

参考官方文档（<http://www.kernel.org/doc/Documentation/networking/ip-sysctl.txt>），解释如下：

tcp\_max\_tw\_buckets - INTEGER

Maximal number of timewait sockets held by system simultaneously.

If this number is exceeded time-wait socket is immediately destroyed and warning is printed.

官方文档没有说明默认值，通过几个系统的简单验证，初步确定默认值是180000。

通过源码查看发现，这个选项比较简单，其实现代码如下：

=====linux-2.6.37 net/ipv4/tcp\_minisocks.c 269=====

```
void tcp_time_wait(struct sock *sk, int state, int timeo)
```

```
{
```

```
    struct inet_timewait_sock *tw = NULL;
```

```
    const struct inet_connection_sock *icsk = inet_csk(sk);
```

```
    const struct tcp_sock *tp = tcp_sk(sk);
```

```
    int recycle_ok = 0;
```

```
    if (tcp_death_row.sysctl_tw_recycle && tp->rx_opt.ts_recent_stamp)
```

```
        recycle_ok = icsk->icsk_af_ops->remember_stamp(sk);
```

```
    if (tcp_death_row.tw_count < tcp_death_row.sysctl_max_tw_buckets)
```

```
        tw = inet_twsk_alloc(sk, state);
```

```
    if (tw != NULL) {
```

```
        //分配成功，进行TIME_WAIT状态处理，此处略去很多代码
```

```
    } else {
```

```
        //分配失败，不进行处理，只记录日志: TCP: time wait bucket table overflow
```

```
    /* Sorry, if we're out of memory, just CLOSE this
```

```
    * socket up. We've got bigger problems than
```

```
    * non-graceful socket closings.
```

```
    */
```

```
    NET_INC_STATS_BH(sock_net(sk), LINUX_MIB_TCPTIMEWAITOVERFLOW);
```

```
}
```

```
tcp_update_metrics(sk);
```

```
tcp_done(sk);
```

```
}
```

实测结果验证，配置为100，TIME\_WAIT连接数就稳定在100，且不受组网和其它配置的影响。

官方手册中有一段警告：

This limit exists only to prevent simple DoS attacks, you must not lower the limit artificially, but rather increase it (probably, after increasing installed memory), if network conditions require more than default value.

基本意思是这个用于防止Dos攻击，我们不应该人工减少，如果网络条件需要的话，反而应该增加。

但其实对于我们的局域网或者公司内网应用来说，这个风险并不大。