

# **Wake On Lan**

You can easily boot up or turn on a remote computer from a completely shutdown state by using Wake on LAN. If you want a system to be turned on when your customer isn't sitting in front of it, then Wake-on-LAN will be handy. It is easy to setup as you can enable wake on LAN on your remote computer right from our website.

### **Prerequisites for Wake on LAN (WOL) :**

Either one of the following conditions should be met for Wake on LAN:

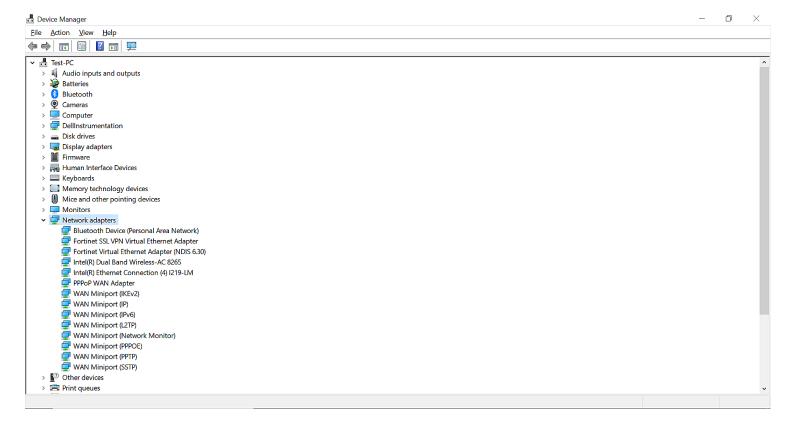
- One of the computers with Zoho Assist should be alive in the target subnet, to perform Wake on LAN.
- IP directed broadcast should be enabled on the router/switch

### 1. Operating System related Settings:

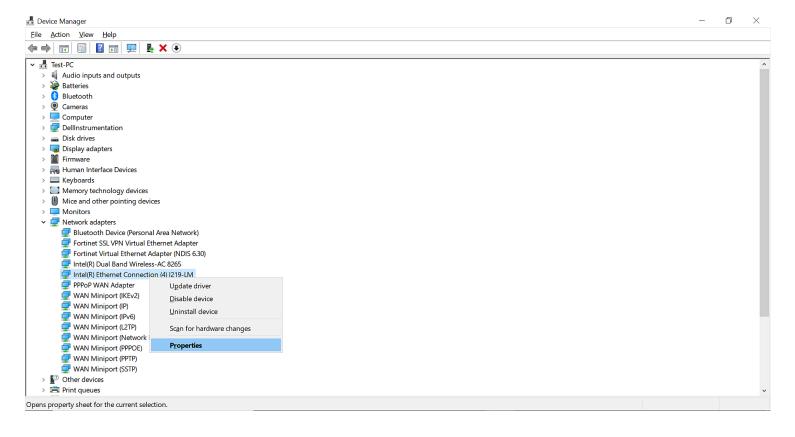
To enable WOL in network adapter in Windows OS:

**Step 1** : Go to Device Manager

Step 2: Navigate to network adapters and right click on the respective network adapter



