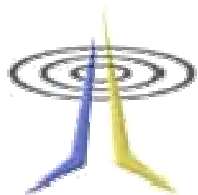


Melbourne Wireless



Building a city-wide community data network

Melbourne Wireless Inc. is a non-profit group dedicated to building a free-access, community data network throughout Melbourne.

We aim to do this by modifying cheap, off-the-shelf WiFi hardware and placing it in strategic locations to create a network of suburb-spanning wireless links.



Anyone with an interest in computers, networking or radio technology can become a member and build their little piece of the network!

Melbourne Wireless members meet on the second Friday of every month at 7pm at the Hawthorn Scout Hall. For more information, please see our website at:

[**melbournewireless.org.au**](http://melbournewireless.org.au)

Why should I join?

With a Melbourne Wireless Membership, you can:

- Learn about wireless (and wired) networking
- Tinker with a real-life, routed wide-area-network
- Learn about radio and antenna technology
- Receive discounts at specified retail outlets
- Become a node on the Melbourne Wireless network!



What can I use the network for?

You can use the Melbourne Wireless network for just about anything!

Some examples:

- File sharing
- VoIP / Network Telephony
- Gaming

Everyone is encouraged to run servers, experiment with new setups and to test the limits of the network.

What equipment do I need?

At the very least, to access the network you need a computer or PDA with a WiFi network adaptor. These come in a few forms, including:

- Inbuilt MiniPCI cards
- PCI Cards
- External PCMCIA cards
- USB Dongles

To get the best possible signal, you will probably need to connect an external antenna to your WiFi adaptor. These are available commercially, or Melbourne Wireless can show you how to make your own antennas.

To access the network, you will need to be within range of an established Melbourne Wireless network node. You may need a radio mast and high-gain antenna to connect to your nearest node.



How do I build a node?

Nodes are permanent or semi-permanent wireless network relay stations or *routers*. Members are encouraged to set up a node at their house, and any other place where they have permission to do so.

Over distance, WiFi signals require Line-Of-Sight (i.e. no obstacles) between antennae. Because of this, your node's antennae should be mounted outdoors, and as high as possible to get the best range.



Members are advised to do a site survey at their node location before buying or building anything. A site survey can be performed by standing on the roof (being very careful!) with a directional antenna and a laptop/PDA running WiFi scanning software. The results of the survey will tell you how strong a signal you are receiving from any neighboring Melbourne Wireless nodes. This will help you decide what kind of equipment you need.

Does Melbourne Wireless provide Internet access?

The short answer is no, unfortunately.

The long answer is that Melbourne Wireless Inc. is not a licensed telecommunications carrier under the Australian Communications and Media Authority (ACMA) regulations. It could be argued that being non-profit, we are exempt from needing a license. But proving this to the ACMA could be a long, arduous process.

Furthermore, if we were to successfully argue this, an Internet feed provided by Melbourne Wireless would bring us to the attention of the Federal Attorney General's Department. We would have to provide details of a wiretap plan to allow law enforcement to eavesdrop on our network.

However, at the grassroots level individual members can make their own arrangements to share their own Internet feeds with each other. This could be legal, subject to ACMA regulations and the member's ISP Acceptable Use Policy.

How do I join?

You can fill out the application form below, or online at www.melbournewireless.org.au/members/join. Membership is subject to Committee approval and you must provide your street address. The membership fee is \$10 per year.

Application to become a member of Melbourne Wireless

Name*: _____

Street Address*: _____

Email*: _____

Occupation: _____

Skills:

Where did you hear about Melbourne Wireless?

It would be nice if Melbourne Wireless could...

I am also a Member of....

I plan to spend \$_____ on wireless equipment this year.

** These fields are mandatory*