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*****
7/28/2020 14:43:04 PM Target: AP1 (VC) Command: show ap debug radio-info 0
*****
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Radio Info Script

Script Output

aruba_dbg_radio_info_0 Start time: Tue Jul 28 14:42:59 UTC 2020

wifi0-drop-list:

_anul_tx_skb(1185): 73357/325454 73205/325091

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: [17651:F:DP] Rx Rate Info:

wlan: [17651:F:DP] OFDM 48 Mbps = 0
wlan: [17651:F:DP] OFDM 24 Mbps = 55308
wlan: [17651:F:DP] OFDM 12 Mbps = 1253
wlan: [17651:F:DP] OFDM 6 Mbps = 6173
wlan: [17651:F:DP] OFDM 54 Mbps = 0
wlan: [17651:F:DP] OFDM 36 Mbps = 0
wlan: [17651:F:DP] OFDM 18 Mbps = 0
wlan: [17651:F:DP] OFDM 9 Mbps = 0
wlan: [17651:F:DP] INVALID = 0
wlan: [17651:F:DP]

wlan: [17651:F:DP] CCK 11 Mbps Long = 0
wlan: [17651:F:DP] CCK 5.5 Mbps Long = 0
wlan: [17651:F:DP] CCK 2 Mbps Long = 0
wlan: [17651:F:DP] CCK 1 Mbps Long = 0
wlan: [17651:F:DP] CCK 11 Mbps Short = 0
wlan: [17651:F:DP] CCK 5.5 Mbps Short = 0
wlan: [17651:F:DP] CCK 2 Mbps Short = 0
wlan: [17651:F:DP] INVALID = 0
wlan: [17651:F:DP]

wlan: [17651:F:DP] HT MCS 0 (BPSK 1/2) = 0
wlan: [17651:F:DP] HT MCS 1 (QPSK 1/2) = 0
wlan: [17651:F:DP] HT MCS 2 (QPSK 3/4) = 0
wlan: [17651:F:DP] HT MCS 3 (16-QAM 1/2) = 0
wlan: [17651:F:DP] HT MCS 4 (16-QAM 3/4) = 0
wlan: [17651:F:DP] HT MCS 5 (64-QAM 2/3) = 0
wlan: [17651:F:DP] HT MCS 6 (64-QAM 3/4) = 0
wlan: [17651:F:DP] HT MCS 7 (64-QAM 5/6) = 0
wlan: [17651:F:DP] INVALID = 0
wlan: [17651:F:DP]

wlan: [17651:F:DP] VHT MCS 0 (BPSK 1/2) = 0
wlan: [17651:F:DP] VHT MCS 1 (QPSK 1/2) = 0
wlan: [17651:F:DP] VHT MCS 2 (QPSK 3/4) = 0
wlan: [17651:F:DP] VHT MCS 3 (16-QAM 1/2) = 0
wlan: [17651:F:DP] VHT MCS 4 (16-QAM 3/4) = 0
wlan: [17651:F:DP] VHT MCS 5 (64-QAM 2/3) = 0
wlan: [17651:F:DP] VHT MCS 6 (64-QAM 3/4) = 0
wlan: [17651:F:DP] VHT MCS 7 (64-QAM 5/6) = 0
wlan: [17651:F:DP] VHT MCS 8 (256-QAM 3/4) = 0
wlan: [17651:F:DP] VHT MCS 9 (256-QAM 5/6) = 0
wlan: [17651:F:DP] VHT MCS 10 (1024-QAM 3/4) = 0
wlan: [17651:F:DP] VHT MCS 11 (1024-QAM 5/6) = 0
wlan: [17651:F:DP] INVALID = 0
wlan: [17651:F:DP]

wlan: [17651:F:DP] HE MCS 0 (BPSK 1/2) = 28770
wlan: [17651:F:DP] HE MCS 1 (QPSK 1/2) = 60
wlan: [17651:F:DP] HE MCS 2 (QPSK 3/4) = 3
wlan: [17651:F:DP] HE MCS 3 (16-QAM 1/2) = 2
wlan: [17651:F:DP] HE MCS 4 (16-QAM 3/4) = 0
wlan: [17651:F:DP] HE MCS 5 (64-QAM 2/3) = 0
wlan: [17651:F:DP] HE MCS 6 (64-QAM 3/4) = 1
wlan: [17651:F:DP] HE MCS 7 (64-QAM 5/6) = 3
wlan: [17651:F:DP] HE MCS 8 (256-QAM 3/4) = 3
wlan: [17651:F:DP] HE MCS 9 (256-QAM 5/6) = 1
wlan: [17651:F:DP] HE MCS 10 (1024-QAM 3/4) = 60
wlan: [17651:F:DP] HE MCS 11 (1024-QAM 5/6) = 31129
wlan: [17651:F:DP] INVALID = 0
wlan: [17651:F:DP]

wlan: [17651:F:DP] NSS(1-8) = 62734 31197 0 0 0 0 0 0
wlan: [17651:F:DP] SGI = 0.8us 121520, 0.4us 0, 1.6us 1174, 3.2us 72,
wlan: [17651:F:DP] BW Counts = 20MHZ 4111, 40MHZ 0, 80MHZ 118655, 160MHZ 0
wlan: [17651:F:DP] Reception Type = SU: 136110, MU_MIMO:0, MU_OFDMA:28972, MU_OFDMA_MIMO:0

wlan: [17651:F:DP] Aggregation:

wlan: [17651:F:DP] Number of Msdu's Part of Ampdus = 39789
wlan: [17651:F:DP] Number of Msdu's With No Mpdu Level Aggregation : 82977
wlan: [17651:F:DP] Number of Msdu's Part of Amsdu: 8982
wlan: [17651:F:DP] Number of Msdu's With No Msdu Level Aggregation: 51298

iwpriv aruba000 txrx_stats 259 - Tx rate and aggregation stats

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wlan: [17662:F:DP] Tx Rate Info:

wlan: [17662:F:DP] OFDM 48 Mbps = 0
wlan: [17662:F:DP] OFDM 24 Mbps = 3359
wlan: [17662:F:DP] OFDM 12 Mbps = 0
wlan: [17662:F:DP] OFDM 6 Mbps = 0
wlan: [17662:F:DP] OFDM 54 Mbps = 0
wlan: [17662:F:DP] OFDM 36 Mbps = 0
wlan: [17662:F:DP] OFDM 18 Mbps = 0
wlan: [17662:F:DP] OFDM 9 Mbps = 0
wlan: [17662:F:DP] INVALID = 86

