = 1
wlan: [4:F:DP] last_sched_cmd_posted_timestamp = 0
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 0
wlan: [4:F:DP] sched_2_tac_lwm_count = 0
wlan: [4:F:DP] sched_2_tac_ring_full = 0
wlan: [4:F:DP] sched_cmd_post_failure = 0
wlan: [4:F:DP] num_active_tids = 0
wlan: [4:F:DP] num_ps_schedules = 0
wlan: [4:F:DP] sched_cmds_pending = 0
wlan: [4:F:DP] num_tid_register = 0
wlan: [4:F:DP] num_tid_unregister = 0
wlan: [4:F:DP] num_qstats_queried = 0
wlan: [4:F:DP] qstats_update_pending = 0
wlan: [4:F:DP] last_qstats_query_timestamp = 0
wlan: [4:F:DP] num_tqm_cmdq_full = 0
wlan: [4:F:DP] num_de_sched_algo_trigger = 0
wlan: [4:F:DP] num_rt_sched_algo_trigger = 0
wlan: [4:F:DP] num_tqm_sched_algo_trigger = 0
wlan: [4:F:DP] notify_sched = 0

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_POSTED_TLV_V:
wlan: [4:F:DP] sched_cmd_posted = 0:0, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:0, 1:0, 2:0, 3:0,

```

```
iwpriv aruba000 txrx_stats 5 - Hardware stats
```

```

=====
wlan: [4:F:DP] HTT_HW_STATS_PDEV_ERRS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] tx_abort = 0
wlan: [4:F:DP] tx_abort_fail_count = 0
wlan: [4:F:DP] rx_abort = 154
wlan: [4:F:DP] rx_abort_fail_count = 0
wlan: [4:F:DP] rx_flush_cnt = 0
wlan: [4:F:DP] warm_reset = 0
wlan: [4:F:DP] cold_reset = 0
wlan: [4:F:DP] mac_cold_reset_restore_cal = 0
wlan: [4:F:DP] mac_cold_reset = 0
wlan: [4:F:DP] mac_warm_reset = 0
wlan: [4:F:DP] mac_only_reset = 0
wlan: [4:F:DP] phy_warm_reset = 0
wlan: [4:F:DP] phy_warm_reset_ucode_trig = 11
wlan: [4:F:DP] mac_warm_reset_restore_cal = 0
wlan: [4:F:DP] mac_sfm_reset = 0
wlan: [4:F:DP] phy_warm_reset_m3_ssr = 0

```

```

wlan: [4:F:DP] fw_rx_rings_reset = 0
wlan: [4:F:DP] tx_flush = 0
wlan: [4:F:DP] tx_glb_reset = 0
wlan: [4:F:DP] tx_txq_reset = 0
wlan: [4:F:DP] rx_timeout_reset = 0

wlan: [4:F:DP] reset_mode = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:11, 13:0, 14:0,
wlan: [4:F:DP]

wlan: [4:F:DP] PDEV_PHY_WARM_RESET_REASONS:
wlan: [4:F:DP] phy_m3 = 11
wlan: [4:F:DP] tx_hw_stuck = 0
wlan: [4:F:DP] num_cca_rx_frame_stuck = 0
wlan: [4:F:DP] wal_rx_recovery_rst_rx_busy = 0
wlan: [4:F:DP] wal_rx_recovery_rst_mac_hang = 0
wlan: [4:F:DP] mac_reset_converted_phy_reset = 0
wlan: [4:F:DP] tx_lifetime_expiry_cca_stuck = 0
wlan: [4:F:DP] tx_consecutive_flush9_war = 0
wlan: [4:F:DP] tx_hwsch_reset_war = 0
wlan: [4:F:DP] hwsch_wdog_or_cca_wdog_war = 0

wlan: [4:F:DP] WAL_RX_RECOVERY_STATS:
wlan: [4:F:DP] mac_hang_count = 0
wlan: [4:F:DP] known_sig_count = 0
wlan: [4:F:DP] no_rx_count = 0
wlan: [4:F:DP] no_rx_consecutive_count = 0
wlan: [4:F:DP] rx_busy_count = 0
wlan: [4:F:DP] phy_mac_hang_count = 0

wlan: [4:F:DP] HTT_HW_STATS_INTR_MISC_TLV:
wlan: [4:F:DP] hw_intr_name = 0:82, 1:69, 2:79, 3:50, 4:0, 5:0, 6:0, 7:0,
wlan: [4:F:DP] mask = 4096
wlan: [4:F:DP] count = 1

wlan: [4:F:DP] HTT_HW_STATS_INTR_MISC_TLV:
wlan: [4:F:DP] hw_intr_name = 0:84, 1:88, 2:80, 3:67, 4:85, 5:0, 6:0, 7:0,
wlan: [4:F:DP] mask = 128
wlan: [4:F:DP] count = 19

```

iwpriv aruba000 txrx_stats 6 - Firmware TQM stats

