USB & External Devices Shut Off Peridocally

On any smaller machines which PROXMOX is run on, you may be reliant on external USB devices to operate the server reliably. For instance, you may need to use an external hard drive to have adequate storage for ISOs or non-I/O-critical VMs, or you may need an external USB device for adequate wired networking, due to recent trends in consumer electronics to skip the inclusion of an Ethernet port altogether.

In this case, it's worth knowing that many Linux distributions have different power management defaults and settings, many of which can be found in GRUB. If PROXMOX (or any distro, really) is periodically auto-suspending your USB devices, consider attempting one (or both) of the following as a solution:

If the system uses GRUB to boot up (it will have the traditional blue GRUB menu on startup)

GRUB Bootup Menu
image.png

Open `/etc/default/grub` as a superuser using the text editor of your choice.

Then, anywhere sensible in the file, add the line `GRUB_CMDLINE_LINUX_DEFAULT="quiet usbcore.autosuspend=-1"` , then save and close the document.

Next, run `update-grub`. If you are on PROXMOX, it will likely state that you should also run the command `proxmox-boot-tool refresh`. Run this as well, then reboot the machine with `reboot`. Oddly, I have seen this work effectively on a machine that uses systemd-boot to start up, even though it should be reading from `/etc/kernel/cmdline` instead.

If the system uses systemd-boot to boot up (it will have a small square of text on startup)

systemd-boot Bootup Menu
image.png

Open `/etc/kernel/cmdline` as a superuser using the text editor of your choice.

Add the line `usbcore.autosuspend=-1` to the file. KEEP THIS ADDITION ON THE SAME LINE AS THE REST OF THE TEXT! This file should only be *one line long*, make sure it stays that way! For instance, the full file should (barring some variance due to system configuration) look something like this:

```
root=ZFS=rpool/ROOT/pve-1 boot=zfs usbcore.autosuspend=-1
```

Once you've saved and exited the document, run `proxmox-boot-tool refresh` and `reboot` the machine. After the reboot, you can check if your changes are in effect by running `cat /proc/cmdline` to view the active version of the file.

It may be worthwhile to attempt both solutions, if only one doesn't work after a restart.

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