Subject: pts limit
Posted by molliver on Tue, 16 May 2006 16:26:35 GMT
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Hi,

Can anyone please tell me what the limit is on pts's in a virtual system and whether they use the host pts's or their own. I.e can I have two virtual servers on the same host both with thoretically all 2048 pts used up?

I am considering using openvz to solve a login problem on our server where we can not get enough session due to the kernel restrictions on pts rather than lack of server resources.

Thanks

Mark

Subject: Re: pts limit
Posted by Vasily Tarasov on Wed, 17 May 2006 05:42:32 GMT
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There is option of vzctl to set number of pty:

--numpty items[:items]

Number of pseudo-terminals (PTY). Note that in OpenVZ each VPS can have not more than 255 PTYs. Setting the barrier and the limit
to different values does not make practical sense.

Subject: Re: pts limit
Posted by molliver on Wed, 17 May 2006 05:58:38 GMT
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Hi,

Surly 255 seams a little low and would only allow me 255 ssh'd users? Is there no way to increase this? an option in the kernel configuration perhaps?
Otherwise how do i get all my users to log onto the server via ssh at the same time to do their work?

Thanks

Mark

Subject: Re: pts limit
Posted by molliver on Wed, 17 May 2006 07:59:30 GMT
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I am a little confused,

I have just re-read you email and you have replied regarding pty's rather than pts's. I have just done a who on my machine it it shows me logged onto a pts not a pty. Is there a differance? and what is the maximum number ?

```
[root@mail ~]# w
 08:55:25 up 7 days, 15:57,  1 user,  load average: 0.01, 0.01, 0.00
USER     TTY      FROM              LOGIN@   IDLE   JCPU   PCPU WHAT
xxx      pts/0    192.168.x.x   08:50    1.00s  0.02s  0.00s login -- xxx
```

The system also show the following for pty's

```
[root@mail ~]# sysctl -A|grep pty
kernel.pty.nr = 0
kernel.pty.max = 4096
```

Any ideas what / how this is controlled?

Thanks

Mark

Subject: Re: pts limit
Posted by Vasily Tarasov on Wed, 17 May 2006 09:59:53 GMT
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Quote:I am considering using openvz to solve a login problem on our server where we can not get enough session due to the kernel restrictions on pts rather than lack of server resources.
Quote:[root@mail ~]# sysctl -A|grep pty
kernel.pty.nr = 0
kernel.pty.max = 4096

Hmmm... If you need more than 4096 pts (pty), why don't you enlarge the limit of ptys? You can do it using:
echo 10000 > /proc/sys/kernel/pty/max
command.

Subject: Re: pts limit
Posted by Vasily Tarasov on Wed, 17 May 2006 10:18:17 GMT
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Quote:...whether they[VPSs] use the host pts's or their own

They use their own, so no probelm to have 1000 pts in one VPS and 1000 pts in another, while the limit of pts on HN is 1000.

Quote:Number of pseudo-terminals (PTY). Note that in OpenVZ each VPS can have not more than 255 PTYs. Setting the barrier and the limit
to different values does not make practical sense.

Sorry, I was wrong! This was written in man page on vzctl, which, I suppose, is depricated. Nowadays you can use > 255 as a limit.

Subject: Re: pts limit
Posted by molliver on Wed, 17 May 2006 15:37:39 GMT
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Is there another limiting factor above these settings? Perhaps a device limit of 2048?
This is based on a realistic projection of users, rather than a wistful "will it work if everyone from never-neverland wants to ssh to it".

Mark

Subject: Re: pts limit
Posted by Vasily Tarasov on Wed, 17 May 2006 15:51:36 GMT
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Quote:Is there another limiting factor above these settings? Perhaps a device limit of 2048?

Well... Each process can open only 1024 files - so only 1024 terminals. It's per process limitation.

Maximum ptys number over the whole system is 2^20.
This is defined in pty-driver.

But, certainly, amount of your system resources, like memory, etc.,
is crutual too.

I don't think there can be any device limitation.

Quote:This is based on a realistic projection of users, rather than a wistful "will it work if everyone from never-neverland wants to ssh to it".

=) You are always welcome with your questions! Good luck.