```

=====
wlan: [4:F:DP] HTT_TX_TQM_CMN_STATS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] max_cmdq_id = 0
wlan: [4:F:DP] list_mpdu_cnt_hist_intvl = 30
wlan: [4:F:DP] add_msdu = 0
wlan: [4:F:DP] q_empty = 21477
wlan: [4:F:DP] q_not_empty = 25366
wlan: [4:F:DP] drop_notification = 0
wlan: [4:F:DP] desc_threshold = 0

wlan: [4:F:DP] HTT_TX_TQM_ERROR_STATS_TLV:
wlan: [4:F:DP] q_empty_failure = 0
wlan: [4:F:DP] q_not_empty_failure = 0
wlan: [4:F:DP] add_msdu_failure = 0

wlan: [4:F:DP] HTT_TX_TQM_GEN_MPDU_STATS_TLV_V:
wlan: [4:F:DP] gen_mpdu_end_reason = 0:0, 1:0, 2:0, 3:0, 4:63725, 5:0, 6:0, 7:0, 8:0, 9:54427, 10:0, 11:0, 12:0, 13:11, 14:1, 15:70978,

wlan: [4:F:DP] HTT_TX_TQM_LIST_MPDU_STATS_TLV_V:
wlan: [4:F:DP] list_mpdu_end_reason = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:8, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,

wlan: [4:F:DP] HTT_TX_TQM_LIST_MPDU_CNT_TLV_V:
wlan: [4:F:DP] list_mpdu_cnt_hist = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0,

wlan: [4:F:DP] HTT_TX_TQM_PDEV_STATS_TLV_V:
wlan: [4:F:DP] msdu_count = 11074461
wlan: [4:F:DP] mpdu_count = 5543128
wlan: [4:F:DP] remove_msdu = 0
wlan: [4:F:DP] remove_mpdu = 0
wlan: [4:F:DP] remove_msdu_ttl = 0
wlan: [4:F:DP] send_bar = 0
wlan: [4:F:DP] bar_sync = 0
wlan: [4:F:DP] notify_mpdu = 0
wlan: [4:F:DP] sync_cmd = 826
wlan: [4:F:DP] write_cmd = 0
wlan: [4:F:DP] hwsch_trigger = 0
wlan: [4:F:DP] ack_tlv_proc = 111895
wlan: [4:F:DP] gen_mpdu_cmd = 189142
wlan: [4:F:DP] gen_list_cmd = 8
wlan: [4:F:DP] remove_mpdu_cmd = 197
wlan: [4:F:DP] remove_mpdu_tried_cmd = 17
wlan: [4:F:DP] mpdu_queue_stats_cmd = 0
wlan: [4:F:DP] mpdu_head_info_cmd = 11
wlan: [4:F:DP] msdu_flow_stats_cmd = 148815
wlan: [4:F:DP] remove_msdu_cmd = 0
wlan: [4:F:DP] remove_msdu_ttl_cmd = 341
wlan: [4:F:DP] flush_cache_cmd = 0
wlan: [4:F:DP] update_mpduq_cmd = 6
wlan: [4:F:DP] enqueue = 50
wlan: [4:F:DP] enqueue_notify = 12
wlan: [4:F:DP] notify_mpdu_at_head = 42
wlan: [4:F:DP] notify_mpdu_state_valid = 12

```

iwpriv aruba000 txrx_stats 8 - Firmware TX classification (tx_de) stats

```

=====
wlan: [4:F:DP] HTT_TX_DE_CMN_STATS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] tc12fw_entry_count = 890
wlan: [4:F:DP] not_to_fw = 0

```

```
wlan: [4:F:DP] invalid_pdev_vdev_peer = 0
wlan: [4:F:DP] tcl_res_invalid_addrx = 0
wlan: [4:F:DP] wbm2fw_entry_count = 0
wlan: [4:F:DP] invalid_pdev = 0
```

```
wlan: [4:F:DP] HTT_TX_DE_EAPOL_PACKETS_STATS_TLV:
wlan: [4:F:DP] m1_packets = 6
wlan: [4:F:DP] m2_packets = 0
wlan: [4:F:DP] m3_packets = 5
wlan: [4:F:DP] m4_packets = 0
wlan: [4:F:DP] g1_packets = 0
wlan: [4:F:DP] g2_packets = 0
```