wlan: [17662:F:DP] CCK 11 Mbps Long = 0
wlan: [17662:F:DP] CCK 5.5 Mbps Long = 0
wlan: [17662:F:DP] CCK 2 Mbps Long = 0
wlan: [17662:F:DP] CCK 1 Mbps Long = 0
wlan: [17662:F:DP] CCK 11 Mbps Short = 0
wlan: [17662:F:DP] CCK 5.5 Mbps Short = 0
wlan: [17662:F:DP] CCK 2 Mbps Short = 0
wlan: [17662:F:DP] INVALID = 0

wlan: [17662:F:DP] HT MCS 0 (BPSK 1/2) = 0
wlan: [17662:F:DP] HT MCS 1 (QPSK 1/2) = 0
wlan: [17662:F:DP] HT MCS 2 (QPSK 3/4) = 0
wlan: [17662:F:DP] HT MCS 3 (16-QAM 1/2) = 0
wlan: [17662:F:DP] HT MCS 4 (16-QAM 3/4) = 0
wlan: [17662:F:DP] HT MCS 5 (64-QAM 2/3) = 0
wlan: [17662:F:DP] HT MCS 6 (64-QAM 3/4) = 0
wlan: [17662:F:DP] HT MCS 7 (64-QAM 5/6) = 0
wlan: [17662:F:DP] INVALID = 0

wlan: [17662:F:DP] VHT MCS 0 (BPSK 1/2) = 0
wlan: [17662:F:DP] VHT MCS 1 (QPSK 1/2) = 0
wlan: [17662:F:DP] VHT MCS 2 (QPSK 3/4) = 0
wlan: [17662:F:DP] VHT MCS 3 (16-QAM 1/2) = 0
wlan: [17662:F:DP] VHT MCS 4 (16-QAM 3/4) = 0
wlan: [17662:F:DP] VHT MCS 5 (64-QAM 2/3) = 0
wlan: [17662:F:DP] VHT MCS 6 (64-QAM 3/4) = 0
wlan: [17662:F:DP] VHT MCS 7 (64-QAM 5/6) = 0
wlan: [17662:F:DP] VHT MCS 8 (256-QAM 3/4) = 0
wlan: [17662:F:DP] VHT MCS 9 (256-QAM 5/6) = 0
wlan: [17662:F:DP] VHT MCS 10 (1024-QAM 3/4) = 0
wlan: [17662:F:DP] VHT MCS 11 (1024-QAM 5/6) = 0
wlan: [17662:F:DP] INVALID = 0

wlan: [17662:F:DP] HE MCS 0 (BPSK 1/2) = 0
wlan: [17662:F:DP] HE MCS 1 (QPSK 1/2) = 128
wlan: [17662:F:DP] HE MCS 2 (QPSK 3/4) = 896
wlan: [17662:F:DP] HE MCS 3 (16-QAM 1/2) = 15720
wlan: [17662:F:DP] HE MCS 4 (16-QAM 3/4) = 61486
wlan: [17662:F:DP] HE MCS 5 (64-QAM 2/3) = 122297
wlan: [17662:F:DP] HE MCS 6 (64-QAM 3/4) = 1288521
wlan: [17662:F:DP] HE MCS 7 (64-QAM 5/6) = 1754450
wlan: [17662:F:DP] HE MCS 8 (256-QAM 3/4) = 4608857
wlan: [17662:F:DP] HE MCS 9 (256-QAM 5/6) = 5632028
wlan: [17662:F:DP] HE MCS 10 (1024-QAM 3/4) = 25603011
wlan: [17662:F:DP] HE MCS 11 (1024-QAM 5/6) = 805356
wlan: [17662:F:DP] INVALID = 0

wlan: [17662:F:DP] SGI = 0.8us 39896195 0.4us 0 1.6us 0 3.2us 0
wlan: [17662:F:DP] BW Counts = 20MHZ 3573, 40MHZ 184, 80MHZ 39892438, 160MHZ 0
wlan: [17662:F:DP] OFDMA = 2414
wlan: [17662:F:DP] STBC = 0
wlan: [17662:F:DP] LDPC = 39892750
wlan: [17662:F:DP] Retries = 1515626
wlan: [17662:F:DP] Last ack rssi = 44

wlan: [17662:F:DP] Aggregation:

wlan: [17662:F:DP] Number of Msdu's Part of Ampdus = 39892822
wlan: [17662:F:DP] Number of Msdu's With No Mpdus Level Aggregation : 3373
wlan: [17662:F:DP] Number of Msdu's Part of Amsdu = 39894339
wlan: [17662:F:DP] Number of Msdu's With No Msdu Level Aggregation = 17205719

iwpriv aruba000 txrx_stats 260 - PDEV TX stats

=====
wlan: [17671:F:DP] PDEV Tx Stats:

wlan: [17671:F:DP] Received From Stack:
wlan: [17671:F:DP] Packets = 57132910
wlan: [17671:F:DP] Bytes = 79975781873
wlan: [17671:F:DP] Processed:
wlan: [17671:F:DP] Packets = 57133370
wlan: [17671:F:DP] Bytes = 79975464401
wlan: [17671:F:DP] Total Completions:
wlan: [17671:F:DP] Packets = 39898358
wlan: [17671:F:DP] Bytes = 57148365582
wlan: [17671:F:DP] Successful Completions:
wlan: [17671:F:DP] Packets = 39906869
wlan: [17671:F:DP] Bytes = 55888310223
wlan: [17671:F:DP] Dropped:
wlan: [17671:F:DP] Total = 0
wlan: [17671:F:DP] Dma_map_error = 0
wlan: [17671:F:DP] Ring Full = 0
wlan: [17671:F:DP] Descriptor Not available = 0
wlan: [17671:F:DP] HW enqueue failed= 0
wlan: [17671:F:DP] Resources Full = 0
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wlan: [17671:F:DP] FW removed Pkts = 17192883
wlan: [17671:F:DP] FW removed bytes= 0
wlan: [17671:F:DP] FW removed transmitted = 248
wlan: [17671:F:DP] FW removed untransmitted = 0
wlan: [17671:F:DP] FW removed untransmitted fw_reason1 = 0
wlan: [17671:F:DP] FW removed untransmitted fw_reason2 = 0
wlan: [17671:F:DP] FW removed untransmitted fw_reason3 = 0
wlan: [17671:F:DP] Aged Out from msdu/mpdu queues = 0
wlan: [17671:F:DP] headroom insufficient = 0
wlan: [17671:F:DP] Multicast:
wlan: [17671:F:DP] Packets: 3348
wlan: [17671:F:DP] Bytes: 148361
wlan: [17671:F:DP] Scatter Gather:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] Dropped By Host = 0
wlan: [17671:F:DP] Dropped By Target = 0
wlan: [17671:F:DP] TSO:
wlan: [17671:F:DP] Number of Segments = 0
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] Dropped By Host = 0
wlan: [17671:F:DP] Mcast Enhancement:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] Dropped: Map Errors = 0
wlan: [17671:F:DP] Dropped: Self Mac = 0
wlan: [17671:F:DP] Dropped: Send Fail = 0
wlan: [17671:F:DP] Unicast sent = 0
wlan: [17671:F:DP] Raw:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] DMA map error = 0
wlan: [17671:F:DP] Reinject:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0

