
Subject: Zimbra on OpenVZ on CentOS
Posted by [czaveri](#) on Mon, 20 Mar 2006 19:11:39 GMT
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Thanks to Kir, Dev and the entire OpenVZ team for this wonderful software and the fantastic support.

Here is how I managed to run Zimbra on OpenVZ on CentOS.

In a compendium; first the results and then the config files:

```
[root@vz ~]# uname -srvmp
Linux 2.6.8-022stab070.1-smp #1 SMP Mon Feb 20 19:24:29 MSK 2006 i686 i686
[root@vz ~]# vzpkglis 101
centos-4-i386-default
[root@vz ~]# vzmemcheck -Av
Output values in Mbytes
veid    LowMem   LowMem   RAM MemSwap MemSwap Alloc Alloc Alloc
          util commit  util commit  util commit limit
101     5.11 8192.13 396.68 396.68 8396800.12 2250.78 9692.13 8396800.12
-----
Summary:  5.11 8192.13 396.68 396.68 8396800.12 2250.78 9692.13 8396800.12
         323.00 323.00 2023.00 4007.00 4007.00 4007.00 4007.00 4007.00
[root@vz ~]# vzctl exec 101 cat /proc/user_beancounters
Version: 2.5
uid resource      held maxheld barrier limit failcnt
101: kmemsize    5004726 6356460 2147483647 2147483647      0
      lockedpages   0      0      32      32      0
      privvmpages  474538 851314 2147483647 2147483647      0
      shmpages     655    2590    8192    8192      0
      dummy        0      0      0      0      0
      numproc      258    304    1000    1000      0
      physpages   97960 107107      0 2147483647      0
      vmguarpages  0      0    384000 2147483647      0
      oomguarpages 97960 107107 2147483647 2147483647      0
      numtcpsock   26     46    200    200      0
      numflock     29     35    100    110      0
      numpty       1      5     16     16      0
      numsiginfo   0     11    256    256      0
      tcpsndbuf   12648 70936 319488 2147483647      0
      tcprcvbuf   692    27192 319488 2147483647      0
      othersockbuf 155960 204976 132096 2147483647      0
      dgramrcvbuf  0    17104 132096 132096      0
      numothersock 116    146    250    250      0
      dcachesize   377260 459342 1048576 1097728      0
      numfile      1008   1489   2048   2048      0
      dummy        0      0      0      0      0
      dummy        0      0      0      0      0
```

```

dummy      0      0      0      0      0      0
numiptent 10     10     128    128    0

[root@vz ~]# cat /etc/sysconfig/vz
## Global parameters
VIRTUOZZO=yes
LOCKDIR=/vz/lock
VE0CPUUNITS=10000

## Logging parameters
LOGGING=yes
LOGFILE=/var/log/vzctl.log
LOG_LEVEL=0

## Disk quota parameters
DISK_QUOTA=no
VZFASTBOOT=no

# The name of the device whose ip address will be used as source ip for VE.
# By default automatically assigned.
#VE_ROUTE_SRC_DEV="eth0"

## Template parameters
TEMPLATE=/vz/template

## Defaults for VEs
VE_ROOT=/vz/root/$VEID
VE_PRIVATE=/vz/private/$VEID
CONFIGFILE="vps.basic"
DEF_OSTEMPLATE="centos-4-i386-default"

## Load vzwdog module
VZWDOG="no"

IPTABLES="ipt_REJECT ipt_tos ipt_limit ipt_multiport iptable_filter iptable_mangle ipt_TCPMSS
ipt_tcpmss ipt_ttl ipt_length"

[root@vz ~]# cat /etc/sysconfig/vz-scripts/101.conf
# This is an example configuration file for so-called "vps.basic" VPS.
# Copyright (C) 2000-2005 SWsoft. All rights reserved.
#
# This file may be distributed under the terms of the Q Public License
# as defined by Trolltech AS of Norway and appearing in the file
# LICENSE.QPL included in the packaging of this file.
#
# This file is provided AS IS with NO WARRANTY OF ANY KIND, INCLUDING THE
# WARRANTY OF DESIGN, MERCHANTABILITY AND FITNESS FOR A PARTICULAR
PURPOSE.