```
wlan: [4:F:DP] HTT_TX_DE_CLASSIFY_STATS_TLV:
wlan: [4:F:DP] arp_packets = 846
wlan: [4:F:DP] igmp_packets = 0
wlan: [4:F:DP] dhcp_packets = 0
wlan: [4:F:DP] host_inspected = 0
wlan: [4:F:DP] htt_included = 0
wlan: [4:F:DP] htt_valid_mcs = 0
wlan: [4:F:DP] htt_valid_nss = 0
wlan: [4:F:DP] htt_valid_preamble_type = 0
wlan: [4:F:DP] htt_valid_chainmask = 0
wlan: [4:F:DP] htt_valid_guard_interval = 0
wlan: [4:F:DP] htt_valid_retries = 0
wlan: [4:F:DP] htt_valid_bw_info = 0
wlan: [4:F:DP] htt_valid_power = 0
wlan: [4:F:DP] htt_valid_key_flags = 0
wlan: [4:F:DP] htt_valid_no_encryption = 0
wlan: [4:F:DP] fse_entry_count = 0
wlan: [4:F:DP] fse_priority_be = 0
wlan: [4:F:DP] fse_priority_high = 0
wlan: [4:F:DP] fse_priority_low = 0
wlan: [4:F:DP] fse_traffic_ptrn_be = 0
wlan: [4:F:DP] fse_traffic_ptrn_over_sub = 0
wlan: [4:F:DP] fse_traffic_ptrn_bursty = 0
wlan: [4:F:DP] fse_traffic_ptrn_interactive = 0
wlan: [4:F:DP] fse_traffic_ptrn_periodic = 0
wlan: [4:F:DP] fse_hwqueue_alloc = 0
wlan: [4:F:DP] fse_hwqueue_created = 0
wlan: [4:F:DP] fse_hwqueue_send_to_host = 0
wlan: [4:F:DP] mcast_entry = 33
wlan: [4:F:DP] bcast_entry = 809
```

```
wlan: [4:F:DP] HTT_TX_DE_CLASSIFY_FAILED_STATS_TLV:
wlan: [4:F:DP] ap_bss_peer_not_found = 0
wlan: [4:F:DP] ap_bcast_mcast_no_peer = 0
wlan: [4:F:DP] sta_delete_in_progress = 0
wlan: [4:F:DP] ibss_no_bss_peer = 0
wlan: [4:F:DP] invalild_vdev_type = 0
wlan: [4:F:DP] invalid_ast_peer_entry = 0
wlan: [4:F:DP] peer_entry_invalid = 0
wlan: [4:F:DP] ethertype_not_ip = 0
wlan: [4:F:DP] eapol_lookup_failed = 0
wlan: [4:F:DP] qpeer_not_allow_data = 0
wlan: [4:F:DP] fse_tid_override = 0
```

```
wlan: [4:F:DP] HTT_TX_DE_CLASSIFY_STATUS_STATS_TLV:
wlan: [4:F:DP] eok = 0
wlan: [4:F:DP] classify_done = 890
wlan: [4:F:DP] lookup_failed = 0
wlan: [4:F:DP] send_host_dhcp = 0
wlan: [4:F:DP] send_host_mcast = 0
wlan: [4:F:DP] send_host_unknown_dest = 0
wlan: [4:F:DP] send_host = 0
wlan: [4:F:DP] status_invalid = 0
```

```
wlan: [4:F:DP] HTT_TX_DE_ENQUEUE_PACKETS_STATS_TLV:
wlan: [4:F:DP] enqueued_pkts = 5128
wlan: [4:F:DP] to_tqm = 48
wlan: [4:F:DP] to_tqm_bypass = 5080
```

```
wlan: [4:F:DP] HTT_TX_DE_ENQUEUE_DISCARD_STATS_TLV:
wlan: [4:F:DP] discarded_pkts = 0
wlan: [4:F:DP] local_frames = 0
wlan: [4:F:DP] is_ext_msdu = 0
```

```
wlan: [4:F:DP] HTT_TX_DE_COMPL_STATS_TLV:
wlan: [4:F:DP] tcl_dummy_frame = 2
wlan: [4:F:DP] tqm_dummy_frame = 2
wlan: [4:F:DP] tqm_notify_frame = 11
wlan: [4:F:DP] fw2wbm_enq = 842
wlan: [4:F:DP] tqm_bypass_frame = 842
```

```
iwpriv aruba000 txrx_stats 9 - Firmware TX rate stats
```

```
=====
wlan: [4:F:DP] HTT_TX_PDEV_RATE_STATS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] tx_ldpc = 113409
wlan: [4:F:DP] rts_cnt = 15
wlan: [4:F:DP] rts_success = 12
wlan: [4:F:DP] ack_rssi = 46
wlan: [4:F:DP] tx_mcs = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:23, 7:56, 8:2853, 9:6284, 10:91433, 11:12760,
wlan: [4:F:DP] tx_su_mcs = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] tx_mu_mcs = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] tx_nss = 1:0, 2:113409, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0,
wlan: [4:F:DP] tx_bw = 0:1, 1:0, 2:113408, 3:0,
wlan: [4:F:DP] tx_stbc = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] tx_pream = 0:5089, 1:0, 2:0, 3:0, 4:113412, 5:0, 6:0,
wlan: [4:F:DP] tx_gi[0] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:23, 7:56, 8:2853, 9:6284, 10:91433, 11:12760,
wlan: [4:F:DP] tx_gi[1] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] tx_gi[2] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
```

