

WakeMyPC Operations Guide

Revision 5.1.3 June 2011

Contents

Overview	2
What is Wake-on-LAN?	2
PC/Windows - Configuring your PC for Wake-On-LAN	3
Initial BIOS and Windows Configuration	3
Manual Operation: Getting technical information about your PC	4
Apple Mac - Configuring your Mac for Wake-On-LAN	6
Initial OS X Configuration	6
Manual Operation: Getting technical information about your Mac	6
Manual Wake Operation	9
Local Broadcast Operation	9
Subnet Broadcast Operation	10
Manual Mode: WakeMyPC Quick Link	11
Automatic Wake Operation using workstation or user name	12
Finding your computer	12
Performing Computer Wake	13
Technical Support	14

Overview

Data Synergy WakeMyPC allows you to remotely power-on or wake a computer from anywhere in the world. This means that when you do not need the computer it can safely be turned-off or in a low power mode such as sleep. Used effectively this will lower your organisations computer running costs without impacting on your productivity.

The WakeMyPC software is available in two different versions:

- **WakeMyPC Lite Server** – Provides basic manual PC wake-up using manually collected technical information
- **WakeMyPC Enterprise Server** – Additionally provides wake-up based upon workstation name or username

Your system administrator will explain to you which version of the software you have and which sections of this document apply to you.

What is Wake-on-LAN?

Wake-on-LAN (WoL) is a computer industry standard for remotely powering-on or waking an unavailable computer from a remote location. Data Synergy WakeMyPC allows WoL to be initiated from anywhere with an internet connection.

Wake-on-LAN requires the following to function:

- **A compatible motherboard and BIOS** - most modern systems support WoL
- **A compatible network card** - This is often integrated into modern motherboards
- **Correct operating system configuration** - The OS must configure the NIC to remain powered whilst the computer is suspended.

This document explains how to enable WoL on your PC and then explains how to use WakeMyPC to wake your PC from a simple web page.

PC/Windows - Configuring your PC for Wake-On-LAN

Initial BIOS and Windows Configuration

Wake-on-LAN requires correct configuration of the workstation system BIOS and operating system to function. There are sometimes several interlinked settings and it may require several combinations to be tested to achieve successful WoL. This section explains the common BIOS and Windows Device Manager settings required.

BIOS configuration is usually straight forward but may be complicated by the different terminology used by each BIOS vendor. The setting is often located in either the **Power** or **Boot** sections of the BIOS configuration and may be described as **Wake-on-LAN**, **PME**, **PM Wake-up Events**, **Wake-up Control**, **Remote Wake** or similar.

A typical BIOS setting is shown below:

