

Proxmox

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tun enabled for lxc

/etc/pve/lxc/###.conf

```
lxc.cgroup2.devices.allow: c 10:200 rwm
```

```
lxc.hook.autodev: sh -c "modprobe tun; cd ${LXC_ROOTFS_MOUNT}/dev; mkdir net; mknod net/tun c 10 200; chmod 0666 net/tun"
```

Hostname Naming Format

[hosting provider acronym][u-unix,m-windows + d-windows desktop][# iteration].madsprite.com

ie. cacm2.madsprite.com

Resource Pages

Windows Best Practices VM

https://pve.proxmox.com/wiki/Windows_VirtIO_Drivers

Shrink Qcow2 filesystems

https://pve.proxmox.com/wiki/Shrink_Qcow2_Disk_Files

ZFS container mount

```
pct shutdown 100
pct status 100
pct set 100 -mp0 /storage/share/downloads,mp=/home/user/torrents/downloads
;Use ro=1 Or for a read-only mount point.
pct set 100 -mp1 /storage/share/junk,mp=/home/user/junk,ro=1
;Mount the iso one randomly.
pct set 100 -mp2 /storage/share/iso,mp=/home/usr/iso,ro=1
```

<https://forum.level1techs.com/t/how-to-create-a-nas-using-zfs-and-proxmox-with-pictures/117375>

MergerFS and Snapraid

<https://www.linuxserver.io/blog/2017-06-24-the-perfect-media-server-2017>

mergerfs in /etc/fstab

```
/snapdisk*/snapMedia fuse.mergerfs direct_io,x-systemd.device-  
timeout=20,defaults,allow_other,minfreespace=50G,fsname=mergerfs,category.create=mfs 0 0
```

/etc/snapraid.conf

```
# Example configuration for snapraid  
  
# Defines the file to use as parity storage  
# It must NOT be in a data disk  
# Format: "parity FILE_PATH"  
parity /snapparidity14/snapraid.parity  
  
# Defines the files to use as content list  
# You can use multiple specification to store more copies  
# You must have least one copy for each parity file plus one. Some more don't hurt  
# They can be in the disks used for data, parity or boot,  
# but each file must be in a different disk  
# Format: "content FILE_PATH"  
content /var/snapraid.content  
content /snapdisk15/.snapraid.content  
content /snapdisk12/.snapraid.content  
  
# Defines the data disks to use  
# The order is relevant for parity, do not change it  
# Format: "disk DISK_NAME DISK_MOUNT_POINT"  
disk ata-WDC_WD161KRYZ-01AGBB0_2BJNHUGN /snapdisk15  
disk ata-WDC_WD140EDGZ-11B1PA0_Y6GW3NUC /snapdisk12  
disk ata-WDC_WD120EDBZ-11B1HA0_5QHY9WUB /snapdisk13  
#disk ata-WDC_WD120EDAZ-11F3RA0_5PHWPLGF /snapdisk11  
  
# Excludes hidden files and directories (uncomment to enable).
```

```
#nohidden

# Defines files and directories to exclude
# Remember that all the paths are relative at the mount points
# Format: "exclude FILE"
# Format: "exclude DIR/"
# Format: "exclude /PATH/FILE"
# Format: "exclude /PATH/DIR/"
exclude *.unrecoverable
exclude /tmp/
exclude /lost+found/
exclude downloads/
exclude appdata/
exclude snapshots/
exclude *.!sync
exclude .AppleDouble
exclude ._AppleDouble
exclude .DS_Store
exclude ._DS_Store
exclude .Thumbs.db
exclude .fseventsd
exclude .Spotlight-V100
exclude .TemporaryItems
exclude .Trashes
exclude .AppleDB
```

<https://stackoverflow.com/questions/24966676/transport-endpoint-is-not-connected>

```
fusermount -uz /snapMedia
mount /snapMedia
```

System migration

virt-sysprep

fstab settings

```
# <file system> <mount point> <type> <options> <dump> <pass>
/dev/pve/root / ext4 errors=remount-ro 0 1
UUID=D5D7-302D /boot/efi vfat defaults 0 1
/dev/pve/swap none swap sw 0 0
proc /proc proc defaults 0 0

/dev/disk/by-id/ata-ST33000651NS_XXXXXXX /disk2 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0
/dev/disk/by-id/ata-Hitachi_HUS724030ALE641_XXXXXXX /disk3 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0
/dev/disk/by-id/ata-ADATA_SU800_2J18XXXXXXXX /disk4 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0
/dev/disk/by-id/ata-TEAML5Lite3D480G_AC20180730XXXXXXXX /disk5 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0
#UUID=998d9a5f-8a92-4f0e-9351-692bc0273a78 /disk6 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0 # moved to BlueBox
/dev/disk/by-id/ata-Hitachi_HUS724030ALE641_XXXXXXX /disk7 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0
#UUID=b4b0045f-5e99-4179-b120-77d5f3e5ab0d /disk8 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0
/dev/disk/by-id/ata-Samsung_SSD_860_EVO_500GB_S598NEXXXXXXXXX /disk9 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0
#UUID=c08875cb-7f36-4b59-b309-3d69c1c8046b /disk10 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0
#ata-WDC_WD120EDAZ-11F3RA0_XXXXXXX /disk11 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0
#ata-WDC_WD140EDGZ-11B1PA0_XXXXXXX /disk12 xfs defaults,nofail,x-systemd.device-
timeout=20 0 0 # retired to mergerfs
/dev/disk/by-id/ata-WDC_WD120EDAZ-11F3RA0_XXXXXXX /snapdisk11 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0
/dev/disk/by-id/ata-WDC_WD140EDGZ-11B1PA0_XXXXXXX /snapdisk12 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0 #sdk cable-A WD140EDGZ-11
/dev/disk/by-id/ata-WDC_WD120EDBZ-11B1HA0_XXXXXXX /snapdisk13 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0
/dev/disk/by-id/ata-WDC_WD161KRYZ-01AGBB0_XXXXXXX /snapparity14 xfs defaults,nofail,x-
```

```
systemd.device-timeout=20 0 0 # parity
/dev/disk/by-id/ata-WDC_WD161KRYZ-01AGBB0_XXXXXXX /snapdisk15 xfs defaults,nofail,x-
systemd.device-timeout=20 0 0

/snapdisk* /snapMedia fuse.mergerfs direct_io,x-systemd.device-
timeout=20,defaults,allow_other,minfreespace=50G,fsname=mergerfs,category.create=mfs 0 0

/dev/zram0 none swap defaults,pri=10 0 0

# zfsStorage ata-TEAM_T253TD480G_AC20191128A0100129 ata-TEAM_T253TD480G_AC20191128A0101307
ata-WDC_WDS250G2B0A-00SM50_174420422522
```

