List of Symbols

Symbol	Description
N	Number of packets of each flow
α	Time required to find a packet belongs to a particular flow
α_s	Smoothing factor
B_f	Buffer size (in bytes) of a switch
C_R	Connectivity ratio
C	Link capacity (in packets/sec)
Δt	Update frequency
d	urgency of the flow
$E[.]$	Expectation function
$\hat{x}$	Normalized vector x
$\lVert . \rVert_\infty$	Infinity norm
k	Number of ports in a switch of Fat-Tree topology
LRT	Last flow reroute time
M_f	Merge factor (Max number of packets merge)
M_T	Threshold for marking a packet
N_f	Total number of flows
n	Number of hosts per ToR
p_d	Propagation delay (in sec)
$p(Marking)$	Packet marking probability
P_t	Total number of packets in transit at time t
p	penalty of the flow
R_{rack}	Number of racks
RAT	Recent flow arrival time
R_{row}	Number of rows
rtt_c	round trip time of subflow c
R	Current rate of link
S_i	Total score of link i
S_j	Size of Jumbo frame (in bytes)
S_p	Size of original packet (in bytes)
T_f	Forwarding time of a packet at a switch
TP_j	Total processing time with jumbo size packets
$T(m)$	Total number of marked packets
TP_o	Total processing time with original size packets
TR	Total number of re-routes
$cwnd_c$	congestion window of subflow c
w_i	Weight to the ith attribute
W_{Min}	Minimum number of packets on a path before marking
$W_i(t)$	Window size of flow i at time t
W_{Max}	Maximum number of packets on a path before marking