
Subject: *partially solved* startx - cannot open /dev/tty0
Posted by [paul_xedos](#) on Fri, 30 Nov 2007 11:44:56 GMT
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Hi,
I'm running RHEL4U4 in a VE and attempting to startx in order to allow developers in India to display their desktops over a slow link using NoMachine (similar to VNC). A pre-req for doing this is that X is running.

```
[root@vz1 ~]# startx
```

```
X Window System Version 6.8.2
Release Date: 9 February 2005
X Protocol Version 11, Revision 0, Release 6.8.2
Build Operating System: Linux 2.6.9-34.0.1.ELsmp i686 [ELF]
Current Operating System: Linux vz1 2.6.9-023stab044.11-enterprise #1 SMP Sun Sep 30
14:02:45 MSD 2007 i686
Build Date: 11 July 2006
Build Host: hs20-bc1-1.build.redhat.com
```

Before reporting problems, check <http://wiki.X.Org>
to make sure that you have the latest version.

Module Loader present

OS Kernel: Linux version 2.6.9-023stab044.11-enterprise (root@rhel4-32) (gcc version 3.4.5
20051201 (Red Hat 3.4.5-2)) #1 SMP Sun Sep 30 14:02:45 MSD 2007

Markers: (--) probed, (**) from config file, (==) default setting,
(++) from command line, (!!) notice, (II) informational,
(WW) warning, (EE) error, (NI) not implemented, (??) unknown.

(==) Log file: "/var/log/Xorg.0.log", Time: Fri Nov 30 11:26:15 2007

(==) Using config file: "/etc/X11/xorg.conf"

[B]

Fatal server error:

xf86OpenConsole: Cannot open /dev/tty0 (No such file or directory)[/B]

My dev/tty directory was created as follows

```
MAKEDEV tty pty
```

```
mknod -m 666 /dev/tty0 c 5 1
```

```
[root@vz1 ~]# ls -l /dev/tty*
```

```
-rw-r--r-- 1 root root 5, 2 Nov 30 11:21 /dev/tty
crw-rw-rw- 1 root root 5, 1 Nov 30 11:39 /dev/tty0
crw-rw-rw- 1 root root 5, 0 Nov 27 17:31 /dev/ttyp
crw-rw-rw- 1 root tty 3, 48 Nov 30 11:25 /dev/ttys0
crw-rw-rw- 1 root tty 3, 49 Nov 30 11:25 /dev/ttys1
:           :           :
crw-rw-rw- 1 root tty 3, 63 Nov 30 11:25 /dev/ttysf
```

I'm beginning to wonder whether the "cannot open /dev/tty0" is not actually the problem and really X is failing for some other reason

Thanks
Paul

Subject: Re: startx - cannot open /dev/tty0
Posted by [khorenko](#) on Fri, 30 Nov 2007 12:06:28 GMT
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Hi Paul,

perhaps this thread could help you?
<http://forum.openvz.org/index.php?t=msg&goto=4044>

Please, post the results if you get any with this.

Thank you.

--
Konstantin.

Subject: Re: startx - cannot open /dev/tty0
Posted by [paul_xedos](#) on Fri, 30 Nov 2007 12:52:20 GMT
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Thanks very much for this, Konstantin. Unfortunately the vzctl command did not work as I still get the same error when running startx-

Fatal server error:
xf86OpenConsole: Cannot open /dev/tty0 (No such file or directory)

If I find a solution I'll report back

Subject: Re: startx - cannot open /dev/tty0
Posted by [khorenko](#) on Fri, 30 Nov 2007 13:28:22 GMT
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It's very strange...

1) wasn't /dev/tty0 somehow deleted ? Might be after the VE reboot? udev?
2) i wonder why tty0 has numbers 5:1 ? Is it correct? My node has tty0:
crw--w---- 1 root 4, 0 Nov 30 16:26 tty0

It's also RHEL4.4 and tty0 was created by MAKEDEV.

Subject: Re: startx - cannot open /dev/tty0
Posted by [paul_xedos](#) on Fri, 30 Nov 2007 15:43:40 GMT
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My tty's were created as a result of running:-
MAKEDEV tty pty
the tty0 with the 5,1 major minor numbers were created as a result of mknod. I tried the
commands suggested in your link
host# vzctl set VEID --devnodes /dev/tty:rw
host# vzctl set VEID --devnodes /dev/tty0:rw
which on start up of the VE creates
[root@vz1 /]# ls -l /dev/tty0
crw-r----- 1 root root 4, 0 Nov 30 15:27 /dev/tty0

Googling the error returned a posting from a Xen forum which said :-

"You can't just startx because it'll look for a graphics card (which it doesn't have)." The fact that no
graphics modules are loaded makes me wonder whether starting X is achievable in a VE

```
[root@vz1 /]# lsmod  
Module          Size Used by
```

Thanks
Paul

Subject: Re: startx - cannot open /dev/tty0
Posted by [khorenko](#) on Fri, 30 Nov 2007 16:21:06 GMT
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paul_xedos wrote on Fri, 30 November 2007 18:43The fact that no graphics modules are loaded
makes me wonder whether starting X is achievable in a VE

Well, i know exactly that VNC can be run inside a VE and it does not require the access to the
graphic card.

Speaking about the modules inside a VE - yes, you can't load a module from inside a VE. But you
can load them in HN and after that they will be accessible in VE.

May be it makes sense to run X server in HN to make sure all required modules are loaded?

At the same time i doubt that the problem is with modules as log says clearly that it can't FIND
/dev/tty0...

Subject: Re: startx - cannot open /dev/tty0
Posted by [khorenko](#) on Fri, 30 Nov 2007 16:24:04 GMT
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paul_xedos wrote on Fri, 30 November 2007 18:43host# vzctl set VEID --devnodes /dev/tty:rw
host# vzctl set VEID --devnodes /dev/tty0:rw
BTW, if you don't use "--save" vzctl option the VE reboot will drop your settings...

Subject: Re: startx - cannot open /dev/tty0
Posted by [paul_xedos](#) on Fri, 30 Nov 2007 16:45:37 GMT
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Konstantin,

Your help was very much appreciated but I have found out why I could not get NX running. My host node was running iptables which prevented authentication through to a nis server. Flushing the firewall allowed NX to authenticate and start up. Like VNC it too must start it's own X server as everything works. Unfortunately, the initial error was vague though, nothing about failure to authenticate, which led me down the route of thinking I needed to run an X server. The actual /dev/tty0 problem was not solved but fortunately in this case I have resolved my initial problem

Thanks very again for your help
Rgds
Paul