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wlan: [17671:F:DP] Inspected:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] Naws Multicast:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] CCE Classified:
wlan: [17671:F:DP] CCE Classified Packets: 3418
wlan: [17671:F:DP] RAW CCE Classified Packets: 0
wlan: [17671:F:DP] Mesh stats:
wlan: [17671:F:DP] frames to firmware: 0
wlan: [17671:F:DP] completions from fw: 0
wlan: [17671:F:DP] PPDU stats counter
wlan: [17671:F:DP] Tag[0] = 579298
wlan: [17671:F:DP] Tag[1] = 693259
wlan: [17671:F:DP] Tag[2] = 649987
wlan: [17671:F:DP] Tag[3] = 548358
wlan: [17671:F:DP] Tag[4] = 0
wlan: [17671:F:DP] Tag[5] = 579298
wlan: [17671:F:DP] Tag[6] = 603342
wlan: [17671:F:DP] Tag[7] = 392397
wlan: [17671:F:DP] Tag[8] = 0
wlan: [17671:F:DP] Tag[9] = 439160
wlan: [17671:F:DP] Tag[10] = 3
wlan: [17671:F:DP] Tag[11] = 0
wlan: [17671:F:DP] Tag[12] = 0
wlan: [17671:F:DP] Tag[13] = 256826
wlan: [17671:F:DP] BA not received for delayed_ba: 30663
wlan: [17671:F:DP] tx_ppdu_proc: 0

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wlan: [17671:F:DP] Wdi msgs received from fw[0]:0
wlan: [17671:F:DP] Wdi msgs received from fw[1]:0
wlan: [17671:F:DP] Wdi msgs received from fw[2]:0
wlan: [17671:F:DP] Wdi msgs received from fw[3]:0
wlan: [17671:F:DP] Wdi msgs received from fw[4]:0
wlan: [17671:F:DP] Wdi msgs received from fw[5]:0
wlan: [17671:F:DP] Wdi msgs received from fw[6]:0
wlan: [17671:F:DP] Wdi msgs received from fw[8]:0
wlan: [17671:F:DP] Wdi msgs received from fw[11]:0
wlan: [17671:F:DP] Wdi msgs received from fw[15]:0
wlan: [17671:F:DP] Wdi msgs received from fw[16]:0
wlan: [17671:F:DP] Wdi msgs received from fw[18]:0
wlan: [17671:F:DP] Wdi msgs received from fw[23]:0
wlan: [17671:F:DP] Wdi msgs received from fw[24]:0
wlan: [17671:F:DP] Wdi msgs received from fw[25]:0
wlan: [17671:F:DP] Wdi msgs received from fw[26]:0
wlan: [17671:F:DP] SOC Tx Stats:

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wlan: [17671:F:DP] Tx Descriptors In Use = 0
wlan: [17671:F:DP] Tx Invalid peer:
wlan: [17671:F:DP] Packets = 0
wlan: [17671:F:DP] Bytes = 0
wlan: [17671:F:DP] Packets dropped due to TCL ring full = 0 0 0
wlan: [17671:F:DP] Tx invalid completion release = 0
wlan: [17671:F:DP] Tx comp wbm internal error = 0

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iwpriv aruba000 txrx_stats 261 - PDEV RX stats
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=====
wlan: [17680:F:DP] PDEV Rx Stats:
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wlan: [17680:F:DP] Received From HW (Per Rx Ring):
wlan: [17680:F:DP] Packets = 51299 0 0 0
wlan: [17680:F:DP] Bytes = 20236328 0 0 0
wlan: [17680:F:DP] Replenished:
wlan: [17680:F:DP] Packets = 190607
wlan: [17680:F:DP] Bytes = 390363136

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wlan: [17680:F:DP] Buffers Added To Freelist = 0
wlan: [17680:F:DP] Low threshold intr = 0
wlan: [17680:F:DP] Dropped:
wlan: [17680:F:DP] msdu_not_done = 0
wlan: [17680:F:DP] wifi parse = 0
wlan: [17680:F:DP] mon_rx_drop = 92
wlan: [17680:F:DP] mon_radiotap_update_err = 0
wlan: [17680:F:DP] mec_drop = 0
wlan: [17680:F:DP] Bytes = 0
wlan: [17680:F:DP] Sent To Stack:
wlan: [17680:F:DP] Packets = 51299
wlan: [17680:F:DP] Bytes = 20236328
wlan: [17680:F:DP] vlan_tag_stp_cnt = 0
wlan: [17680:F:DP] Multicast/Broadcast:
wlan: [17680:F:DP] Packets = 3502
wlan: [17680:F:DP] Bytes = 162442
wlan: [17680:F:DP] Errors:
wlan: [17680:F:DP] Rxdma Ring Un-inititalized = 0
wlan: [17680:F:DP] Desc Alloc Failed: = 0
wlan: [17680:F:DP] IP checksum error = 0
wlan: [17680:F:DP] TCP/UDP checksum error = 0
wlan: [17680:F:DP] BAR Received Count: = 0
wlan: [17680:F:DP] No of AST Entries = 8
wlan: [17680:F:DP] SOC Rx Stats:

wlan: [17680:F:DP] Fragmented packets: 0
wlan: [17680:F:DP] Reo reinjected packets: 0
wlan: [17680:F:DP] Errors:

wlan: [17680:F:DP] Rx Decrypt Errors = 10
wlan: [17680:F:DP] Invalid RBM = 0
wlan: [17680:F:DP] Invalid Vdev = 0
wlan: [17680:F:DP] Invalid sa_idx or da_idx = 0
wlan: [17680:F:DP] Invalid Pdev = 0
wlan: [17680:F:DP] Invalid Peer = 0
wlan: [17680:F:DP] HAL Ring Access Fail = 0
wlan: [17680:F:DP] MSDU Done failures = 0
wlan: [17680:F:DP] RX frags: 0
wlan: [17680:F:DP] RX frag wait: 0
wlan: [17680:F:DP] RX frag err: 0
wlan: [17680:F:DP] RX DESC invalid magic: 0
wlan: [17680:F:DP] RX DUP DESC: 0
wlan: [17680:F:DP] RX REL DUP DESC: 0
wlan: [17680:F:DP] RXDMA ERR DUP DESC: 0
wlan: [17680:F:DP] RXDMA Error (0-31): 0 0 25 10 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: [17680:F:DP] REO Error(0-14): 7 0 0 0 0 0 0 6 0 0 0 0 0 0 0

