



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

C:\>man tc-vlan.8

VLAN manipulation action in tc(8) Linux VLAN manipulation action in tc(8)

NAME

vlan - vlan manipulation module

SYNOPSIS

tc ... action vlan { pop | PUSH | MODIFY } [CONTROL]

PUSH := push [protocol VLANPROTO] [priority VLANPRIO] id VLANID

MODIFY := modify [protocol VLANPROTO] [priority VLANPRIO] id VLANID

CONTROL := { reclassify | pipe | drop | continue | pass | goto chain CHAIN_INDEX }

DESCRIPTION

The vlan action allows to perform 802.1Q en- or decapsulation on a packet, reflected by the operation modes POP, PUSH and MODIFY. The POP mode is simple, as no further information is required to just drop the outer-most VLAN encapsulation. The PUSH and MODIFY modes require at least a VLANID and allow to optionally choose the VLANPROTO to use.

OPTIONS

pop Decapsulation mode, no further arguments allowed.

push Encapsulation mode. Requires at least id option.

modify Replace mode. Existing 802.1Q tag is replaced. Requires at least id option.

id VLANID

Specify the VLAN ID to encapsulate into. VLANID is an unsigned 16bit integer,

the format is detected automatically (e.g. prefix with '0x' for hexadecimal,

decimal interpretation, etc.).

protocol VLANPROTO

Choose the VLAN protocol to use. At the time of writing, the kernel accepts only 802.1Q or 802.1ad.

priority VLANPRIO

Choose the VLAN priority to use. Decimal number in range of 0-7.

CONTROL

How to continue after executing this action.

reclassify

Restarts classification by jumping back to the first filter attached to this action's parent.

pipe Continue with the next action, this is the default.

drop Packet will be dropped without running further actions.

continue

Continue classification with next filter in line.

pass Return to calling qdisc for packet processing. This ends the classification process.

EXAMPLES

The following example encapsulates incoming ICMP packets on eth0 from 10.0.0.2 into VLAN ID 123:

```
#tc qdisc add dev eth0 handle ffff: ingress
#tc filter add dev eth0 parent ffff: pref 11 protocol ip \
    u32 match ip protocol 1 0xff flowid 1:1 \
    match ip src 10.0.0.2 flowid 1:1 \
    action vlan push id 123
```

Here is an example of the pop function: Incoming VLAN packets on eth0 are decapsulated and the classification process then restarted for the plain packet:

```
#tc qdisc add dev eth0 handle ffff: ingress
#tc filter add dev $ETH parent ffff: pref 1 protocol 802.1Q \
    u32 match u32 0 0 flowid 1:1 \
    action vlan pop reclassify
```

SEE ALSO

tc(8)