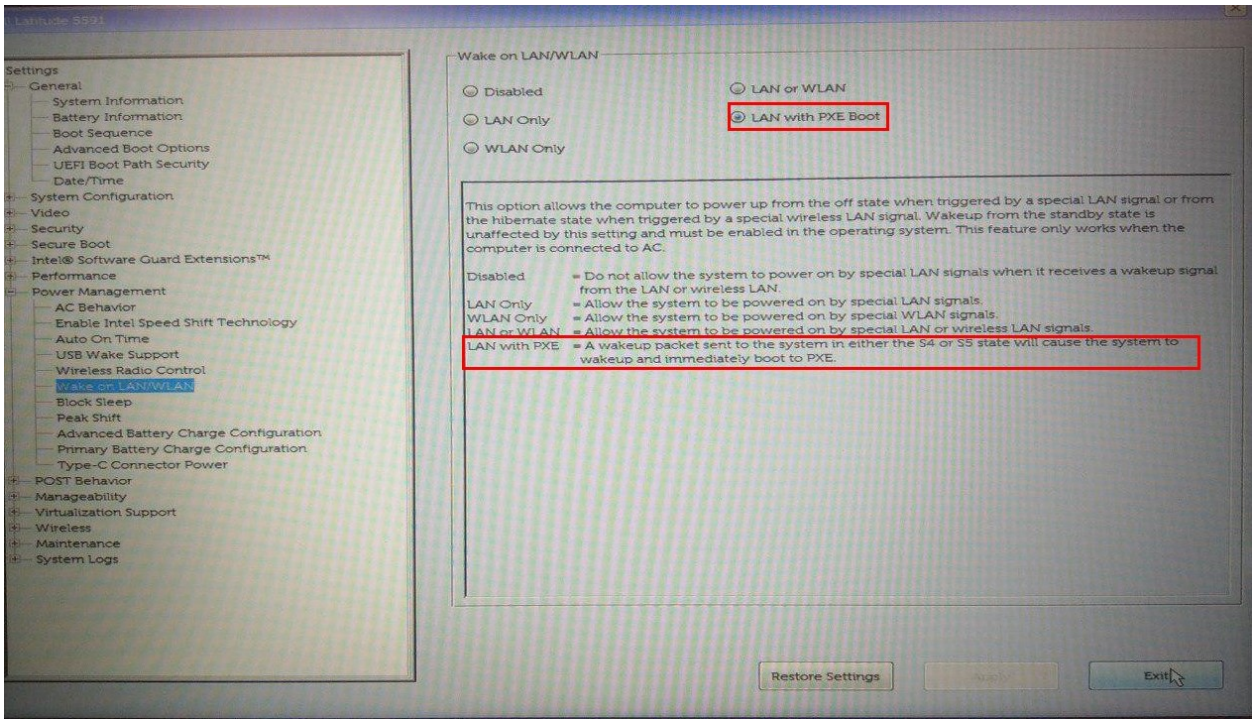
How to enable Wake-on-LAN feature in Ubuntu 18.04 OEM image

Prerequisite:

- Make sure BIOS setting enabled Wake-on-LAN in S4 or S5 state



- AC plug-in
- Ethernet cable plug-in
- Check MAC address and log it

Enable Wake-on-LAN in Ubuntu 18.04 OEM image:

Recovery system and do the test from scratch and wol works well via the procedure below:

1) Enable WOL in TLP

Change following configuration in /etc/default/tlp:

Disable_WOL=**N**

2) Search for the name of the wired connection:

`nmcli c show`

It should be named as Wired *, ex: “Wired connection 1”

```
tiff@tiff-Latitude-5290:~$ nmcli c show
NAME                    UUID                                  TYPE      DEVICE
Canonical-2.4GHz-g      2e7d62b2-d9e2-47a7-92c0-82e4cf8b44bb  wifi      wlp2s0
Wired connection 1      25bbb4ba-0fb4-36de-bd60-15dd4911a325  ethernet  enp0s31f6
```

3) Modify Wake-on-LAN mode to “magic” mode for the wired connection you want to use:

`nmcli c modify "Wired connection 1"  802-3-ethernet.wake-on-lan magic`

4) Reset network device:

`systemctl restart networking`

5) Check whether it is changed to WoL magic packet mode:

5.1) Using nmcli command:

`nmcli c show "Wired connection 1" | grep -i wake`

```
tiff@tiff-Latitude-5290:/etc/default$ nmcli c show "Wired connection 1"  | grep -i wake
802-3-ethernet.wake-on-lan:             magic
802-3-ethernet.wake-on-lan-password:    --
tiff@tiff-Latitude-5290:/etc/default$
```

5.2) Also can use ethtool to double confirm:

Use ip command:

`ip address`

to identify ethernet wired device name. It should be “en*”, ex: enp0s31f6

After confirming the wired device name, use ethtool to check Wake-on-LAN mode:

sudo ethtool [NIC_device]

ex: sudo ethtool enp0s31f6

wake-on field should be “g”

wake-on: g

```
tiff@tiff-Latitude-5290:~$ sudo ethtool enp0s31f6
[sudo] password for tiff:
Settings for enp0s31f6:
        Supported ports: [ TP ]
        Supported link modes:   10baseT/Half 10baseT/Full
                                100baseT/Half 100baseT/Full
                                1000baseT/Full
        Supported pause frame use: No
        Supports auto-negotiation: Yes
        Supported FEC modes: Not reported
        Advertised link modes:  10baseT/Half 10baseT/Full
                                100baseT/Half 100baseT/Full
                                1000baseT/Full
        Advertised pause frame use: No
        Advertised auto-negotiation: Yes
        Advertised FEC modes: Not reported
        Speed: 1000Mb/s
        Duplex: Full
        Port: Twisted Pair
        PHYAD: 1
        Transceiver: internal
        Auto-negotiation: on
        MDI-X: off (auto)
        Supports Wake-on: pumbg
        Wake-on: g
        Current message level: 0x00000007 (7)
                               drv probe link
        Link detected: yes
```

5) Power off the system:

`systemctl poweroff`

6) Use another system to wake up:

`wakeonlan [MAC_address]`