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iwpriv aruba000 txrx_stats 262 - AST stats

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=====
wlan: [17689:F:DP] AST Stats:
wlan: [17689:F:DP] Entries Added = 8
wlan: [17689:F:DP] Entries Deleted = 0
wlan: [17689:F:DP] Entries Agedout = 0
wlan: [17689:F:DP] Entries MAP ERR = 0
wlan: [17689: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: [17689:F:DP] Dumping Peer Table Stats:
wlan: [17689: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: [17689: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: [17689: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: [17689: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: [17689: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: [17689: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

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iwpriv aruba000 txrx_stats 1 - Firmware radio-level TX stats

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=====
wlan: [4:F:DP] HTT_TX_PDEV_STATS_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] hw_queued = 645374
wlan: [4:F:DP] hw_reaped = 645371
wlan: [4:F:DP] underrun = 63
wlan: [4:F:DP] hw_paused = 115479
wlan: [4:F:DP] hw_flush = 11943
wlan: [4:F:DP] hw_filt = 11406
wlan: [4:F:DP] tx_abort = 0
wlan: [4:F:DP] mpdu_requeued = 2482152
wlan: [4:F:DP] tx_xretry = 34456
wlan: [4:F:DP] data_rc = 40
wlan: [4:F:DP] mpdu_dropped_xretry = 5
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 = 41
wlan: [4:F:DP] phy_underrun = 0
wlan: [4:F:DP] txop_ovf = 0
wlan: [4:F:DP] seq_posted = 243308
wlan: [4:F:DP] seq_failed_queueing = 57399
wlan: [4:F:DP] seq_completed = 186924
wlan: [4:F:DP] seq_restarted = 122
wlan: [4:F:DP] mu_seq_posted = 134182
wlan: [4:F:DP] seq_switch_hw_paused = 78
wlan: [4:F:DP] next_seq_posted_dsr = 7218
wlan: [4:F:DP] seq_posted_isr = 115945
wlan: [4:F:DP] seq_ctrl_cached = 148522
wlan: [4:F:DP] mpdu_count_tqm = 19967889
wlan: [4:F:DP] msdu_count_tqm = 39922955
wlan: [4:F:DP] mpdu_removed_tqm = 124

```

```

wlan: [4:F:DP] msdu_removed_tqm = 248
wlan: [4:F:DP] mpdus_sw_flush = 57
wlan: [4:F:DP] mpdus_hw_filter = 0
wlan: [4:F:DP] mpdus_truncated = 18538
wlan: [4:F:DP] mpdus_ack_failed = 1515864
wlan: [4:F:DP] mpdus_expired = 0
wlan: [4:F:DP] mpdus_seq_hw_retry = 6
wlan: [4:F:DP] ack_tlv_proc = 388410
wlan: [4:F:DP] coex_abort_mpdus_cnt_valid = 369878
wlan: [4:F:DP] coex_abort_mpdus_cnt = 22469323

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

wlan: [4:F:DP] HTT_TX_PDEV_STATS_SIFS_TLV_V:
wlan: [4:F:DP] sifs_status = 0:0, 1:392392, 2:40746, 3:33124, 4:263, 5:0, 6:9626, 7:70532, 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, 5:608, 6:120, 7:1807, 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,
8:9408, 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_recvd = 110953
wlan: [4:F:DP] mpdu_cnt_fcs_ok = 94005
wlan: [4:F:DP] mpdu_cnt_fcs_err = 1507
wlan: [4:F:DP] tcp_msdu_cnt = 475
wlan: [4:F:DP] tcp_ack_msdu_cnt = 41541
wlan: [4:F:DP] udp_msdu_cnt = 4988
wlan: [4:F:DP] other_msdu_cnt = 62515
wlan: [4:F:DP] fw_ring_mpdu_ind = 844
wlan: [4:F:DP] fw_ring_mgmt_subtype = 0:5, 1:0, 2:0, 3:0, 4:538, 5:0, 6:0, 7:0, 8:1, 9:0, 10:0, 11:5, 12:0, 13:273, 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 = 59124
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 = 844
wlan: [4:F:DP] local_nondata_buf_recycle_cnt = 843
wlan: [4:F:DP] fw_status_buf_ring_refill_cnt = 110953
wlan: [4:F:DP] fw_status_buf_ring_empty_cnt = 0
wlan: [4:F:DP] fw_pkt_buf_ring_refill_cnt = 60004
wlan: [4:F:DP] fw_pkt_buf_ring_empty_cnt = 1
wlan: [4:F:DP] fw_link_buf_ring_refill_cnt = 59968
wlan: [4:F:DP] fw_link_buf_ring_empty_cnt = 0
wlan: [4:F:DP] host_pkt_buf_ring_refill_cnt = 55583
wlan: [4:F:DP] host_pkt_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_pkt_buf_ring_refill_cnt = 135282
wlan: [4:F:DP] mon_pkt_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_status_buf_ring_refill_cnt = 84023
wlan: [4:F:DP] mon_status_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_desc_buf_ring_refill_cnt = 120501
wlan: [4:F:DP] mon_desc_buf_ring_empty_cnt = 2
wlan: [4:F:DP] mon_dest_ring_update_cnt = 1417124287
wlan: [4:F:DP] mon_dest_ring_full_cnt = 0
wlan: [4:F:DP] rx_suspend_cnt = 595
wlan: [4:F:DP] rx_suspend_fail_cnt = 0
wlan: [4:F:DP] rx_resume_cnt = 595
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_mpdu_err = 0:0, 1:1469, 2:24, 3:0, 4:0, 5:57631, 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_mpdu_drop = 0:1493, 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, 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: 797792
wlan: [4:F:DP] non_zeros_avg: 7
wlan: [4:F:DP] non_zeros_sample: 838
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: 49

