Subject: *SOLVED* Shared vps files
Posted by dagr on Mon, 11 Sep 2006 14:14:57 GMT
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I know that in vserver project there is such thing like sharing files between different vps. Say you need common dirs like /bin /sbin in every vps - to save disk space you can make it sharable. Default centos vps takes 300 Mb which is not good in case of 100 VPS. Is there similar thing in openvz ?

Subject: Re: Shared vps files
Posted by Vasily Tarasov on Mon, 11 Sep 2006 14:56:34 GMT
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This is possible with some tricks. This is what I've just done:

[myhwn]# vzctl create 30
Creating VPS private area: /vz/private/30
Performing postcreate actions
VPS private area was created

[root@dhcp0-174 ~]# vzctl create 31
Creating VPS private area: /vz/private/31
Performing postcreate actions
VPS private area was created

[root@dhcp0-174 ~]# rm -rf /vz/private/31/sbin/*

[root@dhcp0-174 ~]# cat > /etc/vz/conf/31.mount
#! /bin/bash
mount --bind /vz/private/30/sbin /vz/root/31/sbin

[root@dhcp0-174 ~]# chmod +x /etc/vz/conf/31.mount

[root@dhcp0-174 ~]# cat > /etc/vz/conf/31.umount
#! /bin/bash
umount /vz/root/31/sbin

[root@dhcp0-174 ~]# chmod +x /etc/vz/conf/31.umount

After that VE 31 should use the same /sbin, that uses VE30. Let's check, does it work:

[root@dhcp0-174 ~]# vzctl start 30
Starting VPS ...
VPS is mounted

```
Setting CPU units: 1000
VPS start in progress...
[root@dhcp0-174 ~]# vzctl start 31
Starting VPS ...
vzquota : (warning) Quota is running for id 31 already
VPS is mounted
Setting CPU units: 1000
VPS start in progress...
[root@dhcp0-174 ~]# vzctl enter 30
entered into VPS 30

-bash-3.00# ls /sbin/
MAKEDEV        clock        ether-wake   halt        insmod.static   kmodule      mkfs.ext2   netreport
         poweroff     route        sulogin
addpart        consoletype  fdisk        hwclock     install-info    ldconfig     mkfs.ext3   nologin
  ppp-watch    rtmon        swapoff
agetty         ctrlaltdel   findfs       ifcfg       ip              logsave      mkswap      pam_console_apply
 pwdb_chkpwd  runlevel     swapon
arp            debugfs      fsck         ifconfig    ipmaddr         losetup      modprobe    pam_tally
quotacheck   runuser     sysctl
arping         delpart      fsck.cramfs  ifdown      iptables        lsmod        mount.cifs
pam_timestamp_check  quotaoff     service      syslogd
badblocks      dumpe2fs     fsck.ext2    ifenslave   iptables-restore  mii-diag     mount.smb    partx
          quotaon      setsysfont   tc
blkid          e2fsck       fsck.ext3    ifup        iptables-save   mii-tool     mount.smbfs  pidof
rdisc        sfdisk       telinit
blockdev       e2image      fuser        init        iptunnel        mke2fs       nameif       pivot_root
reboot       shutdown     tune2fs
change_console  e2label      genhostid    initlog     killall5        mkfs         nash         plipconfig
 rescuept     slattach     unix_chkpwd
chkconfig      elvtune      getkey       insmod      klogd           mkfs.cramfs  netplugd     portmap
      resize2fs    sln

-bash-3.00# echo "qwe" > /sbin/check

-bash-3.00# exit
logout
exited from VPS 30

[root@dhcp0-174 ~]# vzctl enter 31
entered into VPS 31

-bash-3.00# ls /sbin/
MAKEDEV        chkconfig    elvtune      getkey      insmod          klogd        mkfs.cramfs  netplugd
       portmap      resize2fs    sln
addpart        clock        ether-wake   halt        insmod.static   kmodule      mkfs.ext2   netreport
  poweroff     route        sulogin
agetty         consoletype  fdisk        hwclock     install-info    ldconfig     mkfs.ext3   nologin
```

```
ppp-watch    rtmon       swapoff
arp          ctrlaltdel  findfs      ifcfg     ip            logsave   mkswap      pam_console_apply
pwdb_chkpwd  runlevel    swapon
arping       debugfs     fsck        ifconfig  ipmaddr       losetup   modprobe    pam_tally
quotacheck   runuser     sysctl
badblocks    delpart     fsck.cramfs ifdown    iptables      lsmod     mount.cifs
pam_timestamp_check  quotaoff  service  syslogd
blkid        dumpe2fs    fsck.ext2   ifenslave iptables-restore  mii-diag  mount.smb   partx
   quotaon   setsysfont  tc
blockdev     e2fsck      fsck.ext3   ifup      iptables-save     mii-tool  mount.smbfs pidof
rdisc        sfdisk      telinit
change_console  e2image  fuser       init      iptunnel      mke2fs    nameif      pivot_root
  reboot     shutdown    tune2fs
check        e2label     genhostid   initlog   killall5      mkfs      nash        plipconfig
rescuept     slattach    unix_chkpwd

-bash-3.00# cat /sbin/check
qwe

-bash-3.00# exit
logout
exited from VPS 31

[root@dhcp0-174 ~]# vzctl stop 30
Stopping VPS ...
VPS was stopped
vzquota : (error) Quota off syscall for id 30: Device or resource busy
vzquota off failed [3]

[root@dhcp0-174 ~]# vzctl stop 31
Stopping VPS ...
VPS was stopped
VPS is unmounted
```

So it works! =)
The only problem is OpenVZ disk quota. This feature obviously will not work properly with such configuration.
You should turn it off.

BTW, Virtuozzo uses vzfs instead simfs (this one is used in OpenVZ), and vzfs accomplish file sharing very effectively.

Subject: Re: Shared vps files
Posted by n00b_admin on Wed, 13 Sep 2006 09:01:08 GMT
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Thanks for the tip !
I was looking for something like this !

Subject: Re: Shared vps files
Posted by szocske on Thu, 14 Sep 2006 20:48:14 GMT
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Hi there!

Would hardlinking the directorys from the host work?

Subject: Re: Shared vps files
Posted by Vasily Tarasov on Mon, 18 Sep 2006 06:12:19 GMT
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Hardlinking of directories is not permited in linux:

[host] $ ln /usr/ /tmp/
ln: `/usr/': hard link not allowed for directory