Creating A Backup Of A VM

(This chapter is for server1 only!)

On server1.example.com, I want to create a backup of my VM with the VEID 102. Take a look at

man vzdump

to learn how to use vzdump.

To back up all VMs on your server, you'd use something like

vzdump --compress --dumpdir /home/backup --stop --all

--compress means: compress the dump file (results in a .tgz).

--dumpdir specifies the directory in which you want to store the dump. If you don't specify a dumpdir, it defaults to   /vz/dump or /var/lib/vz/dump (depends on your distribution).

--stop stops the VM, creates the backup, and starts it again afterwards. Your VM can be down a few minutes if you use   --stop. A faster solution would be to use...

--suspend: it suspends the VM; the VM is then copied via rsync to a temporary directory. The VM gets resumed right afterwards so that it's down only a few seconds, and then the dump is created using the copy in the temporary directory. I recommend to use this one if you can't afford long downtimes.

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You can as well leave out --stop and --suspend and dump a running VM. In most cases this makes no problem, but it is possible that the dump is inconsistent, so be warned!

--all creates a dump of all available VMs. If you want to dump only a specific VM, replace --all with the
VEID
of the VM.

To create a dump of our VM 102 in /home/backup and stop the VM during the backup, use

vzdump --compress --dumpdir /home/backup --stop 102

To create a dump in the default directory (/vz/dump or /var/lib/vz/dump), use

vzdump --compress --stop 102

The output could look as follows:

```
server1:/vz/dump# vzdump --compress --stop 102
 INFO: starting backup for VPS 102 (/var/lib/vz/private/102)
 INFO: starting first sync /var/lib/vz/private/102 to /var/lib/vz/dump/tmp9009
 INFO: stopping vps
 Stopping container ...
 Container was stopped
 Container is unmounted
 INFO: final sync /var/lib/vz/private/102 to /var/lib/vz/dump/tmp9009
 INFO: restarting vps
 Starting container ...
 Container is mounted
 Adding IP address(es): 192.168.0.102
```

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```
 Setting CPU units: 1000
 Configure meminfo: 65536
 Set hostname: test.example.com
 File resolv.conf was modified
 Container start in progress...
 INFO: vps is online again after 15 seconds
 INFO: Creating archive '/var/lib/vz/dump/vzdump-102.tgz' (/var/lib/vz/dump/tmp9009/102)
 Total bytes written: 340428800 (325MiB, 11MiB/s)
 INFO: backup for VPS 102 finished successful (1.37 minutes)
 server1:/vz/dump#
```

To not stop, but suspend the VM, use

vzdump --compress --suspend 102

This is a sample output:

