

Source IP / INADDR_ANY

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Hi,

I'm wondering which IP address is used as the source IP of a TCP connection.

I came across this issue when I was debugging problems with a box with several IP aliases that could not connect to another box where it is identified by its IP. (`mysql_connect`)

To connect `libmysql.c` calls `socket()` and then `connect()`, without any `bind()` inbetween.

In `ip(7)` I found:

"When `listen(2)` or `connect(2)` are called on an unbound socket, it is automatically bound to a random free port with the local address set to `INADDR_ANY`."

So what does this `INADDR_ANY` mean? I guess, when there are multiple interfaces but they point to different routes, the one which points to my destination address is selected. (I did not verify this behaviour yet.)

But what if there are just a few IP aliases that point all to the same net. Googling for `INADDR_ANY` gave me (although unproven):

"When sending, a socket bound with `INADDR_ANY` binds to the default IP address, which is that of the lowest-numbered interface."

However this is not the behaviour I see on my box, unless the "interface numbering" is secretly rotated. ;)

Regards,
André

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