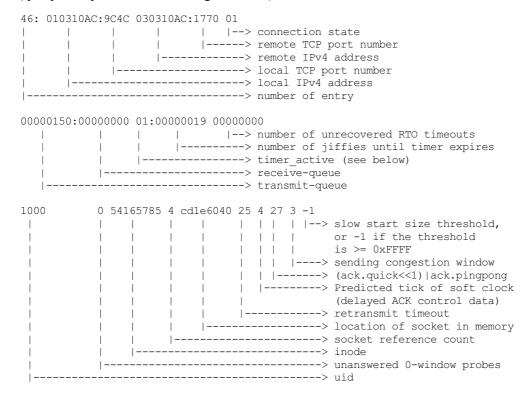# The proc/net/tcp and proc/net/tcp6 variables

This document describes the interfaces /proc/net/tcp and /proc/net/tcp6. Note that these interfaces are deprecated in favor of tcp_diag.

These /proc interfaces provide information about currently active TCP connections, and are implemented by tcp4_seq_show() in net/ipv4/tcp_ipv4.c and tcp6_seq_show() in net/ipv6/tcp_ipv6.c, respectively.

It will first list all listening TCP sockets, and next list all established TCP connections. A typical entry of /proc/net/tcp would look like this (split up into 3 parts because of the length of the line):

```
46: 010310AC:9C4C 030310AC:1770 01
 |      |       |       |       |  |--> connection state
 |      |       |       |       |------> remote TCP port number
 |      |       |       |-------------> remote IPv4 address
 |      |       |--------------------> local TCP port number
 |      |--------------------------> local IPv4 address
 |-------------------------------> number of entry

00000150:00000000 01:00000019 00000000
    |        |       |       |          |--> number of unrecovered RTO timeouts
    |        |       |       |---------> number of jiffies until timer expires
    |        |       |---------------> timer_active (see below)
    |        |--------------------> receive-queue
    |------------------------------> transmit-queue

1000        0 54165785 4 cd1e6040 25 4 27 3 -1
 |          |  |       |  |        |  | |  | |--> slow start size threshold,
 |          |  |       |  |        |  | |  |      or -1 if the threshold
 |          |  |       |  |        |  | |  |      is >= 0xFFFF
 |          |  |       |  |        |  | |  |----> sending congestion window
 |          |  |       |  |        |  | |-------> (ack.quick<<1)|ack.pingpong
 |          |  |       |  |        |  |--------> Predicted tick of soft clock
 |          |  |       |  |        |             (delayed ACK control data)
 |          |  |       |  |        |------------> retransmit timeout
 |          |  |       |  |-----------------> location of socket in memory
 |          |  |       |----------------------> socket reference count
 |          |  |----------------------------> inode
 |          |--------------------------------> unanswered 0-window probes
 |------------------------------------------> uid
```

timer_active:

0	no timer is pending
1	retransmit-timer is pending
2	another timer (e.g. delayed ack or keepalive) is pending
3	this is a socket in TIME_WAIT state. Not all fields will contain data (or even exist)
4	zero window probe timer is pending