How to Enable Wake-on-LAN (WoL) on Ubuntu 24.04

Wake-on-LAN lets you power on your PC remotely.

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0. Prerequisites in the Informatics Forum

- Your machine must be connected to a physical Ethernet port. (Wi-Fi will **not** work for WoL.)
- You need a static IP address and a hostname.
  - If you don't have these, Computing Support in the Informatics Forum can help set them up.

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1. Enable Wake-on-LAN in BIOS/UEFI

- Enter your PC's BIOS or UEFI settings and look for an option related to Wake-on-LAN or powering on devices via PCI-E.
  - For example, on the ASUS B760-I motherboard, enable **"Power On By PCI-E"**.
- *Note: Not all BIOS/UEFI firmware supports WoL. If in doubt, check your motherboard manual.*

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2. Identify Your Ethernet Interface Name

- On the target machine, open a terminal and run: `bash ip a`
- Determine the name of your wired (Ethernet) interface. It will look like `enp5s0`, `eth0`, etc.
  - *(Replace `enp5s0` in the steps below with your actual interface name if different.)*

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3. Check Your NIC's Wake-on-LAN Support

- Run: `bash sudo ethtool enp5s0`
- Look for these lines: `Supports Wake-on: pumbg Wake-on: d`
    - The presence of `g` in `Supports Wake-on:` confirms your hardware can use Wake-on-LAN.
    - `Wake-on: d` means WoL is currently disabled (the default).

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4. Enable WoL Automatically at Boot

- Create a systemd service file to enable WoL every time the system boots: `bash sudo nano /etc/systemd/system/wol.service`
- Paste the following, replacing `enp5s0` with your interface name if needed: ``` [Unit] Description=Enable Wake On Lan After=network-online.target Wants=network-online.target

  [Service] Type=oneshot ExecStart=/sbin/ethtool --change enp5s0 wol g

  [Install] WantedBy=multi-user.target ```
- Save and exit.
- Reload systemd's configuration and enable the service: `bash sudo systemctl daemon-reload sudo systemctl enable wol`

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5. Reboot and Verify WoL Is Enabled

- Restart your computer.
- After logging back in, run: `bash sudo ethtool enp5s0`
- Confirm that you now see: `Wake-on: g`
    - This means WoL is now **enabled**.

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6. Remotely Wake Your Machine

- Power off your machine.
- Go to https://wake.inf.ed.ac.uk/cgi-bin/wakeup.cgi and follow the instructions to wake up your machine remotely.