**Step 3** : Select properties.



**Step 4**: Go to the **Advanced** tab and configure the following property settings:

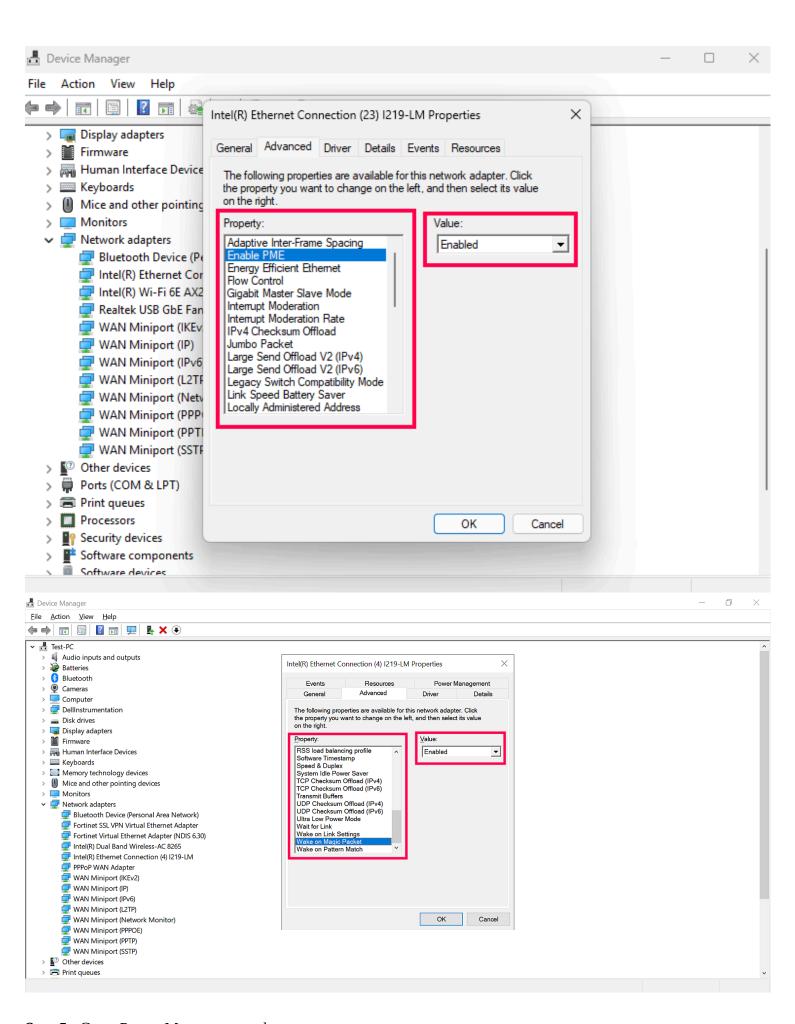
**Enable PME** → Set its value to **Enabled** (Skip if the property does not exist).

**Energy-Efficient Ethernet** → Set its value to **Disabled/Off** (Skip if the property does not exist).

**Green Ethernet** → Set its value to **Disabled/Off** (Skip if the property does not exist).

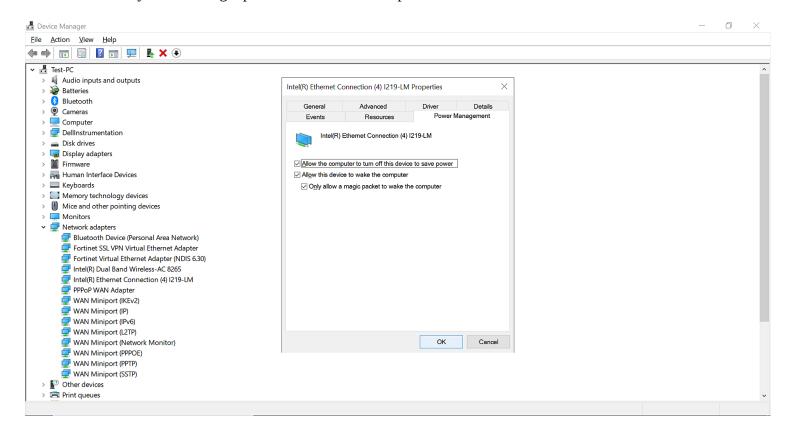
**Wake On Magic Packet** → Set its value to **Enabled**.