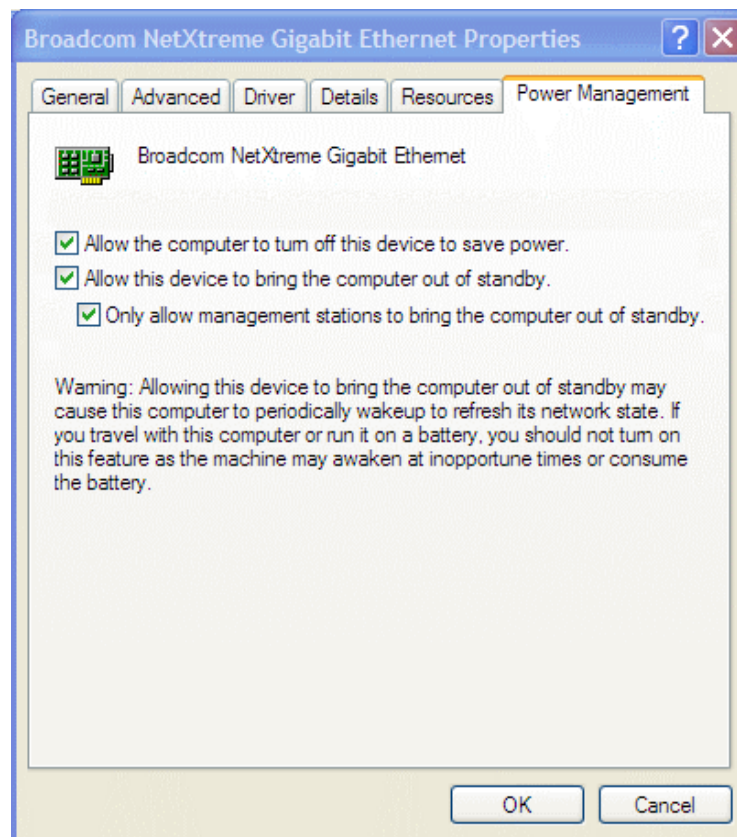


Soft-Off by PWR-Button	Delay 4 Sec.
Wake On PCI Card	By OS
Wake On Modem	Disabled
Wake On LAN	Enabled
Wake On RTC	By OS

WoL also requires operating system participation to function whilst the system is suspended. This is because the network interface card must be configured to remain active and thus able to process WoL messages.

The following options must be selected (ticked) for the network card in Device Manager:

- Allow the computer to turn off this device to save power
- Allow this device to bring the computer out of standby / wake the computer
- Only allow management stations to bring the computer out of standby



Manual Operation: Getting technical information about your PC

To operate in manual mode WakeMyPC requires some technical details about your computer. **You can ignore this section if you are using WakeMyPC Enterprise Server and your administrator has enabled the wake-up using workstation name or username features.**

In most situations you will only need to find this information once. The simplest way to find this information on a Windows based PC is as follows:

1. Launch a Windows command prompt (CMD.EXE)
2. Type **IPCONFIG /ALL** and press **ENTER**
3. Examine the Windows IP Configuration display for the following information:
 - Host Name (computer name) *e.g. Laptop*
 - Physical (MAC) Address *e.g. 80-1A-77-2D-38-90*
 - IP(v4) Address *e.g. 192.168.77.120*
 - Subnet Mask *e.g. 255.255.255.0*

```
Command Prompt
C:\Windows\System32> IPCONFIG /ALL

Windows IP Configuration

Host Name . . . . . : Laptop
Primary Dns Suffix . . . . . :
Node Type . . . . . : Hybrid
IP Routing Enabled. . . . . : No
WINS Proxy Enabled. . . . . : No

Ethernet adapter Local Area Connection:

Description . . . . . : Realtek RTL8139/810x Family Fast Ethernet
NIC
Physical Address. . . . . : 80-1A-77-2D-38-90
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
IPv4 Address. . . . . : 192.168.77.120 (Preferred)
Subnet Mask . . . . . : 255.255.255.0
Lease Obtained. . . . . : 18 July 2010 23:01:26
Lease Expires . . . . . : 30 July 2010 12:47:15
Default Gateway . . . . . : 192.168.77.1
DHCP Server . . . . . : 192.168.77.1
DNS Servers . . . . . : 192.168.77.1
NetBIOS over Tcpip. . . . . : Enabled

Wireless LAN adapter Wireless Network Connection:

Description . . . . . : Intel(R) PRO/Wireless 3945ABG Network Con
nection
Physical Address. . . . . : 88-1D-60-19-5F-41
DHCP Enabled. . . . . : Yes
Autoconfiguration Enabled . . . . . : Yes
```

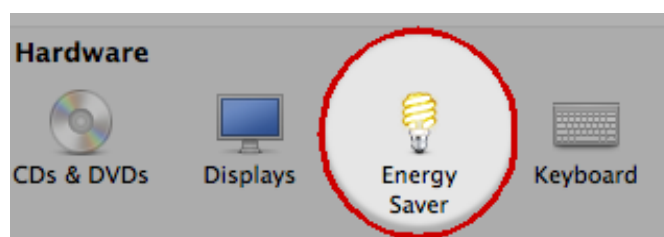
Tip: Some computers have multiple network connections. For instance, most laptops have an additional wireless connection. The network details you require are for the main **wired** network connection. This is normally listed first and typically called 'Local Area Connection'.

