Difficulté Difficile Restoring a Proxmox from its snapshots (zfs file system)

09.03.2025: pour résoudre le problème de mismatch hostid entre l'OS et rpool essager:

rm /etc/hostid # zgenhostid # zpool set multihost=on rpool # zpool set multihost=off rpool # zpool status rpool



Old stuff not working any more!! See https://forum.proxmox.com/threads/proxmox-virtual-environment-backup-und-recover y-mit-proxmox-backup-server.89207/#post-406609 for another method

Source: https://www.youtube.com/watch?v=6ayd2NHkBXk&t=931s

Configuration:

Proxmox5, running only 2 mirrored SSDs à 240Go (pool zfs RAID1). In this case Proxox runs on dataset rpool/ROOT/pve-1 and the VMs are on datasets rpool/data/VM#######.

Restoring the Proxmox is restoring "pve-1" and restoring the VMs.

Preparing tasks:

- stop the VMs
- if you can, make a snapshot of the entire pool "rpool" to get the current state of the OS and of the VMs and e.g. sending the snapshot to a FreeNAS if the necessary storage capacity is not available with a USB disk. From the Proxmox:

```
# zfs snapshot -r rpool@complete
# zfs send -Rpv rpool@complete | ssh root@FreeNAS.domain.tld zfs recv -
vF pool/backup/Proxmox
```

Restore:

Starting point:

- A fresh installed new Proxmox as zfs RAID1
- The Proxmox installation usb stick.

The Proxmox OS and the VMs can be restored independently from each other.

As the restoring is made from a usb device containing the snapshots, I think that the easier way is to restore only the OS in a first time and the VMs in a second time after the system is running again. In this case a simple usb stick is sufficient.

Step 1:

Getting the snapshot of rpool/ROOT/pve-1 on the usb stick:

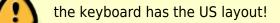
- plug the stick into the FreeNAS, create a "restore" pool and send the snapshot on it:
- root@FreeNAS \$ zfs send -pv pool/backup/Proxmox/rpool/ROOT/pve-1@complete | zfs recv restore/pve-1

Step 2

- Plug the restore USB stick
- Then start a normal installation of Proxmox with the installation stick.
- When the screen about the condition of use is displayed, press Ctrl-Alt-F1 to swith into the shell an press Ctrl-C to stop the installer.

From this state, there is enough OS in live modus to manage zfs. This trick is magic, isn't it???





zpool import

shows the pool recreated during the new install and the pool for restore from the USB stick.

- zpool import -f rpool
 - \$ zfs list

Step 3:

• The next step will be get dataset "rpool/ROOT/pve-1" and mountpoint "/" available for the data to be restored:

```
$ zfs rename rpool/ROOT/pve-1 rpool/ROOT/pve-2
$ zfs get mountpoint rpool/ROOT/pve-2
NAME
                  PROPERTY
                              VALUE
                                         SOURCE
rpool/ROOT/pve-2 mountpoint /
                                                    ### this confirms
                                         local
that rpool/ROOT/pve-2 is mounted on "/"
$ zfs set mountpoint=/rpool/ROOT/pve-2 rpool/ROOT/pve-2 ### or the
mountpoint you want
$ zfs get mountpoint rpool/ROOT/pve-2
                  PROPERTY
NAME
                              VALUE
                                                 SOURCE
rpool/ROOT/pve-2 mountpoint /rpool/ROOT/pve-2 local
                                                                ### =>
0K
```

• import the pool "restore".

\$ zpool import restore

• Have a look to the datasets and cehck that the snapshot for restoration is present:

```
$ zfs list
$ zfs list -t snap
```

 Now we copy the data from the "restore" pool into a new created rpool/ROOT/pve-1 and set its mountpoint on "/"

```
$ zfs send -pv restore/rpool/ROOT/pve-1@complete | zfs recv -dvF
rpool/ROOT
```

The transfer of data should be visible.

• When this is over:

```
$ zfs set mountpoint=/ rpool/ROOT/pve-1  ##### It is possible that
"/" is already mounted because Proxmox have already done the mounting
automatically.
$ zfs get mountpoint rpool/ROOT/pve-1 ## will confirm
```

• Remove the restore stick:

\$ zpool export restore

• Have a look and reboot:

\$ zfs list

\$ exit

Step 4:

I had some minor issues at the reboot:

- device (= the "old" dataset for pve-1) no found but the boot process didn't stop here. In case of problems, use the function "boot rescue" of the USB-stick for installation
- zfs: the first boot stops because the import of dataset "pve-1" must be forced by hand ("-f") the fist time because of having been mounted on another system (= the previous used temporary OS for restoring).
- nfs: nfs was not working and there were some error messages during the boot. Another reboot



After the OS runs:

update-grub2

and reboot to solve the error messages at boot up.

Restoring the VMs

Restore the disks of the VMs: From the FreeNAS:

zfs send -pv pool/backup/Proxmox/rpool/data/vm-100-disk-0@complete | ssh root@proxmox.domain.tld zfs recv rpool/data/vm-100-disk-0

and so on...

From: https://wiki.guedel.eu/ - Wiki-GuedeL

Permanent link: https://wiki.guedel.eu/doku.php?id=welcome:proxmox:restoring_the_hypervisor



Last update: 2025/03/09 20:22