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: 797792
wlan: [4:F:DP] non_zeros_avg: 6
wlan: [4:F:DP] non_zeros_sample: 838
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: 49

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: 797792
wlan: [4:F:DP] non_zeros_avg: 1
wlan: [4:F:DP] non_zeros_sample: 838
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: 49

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_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 = 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 = 6
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 = 374
wlan: [4:F:DP] mpdu_queued_cnt = 374
wlan: [4:F:DP] mpdu_ack_fail_cnt = 6
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 = 0:368, 1:0, 2:0, 3:0, 4:6, 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 = 0:368, 1:0, 2:6, 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 = 44
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 = 331
wlan: [4:F:DP] mpdu_queued_cnt = 331
wlan: [4:F:DP] mpdu_ack_fail_cnt = 44
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 = 0:287, 1:0, 2:0, 3:0, 4:44, 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 = 0:287, 1:0, 2:44, 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 = 42
wlan: [4:F:DP] underrun_cnt = 0
wlan: [4:F:DP] flush_cnt = 38
wlan: [4:F:DP] filt_cnt = 40
wlan: [4:F:DP] null_mpdu_bmap = 0
wlan: [4:F:DP] user_ack_failure = 1650
wlan: [4:F:DP] ack_tlv_proc = 153
wlan: [4:F:DP] sched_id_proc = 1181458
wlan: [4:F:DP] null_mpdu_tx_count = 0
wlan: [4:F:DP] mpdu_bmap_not_recvd = 304
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 = 1586
wlan: [4:F:DP] mpdu_queued_cnt = 1696
wlan: [4:F:DP] mpdu_ack_fail_cnt = 1274
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 = 0:1697, 1:0, 2:0, 3:0, 4:42, 5:3, 6:0, 7:38, 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, 1:40, 2:0, 3:33, 4:0,

wlan: [4:F:DP] HTT_TX_HWQ_FES_RESULT_STATS_TLV_V:
wlan: [4:F:DP] fes_result = 0:1803, 1:0, 2:42, 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 = 16124
wlan: [4:F:DP] num_tid_unregister = 16106
wlan: [4:F:DP] num_qstats_queried = 257
wlan: [4:F:DP] qstats_update_pending = 0
wlan: [4:F:DP] last_qstats_query_timestamp = 1841965202
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 = 155
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 = 0:255, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:565, 1:0, 2:208, 3:1069,

wlan: [4:F:DP] HTT_STATS_TX_SCHED_CMN_TLV:
wlan: [4:F:DP] mac_id_word = 0
wlan: [4:F:DP] current_timestamp = 1842865780

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 = 1827867061
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 1827869820
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 = 3445
wlan: [4:F:DP] num_tid_unregister = 3414
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 = 328
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 = 0:331, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:331, 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 = 1842865785

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 = 1842790535
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 1842796175
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 = 16004
wlan: [4:F:DP] num_tid_unregister = 15842
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 = 16002
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 = 0:15841, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
wlan: [4:F:DP] sched_cmd_reaped = 0:15841, 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 = 1842865791

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 = 1842693536
wlan: [4:F:DP] last_sched_cmd_compl_timestamp = 1842693927
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 = 2939
wlan: [4:F:DP] sched_cmds_pending = 0
wlan: [4:F:DP] num_tid_register = 0
wlan: [4:F:DP] num_tid_unregister = 5878
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 = 0:2984, 1:0, 2:0, 3:0,

wlan: [4:F:DP] HTT_SCHED_TXQ_CMD_REAPED_TLV_V:
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wlan: [4:F:DP] sched_cmd_reaped = 0:2984, 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 = 1842865804

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 = 595
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 = 41
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, 12:41, 13:0, 14:0,
wlan: [4:F:DP]

wlan: [4:F:DP] PDEV_PHY_WARM_RESET_REASONS:
wlan: [4:F:DP] phy_m3 = 41
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 = 16777344
wlan: [4:F:DP] count = 27

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=====
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

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wlan: [4:F:DP] q_empty = 23035
wlan: [4:F:DP] q_not_empty = 27596
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, 4:482890, 5:0, 6:0, 7:0, 8:0, 9:60380, 10:0, 11:0, 12:0, 13:25, 14:45, 15:234650,

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 = 39974812
wlan: [4:F:DP] mpdu_count = 19993818
wlan: [4:F:DP] remove_msdu = 248
wlan: [4:F:DP] remove_mpdu = 124
wlan: [4:F:DP] remove_msdu_ttl = 0
wlan: [4:F:DP] send_bar = 3
wlan: [4:F:DP] bar_sync = 0
wlan: [4:F:DP] notify_mpdu = 0
wlan: [4:F:DP] sync_cmd = 2929
wlan: [4:F:DP] write_cmd = 0
wlan: [4:F:DP] hwsch_trigger = 0
wlan: [4:F:DP] ack_tlv_proc = 388907
wlan: [4:F:DP] gen_mpdu_cmd = 777990
wlan: [4:F:DP] gen_list_cmd = 8
wlan: [4:F:DP] remove_mpdu_cmd = 1159
wlan: [4:F:DP] remove_mpdu_tried_cmd = 22
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 = 1236736
wlan: [4:F:DP] remove_msdu_cmd = 0
wlan: [4:F:DP] remove_msdu_ttl_cmd = 2240
wlan: [4:F:DP] flush_cache_cmd = 0
wlan: [4:F:DP] update_mpduq_cmd = 6
wlan: [4:F:DP] enqueue = 168
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] tcl2fw_entry_count = 3518
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 = 3411
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 = 96
wlan: [4:F:DP] bcast_entry = 3256

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] invalid_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 = 3518
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 = 20059
wlan: [4:F:DP] to_tqm = 166
wlan: [4:F:DP] to_tqm_bypass = 19893