Apple Mac - Configuring your Mac for Wake-On-LAN

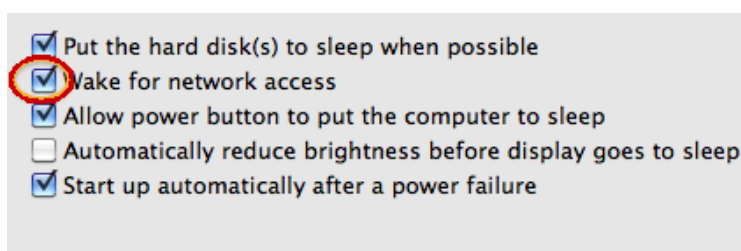
Initial OS X Configuration

To enable Wake-on-LAN support in Apple OS X proceed as follows:

1. Open **System Preferences**
2. Select **Energy Saver**



3. Select **Wake for network access**

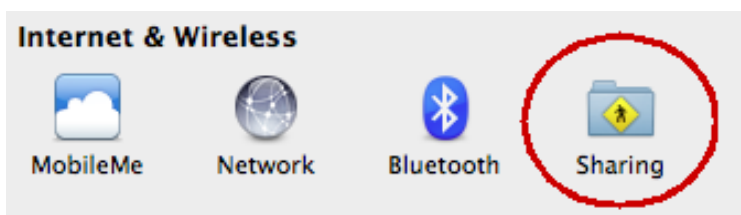


Manual Operation: Getting technical information about your Mac

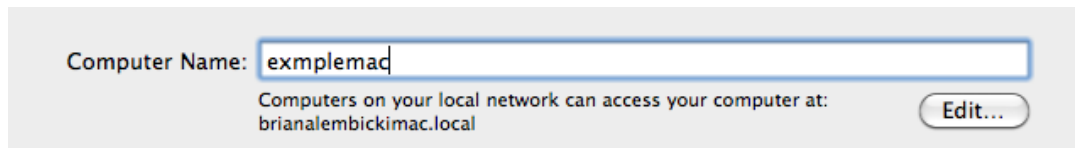
To operate in manual mode WakeMyPC requires some technical details about your Mac. **You can ignore this section if you are using WakeMyPC Enterprise Server and your administrator has enabled the wake-up using workstation name or username features.**

In most situations you will only need to find this information once. The simplest way to find this information on an OS X Mac is as follows:

4. Open **System Preferences**
5. Select **Sharing**



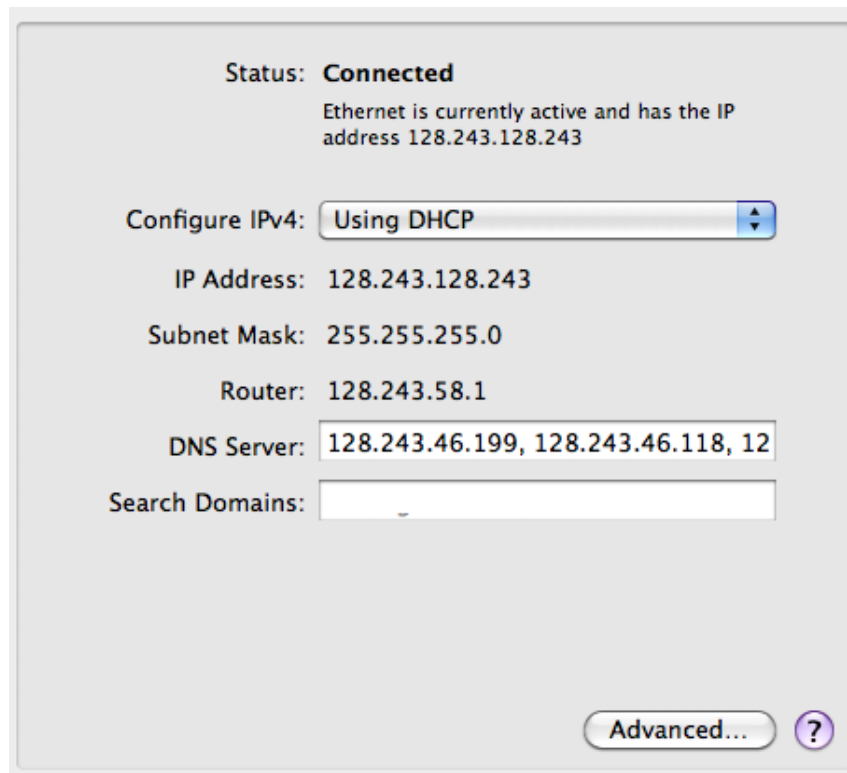
6. Note the **computer name**:



7. Return to **System Preferences** and select **Network**

8. Examine the network properties for the following information:

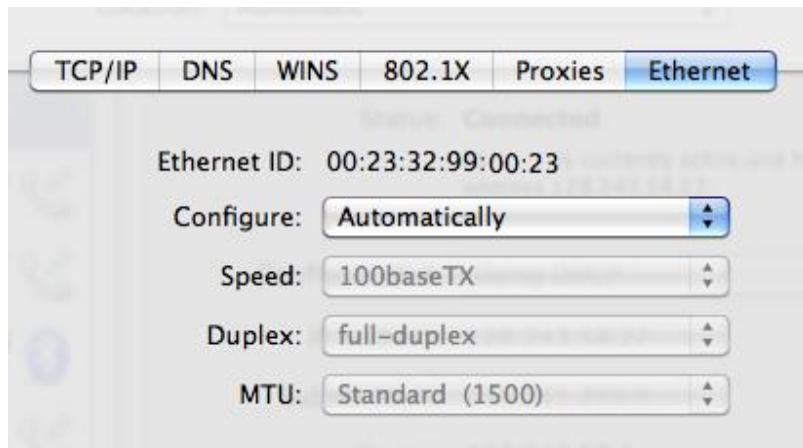
- IP Address *e.g.* 128.243.128.243
- Subnet Mask *e.g.* 255.255.255.0



9. Click **Advanced**

10. Examine the advanced properties for the following information:

- Ethernet ID (MAC) *e.g.* 00:23:32:99:00:23



Manual Wake Operation

Your network administrator will provide you details of your organisation's WakeMyPC server. This is a web site that provides the remote computer wake-up service.

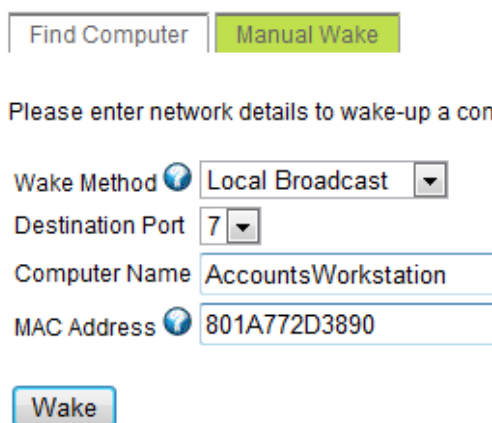
Your administrator will also explain which mode your system uses. The most common options are **Local Broadcast** and **Subnet Directed Broadcast**. You will require some of the technical details collected in the previous section to initiate workstation wake-up.

You can ignore this section if you are using WakeMyPC Enterprise Server and your administrator has enabled the wake-up using workstation name or username features.

Local Broadcast Operation

The simplest WakeMyPC mode is called Local Broadcast. This requires only the computer name and MAC address to function:

1. To use this mode open the WakeMyPC webpage in your web browser and select **Local Broadcast**:



The screenshot shows a web interface with two buttons at the top: "Find Computer" and "Manual Wake". Below them is a heading: "Please enter network details to wake-up a computer using Wake-on-LAN (Wol):". The form contains four fields: "Wake Method" (dropdown menu set to "Local Broadcast"), "Destination Port" (dropdown menu set to "7"), "Computer Name" (text input field containing "AccountsWorkstation"), and "MAC Address" (text input field containing "801A772D3890"). At the bottom of the form is a "Wake" button.


2. Enter your computer name
3. Enter your MAC Address omitting any – or : characters. This is sometimes referred to as the Physical or Ethernet Address.
4. Click **Wake**

Subnet Broadcast Operation

Another WakeMyPC approach is called Subnet Broadcast. This is commonly used in larger networks and requires some more technical details to operate.