```
wlan: [4:F:DP] tx_gi[3] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] tx_dcm = 0:0, 1:0, 2:0, 3:0, 4:0,
```

```
iwpriv aruba000 txrx_stats 10 - Firmware RX rate stats
```

```
=====
wlan: [4:F:DP] ul_ofdma_data_rx_ppdu = 759
wlan: [4:F:DP] ul_ofdma_data 0 user = 0
wlan: [4:F:DP] ul_ofdma_data 1 user = 223
wlan: [4:F:DP] ul_ofdma_data 2 user = 536
wlan: [4:F:DP] ul_ofdma_data 3 user = 0
wlan: [4:F:DP] ul_ofdma_data 4 user = 0
wlan: [4:F:DP] ul_ofdma_data 5 user = 0
wlan: [4:F:DP] ul_ofdma_data 6 user = 0
wlan: [4:F:DP] ul_ofdma_data 7 user = 0
wlan: [4:F:DP] ul_ofdma_data 8 user = 0
wlan: [4:F:DP] ul_ofdma_data 9 user = 0
wlan: [4:F:DP] ul_ofdma_data 10 user = 0
wlan: [4:F:DP] ul_ofdma_data 11 user = 0
wlan: [4:F:DP] ul_ofdma_data 12 user = 0
wlan: [4:F:DP] ul_ofdma_data 13 user = 0
wlan: [4:F:DP] ul_ofdma_data 14 user = 0
wlan: [4:F:DP] ul_ofdma_data 15 user = 0
wlan: [4:F:DP] ul_ofdma_data 16 user = 0
wlan: [4:F:DP] ul_ofdma_data 17 user = 0
wlan: [4:F:DP] ul_ofdma_data 18 user = 0
wlan: [4:F:DP] ul_ofdma_data 19 user = 0
wlan: [4:F:DP] ul_ofdma_data 20 user = 0
wlan: [4:F:DP] ul_ofdma_data 21 user = 0
wlan: [4:F:DP] ul_ofdma_data 22 user = 0
wlan: [4:F:DP] ul_ofdma_data 23 user = 0
wlan: [4:F:DP] ul_ofdma_data 24 user = 0
wlan: [4:F:DP] ul_ofdma_data 25 user = 0
wlan: [4:F:DP] ul_ofdma_data 26 user = 0
wlan: [4:F:DP] ul_ofdma_data 27 user = 0
wlan: [4:F:DP] ul_ofdma_data 28 user = 0
wlan: [4:F:DP] ul_ofdma_data 29 user = 0
wlan: [4:F:DP] ul_ofdma_data 30 user = 0
wlan: [4:F:DP] ul_ofdma_data 31 user = 0
wlan: [4:F:DP] ul_ofdma_data 32 user = 0
wlan: [4:F:DP] ul_ofdma_data 33 user = 0
wlan: [4:F:DP] ul_ofdma_data 34 user = 0
wlan: [4:F:DP] ul_ofdma_data 35 user = 0
wlan: [4:F:DP] ul_ofdma_data 36 user = 0
wlan: [4:F:DP] ul_ofdma_data_rx_ru_size= 0:759, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0,
wlan: [4:F:DP] ul_ofdma_nondata_rx_ru_size= 0:2472, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0,
wlan: [4:F:DP] HTT_RX_PDEV_RATE_STATS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] nsts = 0
wlan: [4:F:DP] rx_ldpc = 9806
wlan: [4:F:DP] rts_cnt = 0
wlan: [4:F:DP] rssi_mgmt = 48
wlan: [4:F:DP] rssi_data = 51
wlan: [4:F:DP] rssi_comb = 0
wlan: [4:F:DP] rx_mcs = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:1, 7:1, 8:2, 9:3, 10:30, 11:9769,
wlan: [4:F:DP] rx_nss = 1:0, 2:9806, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0,
wlan: [4:F:DP] rx_dcm = 0:0, 1:0, 2:0, 3:0, 4:0,
wlan: [4:F:DP] rx_stbc = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] rx_bw = 0:2174, 1:0, 2:9806, 3:0,
wlan: [4:F:DP] rssi_chain[0] = 0:128, 1:128, 2:128, 3:128,
wlan: [4:F:DP] rssi_chain[1] = 0:128, 1:128, 2:128, 3:128,
wlan: [4:F:DP] rssi_chain[2] = 0:128, 1:128, 2:128, 3:128,
wlan: [4:F:DP] rssi_chain[3] = 0:128, 1:128, 2:128, 3:128,
wlan: [4:F:DP] rssi_chain[4] = 0:46, 1:48, 2:49, 3:42,
wlan: [4:F:DP] rssi_chain[5] = 0:49, 1:57, 2:54, 3:52,
wlan: [4:F:DP] rssi_chain[6] = 0:43, 1:51, 2:55, 3:48,
wlan: [4:F:DP] rssi_chain[7] = 0:50, 1:46, 2:47, 3:42,
wlan: [4:F:DP] rx_gi[0] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:1, 7:1, 8:1, 9:3, 10:20, 11:9247,
wlan: [4:F:DP] rx_gi[1] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] rx_gi[2] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:1, 9:0, 10:10, 11:522,
wlan: [4:F:DP] rx_gi[3] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0,
wlan: [4:F:DP] rx_pream = 0:2174, 1:0, 2:0, 3:0, 4:9806, 5:0, 6:0,
```