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 = 3352
wlan: [4:F:DP] tqm_bypass_frame = 3352
```

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 = 456324
wlan: [4:F:DP] rts_cnt = 108
wlan: [4:F:DP] rts_success = 63
wlan: [4:F:DP] ack_rssi = 45
wlan: [4:F:DP] tx_mcs = 0:0, 1:0, 2:60, 3:489, 4:2339, 5:5931, 6:20993, 7:32363, 8:66253, 9:68438, 10:237379, 11:22079,
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 = 1:29393, 2:426931, 3:0, 4:0, 5:0, 6:0, 7:0, 8:0,
wlan: [4:F:DP] tx_bw = 0:10, 1:7, 2:456307, 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 = 0:19887, 1:0, 2:0, 3:0, 4:456356, 5:0, 6:0,
wlan: [4:F:DP] tx_gi[0] = 0:0, 1:0, 2:60, 3:489, 4:2339, 5:5931, 6:20993, 7:32363, 8:66253, 9:68438, 10:237379, 11:22079,
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 = 792
wlan: [4:F:DP] ul_ofdma data 0 user = 0
wlan: [4:F:DP] ul_ofdma data 1 user = 245
wlan: [4:F:DP] ul_ofdma data 2 user = 547
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= 0:792, 1:0, 2:0, 3:0, 4:0, 5:0, 6:0,
wlan: [4:F:DP] ul_ofdma_nondata_rx_ru_size= 0:10845, 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 = 13438
wlan: [4:F:DP] rts_cnt = 0
wlan: [4:F:DP] rssi_mgmt = 62
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, 7:5, 8:4, 9:8, 10:60, 11:13360,
wlan: [4:F:DP] rx_nss = 1:0, 2:13438, 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 = 0:6904, 1:0, 2:13438, 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, 1:42, 2:42, 3:43,
wlan: [4:F:DP] rssi_chain[5] = 0:43, 1:48, 2:50, 3:47,
wlan: [4:F:DP] rssi_chain[6] = 0:42, 1:48, 2:53, 3:48,
wlan: [4:F:DP] rssi_chain[7] = 0:46, 1:50, 2:47, 3:48,
wlan: [4:F:DP] rx_gi[0] = 0:0, 1:0, 2:0, 3:0, 4:0, 5:0, 6:1, 7:2, 8:2, 9:6, 10:40, 11:11983,
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, 7:3, 8:2, 9:2, 10:20, 11:1377,
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 = 0:6904, 1:0, 2:0, 3:0, 4:13438, 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 = 3
wlan: [4:F:DP] rts = 0
wlan: [4:F:DP] cts2self = 54301
wlan: [4:F:DP] qos_null = 0
wlan: [4:F:DP] delayed_bar_1 = 58492
wlan: [4:F:DP] delayed_bar_2 = 708
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 = 5873
wlan: [4:F:DP] ax_su_ndp = 5860
wlan: [4:F:DP] ax_mu_mimo_ndpa = 12321
wlan: [4:F:DP] ax_mu_mimo_ndp = 12321
wlan: [4:F:DP] ax_mu_mimo_brpoll_1 = 12060
wlan: [4:F:DP] ax_mu_mimo_brpoll_2 = 237
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 = 13323
wlan: [4:F:DP] ax_bsr_trigger = 5518
wlan: [4:F:DP] ax_mu_bar_trigger = 221
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 = 1144
wlan: [4:F:DP] ax_su_ndpa_err = 16
wlan: [4:F:DP] ax_mu_mimo_ndpa_err = 1
wlan: [4:F:DP] ax_mu_mimo_ndp_err = 6
wlan: [4:F:DP] ax_mu_mimo_brp1_err = 18
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 = 18
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 = 302
wlan: [4:F:DP] ax_bsr_trigger_err = 62
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 = 1966112
wlan: [4:F:DP] head_ptr_tail_ptr = 2621476
wlan: [4:F:DP] consumer_empty_producer_full = 0
```

```
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 393246

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 = 3407946
wlan: [4:F:DP] head_ptr__tail_ptr = 1704034
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 3014676

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 = 288100650
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 289669144

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 = 3539016
wlan: [4:F:DP] head_ptr__tail_ptr = 1704036
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 3014676

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 = 266207264
wlan: [4:F:DP] head_ptr__tail_ptr = 2097182
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 4194336

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 = 1070727212
wlan: [4:F:DP] head_ptr__tail_ptr = 538714122
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 540540956

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 = 1070465072
wlan: [4:F:DP] head_ptr__tail_ptr = 750136484
wlan: [4:F:DP] consumer_empty__producer_full = 0
wlan: [4:F:DP] prefetch_count__internal_tail_ptr = 752222240

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 = 40370792
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 = 4259760
wlan: [4:F:DP] head_ptr__tail_ptr = 3003167552
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 = 135
wlan: [4:F:DP] buf_alloc = 151
wlan: [4:F:DP] buf_avail = 15
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 = 0:1932, 1:2337, 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,
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 = 11
wlan: [4:F:DP] buf_alloc = 393
wlan: [4:F:DP] buf_avail = 382
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, 9:313, 10:0, 11:0, 12:0, 13:0, 14:0, 15:0, 16:25, 17:0, 18:0, 19

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 = 9
wlan: [4:F:DP] buf_alloc = 59
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 = 0:50, 1:175, 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

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_SFM_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_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, 2:1597592654, 3:1296324690, 4:12609,

wlan: [4:F:DP] HTT_SFM_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_SFM_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] HTT_TX_PDEV_MU_MIMO_AX_MPDU_STATS:

wlan: [4:F:DP] ax_mu_mimo_mpds_queued_usr_0 = 4656369
wlan: [4:F:DP] ax_mu_mimo_mpds_tried_usr_0 = 4504693
wlan: [4:F:DP] ax_mu_mimo_mpds_failed_usr_0 = 1766990
wlan: [4:F:DP] ax_mu_mimo_mpds_requeued_usr_0 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_0 = 29504
wlan: [4:F:DP] ax_mu_mimo_mpdu_underrun_usr_0 = 1
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_0 = 0

wlan: [4:F:DP] ax_mu_mimo_mpds_queued_usr_1 = 3375879
wlan: [4:F:DP] ax_mu_mimo_mpds_tried_usr_1 = 3255355
wlan: [4:F:DP] ax_mu_mimo_mpds_failed_usr_1 = 381400
wlan: [4:F:DP] ax_mu_mimo_mpds_requeued_usr_1 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_1 = 205
wlan: [4:F:DP] ax_mu_mimo_mpdu_underrun_usr_1 = 2
```

```
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_1 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdu_queued_usr_2 = 38611
wlan: [4:F:DP] ax_mu_mimo_mpdu_tried_usr_2 = 36227
wlan: [4:F:DP] ax_mu_mimo_mpdu_failed_usr_2 = 7760
wlan: [4:F:DP] ax_mu_mimo_mpdu_requeued_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_2 = 5
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_2 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_2 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdu_queued_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_tried_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_failed_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_requeued_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_3 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_3 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdu_queued_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_tried_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_failed_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_requeued_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_4 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_4 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdu_queued_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_tried_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_failed_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_requeued_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_5 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_5 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdu_queued_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_tried_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_failed_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_requeued_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_6 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_underrun_usr_6 = 0

wlan: [4:F:DP] ax_mu_mimo_mpdu_queued_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_tried_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_failed_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_mpdu_requeued_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_err_no_ba_usr_7 = 0
wlan: [4:F:DP] ax_mu_mimo_ampdu_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_mpdu_queued_usr_0 = 973
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_0 = 973
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_0 = 134
wlan: [4:F:DP] ax_mu_ofdma_mpdu_requeued_usr_0 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_0 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_0 = 25
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_0 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_1 = 517
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_1 = 517
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_1 = 85
wlan: [4:F:DP] ax_mu_ofdma_mpdu_requeued_usr_1 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_1 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_1 = 32
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_1 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdu_queued_usr_2 = 1
wlan: [4:F:DP] ax_mu_ofdma_mpdu_tried_usr_2 = 1
wlan: [4:F:DP] ax_mu_ofdma_mpdu_failed_usr_2 = 1
wlan: [4:F:DP] ax_mu_ofdma_mpdu_requeued_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_2 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_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_requeued_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_3 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_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_requeued_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_4 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_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_requeued_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_5 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_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_requeued_usr_6 = 0
```



```
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdus_underrun_usr_6 = 0
wlan: [4:F:DP] ax_mu_ofdma_ampdu_underrun_usr_6 = 0

wlan: [4:F:DP] ax_mu_ofdma_mpdus_queued_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdus_tried_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdus_failed_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdus_requeued_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_err_no_ba_usr_7 = 0
wlan: [4:F:DP] ax_mu_ofdma_mpdus_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 dBr:-105 dBm: -95 Offset:10
Chain1 dBr:-105 dBm: -95 Offset:10
Chain2 dBr:-105 dBm: -95 Offset:10
Chain3 dBr:-105 dBm: -95 Offset:10
```

