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Rocky Enterprise Linux 9.2 Manual Pages on command 'tc-cgroup.8'

\$ man tc-cgroup.8

Cgroup classifier in tc(8) Linux Cgroup classifier in tc(8)

NAME

cgroup - control group based traffic control filter

SYNOPSIS

tc filter ... cgroup [match EMATCH_TREE] [action ACTION_SPEC]

DESCRIPTION

This filter serves as a hint to tc that the assigned class ID of the net_cls control group the process the packet originates from belongs to should be used for classification. Obviously, it is useful for locally generated packets only.

OPTIONS

action ACTION_SPEC

Apply an action from the generic actions framework on matching packets.

match EMATCH_TREE

Match packets using the extended match infrastructure. See `tc-
ematch(8)` for a detailed description of the allowed syntax in
EMATCH_TREE.

EXAMPLES

In order to use this filter, a `net_cls` control group has to be created
first and class as well as process ID(s) assigned to it. The following
creates a `net_cls` cgroup named "foobar":

```
modprobe cls_cgroup  
mkdir /sys/fs/cgroup/net_cls  
mount -t cgroup -onet_cls net_cls /sys/fs/cgroup/net_cls  
mkdir /sys/fs/cgroup/net_cls/foobar
```

To assign a class ID to the created cgroup, a file named `net_cls.classid`
has to be created which contains the class ID to be assigned as a
hexadecimal, 64bit wide number. The upper 32bits are reserved for the
major handle, the remaining hold the minor. So a class ID of e.g.
`ff:be` has to be written like so: `0xff00be` (leading zeroes may be omit-
ted). To continue the above example, the following assigns class ID 1:2
to foobar cgroup:

```
echo 0x10002 > /sys/fs/cgroup/net_cls/foobar/net_cls.classid
```

Finally some PIDs can be assigned to the given cgroup:

```
echo 1234 > /sys/fs/cgroup/net_cls/foobar/tasks  
echo 5678 > /sys/fs/cgroup/net_cls/foobar/tasks
```

Now by simply attaching a cgroup filter to a qdisc makes packets from
PIDs 1234 and 5678 be pushed into class 1:2.

SEE ALSO

`tc(8)`, `tc-ematch(8)`,

the file `Documentation/cgroups/net_cls.txt` of the Linux kernel tree

`iproute2`

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Cgroup classifier in `tc(8)`