**Wake On Pattern Match**  $\rightarrow$  Set its value to **Enabled**.

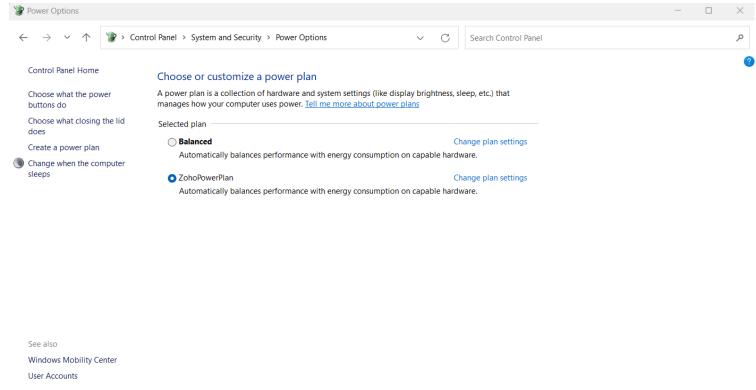


**Step 5** : Go to Power Management tab :

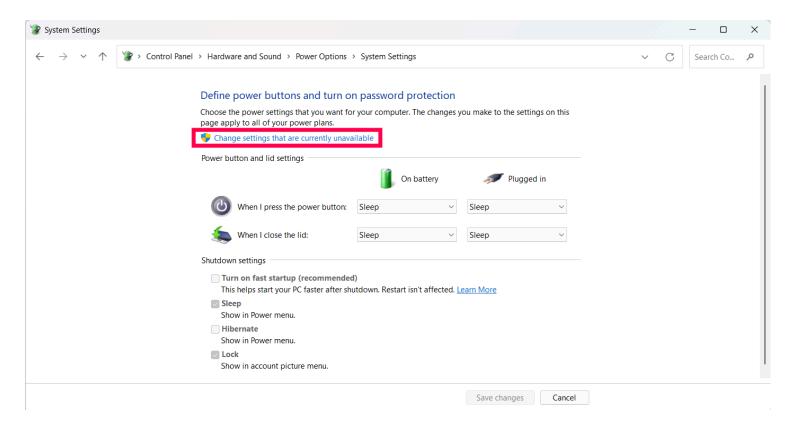
- Enable Allow the computer to turn off this device to save power.
- Enable Allow this device to wake the computer.
- Enable Only allow a magic packet to wake this computer.



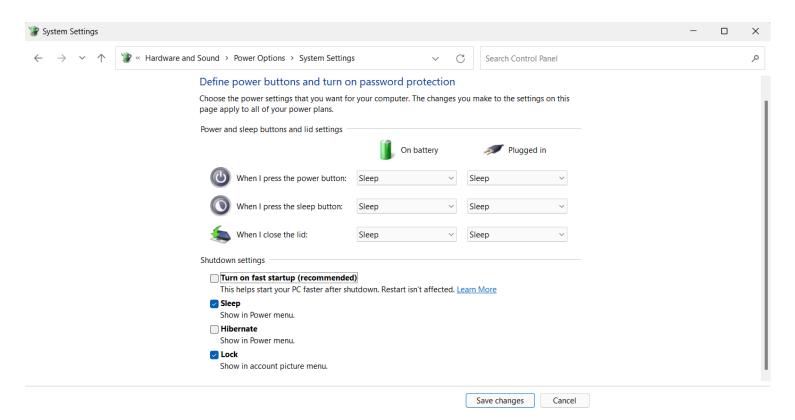
**Step 6**: Open **Control Panel** and navigate to **System and Security >Power Options.** From the left menu, select **Choose what the power buttons do**.



**Step 7**: Click **Change settings that are currently unavailable**.



Step 8: Disable Turn on fast startup and click Save changes.



