

Proxmox: clone ZFS bootroot to mirror

Взято здесь:

<https://github.com/kneutron/ansitest/blob/master/proxmox/proxmox-clone-zfs-bootroot-to-mirror.sh>

И там еще много полезного: <https://github.com/kneutron/ansitest/tree/master/proxmox>

```
#!/bin/bash

# Add 2nd or 3rd mirror drive to proxmox zfs boot/root and fix boot
# This is for when you want to make a full backup of your proxmox zfs
# boot/root
# so you can test boot it on other hardware or use it as a DR drive
# 2024.May kneutron

# NOTE I TAKE NO RESPONSIBILITY FOR DATA LOSS, EDIT THIS SCRIPT BEFORE
# RUNNING
# AND MAKE SURE YOU DESIGNATE THE RIGHT DISKS!

# NOTE it is HIGHLY RECOMMENDED to try this in a vm first!!!!

# REF:
https://hosting-tutorials.co.uk/tutorials/linux/replacing-a-zfs-rpool-disk-w
ith-proxmox-7-x
# REF:
https://www.reddit.com/r/Proxmox/comments/1cr6wn7/tutorial_howto_migrate_a_p
ve_zfs_bootroot_mirror/

# Depends:
# sgdisk wipefs

set -u # abort on undefined var
set -e # abort on error

[ $(which sgdisk |wc -l) -eq 0 ] && apt-get install -y gdisk
[ $(which wipefs |wc -l) -eq 0 ] && apt-get install -y util-linux
[ $(which parted |wc -l) -eq 0 ] && apt-get install -y parted # included in
case partition end needs to be manually moved + makes new gptlabel
# REF: https://sirlagz.net/2023/07/03/updated-live-resize-lvm-on-linux/

# failexit.mrg
function failexit () {
    echo '! Something failed! Code: "$1 $2" # code # (and optional
description)
    exit $1
}

# TODO EDITME and make sure to put the correct shortnames in!
```

```
oldisk1=vda
#oldisk2=vdb

newdisk1=vdc
#newdisk2=vdd

echo "WARNING: About to destructively apply a new GPT label to disk
$newdisk1 - ^C to backout or Enter to proceed"
read

#zpool set autoexpand=on rpool

for disk in $newdisk1; do
    echo $disk

    # need to do this if run >1
    parted -s /dev/$disk mklabel gpt
    sgdisk -g \
    -n 1:0:+1M \
    -n 2:0:+1G \
    -n 3:0:0 \
    -t 1:8300 \
    -t 2:EF00 \
    -t 3:BF01 \
    -p /dev/$disk

    gdisk -l /dev/$disk
done

echo "$(date) - Prep new mirror disk, blank any filesystem / zfs data"
set +e # OK if we fail here, not fatal
zpool labelclear /dev/${newdisk1}3
#zpool labelclear /dev/${newdisk2}3
wipefs -a /dev/${newdisk1}3
#wipefs -a /dev/${newdisk2}3
set -e

zpool status rpool -v |awk 'NF>1'
#sizeb4=$(zpool list rpool)
echo "About to attach new mirror disk $newdisk1 to zfs boot disk(s) - ^C to
backout / Enter = proceed"
read

function waitresilver () {
    # wait for resilver
    # do forever
    while ;; do
        clear
        echo "Pool: rpool - NOW: $(date) -- Watchresilver started: $sdate"
```

```
zpool status rpool |grep -A 2 'in progress' || break 2
zpool iostat -v rpool #2 3 &

sleep 5
date
done
ndate=$(date)
}

sdate=$(date)
set -x
#zpool add -f rpool mirror /dev/${newdisk1}3 /dev/${newdisk2}3
#zpool detach rpool /dev/${olddisk1}3
#time zpool remove rpool /dev/${olddisk2}3
time zpool attach rpool ${olddisk1}3 ${newdisk1}3 \
    || failexit 100 "Zpool replace $olddisk1 $newdisk1 failed"
set +x

waitresilver;

#set -x
#time zpool replace rpool ${olddisk2}3 ${newdisk2}3 \
# || failexit 100 "Zpool replace $olddisk2 $newdisk2 failed"
#set +x
#waitresilver;

zpool status -v rpool |awk 'NF>0' # skip blank lines
echo "o Resilver watch rpool start: $sdate // Completed: $ndate"

proxmox-boot-tool status # Note if grub is being used or not here
addgrub=""
[ $(proxmox-boot-tool status |grep -c grub) -gt 0 ] && addgrub="grub"

echo "$(date) - Fixing boot on new mirror drive"
set -x
proxmox-boot-tool format /dev/${newdisk1}2 --force # <new disk's ESP partn>
#proxmox-boot-tool format /dev/${newdisk2}2 --force # <new disk's ESP partn>
time sync; sleep 2

proxmox-boot-tool init /dev/${newdisk1}2 $addgrub # <new disk's ESP partn>
#proxmox-boot-tool init /dev/${newdisk2}2 $addgrub # <new disk's ESP partn>

set +e # grub error is ok here
proxmox-boot-tool refresh
set +x

zpool status rpool -v

echo '====='
echo "You should be able to boot with any disk now! After shutdown + remove
extra mirror disk, run:"
```

```
echo " proxmox-boot-tool clean"
echo "and:"
echo " zpool detach rpool ${newdisk1}3"
echo "or whatever the missing device GUID is in zpool status -v"
echo "Then:"
echo " zpool clear rpool"
echo "If you are running this in VM, assign 3rd mirror disk to another VM
before powering this instance back on"
echo " you will need to give the other instance a new IP address, or just do
not run the same boot image simultaneously"

#echo "Size before:"
#echo "$sizeb4"
#echo "Size after:"
#zpool list rpool

exit;
```

Таблицы разделов:

Device	Start	End	Sectors	Size	Type
/dev/nvme0n1p1	34	2047	2014	1007K	BIOS boot
/dev/nvme0n1p2	2048	2099199	2097152	1G	EFI System
/dev/nvme0n1p3	2099200	167772160	165672961	119G	ZFS

Полезные ссылки:

- <https://forum.proxmox.com/threads/replace-512gb-ssds-with-500gb-ssds.143077/>
- https://pve.proxmox.com/wiki/ZFS_on_Linux#sysadmin_zfs_change_failed_dev
- https://pve.proxmox.com/wiki/Host_Bootloader#sysboot_proxmox_boot_tool
- <https://forum.proxmox.com/threads/fixing-uefi-boot.87719/>

From:
<https://wiki.rtzra.ru/> - RTzRa's hive

Permanent link:
<https://wiki.rtzra.ru/software/proxmox/proxmox-clone-zfs-bootroor-to-mirror>

Last update: **2025/12/29 13:10**

