

**NAME**

choke - choose and keep scheduler

**SYNOPSIS**

**tc qdisc ... choke limit** packets **min** packets **max** packets **avpkt** bytes **burst** packets [ **ecn** ] [ **bandwidth** rate ] **probability** chance

**DESCRIPTION**

CHOke (CHOose and Keep for responsive flows, CHOose and Kill for unresponsive flows) is a classless qdisc designed to both identify and penalize flows that monopolize the queue. CHOke is a variation of RED, and the configuration is similar to RED.

**ALGORITHM**

Once the queue hits a certain average length, a random packet is drawn from the queue. If both the to-be-queued and the drawn packet belong to the same flow, both packets are dropped. Otherwise, if the queue length is still below the maximum length, the new packet has a configurable chance of being marked (which may mean dropped). If the queue length exceeds **max**, the new packet will always be marked (or dropped). If the queue length exceeds **limit**, the new packet is always dropped.

The marking probability computation is the same as used by the RED qdisc.

**PARAMETERS**

The parameters are the same as for RED, except that RED uses bytes whereas choke counts packets. See [tc-red\(8\)](#) for a description.

**SOURCE**

- o R. Pan, B. Prabhakar, and K. Psounis, "CHOke, A Stateless Active Queue Management Scheme for Approximating Fair Bandwidth Allocation", IEEE INFOCOM, 2000.
- o A. Tang, J. Wang, S. Low, "Understanding CHOke: Throughput and Spatial Characteristics", IEEE/ACM Transactions on Networking, 2004

**SEE ALSO**

[tc\(8\)](#), [tc-red\(8\)](#)

**AUTHOR**

sched\_choke was contributed by Stephen Hemminger.