Subject: nscd on VE

Posted by edel on Sat, 19 Jan 2008 03:17:17 GMT

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hello great people, in this great society

i have problem running nscd on top of cos ve. from the logfile, it says "30624: Failed to drop capabilities", so i thought i have to enable some caps to run nscd.

here's the relevant info from strace:

```
Quote:...
chmod("/var/run/nscd/socket", 0666)
                                       = 0
listen(12, 128)
                             = 0
getuid32()
                             = 0
prctl(0x8, 0x1, 0x8c42050, 0xa84f63, 0x8c43258) = 0
capset(0x19980330, 0, {CAP SETGID|CAP SETUID|0x20000000.
CAP_SETGID|CAP_SETUID|0x20000000, 0}) = -1 EPERM (Operation not permitted)
write(3, "30490: Failed to drop capabiliti"..., 35) = 35
write(2, "nscd: ", 6)
                              = 6
write(2, "cap_set_proc failed", 19)
                                    = 19
write(2, "\n", 1)
                           = 1
                              = ?
exit_group(1)
i did try:
vzctl set 1502 -- capability setuid: on -- save
vzctl set 1502 -- capability setgid:on -- save
```

but it does not succed. i also tried enabling all but setpcap but to no avail still nscd failed to start.

thanks in advance.

...and reboot.

--edel

Subject: Re: nscd on VE

Posted by edel on Fri, 25 Jan 2008 05:16:15 GMT

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hi,

anyone can help me here? thank you.

--edel

Subject: Re: nscd on VE

Posted by maratrus on Sat, 02 Feb 2008 13:25:19 GMT

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Hi,

I'm very sorry for delay.

As we can see from strace output setuid and setgid capabilities are not sufficient. We need also CAP\_AUDIT\_WRITE.

From src/include/linux/capability.h (openvz kernel tree) inside VE we should to set SETVEID capability and "man vzctl" allows us to do this. I tried this but suddenly found that this capability was not actually set. The reason is in kernel's do\_env\_create() function which is called when we start our VPS. It displaces setveid capability otherwise this VPS becomes the serious hole in security.

So I can suggest you two ways:

- 1. If it is possible you can use the elder version of nscd. I noticed that it doesn't try to set this capabilities. (I experimented with VPS based on Fedora 4).
- 2. You can compile nscd by yourself. We easily can find the relevant piece of code and can try to comment unnecessary string.

Subject: Re: nscd on VE

Posted by edel on Sat, 02 Feb 2008 23:59:35 GMT

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hello maratrus,

thank you very much for the reply.

i was already thnking of recompiling nscd before, however i couldnt find the source for centos5. and honestly, i didnt tried hard enough. since it's a nss, im thinking its part of glibc. not sure. maybe, when i have the time, i'll look into it.

i also tried setting setting up nsscache[1], but didnt get it to work.

for now, here's my workaround (for the benefit of others):

- 1. on HN, setup nss\_ldap and nscd as usual
- 2. HN's /var/run/nscd is on tmpfs (1mb)
- 3. HN's /var/db/nscd is on 10mb loopback-mounted image
- 4. mount (--bind) HN's /var/{run,db}/nscd to /vz/root/\${VEID}/var/{run,db}/nscd (via \$VEID.mount)

reason for #2/3 is that i dont want to give HN's /var partition open/fully accessible to VEs.

and it appears working.

i got this idea from the mysql/shared hosting form the openvz wiki.	
openvz is great!	
thanks.	
edel	
[1] http://code.google.com/p/nsscache/	