
Subject: [solved] Help Me Understand Please (About Setting Resource Per VE)
Posted by [latheesan](#) on Tue, 09 Sep 2008 01:07:44 GMT

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I am trying to set a VPS I created to have the following specs:

1 Ghz Guaranteed CPU (Burstable Up-to 2 Ghz)
512 MB Guaranteed RAM (No bursting)

Also, is there a way to limit the maximum upload/download speed per VE? E.g. VE xxx can only upload at 256 kb/s and download at 512 kb/s or is this impossible to do? I saw some settings about TCP buffer size, but I didn't quite understand.

P.S. I am not trying to just workout how to set the above, I am trying to learn, so a few extra details on why you set it like that etc would be most appreciated.

Subject: Re: Help Me Understand Please (About Setting Resource Per VE)
Posted by [latheesan](#) on Tue, 09 Sep 2008 03:11:57 GMT

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I saw in this guide (<http://www.linux.com/feature/114214>) a "possible" way of setting RAM per VE and so I tried this:

```
$ vzctl set VEID --vmguarpages $((256 * 512)) --save  
$ vzctl set VEID --privvmpages $((256 * 512)) --save
```

and I checked the configuration like this ...

```
$ vzcfgvalidate /etc/vz/conf/VEID.conf
```

and it replies like this ...

Error: limit should be = 9223372036854775807 for vmguarpages (currently, 131072)

This doesn't make any sense... can someone plz shed some light on this?

Subject: Re: Help Me Understand Please (About Setting Resource Per VE)
Posted by [khorensko](#) on Tue, 09 Sep 2008 06:46:53 GMT

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Hi.

http://wiki.openvz.org/Traffic_shaping_with_tc

i think this is the answer for your question about traffic shaping.

Please, keep in mind that it makes sense to shape only outgoing shaping as what would you do

with network packets already received but more than configured limit? Drop? Inefficient.

Quote:\$ vzcfgvalidate /etc/vz/conf/VEID.conf

and it replies like this ...

Error: limit should be = 9223372036854775807 for vmguarpages (currently, 131072)

Well, seems to understand this one needs to check the sources of the vzcfgvalidate. You are welcome to find out the problem. i don't think this is difficult - just need to find the corresponding printf() and check what formula is used to get the printed value.

Good luck!

--

Konstantin

Subject: Re: Help Me Understand Please (About Setting Resource Per VE)

Posted by [latheesan](#) on Tue, 09 Sep 2008 14:14:54 GMT

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So, have I done this right? To set the RAM of my VPS to 512 MB RAM, I do this:

```
$ vzctl set VEID --vmguarpages $((256 * 512)) --save
```

```
$ vzctl set VEID --privvmpages $((256 * 512)) --save
```

---[Edit]---

Okay, never mind, I think I've worked out how to properly set the RAM now. This IS the correct method. I verified it by using this shell script:

```
#!/bin/bash
#
# http://www.labradordata.ca/home/40
# Revised 02-Feb-2007: include kernel memory (kmemsize) in 'used' calculation
# and show percentages in output.
#
BEAN=`cat /proc/user_beancounters`
GUAR=`echo "$BEAN" | grep vmguar | awk '{ print $4;}'`
PRIV=`echo "$BEAN" | grep privvm | awk '{ print $2;}'`
KMEM=`echo "$BEAN" | grep kmem | awk '{ print $3;}'`
let TOTL=$GUAR/256
let KMMB=$KMEM/1048576
let PVMB=$PRIV/256
let USED=$KMMB+$PVMB
let FREE=$TOTL-$USED
if [ "$FREE" -gt "0" ]; then
    let UPER=$USED*100/$TOTL
    let FPER=100-$UPER
```

```
else
  let UPER="100"
  let FPER="0"
fi
echo "VPS Memory:"
echo " Total: $TOTL mb Used: $USED mb (${UPER}%) Free: $FREE mb (${FPER}%)"
```