```
iwpriv aruba000 txrx_stats 12 - Firmware self-generated frame stats
```

```
=====
wlan: [4:F:DP] HTT_TX_SELFGEN_CMN_STATS_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] su_bar = 0
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 0
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] delayed_bar_1 = 1
wlan: [4:F:DP] delayed_bar_2 = 0
wlan: [4:F:DP] delayed_bar_3 = 0
wlan: [4:F:DP] delayed_bar_4 = 0
wlan: [4:F:DP] delayed_bar_5 = 0
wlan: [4:F:DP] delayed_bar_6 = 0
wlan: [4:F:DP] delayed_bar_7 = 0

wlan: [4:F:DP] HTT_TX_SELFGEN_AC_STATS_TLV:
wlan: [4:F:DP] ac_su_ndpa = 0
wlan: [4:F:DP] ac_su_ndp = 0
wlan: [4:F:DP] ac_mu_mimo_ndpa = 0
wlan: [4:F:DP] ac_mu_mimo_ndp = 0
wlan: [4:F:DP] ac_mu_mimo_brpoll_1 = 0
wlan: [4:F:DP] ac_mu_mimo_brpoll_2 = 0
wlan: [4:F:DP] ac_mu_mimo_brpoll_3 = 0

wlan: [4:F:DP] HTT_TX_SELFGEN_AX_STATS_TLV:
wlan: [4:F:DP] ax_su_ndpa = 2916
wlan: [4:F:DP] ax_su_ndp = 2916
```

```

wlan: [4:F:DP] ax_mu_mimo_ndpa = 40
wlan: [4:F:DP] ax_mu_mimo_ndp = 40
wlan: [4:F:DP] ax_mu_mimo_brpoll_1 = 40
wlan: [4:F:DP] ax_mu_mimo_brpoll_2 = 0
wlan: [4:F:DP] ax_mu_mimo_brpoll_3 = 0
wlan: [4:F:DP] ax_mu_mimo_brpoll_4 = 0
wlan: [4:F:DP] ax_mu_mimo_brpoll_5 = 0
wlan: [4:F:DP] ax_mu_mimo_brpoll_6 = 0
wlan: [4:F:DP] ax_mu_mimo_brpoll_7 = 0
wlan: [4:F:DP] ax_basic_trigger = 2033
wlan: [4:F:DP] ax_bsr_trigger = 1671
wlan: [4:F:DP] ax_mu_bar_trigger = 211
wlan: [4:F:DP] ax_mu_rts_trigger = 0

wlan: [4:F:DP] HTT_TX_SELFGEN_AC_ERR_STATS_TLV:
wlan: [4:F:DP] ac_su_ndp_err = 0
wlan: [4:F:DP] ac_su_ndpa_err = 0
wlan: [4:F:DP] ac_mu_mimo_ndpa_err = 0
wlan: [4:F:DP] ac_mu_mimo_ndp_err = 0
wlan: [4:F:DP] ac_mu_mimo_brp1_err = 0
wlan: [4:F:DP] ac_mu_mimo_brp2_err = 0
wlan: [4:F:DP] ac_mu_mimo_brp3_err = 0

wlan: [4:F:DP] HTT_TX_SELFGEN_AX_ERR_STATS_TLV:
wlan: [4:F:DP] ax_su_ndp_err = 714
wlan: [4:F:DP] ax_su_ndpa_err = 1
wlan: [4:F:DP] ax_mu_mimo_ndpa_err = 0
wlan: [4:F:DP] ax_mu_mimo_ndp_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp1_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp2_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp3_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp4_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp5_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp6_err = 0
wlan: [4:F:DP] ax_mu_mimo_brp7_err = 0
wlan: [4:F:DP] ax_basic_trigger_err = 63
wlan: [4:F:DP] ax_bsr_trigger_err = 18
wlan: [4:F:DP] ax_mu_bar_trigger_err = 0
wlan: [4:F:DP] ax_mu_rts_trigger_err = 0

iwpriv aruba000 txrx_stats 15 - Firmware HTT sring info

=====
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 2359322
wlan: [4:F:DP] head_ptr__tail_ptr = 2097180
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 3670040