Channel:112 Frequency:5560

```
Chain0 dBr:-105 dBm: -95 Offset:10
Chain1 dBr:-105 dBm: -95 Offset:10
Chain2 dBr:-105 dBm: -95 Offset:10
Chain3 dBr:-105 dBm: -95 Offset:10
```

Channel:128 Frequency:5640

```
Chain0 dBr:-105 dBm: -95 Offset:10
Chain1 dBr:-105 dBm: -95 Offset:10
Chain2 dBr:-105 dBm: -95 Offset:10
Chain3 dBr:-105 dBm: -95 Offset:10
```

Channel:157 Frequency:5785

```
Chain0 dBr:-105 dBm: -95 Offset:10
Chain1 dBr:-105 dBm: -95 Offset:10
Chain2 dBr:-105 dBm: -95 Offset:10
Chain3 dBr:-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)	-92 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)	-92 dBr
136:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
140:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 dBr
144:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	0 dBr
149:	-95 (+ 6)	-93 (+ 7)	-91 (+ 9)	-89 (+11)	-92 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 -107 -108 -110 (-108 dBr) 1743
1: -107 -106 -108 -110 (-107 dBr) 1773
2: -107 -106 -107 -110 (-107 dBr) 1803
3: -107 -106 -107 -110 (-107 dBr) 1683
4: -107 -106 -108 -110 (-107 dBr) 1713
```

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: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
    1112 1367 1620 0000 0000 0000 0000 [0x00000000]
40: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
    0192 1124 1381 1629 0000 0000 0000 [0x00000000]
44: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
    0202 1133 1392 1643 0000 0000 0000 [0x00000000]
48: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
    0208 1147 1402 1649 0000 0000 0000 [0x00000000]
52: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
    0000 0000 0000 0000 0000 0000 0000 [0x00000000]
56: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
```

```

0230 1174 1420 0000 0000 0000 0000 [0x00000000]
60: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0252 1185 1434 0000 0000 0000 0000 [0x00000000]
64: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0285 1193 1447 0000 0000 0000 0000 [0x00000000]
100: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0294 1202 1459 0000 0000 0000 0000 [0x00000000]
104: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0305 1209 1473 0000 0000 0000 0000 [0x00000000]
108: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0315 1220 1481 0000 0000 0000 0000 [0x00000000]
112: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0341 1231 1493 0000 0000 0000 0000 [0x00000000]
116: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
0349 1237 1500 0000 0000 0000 0000 [0x00000000]
120: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0356 1008 1250 1506 0000 0000 0000 [0x00000000]
124: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0367 1016 1258 1520 0000 0000 0000 [0x00000000]
128: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0378 1029 1266 1529 0000 0000 0000 [0x00000000]
132: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
1036 1279 1536 0000 0000 0000 0000 [0x00000000]
136: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
1048 1292 1546 0000 0000 0000 0000 [0x00000000]
140: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
1060 1303 1553 0000 0000 0000 0000 [0x00000000]
144: -105 -105 -105 -105 -105 -105 -105 (-105 dBr)
0000 0000 0000 0000 0000 0000 0000 [0x00000000]
149: -107 -107 -107 -105 -105 -105 -105 (-105 dBr)
1068 1315 1566 0000 0000 0000 0000 [0x00000000]
153: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0528 1078 1322 1580 0000 0000 0000 [0x00000000]
157: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0538 1090 1333 1588 0000 0000 0000 [0x00000000]
161: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0547 1100 1348 1602 0000 0000 0000 [0x00000000]
165: -107 -107 -107 -107 -105 -105 -105 (-107 dBr)
0562 1106 1360 1612 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 14:43:01 UTC 2020
aruba_dbg_radio_info_0: Read 18066 bytes in 1791 lines. Truncated:FALSE

```