<https://askubuntu.com/questions/1210867/remount-cifs-on-network-reconnect>

Auth Apps

<https://github.com/nitnelave/lldap>

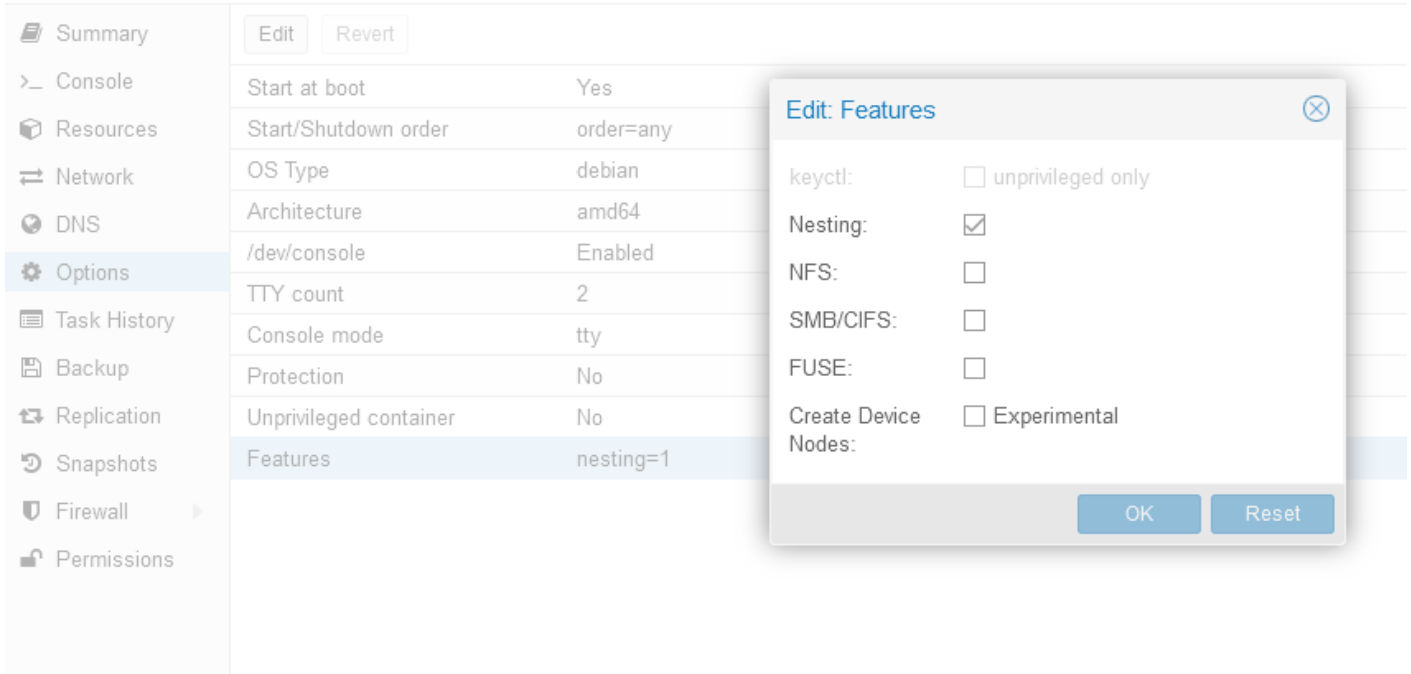
<https://www.pomerium.com/>

Pihole LXC

Required:


```
lxc config set {container-name} security.nesting true.
```

Container 103 (pihole) on node 'pve' No Tags 



The screenshot shows the Proxmox VE interface for a container named 'pihole'. The left sidebar contains navigation options: Summary, Console, Resources, Network, DNS, Options (selected), Task History, Backup, Replication, Snapshots, Firewall, and Permissions. The main area displays the container's configuration table, with the 'Features' row highlighted. An 'Edit: Features' dialog box is open, showing various options with checkboxes.

Property	Value
Start at boot	Yes
Start/Shutdown order	order=any
OS Type	debian
Architecture	amd64
/dev/console	Enabled
TTY count	2
Console mode	tty
Protection	No
Unprivileged container	No
Features	nesting=1

Edit: Features 

keyctl: unprivileged only

Nesting:

NFS:

SMB/CIFS:

FUSE:

Create Device Nodes: Experimental

OK **Reset**

Restart hosts if down

crontab -e

```
*/5 * * * * pct start 100 >/dev/null #container restart  
*/5 * * * * qm start 100 > /dev/null #KVM restart
```

iGPU Passthrough

<https://www.derekseaman.com/2023/11/proxmox-ve-8-1-windows-11-vgpu-vt-d-passthrough-with-intel-alder-lake.html>