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```
hdparm -W
zfs set atime=off local-ssd-zfs
zfs set compression=lz4 local-ssd-zfs

zpool iostat (affiche les stats cumulées...)
zpool iostat 2 (pour rafraichir toutes les 2 secondes)

#ajouter un disque log et cache
zpool add -f test-zfs log /dev/sdxx cache /dev/sdxxx
```

Trouvé sur le net

Symptom: Copying anything—even an ISO—caused I/O delay to spike to 40–90%, the VM froze, and the whole node choked. Even with only one VM and plenty of CPU/RAM. I know, I know...

"You're not supposed to use consumer SSDs in production." Totally agree. But sometimes a client chooses the budget they choose and the job is to make it work as safely as possible. Anyway... ✓ The Root Cause ZFS synchronous writes + consumer SSDs = absolute misery. Consumer SATA SSDs have:

```
slow fsync latency
tiny SLC caches
no power-loss protection
awful random write performance once the cache fills
controllers that can stall under ZFS write patterns
```

Even with a 2-disk mirror, copying a file would hit the end of the SLC cache \rightarrow SSD latency would jump \rightarrow ZFS TXG flushes stalled \rightarrow Proxmox I/O delay went crazy. I also spun up another test box at home using Intel DC enterprise SSDs and none of these issues showed up — so the hardware difference was the smoking gun. \checkmark The Fix These ZFS dataset settings instantly stabilized the system: zfs set sync=disabled rpool/data zfs set atime=off rpool/data zfs set recordsize=64K rpool/data What each does (short version):

```
sync=disabled → stops ZFS from forcing every tiny write to hit the SSD immediately.

(Yes, slight risk during an unexpected power loss. We have a UPS and BDR.) atime=off → stops ZFS from doing metadata writes for every read. recordsize=64K → better block size for VM workloads.
```

After these changes:

```
ISO copies completed instantly I/O delay dropped from 90\% \rightarrow 1-5\% Windows VM became responsive No more host freezing
```

Night and day.

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