

HIERARCHICAL RATE LIMITING OF CONTROL PACKETS

ABSTRACT

Line cards receive control packets and perform a hierarchical rate limiting on
5 those control packets. A set of identifier keys are extracted from the control packets
and the protocol of those control packets are determined. At a first level, the control
packets are rate limited per unique set of identifier keys per protocol. Those packets
which fail the first rate limiting level are dropped. Those packets which pass the first
rate limiting level are rate limited at a second level per protocol type. Those packets
10 which fail the second level rate limiting are dropped while those packets which pass the
second level rate limiting are sent to the control card for further processing.

Figure 3