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1398757458, 1:1381974866, 2:1598508617, 3:1094930252, 4:1263558476, 5:84,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 16777472
wlan: [4:F:DP] base_addr_lsb = 1497445664
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 128
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 3539016
wlan: [4:F:DP] head_ptr__tail_ptr = 2490478
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 3670034

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1398757458, 1:1381974866, 2:1598508617, 3:1330464082, 4:1348420948, 5:21579,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 16777728
wlan: [4:F:DP] base_addr_lsb = 2971074560
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 8192
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 535167000
wlan: [4:F:DP] head_ptr__tail_ptr = 78513324
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 80085016

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1398757458, 1:1381974866, 2:1598508617, 3:1094930252, 4:1162108748, 5:17235,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 16777984
wlan: [4:F:DP] base_addr_lsb = 1497446208
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 128
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 3670086
wlan: [4:F:DP] head_ptr__tail_ptr = 2490480
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 3670034

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1398757458, 1:1381974866, 2:1598508617, 3:1229868877, 4:1599229780, 5:1413567571, 6:21333,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 16778240
wlan: [4:F:DP] base_addr_lsb = 2971058176
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 4096
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 266993684
wlan: [4:F:DP] head_ptr__tail_ptr = 11665584
wlan: [4:F:DP] consumer_empty__producer_full = 0

```



```
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 12976148

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1398757458, 1:1381974866, 2:1598508617, 3:1229868877, 4:1599229780, 5:5524304,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 16778496
wlan: [4:F:DP] base_addr_lsb = 3135766528
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 16384
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 1071382562
wlan: [4:F:DP] head_ptr__tail_ptr = 370284046
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 372375584

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1398757458, 1:1381974866, 2:1598508617, 3:1229868877, 4:1599229780, 5:1129530692, 6:0,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 16778752
wlan: [4:F:DP] base_addr_lsb = 3135832064
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 16384
wlan: [4:F:DP] elem_size = 2
wlan: [4:F:DP] num_avail_words__num_valid_words = 1071644702
wlan: [4:F:DP] head_ptr__tail_ptr = 888550642
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 890372124

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1147099218, 1:1599361861, 2:1196312914, 3:1599555167, 4:1414743364, 5:0,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 0
wlan: [4:F:DP] base_addr_lsb = 1507990112
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 1024
wlan: [4:F:DP] elem_size = 8
wlan: [4:F:DP] num_avail_words__num_valid_words = 1016
wlan: [4:F:DP] head_ptr__tail_ptr = 43516568
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 0

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1147099218, 1:1599361861, 2:1196312914, 3:1313819999, 4:1380930633, 5:1397048415, 6:84,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 256
wlan: [4:F:DP] base_addr_lsb = 3136028672
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 65528
wlan: [4:F:DP] elem_size = 8
wlan: [4:F:DP] num_avail_words__num_valid_words = 589800
wlan: [4:F:DP] head_ptr__tail_ptr = 3557348368
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 0

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1147099218, 1:1599361861, 2:1196312914, 3:1397704799, 4:1162108756, 5:21587,

wlan: [4:F:DP] HTT_SRING_STATS_TLV:
wlan: [4:F:DP] mac_id__ring_id__arena_ep = 512
wlan: [4:F:DP] base_addr_lsb = 3135897600
wlan: [4:F:DP] base_addr_msb = 0
wlan: [4:F:DP] ring_size = 32768
wlan: [4:F:DP] elem_size = 8
wlan: [4:F:DP] num_avail_words__num_valid_words = 32760
wlan: [4:F:DP] head_ptr__tail_ptr = 0
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 0

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1147099218, 1:1599361861, 2:1196312914, 3:1329943135, 4:1397048415, 5:84,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1147099218, 1:1599361861, 2:1196312914, 3:1296193375, 4:1397048415, 5:84,
```

Radio Info Script

Script Output

iwpriv aruba000 txrx_stats 16 - Firmware SFM client info

=====

```
wlan: [4:F:DP] client_id = 0
wlan: [4:F:DP] buf_min = 74
wlan: [4:F:DP] buf_max = 112
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 74
wlan: [4:F:DP] buf_avail = 74
wlan: [4:F:DP] num_users = 39
```

```
wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0,
0, 38:0,
```

```
wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597068366, 3:1129338962, 4:12629,
```