```

*****
7/28/2020 14:42:38 PM Target: AP1 (VC) Command: show ap debug radio-stats 0
*****
RADIO Stats
-----
Parameter Value
-----
----- General
Total Radio Resets 41
Resets Beacon Fail 0
BB Check Positives 0
Resets BeacQ Stuck 0
Resets Fatal Intr 0
Resets RX Overrun 0
Resets RF Gain 0
Resets MTU Change 0
Resets TX Timeouts 0
Resets RX Timeouts 0
POE-Related Resets 0
External Reset 0
PCI Fatal Intr Reset 0
Chainmask Reset 0
TX stat Reset 0
TX Power Changes 2
Channel Changes 2
Failed Channel Changes 0
Radio Band Changes 0
Current Noise Floor 92
Dummy NF pkts on home channel 1663
Dummy NF pkts on scan channel 79
Avail TX Buffers 0
11g Protection 0
Last TX Antenna 0
Last RX Antenna 0
Scan Requests 154
Scan Rejects 71
Load aware Scan Rejects 66
PS aware Scan Rejects 0
EAP Scan Rejects 0
Voice aware Scan Rejects 3
Video aware Scan Rejects 1
UAPSD Scan Rejects 0
Post radar related scan Rejects 0
CABQ traffic Scan Rejects 0
Radio Reset Scan Rejects 0
Queue Drain Scan Rejects 0
Scan Success 83
EIRP 17.0
MAX EIRP 23.0
Dummy012 0
Dummy013 0
Dummy014 0
Dummy015 0
Dummy016 0
Dummy017 0
Dummy018 0
Dummy019 0
Dummy020 0

```

```

Dummy021 0
Dummy022 0
----- Transmit
Tx Time perct @ beacon intvl 71 71 71 71 71 71 71 71 71 66 66 66 66 66 66 66 66 66 68 68 68 68 68 68 68 68 68
Tx Frames Rcvd 674
Tx Bcast Frames Rcvd 0
Tx Frames Dropped 81033
Tx Frames Dropped Rate 1s 0
Tx Bcast Frames Dropped 0
Tx Frames Transmitted 38902956
Tx Bytes Rcvd 136477
Tx Bytes Transmitted 55721530540
Tx Time Frames Rcvd 0
Tx Time Frames Dropped 0
Tx Time Frames Transmitted 0
Tx PS Unicast 0
Tx DTIM Broadcast 0
Tx Success With Retry 0
Tx Multiple Retries 1434263
Tx Mgmt Frames 16262
Tx Mgmt Frames(PPS) 0
Tx Beacons Transmitted 15564
Tx Beacons Transmitted(PPS) 0
Tx Probe Responses 330
Tx Probe Responses(PPS) 0
Tx Auth Frames 0
Tx Assoc Resp Frames 0
Tx Data Transmitted Retried 0
Tx Data Transmitted 3816056
Tx Data Frames 3816056
Tx Broadcast Data Frames In 0
Tx Data Bytes Transmitted 54496210423
Tx Data Bytes 5431521780
Tx Time Data Transmitted 0
Tx Time BC/MC Data 0
Tx Time Data dropped 0
Tx Time Data 62135238
Tx Time Data (Ideal) 47638746
Client Health Samples 54684
Tx Broadcast Data Frames Sent 3209
Tx Broadcast Data Frames Sent(PPS) 0
Tx Multicast Data Frames 3304
Tx Multicast Data Frames(PPS) 0
Tx Workqueue Frames 0
Tx Bypass Frames 0
Tx DMO Multicast 90
Tx DMO Invalid 0
Tx DMO Converted 56
Tx DMO Replicated 0
Tx DMO Dropped 196
Tx DMO No Client 0
Tx DMO No BSSID 0
Tx Unicast Data Frames 55201757
Tx RTS Success 63
Tx RTS Failed 45
Tx CTS Frames 0
Tx CTS Frames(PPS) 0
Tx Powersave Queue Timeouts 0
Tx Dropped After Retry 5
Tx Dropped No Buffer 0
Tx Missed ACKs 0
Tx Failed Beacons 23
Tx Multi-Beacon Fail 0
Tx Long Preamble 0
Tx Short Preamble 0
Tx Beacon Interrupts 15588
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 38899555
Tx OFDMA Frames 2414
Tx AGGR Good 38899627
Tx AGGR Unaggr 3329
Tx Data Frames 12 Mbps (Mon) 0
Tx Data Frames 24 Mbps (Mon) 1651
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) 1118
Tx Data Frames 450 Mbps (Mon) 66692
Tx Data Frames 1300 Mbps (Mon) 3746595
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) 1602628
Tx Data Bytes 450 Mbps (Mon) 95646912
Tx Data Bytes 1300 Mbps (Mon) 5334270161
Tx Data Bytes 1300 Mbps+ (Mon) 0
Tx WMM [BE] 38899500
Tx WMM [VO] 152
Tx WMM [BE] Dropped 248
Tx UAPSD OverflowDrop 0
Tx Timeouts 0
Lost Carrier Events 0
Tx HT40 Hang Detected 0
Tx HT40 Hang Stuck 0

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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) 31043
Rx Data Frames 1300 Mbps+ (Mon) 0
Rx Data Bytes 12 Mbps (Mon) 0
Rx Data Bytes 54 Mbps (Mon) 2790148
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) 16234572
Rx Data Bytes 1300 Mbps+ (Mon) 0
Rx Data Frames MCS 0 : 28369
Rx Data Frames MCS 1 : 54867
Rx Data Frames MCS 2 : 1167
Rx Data Frames MCS 3 : 5610
Rx Data Frames MCS 6 : 1
Rx Data Frames MCS 7 : 3
Rx Data Frames MCS 8 : 3
Rx Data Frames MCS 9 : 1
Rx Data Frames MCS 10 : 60
Rx Data Frames MCS 11 : 31109
Rx WMM [BE] 35432
Rx WMM [VI] 16
Rx WMM [VO] 160
Rx Data Frames NSS1 : 61581
Rx Data Frames NSS2 : 31177
Rx Data Frames GI(0.8) : 119949
Rx Data Frames GI(1.6) : 1169
Rx Data Frames GI(3.2) : 72
Rx Data Frames BW 20 : 4107
Rx Data Frames BW 80 : 117083
RX bad length 0
Rx Null Src MAC 1
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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 5863
SU-NDP frames transmitted 5850
SU-NDPA frames Tx failed 16
SU-NDP frames Tx failed 1144
MU-NDPA frames transmitted 10959
MU-NDP frames transmitted 10959
MU-NDPA frames Tx failed 1
MU-NDP frames Tx failed 5
MU Sequences posted 0
Client swap with pkt drop 0
Client swap pkt drop frames 0
Basic trigger frames 12832
BSR trigger frames 5307
MU-BAR trigger frames 221
MU-RTS trigger frames 0
Basic trigger frames Tx failed 302
BSR trigger frames Tx failed 62
MU-BAR trigger frames Tx failed 0
MU-RTS trigger frames Tx failed 0
Resets Seq Mismatch 0

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ANUL RADIO Stats

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Parameter Value
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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

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