

remotePowerOn WOL

Remotely power on a notebook / desktop located at IMATH

The idea of this feature is simple, everyone should be able to wake their machine using localinfo. We use the standard 'Wake on Lan' (in short WOL) feature to accomplish this.

The following steps have to be taken:

1. Activate WOL on the Device
2. Connect the device to the yellow tagged network (LAN).
 - WOL over WIFI is not supported.
3. Put the device to sleep.
4. Log in to localinfo: <http://www.math.uzh.ch> > LI > Remote Power On (WOL) and power on
 - If the device is not on the list, contact support@math.uzh.ch

Activate WOL

BIOS: Linux / Windows

Enter the BIOS Setup at startup of the machine. Look for an Option like `Power on by PCIE Devices`, `Power On by onboard Lan`, `On Board LAN boot (rom)` ☐ and set it to enable. It is usually under `Boot` or `Advanced`.

Note: Some newer Notebooks may only allow Boot On LAN in Sleep Mode to save Energy.

OS: Mac OS X

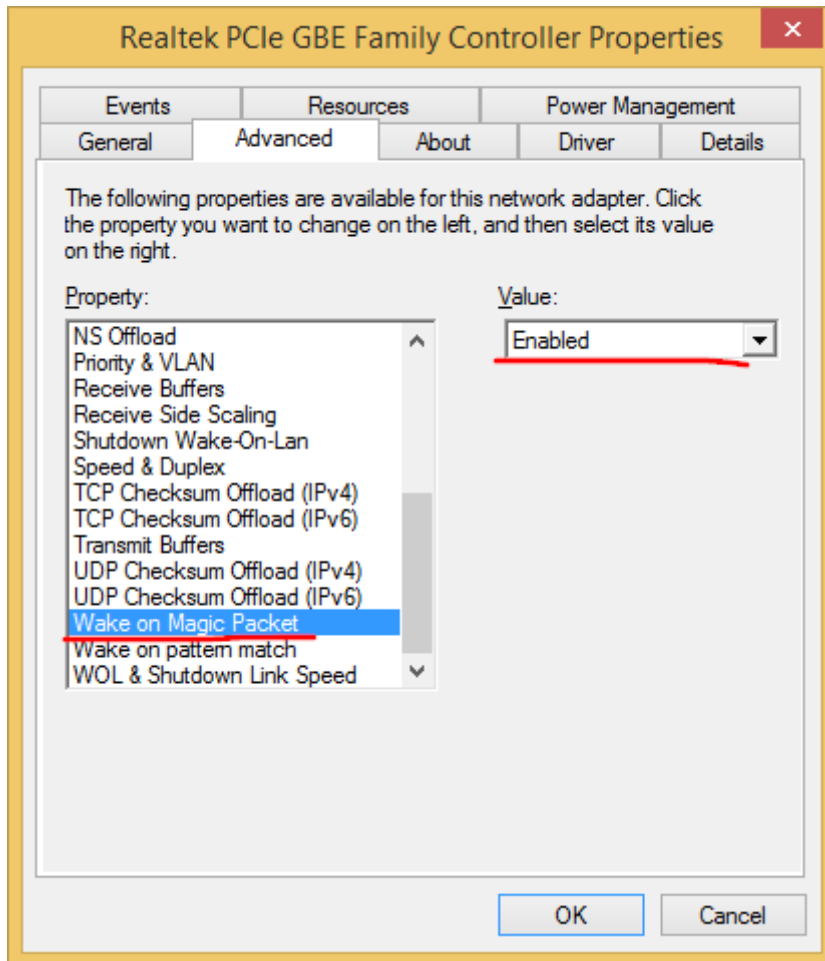
- Open system preferences -> Energy saving options -> wake for network access (or wake for wifi on most notebooks).
- General: if you leave your office, use **sleep** instead of **Power Off**.

Note: Some Mac Mini (10.9) don't support WOL.