```

```
ONBOOT="yes"

# UBC parameters (in form of barrier:limit)

# Primary parameters
AVNUMPROC="400:400"
NUMPROC="1000:1000"
NUMTCPSOCK="200:200"
NUMOTHERSOCK="250:250"
VMGUARPAGES="384000:2147483647"

# Secondary parameters
KMEMSIZE="2147483647:2147483647"
TCPSNDBUF="319488:2147483647"
TCPRCVBUF="319488:2147483647"
OTHERSOCKBUF="132096:2147483647"
DGRAMRCVBUF="132096:132096"
OOMGUARPAGES="2147483647:2147483647"

# Auxiliary parameters
LOCKEDPAGES="32:32"
SHMPAGES="8192:8192"
#PRIVVMPAGES="384000:385000"
PRIVVMPAGES="2147483647:2147483647"
NUMFILE="2048:2048"
NUMFLOCK="100:110"
NUMPTY="16:16"
NUMSIGINFO="256:256"
DCACHESIZE="1048576:1097728"

PHYSPAGES="0:2147483647"
NUMIPTENT="128:128"

# Disk quota parameters (in form of softlimit:hardlimit)
DISKSPACE=""
DISKINODES=""
QUOTATIME=""
DISK_QUOTA=no

# CPU fair scheduler parameter
CPUUNITS="100000"
VE_ROOT="/vz/root/$VEID"
VE_PRIVATE="/vz/private/$VEID"
OSTEMPLATE="centos-4-i386-default"
ORIGIN_SAMPLE="vps.basic"
HOSTNAME="zimbra.mydomain.net"
IP_ADDRESS="192.168.1.10"
NAMESERVER="192.168.1.20"
```

```
CPULIMIT="75"
[root@vz ~]#
```

If the above configuration files don't work for you. Here is the How-to. (describes what I did)

Installed CentOS 4.2 on the computer

Installed OpenVZ

Created a VPS with ID 101

Installed Zimbra in this VPS

Zimbra didn't work!

A few services failed and I checked the logs, which looked something like this:

Could not reserve enough space for object heap

Could not create the Java virtual machine.

Could not create the Java virtual machine.

/opt/zimbra/bin/zmshutil: line 50: Error: command not found

Error: executing: /opt/zimbra/bin/zmlocalconfig -q -m export

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Error: executing: /opt/zimbra/bin/zmlocalconfig -q -m export

Error occurred during initialization of VM

Could not reserve enough space for object heap

Could not create the Java virtual machine.

Could not create the Java virtual machine.

Host

Could not create the Java virtual machine.

/opt/zimbra/bin/..../bin/zmshutil: line 50: Error: command not found

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So, now I checked UBC or user_beancounters using the following command:

```
vzctl exec 101 cat /proc/user_beancounters
```

The last column in the results is called failcnt. All the values in this column should be "0" (zero). If there exists a non-zero value in any row corresponding to failcnt column then there is a problem with resource allocation.

So, starting with the resource that has maximum failcnt, I started increasing values for the corresponding variable in /etc/sysconfig/vz-scripts/101.conf configuration file. I increased a little everytime and checked if the result will be Ok (not the solution, but valid configuration). This can be checked by issuing the command:

```
vzcfgvalidate /etc/sysconfig/vz-scripts/101.conf
```

First, I increased the limit (the value after the colon ":") and after validating the file, I restarted the VPS. If it didn't work, then I increased the barrier (the value before the colon ":") and after validating the file again restarted the VPS.

Slowly the values in failcnt started decreasing and finally became "0" (zero).

Also, it is possible to allocate much more than you have. So, you need not worry if the values that you assign to various resource variables in the config files are very high.

That's it!

Kir, please correct where I am wrong.

Thank-you very much!

Subject: Re: Zimbra on OpenVZ on CentOS
Posted by [dev](#) on Tue, 04 Jul 2006 15:15:55 GMT
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Can you please create this howto on <http://wiki.openvz.org> as well?
