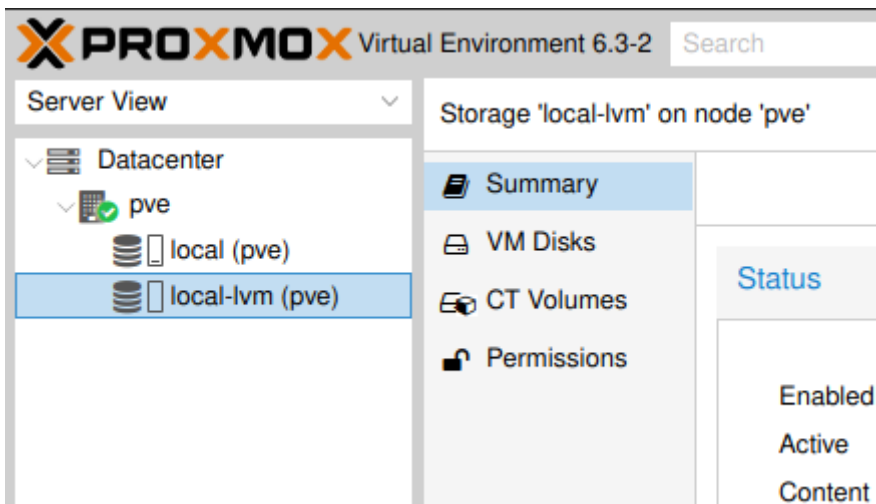


# Resizing (or removing) Local-LVM



When installing Proxmox to an ext4 volume, the installer assigns the majority of your boot disk to "Local-LVM". This may not be desirable if you plan on using a secondary disk for VM storage, and would like to store more ISO images and backups in the root volume (known in Proxmox as "Local").

First, run `lvdisplay` (Logical Volume display) as root to check the current layout:

```
root@pve:~# lvdisplay
--- Logical volume ---
LV Path                /dev/pve/swap
LV Name                 swap
VG Name                pve
LV UUID                DkDV6A-7iqo-70k0-i9Gx-d9qo-XaCu-VUCAYb
LV Write Access        read/write
LV Creation host, time proxmox, 2021-03-13 22:40:36 +0000
LV Status               available
# open                 2
LV Size                8.00 GiB
Current LE             2048
Segments               1
Allocation              inherit
Read ahead sectors     auto
- currently set to    256
```

Block device 253:0

--- Logical volume ---

LV Path /dev/pve/root  
LV Name root  
VG Name pve  
LV UUID pqcv3c-Csis-fBqQ-ARkb-3xzo-7xau-DaRzxT  
LV Write Access read/write  
LV Creation host, time proxmox, 2021-03-13 22:40:37 +0000  
LV Status available  
# open 1  
LV Size 58.00 GiB  
Current LE 14848  
Segments 1  
Allocation inherit  
Read ahead sectors auto  
- currently set to 256  
Block device 253:1

--- Logical volume ---

LV Name data  
VG Name pve  
LV UUID tyoWtm-fyEr-PqRg-5Sn2-dcTq-tE69-qKHprl  
LV Write Access read/write  
LV Creation host, time proxmox, 2021-03-13 22:40:37 +0000  
LV Pool metadata data\_tmeta  
LV Pool data data\_tdata  
LV Status available  
# open 0  
LV Size <147.38 GiB  
Allocated pool data 0.00%  
Allocated metadata 1.08%  
Current LE 37728  
Segments 1  
Allocation inherit  
Read ahead sectors auto  
- currently set to 256  
Block device 253:4

Based on the above output, we see that pve-data (local-lvm in the Proxmox GUI) is almost 3 times the size of the root volume. To resize this, you will first need to remove it. This will delete all contents of local-lvm, so please back up any virtual machines and remove them first so you don't lose anything!

```
root@pve:~# lvremove /dev/pve/data -y
Logical volume "data" successfully removed
```

**Optional** - If you still require a local-lvm partition (but want to give it less space) you can recreate it with the following command (in this example, 40G is specified to give it 40 Gibibytes).

```
root@pve:~# lvcreate -L 40G -n data pve -T
Thin pool volume with chunk size 64.00 KiB can address at most 15.81 TiB of data.
Logical volume "data" created.
```

The logical volume for root can then be resized to give it all available free space:

```
root@pve:~# lvresize -l +100%FREE /dev/pve/root
Size of logical volume pve/root changed from 58.00 GiB (14848 extents) to 224.38 GiB (57442 extents).
Logical volume pve/root successfully resized.
```

Once the logical volume has been resized, the ext4 partition must also be resized using **resize2fs**:

```
root@pve:~# resize2fs /dev/mapper/pve-root
resize2fs 1.44.5 (15-Dec-2018)
Filesystem at /dev/mapper/pve-root is mounted on /; on-line resizing required
old_desc_blocks = 8, new_desc_blocks = 29
The filesystem on /dev/mapper/pve-root is now 58820608 (4k) blocks long.
```

Once resized, run **lvdisplay** again to verify the changes have taken effect.

```
root@pve:~# lvdisplay
--- Logical volume ---
LV Path                /dev/pve/swap
LV Name                 swap
VG Name                 pve
LV UUID                 DkDV6A-7iqo-70k0-i9Gx-d9qo-XaCu-VUCAYb
LV Write Access         read/write
LV Creation host, time proxmox, 2021-03-13 22:40:36 +0000
LV Status                available
# open                  2
```

```
LV Size                8.00 GiB
Current LE             2048
Segments              1
Allocation             inherit
Read ahead sectors    auto
- currently set to    256
Block device          253:0

--- Logical volume ---
LV Path                /dev/pve/root
LV Name                root
VG Name                pve
LV UUID                pqcv3c-Csis-fBqQ-ARkb-3xzo-7xau-DaRzxT
LV Write Access        read/write
LV Creation host, time proxmox, 2021-03-13 22:40:37 +0000
LV Status              available
# open                 1
LV Size                224.38 GiB
Current LE             57442
Segments              1
Allocation             inherit
Read ahead sectors    auto
- currently set to    256
Block device          253:1
```

Then, log into the Proxmox GUI and go to **Datacenter > Storage** and remove the **local-lvm** entry:

Datacenter

Q Search

Summary

Cluster

Ceph

Add ▾

Remove

Edit

ID	Type ↑	Content
local	Directory	VZDump backup file, ISO image, Container template
local-lvm	LVM-Thin	Disk image, Container