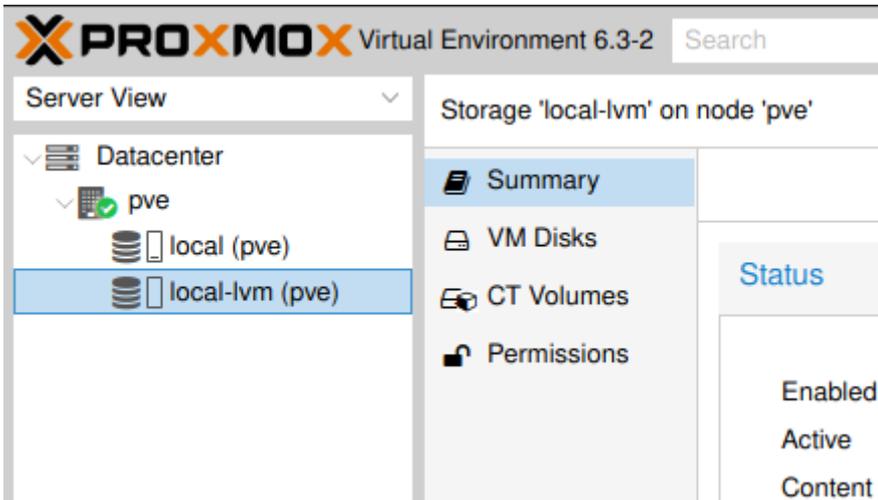


Resizing (or removing) Local-LVM



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` (**L**ogical **V**olume 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-70kO-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-70kO-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	Add ▾	Remove	Edit
Summary	ID	Type ↑	Content
Cluster	local	Directory	VZDump backup file, ISO image, Container template
Ceph	local-lvm	LVM-Thin	Disk image, Container

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