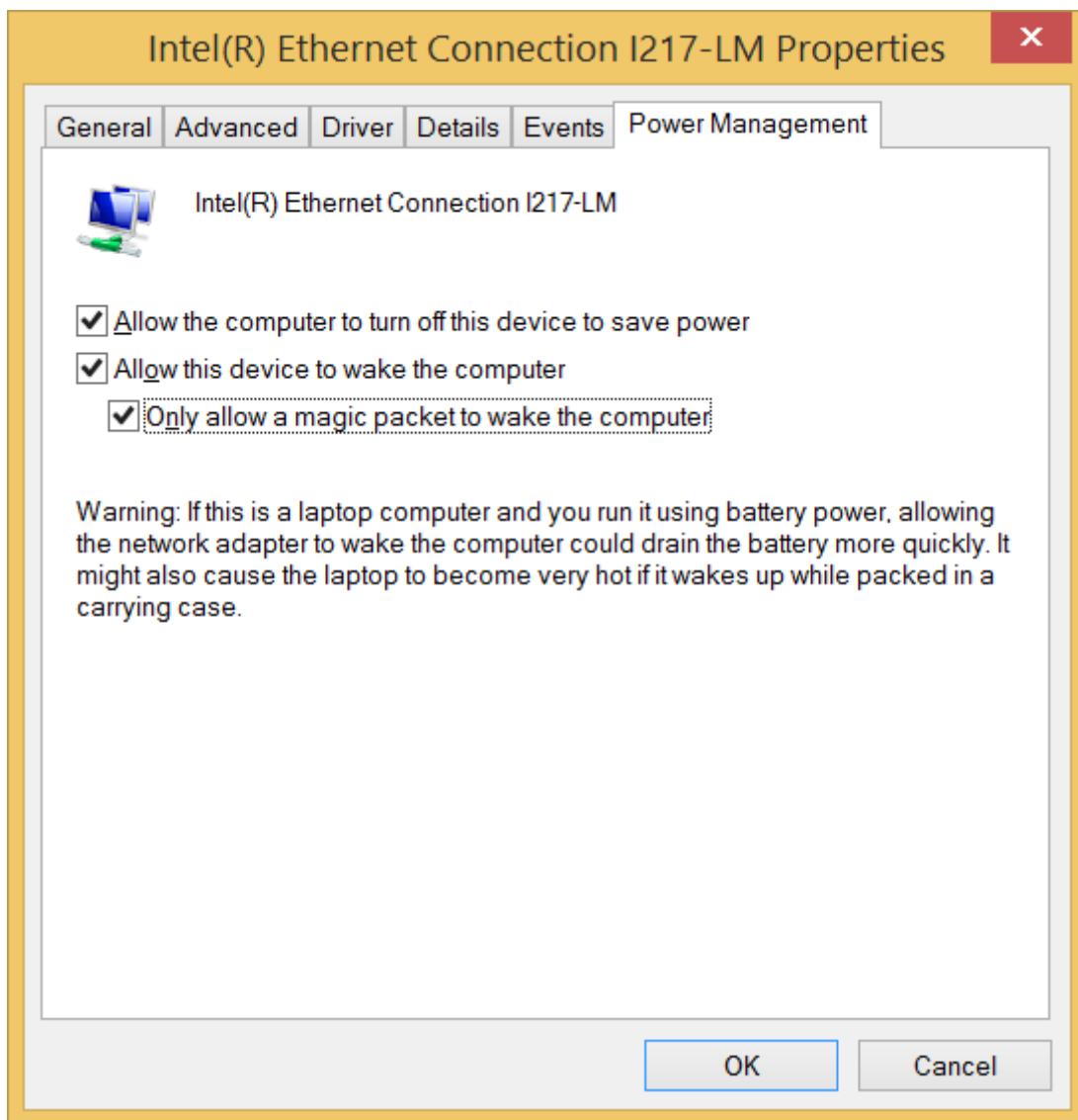
OS: Windows

To enable WOL under Windows:

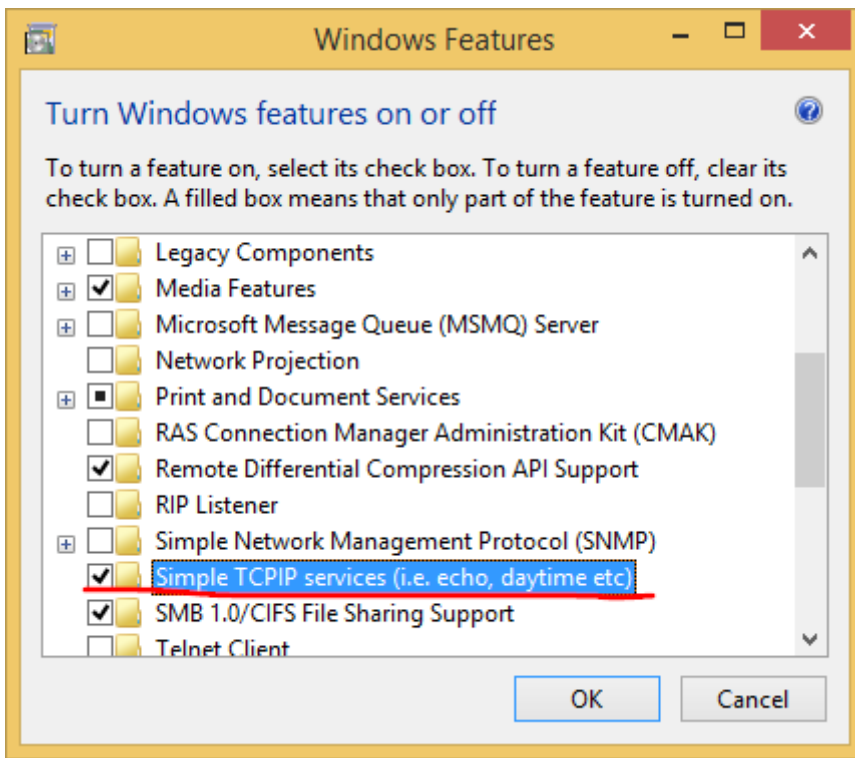
- Right-click Computer > Properties > Device Manager.
- Under Network Adapters, double-click the device.
- Switch to the Advanced Tab and set WOL Magic Packet to enabled



- Tick all the items under the Power Management tab.

