

NAME

HFSC – Hierarchical Fair Service Curve’s control under linux

SYNOPSIS

```
tc qdisc add ... hfsc [ default CLASSID ]
```

```
tc class add ... hfsc [ [ rt SC ] [ ls SC ] | [ sc SC ] ] [ ul SC ]
```

rt : realtime service curve

ls : linkshare service curve

sc : rt+ls service curve

ul : upperlimit service curve

- at least one of **rt**, **ls** or **sc** must be specified

- **ul** can only be specified with **ls** or **sc**

SC := [[**m1** BPS] **d** SEC] **m2** BPS

m1 : slope of the first segment

d : x-coordinate of intersection

m2 : slope of the second segment

SC := [[**umax** BYTE] **dmax** SEC] **rate** BPS

umax : maximum unit of work

dmax : maximum delay

rate : rate

For description of BYTE, BPS and SEC – please see **UNITS** section of **tc(8)**.

DESCRIPTION (qdisc)

HFSC qdisc has only one optional parameter – **default**. CLASSID specifies the minor part of the default classid, where packets not classified by other means (e.g. u32 filter, CLASSIFY target of iptables) will be enqueued. If **default** is not specified, unclassified packets will be dropped.

DESCRIPTION (class)

HFSC class is used to create a class hierarchy for HFSC scheduler. For explanation of the algorithm, and the meaning behind **rt**, **ls**, **sc** and **ul** service curves – please refer to **tc-hfsc(7)**.

As you can see in **SYNOPSIS**, service curve (SC) can be specified in two ways. Either as maximum delay for certain amount of work, or as a bandwidth assigned for certain amount of time. Obviously, **m1** is simply **umax/dmax**.

Both **m2** and **rate** are mandatory. If you omit other parameters, you will specify linear service curve.

SEE ALSO

tc(8), **tc-hfsc(7)**, **tc-stab(8)**

Please direct bugreports and patches to: <netdev@vger.kernel.org>

AUTHOR

Manpage created by Michal Soltys (soltys@ziu.info)