1. To use this mode open the WakeMyPC webpage in your web browser and select **Subnet Broadcast**:


Please enter network details to wake-up a computer using Wake-on-LAN (Wol):


Wake Method  Subnet Broadcast

Destination Port

Computer Name

MAC Address 

IP Address 

Subnet Mask 

2. Enter your computer name
3. Enter your MAC Address omitting any – or : characters. This is sometimes referred to as the Physical or Ethernet Address.
4. Enter your last known IP Address and Subnet Mask
5. Click **Wake**

Manual Mode: WakeMyPC Quick Link

In manual mode WakeMyPC requires some technical information to operate. Once the required settings have been confirmed you can store a link to the WakeMyPC webpage for future use. This will allow you to access the same information again in the future without having to remember the details.

WakeMyPC provides a convenient **Quick Wake Link** feature to help bookmark the correct settings. As you configure WakeMyPC the software will automatically modify the link. You can copy this link into your favourites or, if enabled by your administrator, email yourself the link:

Quick Wake Link

Please add the following link to your favorites to quickly wake this PC in the future:

<http://manual.org:8000/wakemanual.aspx?WolMode=1&MacAddress=801A772D3890&ComputerName=laptop>

Select Link

Automatic Wake Operation using workstation or user name

If your organisation is using the WakeMyPC Enterprise Server product your administrator can configure the software to allow wake-up using **either** the **workstation name** or **your logon user name**. This avoids the need to collect or understand any technical information.

Your network administrator will provide you details of your organisation's WakeMyPC server. This is a web site that provides the remote computer wake-up service.

You can ignore this section if you are using WakeMyPC Lite Server or if the wake by computer name feature has been disabled by your system administrator.

Finding your computer

To find your computer enter **either** your **computer's workstation name** or your **own username** into the search box and click **Search**:

Please enter your username (or a computer name) to find available computer(s):

The WakeMyPC will attempt to locate your computer. In some cases, where you have recently used more than one computer, several results may be displayed. Select the desired computer and press **Wake**:

Available Computers

Computer	Description
Brenda	Brenda's Workstation Wake

Performing Computer Wake

When you click **Wake** WakeMyPC will start trying to contact your PC. If the PC has been configured to support Wake-On-LAN (WoL) it will typically respond after a few seconds. If the computer is turned off this may take up to a couple minutes to respond.

WakeMyPC will keep you informed with an animated display. Periodically the software will also update the last checked time:

Wake Computers

50s remaining Stop Wake another PC

0 computer(s) found

Available	Checked	Computer	Connect
000	14:09:22	laptop	

When your computer has been successfully contacted WakeMyPC will display a green tick icon:

Wake Computers

60s remaining Stop Wake another PC

0 computer(s) found

Available	Checked	Computer	Connect
✓	14:09:48	laptop	Remote Desktop

If your computer is running Microsoft Windows, and your network administrator has configured the feature, you may connect directly to your computer by clicking the **Remote Desktop** link.

If WakeMyPC is unable to contact your computer the software displays a red cross icon. This may mean that WoL is not correctly enabled on your computer or the computer is disconnected from the mains supply or network.

You can click **Retry** to try to contact the computer again:

Wake Computers

0 computer(s) found

Available	Checked	Computer	Connect
	14:11:51	laptop	

Technical Support

The WakeMyPC service is supported by your internal IT support department or team. Please contact them in the event of any problems.

About Data Synergy



Data Synergy is a British company based in Sheffield. We have over 10 years' experience developing and supporting software solutions for enterprise PC deployment and management. We do not resell other vendors' products and do all of our development, sales and support from our UK base.

Our products have evolved through listening to customer ideas and applying our unrivalled knowledge of PC internals. If you have a suggestion for a new product or feature we would love to talk to you.

Data Synergy UK Ltd
Cooper Buildings
Sheffield Technology Parks
Arundel Street
Sheffield
S1 2NS

Website: www.datasynergy.co.uk
Email: sales@datasynergy.co.uk
Telephone: 08456 435 035

Registered in England and Wales
Company Number 06682095
VAT Registration GB 939 7559 56