```
wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
```

```
wlan: [4:F:DP] client_id = 1
wlan: [4:F:DP] buf_min = 16
wlan: [4:F:DP] buf_max = 16
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 16
wlan: [4:F:DP] buf_avail = 16
wlan: [4:F:DP] num_users = 1

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597133902, 3:1129338964, 4:12373,

wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 2
wlan: [4:F:DP] buf_min = 64
wlan: [4:F:DP] buf_max = 647
wlan: [4:F:DP] buf_busy = 141
wlan: [4:F:DP] buf_alloc = 158
wlan: [4:F:DP] buf_avail = 17
wlan: [4:F:DP] num_users = 37

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:4465, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597199438, 3:1129338964, 4:12629,

wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 3
wlan: [4:F:DP] buf_min = 8
wlan: [4:F:DP] buf_max = 30
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 8
wlan: [4:F:DP] buf_avail = 8
wlan: [4:F:DP] num_users = 3

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0, 1:0, 2:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597264974, 3:1129535304, 4:72,

wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 4
wlan: [4:F:DP] buf_min = 392
wlan: [4:F:DP] buf_max = 402
wlan: [4:F:DP] buf_busy = 9
wlan: [4:F:DP] buf_alloc = 393
wlan: [4:F:DP] buf_avail = 384
wlan: [4:F:DP] num_users = 22

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:232, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:9, 17:0, 18:0, 19:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597330510, 3:4670544,

wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 5
wlan: [4:F:DP] buf_min = 10
wlan: [4:F:DP] buf_max = 37
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 10
wlan: [4:F:DP] buf_avail = 10
wlan: [4:F:DP] num_users = 37

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597396046, 3:1296324692, 4:65,

wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 6
wlan: [4:F:DP] buf_min = 50
wlan: [4:F:DP] buf_max = 111
wlan: [4:F:DP] buf_busy = 2
wlan: [4:F:DP] buf_alloc = 52
wlan: [4:F:DP] buf_avail = 50
wlan: [4:F:DP] num_users = 37

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:35, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597461582, 3:1296324690, 4:12353,

wlan: [4:F:DP] HTT_SFM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 7
wlan: [4:F:DP] buf_min = 8
wlan: [4:F:DP] buf_max = 50
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 8
wlan: [4:F:DP] buf_avail = 8
wlan: [4:F:DP] num_users = 1

wlan: [4:F:DP] HTT_SFM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597527118, 3:1280268370, 4:69,
```

```

wlan: [4:F:DP] HTT_SFMM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 8
wlan: [4:F:DP] buf_min = 294
wlan: [4:F:DP] buf_max = 304
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 294
wlan: [4:F:DP] buf_avail = 294
wlan: [4:F:DP] num_users = 37

wlan: [4:F:DP] HTT_SFMM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0, 9:0, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:0, 17:0, 18:0, 19:0,

wlan: [4:F:DP] HTT_STATS_STRING_TLV:
wlan: [4:F:DP] data = 0:1598899795, 1:1162431555, 2:1597592654, 3:1296324690, 4:126009,

wlan: [4:F:DP] HTT_SFMM_CLIENT_TLV:
wlan: [4:F:DP] client_id = 9
wlan: [4:F:DP] buf_min = 8
wlan: [4:F:DP] buf_max = 50
wlan: [4:F:DP] buf_busy = 0
wlan: [4:F:DP] buf_alloc = 8
wlan: [4:F:DP] buf_avail = 8
wlan: [4:F:DP] num_users = 1

wlan: [4:F:DP] HTT_SFMM_CLIENT_USER_TLV_V:
wlan: [4:F:DP] dwords_used_by_user_n = 0:0,

iwpriv aruba000 txrx_stats 17 - Firmware TX MU-MIMO scheduler stats

=====
wlan: [4:F:DP] ac_mu_mimo_ampdu_underrun_usr_3 = 0

wlan: [4:F:DP] HTT_TX_PDEV_MU_MIMO_AX_MPDU_STATS:

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_0 = 115
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_0 = 35
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_0 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_0 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_0 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_0 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_0 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_1 = 104
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_1 = 64
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_1 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_1 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_1 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_1 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_1 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_2 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_3 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_4 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_5 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_6 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdus_queued_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_tried_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_failed_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_requeued_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdus_underrun_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_7 = 0

wlan: [4:F:DP] HTT_TX_PDEV_AX_MU_OFDMA_MPDU_STATS:

wlan: [4:F:DP] ax_mu_ofdma_mpdus_queued_usr_0 = 948
wlan: [4:F:DP] ax_mu_ofdma_mpdus_tried_usr_0 = 948
wlan: [4:F:DP] ax_mu_ofdma_mpdus_failed_usr_0 = 133

```