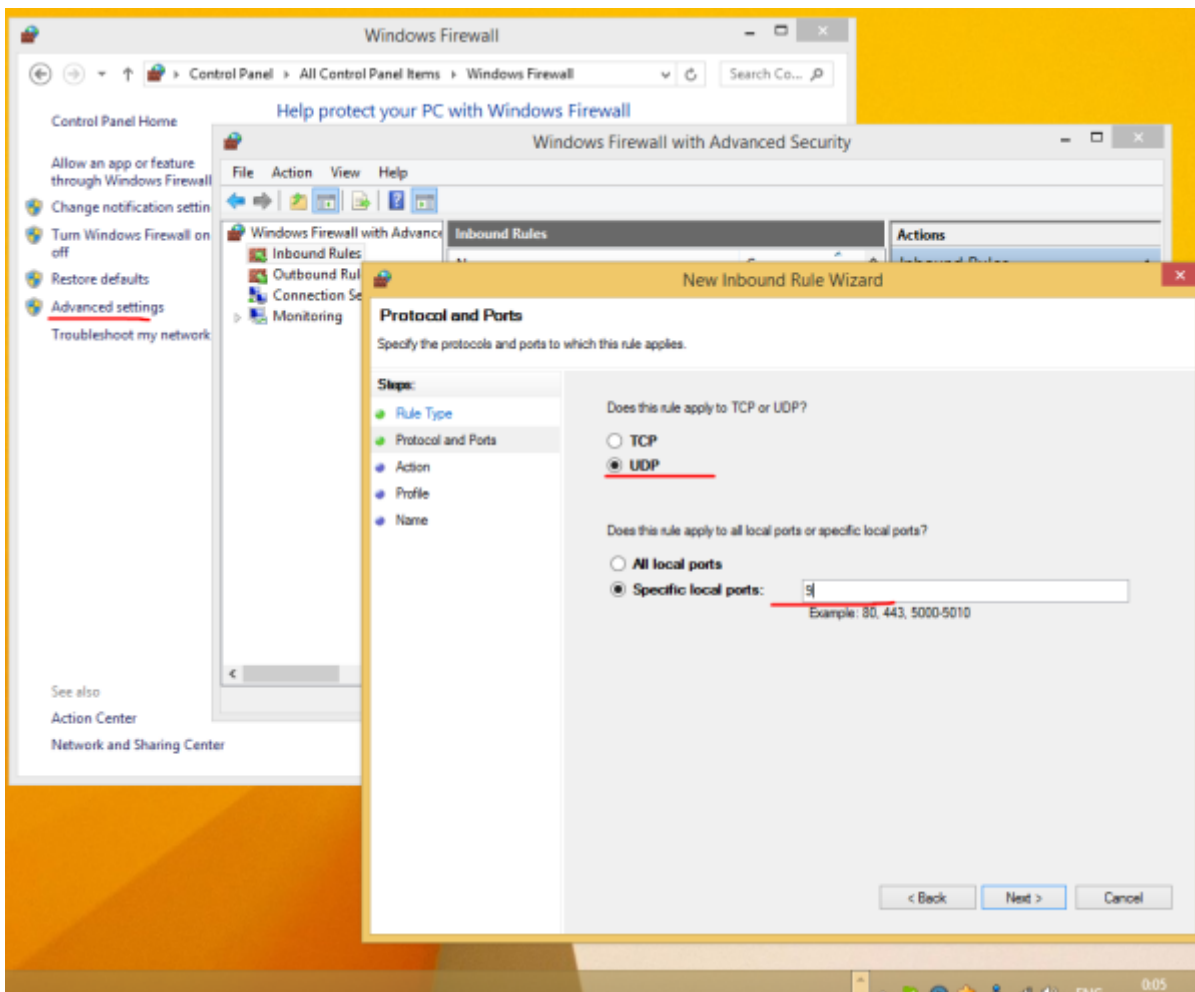


- Use Windowskey + R and type: `shell:::{67718415-c450-4f3c-bf8a-b487642dc39b}` and turn Simple TCP/IP Services on



- Open UDP Port 9 in the Windows Firewall

go to Control Panel\All Control Panel Items\Windows Firewall, click 'Advanced Settings' on the left, and create a new Inbound Rule to open the required port.



- Restart Windows

OS: Linux

- Install ethtools `sudo apt-get install ethtool`

* Run the command (necessary after each boot)

```
sudo /sbin/ethtool -s eth0 wol g }}
```

* Auto activation during boot:

* For Debian / Ubuntu Linux (without network manager) edit `/etc/network/interfaces` and append the following to `eth0`: {{{

```
auto eth0
```

```
iface eth0 inet static
```

```
address 192.168.1.1
```

```
netmask 255.255.255.0
```

```
gateway 192.168.1.254
```

```
    post-up /sbin/ethtool -s eth0 wol g
```

```
    post-down /sbin/ethtool -s eth0 wol g
```

* For RHEL / SL / Fedora / CentOS Linux, edit `/etc/sysconfig/network-scripts/ifcfg-eth0` and add / modify the following line:

```
ETHTOOL_OPTS="wol g" }}
```

* or {{{

```
ETHTOOL_OPTS="wol g autoneg off speed 100 duplex full " }}
```

= Restrictions =

* The device needs hardware which supports WOL.

* WOL only works on the yellow LAN (no WLAN).

* Typically, the device is blocked by the UZH Firewall - use `thinlinc` (that's behind the UZH firewall) to connect to your device.

* Make sure that there is a service running on your device which waits for remote connection.

* F.e. use `gtkvncviewer` (started on `thinlinc`) to connect with a GUI to your mac (not very fast) - check <http://www.howtogeek.com/180953/3-free-ways-to-remotely-connect-to-your-macs-desktop/> | Screen sharing]]

