Proxmox Backup Server PBS enlarge root disk

How to enlarge an EXT4 or LVM disk on an PBS Proxmox VM

Quick TL;DR Guide

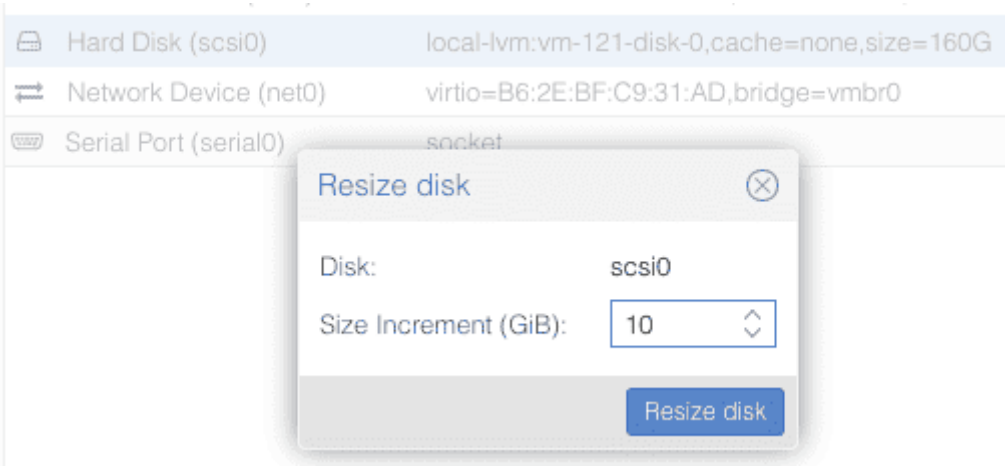
1. First resize the disk in Proxmox
2. Then in the PBS VM terminal:
   parted /dev/sdX (probably a) example

   ```
   parted /dev/sda
   ```

   print / yes to fix / resizepart Y (probably 1)
   quit
3. resize2fs /dev/sdXY
4. df -h

Longer Guide with Explanation

First resize the disk in Proxmox:



At this point you need to START the PBS VM and enter the shell as root follow the below instractions.

```
fdisk -l
```

should show which disks are there.

Disk /dev/sda: 50 GiB, 53687091200 bytes, 104857600 sectors
Disk model: QEMU HARDDISK
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes
Disklabel type: gpt
Disk identifier: XXXXXXXX-XXXX-XXXX-XXXX-XXXXXXXXXXXX

Device   Start   End   Sectors Size Type
/dev/sda1   34   2047   2014 1007K BIOS boot
/dev/sda2   2048 1050623   1048576 512M EFI System
/dev/sda3 1050624 104855551 103804928 31.5G Linux LVM

Disk /dev/mapper/pbs-swap: 3.82 GiB, 4106223616 bytes, 8019968 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

Disk /dev/mapper/pbs-root: 27.67 GiB, 49039802368 bytes, 95780864 sectors
Units: sectors of 1 * 512 = 512 bytes
Sector size (logical/physical): 512 bytes / 512 bytes
I/O size (minimum/optimal): 512 bytes / 512 bytes

If you get this message which seems like an error, the resize in Proxmox worked:

```
GPT PMBR size mismatch (167772159 != 314572799) will be corrected by write.
The backup GPT table is not on the end of the device. This problem will be corrected by write.
```

The example above is resizing from 30 GB to 50 GB.

Now we still have to resize the file system from inside the PBS VM cli terminal :

```
lsblk
```

You should see something like the below.

NAME   MAJ:MIN RM SIZE RO TYPE MOUNTPOINTS
sda   8:0   0   50G 0 disk
├─sda1   8:1   0 1007K 0 part
├─sda2   8:2   0 512M 0 part
└─sda3   8:3   0 31.5G 0 part
  ├─pbs-swap 252:0   0 3.8G 0 lvm [SWAP]
  └─pbs-root 252:1   0 27.7G 0 lvm /

The run the below command to resize the sda3

```
lvextend -l +100%FREE /dev/mapper/pbs-root
resize2fs /dev/mapper/pbs-root
```

Check that root disk resize all free space

```
df -h
```

Output should be something like this.

Filesystem	Size	Used	Avail	Use%	Mounted on
udev	3.9G	0	3.9G	0%	/dev
tmpfs	795M	720K	794M	1%	/run
/dev/mapper/pbs-root	45G	26G	18G	59%	/
tmpfs	3.9G	0	3.9G	0%	/dev/shm
tmpfs	5.0M	0	5.0M	0%	/run/lock
tmpfs	795M	0	795M	0%	/run/user/0

Now your PBS root disk is resize and have free space.

If you find this helpful or not please leave a comment.

Ins0mniA

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