

proc_net_tcp.txt

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