How to interprete the NS2 tracefile for wireless simulation?

To find the interpretation of all possible trace format when you do the wireless simulation, you'd better read the code of ns2 in file ns2home/trace/cmu-trace{.h, .cc} Mostly, the format would be as

ACTION: [s|r|D]: s -- sent, r -- received, D -- dropped
WHEN: the time when the action happened
WHERE: the node where the action happened
LAYER: AGT -- application,
RTR -- routing,
LL -- link layer (ARP is done here)
IFQ -- outgoing packet queue (between link and mac layer)
MAC -- mac,
PHY -- physical
flags:
SEQNO: the sequence number of the packet
TYPE: the packet type
cbr -- CBR data stream packet
DSR -- DSR routing packet (control packet generated by routing)
RTS -- RTS packet generated by MAC 802.11
ARP -- link layer ARP packet
SIZE: the size of packet at current layer, when packet goes down, size increases, goes up size decreases
[a b c d]: a -- the packet duration in mac layer header
b -- the mac address of destination
c -- the mac address of source
d -- the mac type of the packet body
flags:
[.....]: [
source node ip : port_number
destination node ip (-1 means broadcast) : port_number
ip header ttl
ip of next hop (0 means node 0 or broadcast)
]

So we can interpret the below trace

s 76.000000000 _98_ AGT --- 1812 cbr 32 [0 0 0 0] ------- [98:0 0:0 32 0]

as Application 0 (port number) on node 98 sent a CBR packet whose ID is 1812 and size is 32 bytes, at time 76.0 second, to application 0 on node 0 with TTL is 32 hops. The next hop is not decided yet.

And we can also interpret the below trace

r 0.010176954 _9_ RTR --- 1 gpsr 29 [0 ffffffff 8 800] ------- [8:255 -1:255 32 0]

in the same way, as The routing agent on node 9 received a GPSR broadcast (mac address 0xff, and ip address is -1, either of them means broadcast) routing packet whose ID is 1 and size is 19 bytes, at time 0.010176954 second, from node 8 (both mac and ip addresses are 8), port 255 (routing agent).

Reference
http://www.cs.binghamton.edu/~kliu/research/ns2code/index.html#trace