```
server1:~# vzdump --compress --suspend 102
 INFO: starting backup for VPS 102 (/var/lib/vz/private/102)
 INFO: starting first sync /var/lib/vz/private/102 to /var/lib/vz/dump/tmp10842
 INFO: suspend vps
 Setting up checkpoint...
 suspend...
 get context...
 Checkpointing completed succesfully
 INFO: final sync /var/lib/vz/private/102 to /var/lib/vz/dump/tmp10842
 INFO: resume vps
 Resuming...
 INFO: vps is online again after 4 seconds
 INFO: Creating archive '/var/lib/vz/dump/vzdump-102.tgz'
(/var/lib/vz/dump/tmp10842/102)
 Total bytes written: 340428800 (325MiB, 24MiB/s)
 INFO: backup for VPS 102 finished successful  (1.57 minutes)
 server1:~#
```
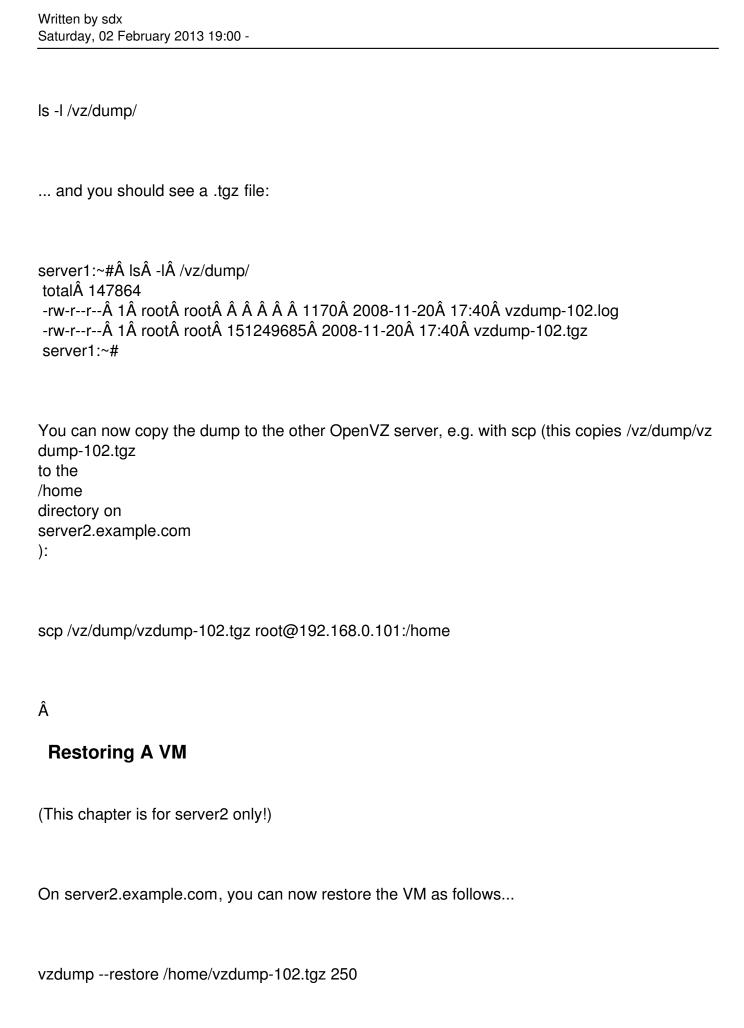
After the backup, take a look at the dump directory...

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ls -l /vz/dump/

... and you should see a .tgz file:

server1:~#Â lsÂ -lÂ /vz/dump/
 totalÂ 147864
 -rw-r--r--Â 1Â rootÂ rootÂ Â Â Â Â 1170Â 2008-11-20Â 17:40Â vzdump-102.log
 -rw-r--r--Â 1Â rootÂ rootÂ 151249685Â 2008-11-20Â 17:40Â vzdump-102.tgz
 server1:~#

You can now copy the dump to the other OpenVZ server, e.g. with scp (this copies /vz/dump/vz
dump-102.tgz
to the
/home
directory on
server2.example.com
):

scp /vz/dump/vzdump-102.tgz root@192.168.0.101:/home

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Restoring A VM

(This chapter is for server2 only!)

On server2.example.com, you can now restore the VM as follows...

vzdump --restore /home/vzdump-102.tgz 250

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... where 250 is the new VEID of the restored VM - you can use any VEID that is unused on ser
ver2.example.com
- you could even use
102
again if it is unused on
server2.example.com
.

If you don't want to modify the settings of the VM (e.g. IP address, hostname), you can start it
now, but please make sure that the original VM is stopped on server1.example.com because
otherwise the IP addresses conflict:

vzctl start 250

If you want to run both VMs (the original one and the clone) at the same time, you must change
the IP address and hostname of the clone
before you start it.

To set a new hostname, run sonething like this:

vzctl set 250 --hostname test2.example.com --save

To set a new IP address, we must first delete the original one...

vzctl set 250 --ipdel 192.168.0.102 --save

... and then set a new one:

vzctl set 250 --ipadd 192.168.0.250 --save

Afterwards we can start the clone:

vzctl start 250

vzctl set 250 --ipadd 192.168.0.250 --save