```

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_0 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_0 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_0 = 24
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_0 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_1 = 497
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_1 = 497
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_1 = 83
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_1 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_1 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_1 = 31
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_1 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_2 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_3 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_4 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_5 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_6 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdu_underrun_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_7 = 0

```

VAP 'aruba000' will be used to display Noise Floor statistics.

===== iwpriv-commands =====

iwpriv aruba000 nf_stats 0 - Noise Floor Factory Cal Data

=====

Number of Cal Channel:4 Chain:4

Channel: 48 Frequency:5240

Chain0 dB:-105 dBm: -95 Offset:10

Chain1 dB:-105 dBm: -95 Offset:10

Chain2 dB:-105 dBm: -95 Offset:10

Chain3 dB:-105 dBm: -95 Offset:10

Channel:112 Frequency:5560

Chain0 dB:-105 dBm: -95 Offset:10

Chain1 dB:-105 dBm: -95 Offset:10

Chain2 dB:-105 dBm: -95 Offset:10

Chain3 dB:-105 dBm: -95 Offset:10

Channel:128 Frequency:5640

Chain0 dB:-105 dBm: -95 Offset:10

Chain1 dB:-105 dBm: -95 Offset:10

Chain2 dB:-105 dBm: -95 Offset:10

Chain3 dB:-105 dBm: -95 Offset:10

Channel:157 Frequency:5785

Chain0 dB:-105 dBm: -95 Offset:10

Chain1 dB:-105 dBm: -95 Offset:10

Chain2 dB:-105 dBm: -95 Offset:10

Chain3 dB:-105 dBm: -95 Offset:10

iwpriv aruba000 nf_stats 1 - Noise Floor Table

=====

Default Noise Floor (+ Offset) and Current Noise Floor

Chan	20MHz	40MHz	80MHz	160MHz	Current NF
36:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-95 dBr
40:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
44:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
48:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
52:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
56:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
60:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
64:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr

```
100: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
104: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
108: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
112: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
116: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
120: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
124: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
128: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
132: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
136: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
140: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
144: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
149: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
153: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
157: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
161: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -92 dBr
165: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) -96 dBr
169: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
173: -95 (+ 6) -93 (+ 7) -91 (+ 9) -89 (+11) 0 dBr
```

iwpriv aruba000 nf_stats 2 - Home Channel Noise Floor History

```
=====
Noise Floor History at Home Channel: 52
Number of Chains: 4
0: -107 -106 -107 -110 (-107 dBr) 0513
1: -107 -106 -107 -108 (-107 dBr) 0543
2: -107 -106 -107 -108 (-107 dBr) 0573
3: -107 -106 -107 -110 (-107 dBr) 0453
4: -107 -106 -107 -108 (-107 dBr) 0483
Current NF: -107 dBr -92 dBm
Cal Status: 0x00000000
Current Override: 0, Max Override: 0, MA: -107 dBr
```

iwpriv aruba000 nf_stats 3 - Scan Channel Noise Floor History

```
=====
Noise Floor History at Scan Channels
36: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
40: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0192 0000 0000 0000 0000 0000 0000 [0x00000000]
44: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0202 0000 0000 0000 0000 0000 0000 [0x00000000]
48: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0208 0000 0000 0000 0000 0000 0000 [0x00000000]
52: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
56: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0230 0000 0000 0000 0000 0000 0000 [0x00000000]
60: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0252 0000 0000 0000 0000 0000 0000 [0x00000000]
64: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0285 0000 0000 0000 0000 0000 0000 [0x00000000]
100: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0294 0000 0000 0000 0000 0000 0000 [0x00000000]
104: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0305 0000 0000 0000 0000 0000 0000 [0x00000000]
108: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0315 0000 0000 0000 0000 0000 0000 [0x00000000]
112: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0341 0000 0000 0000 0000 0000 0000 [0x00000000]
116: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0349 0000 0000 0000 0000 0000 0000 [0x00000000]
120: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0356 0000 0000 0000 0000 0000 0000 [0x00000000]
124: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0367 0000 0000 0000 0000 0000 0000 [0x00000000]
128: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0378 0000 0000 0000 0000 0000 0000 [0x00000000]
132: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
136: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
140: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
144: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
149: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
153: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0528 0000 0000 0000 0000 0000 0000 [0x00000000]
157: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0538 0000 0000 0000 0000 0000 0000 [0x00000000]
161: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0547 0000 0000 0000 0000 0000 0000 [0x00000000]
165: -107 -105 -105 -105 -105 -105 -105 (-105 dBr)
0562 0000 0000 0000 0000 0000 0000 [0x00000000]
169: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
173: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
aruba_dbg_radio_info_0 Finished time: Tue Jul 28 14:22:39 UTC 2020
aruba_dbg_radio_info_0: Read 18065 bytes in 1792 lines. Truncated:FALSE
```