
Subject: *SOLVED* want SOCK_RAW inside vps
Posted by [jeffa](#) on Tue, 05 Sep 2006 21:53:15 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hi, I have a program that I want to run inside a VPS that opens a raw socket:
s = socket(AF_INET, SOCK_RAW, IPPROTO_ESP)

...but this returns EAFNOSUPPORT, "Address family not supported by protocol". If run as non-root then you get EPERM "Operation not permitted" as expected. This works fine as root from the host system.

I'm running the latest 2.6.16-026test017 SMP development kernel.

My capabilities line says:
CAPABILITY="NET_ADMIN:on NET_RAW:on SYS_ADMIN:on SYS_TTY_CONFIG:on "
and cat /proc/1/status says:
CapPrm: 000000005decfeff
CapEff: 000000005decfeff

What am I missing?

Subject: Re: want SOCK_RAW inside vps
Posted by [jeffa](#) on Tue, 05 Sep 2006 22:12:43 GMT
[View Forum Message](#) <> [Reply to Message](#)

Now I also see using a simple test program that ICMP, TCP, and UDP raw sockets are permitted, but all others return this error. Is there some way to get a VPS that supports opening a raw socket using other protocol numbers?

Subject: Re: want SOCK_RAW inside vps
Posted by [Vasily Tarasov](#) on Wed, 06 Sep 2006 06:23:36 GMT
[View Forum Message](#) <> [Reply to Message](#)

Hello,

The problem is that OpenVZ kernel in rpm is compiled with CONFIG_INET_ESP option off. So this protocol is not supported. You should recompile the kernel with CONFIG_INET_ESP option turned on.

Good luck,
vass.

Subject: Re: want SOCK_RAW inside vps

Posted by [jeffa](#) on Wed, 06 Sep 2006 15:47:20 GMT

[View Forum Message](#) <> [Reply to Message](#)

Thanks for replying. I was able to bind using the protocols that I wanted (not just IPPROTO_ESP) by adding protocols to the switch statement in vz_security_proto_check() in net/sock.c.

There it restricts PF_INET to these protocols:

```
case IPPROTO_IP:
case IPPROTO_ICMP:
case IPPROTO_TCP:
case IPPROTO_UDP:
case IPPROTO_RAW:
```