### 2. BIOS Settings:

The Wake-On-LAN functionality is generally disabled by default. The procedure to remotely modify the BIOS Settings of the target computers varies from manufacturer to manufacturer. Most manufacturers do not allow remote configuration of the BIOS Settings due to security concerns. However, a few manufacturers like Dell, HP, and Lenovo allow remote configuration. For those manufacturers, please follow the procedure given at the end of this section. For others, where your manufacturer does not allow remote configuration of the BIOS Settings, please

follow the Manual Configuration procedure:

## **Manually Configuring the BIOS Settings:**

- 1. During the computer's power-on self-test enter the BIOS setting screen by pressing the F1, INS, or DEL keys
- 2. Select Power Management.
- 3. Choose Wake on LAN/WLAN, under Wake on LAN/WLAN, choose LAN or WLAN

**Note**: If you see a mode called "Deep Sleep Mode", ensure that it is disabled. This mode may not be found on all computers.

4. Save and Exit the BIOS settings.

### **Remotely configuring the BIOS Settings:**

Dell, Lenovo and HP allow you to modify the BIOS Settings remotely through a specific tool:

- 1. For Dell:
  - i. Dell Client Configuration Utility (DCCU) can modify BIOS Settings remotely for Dell computers. To get the latest driver of DCCU, please <u>visit this link</u>.
  - ii. Follow the steps given in this document to configure BIOS using DCCU.
- 2. For HP: HP BIOS Configuration Utility (HPBCU) can modify the BIOS Settings remotely for HP computers. Please <u>visit this link</u>.
- 3. For Lenovo: Lenovo Think BIOS Config Tool (TBCT) can modify the BIOS Settings remotely for Lenovo computers. Please <u>visit this link</u>.

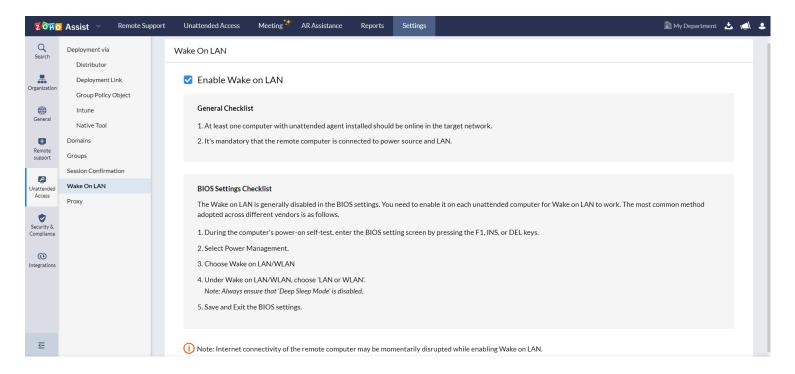
# **Enabling Wake on Lan:**

**Step 1** : Log in to your Zoho Assist account.

**Step 2**: Go to Settings > Unattended Access > Wake on Lan

 $\mbox{\bf Step 3}$  : Select Enable Wake On Lan to enable the power management settings on

remote computers.



Now you can wake up the remote computer by clicking on the power icon given beside the computer you want to wake up.

#### Note:

The following conditions need to be ensured before using Wake on LAN.

- The computer should be connected to a power source.
- The computer must be connected to the internet via a network cable ( Ethernet ).
- At least one computer with unattended agent installed should be online in the target network.
- The necessary conditions before enabling wake on LAN are available at the settings page itself.

# **Troubleshooting boot-up failed issue in Wake-On-Lan:**

"Boot Up Failed", is an issue associated with Wake-On-Lan feature, which arises when you're trying to connect to a device and the connection is not established.

### **Reasons for boot-up failure:**

- 1. If the specified *MAC address*, IP address or the Subnet-Mask is incorrect
- 2. None of the computers are live on the specified subnet.

# **Troubleshooting:**

1) If the specified MAC address, IP address or the Subnet\_Mask is incorrect

You need to manually ensure that the provided Mac address, IP address and Subnet\_Mask details are correct.

# 2) None of the computers are live on the specified subnet.

WOL packets should be broadcasted in the network to wake a computer. If IP broadcast is disabled in the network, then the packets will be broadcasted through the Zoho Assist's Unattended agent. So at least one of the computer with Unattended agent in it should be live in the subnet.

Now, you can try to wake up the computer in the LAN again.