

# ADSL Arrives at Melb PC!

**Are you wondering about ADSL? Have you considered the options and perhaps done some research? Do you want a faster Internet feed? There are many reasons why you might consider ADSL... read on and allow James Cox to tell you the good news.**

For some time, Melb PC has been looking at how to provide members with faster Internet access. As broadband access prices have literally fallen around us, many members have been asking, *when will the group introduce ADSL?* After investigating all available options and considering what would be the best deal both for participating members and for the group as a whole, we have a solution. We have decided to join forces with *WestNet Internet Services* and sell their ADSL feed. Melb PC will add value to that by providing extra services at no additional cost.

You may be asking why is Melb PC selling another ISP's service instead of providing a service directly. It's an important question that we asked ourselves and debated at length. Putting the answer in a nutshell: doing it this way provides members with more competitive prices and a wider range of plans than we could have offered by reselling our own service from a wholesaler. Many of the smaller ISPs do that. This arrangement also removes any uncertainty we had about our ability to provide a Melb PC direct service, plus the required support, while facing the potential relocation of the group's premises to one location and dial up Internet service to another.

Melbourne PC User Group is now an agent for WestNet Internet Services and we are offering their ADSL Internet service. If you sign up through Melb PC you will be paying

WestNet directly and will receive support from them for the ADSL connection and any of their services. Melb PC will provide additional services and will receive a commission from WestNet to fund these. I will describe those services shortly but first let's take a look at ADSL in general and whether or not it's suitable for you.

## What is ADSL?

ADSL stands for *Asymmetric Digital Subscriber Line* and it is a modem technology that transmits data over existing copper telephone wire from residences or businesses to the local telephone exchange. It does this at much faster speeds than a dial up modem. It does it by modulating the data onto a broader frequency range than is utilised by the dial up modems. This frequency range is above the frequency range used for voice calls, enabling the simultaneous use of an ADSL Internet connection and the telephone (*or fax, or dial up modem for that matter*) on the same telephone line. In order to enable this, small inline filters are inserted in the line to the telephone and any other devices that use that line.

The ADSL technology is used only to transmit data between the user and the local exchange. In the exchange, the ADSL signal and telephone signal are split and the latter goes through the telephone network as usual. The ADSL signal is sent to specialised equipment that functions as a modem

at the other end of your ADSL link and passes the data signal to and from your ISP over Telstra's switched data network.

## Is It For Me?

There are a number of limitations that may mean an ADSL service is not yet available to you. Firstly your local exchange needs to be equipped for ADSL and have spare capacity for your connection. You can get an indication (not confirmation) of this from the "availability checker" to which you will find a link on our ADSL Web site. You also need a copper telephone wire, with a standard telephone service between your premises and the exchange. It must be dedicated for your use and not be "paired gained" to provide two telephone services. The signal loss between your premises and the exchange must not exceed a specified level and this means that you must be within a certain distance of the local exchange.

If you apply, all these factors are checked and confirmed by Telstra to the ISP before you are billed anything. In fact the only way to know for sure that you can get ADSL is to apply. Even if you have applied before and your application was rejected, perhaps because ADSL wasn't available, it is worth applying again. Telstra is still installing ADSL equipment and has recently increased the allowable signal loss, effectively increasing the service range from its exchanges.

There are a number of benefits to having an ADSL connection over a dial up connection. They are:

- Faster speeds. You can select download speeds of 256, 512 Kbit/s or 1.5 Mbit/s, which are approximately 5, 10 and 30 times faster than 56 Kbit/s modems. Upload speeds are faster too but are usually less than the download speed.
- Your connection is always on (although like any service there are occasional outages).
- The telephone line is free for telephone calls even when you are using the Internet.

So, is there any reason not to get an ADSL service if it's available on your telephone line? Yes, there is one reason — cost — for many people it will cost more. However, you may find, not as much more as it first appears. You don't have the call costs associated with a dial up connection and those who have a second telephone line just for the Internet could cancel that service if they have ADSL.

Let's look at some costs. Taking \$140 p.a. (\$11.60 per month) for your dial up Internet service, 20¢ per telephone call and \$26.95 per month for rental on a second telephone line, it takes an average of just one call each day to put your costs at \$45 per month. You can get rid of the extra telephone line and pay for a lower priced ADSL plan with change to spare. If you have only one telephone line, three calls a day will end up costing you \$30 a month. As you can see, the dial up Internet subscription fee can be the least of your costs.

That said, for many members who do not average anywhere near one call a day and do not want to pay more for a faster Internet connection, a dial up service will remain the best option. We expect most members will stay with the group's existing dial up Internet service while a significant minority transfer to ADSL — based on our survey and other indications. So,

for those who are not interested in getting ADSL, while you might hear a lot about ADSL as it is communicated to the membership, please be assured that our dial up service and users will remain a core concern for Melb PC and will receive our continuing attention.

## WestNet and its ADSL Service

WestNet Internet Services is an ISP that started in Geraldton, WA in 1994 and has grown to have over 50,000 customers, putting it in the top 20 of Australian ISPs. Of that number 10,000 use the ADSL service. You may not have heard of it before, as WestNet operated solely in Western Australia until 2003, but it is well known at the Whirlpool broadband community Web site <<http://www.whirlpool.net.au>> where it is one of nine companies important enough to rate its own forum area.

In the independent Australian Broadband Survey conducted late last year, WestNet was the most highly rated ISP for customer service and support. It was also highly rated for speed and reliability. This survey was conducted by Whirlpool and received over 10,000 responses.

In addition, WestNet offers the option to have a *shaped* service which many of our members considering ADSL have indicated they would prefer. This means that when you reach your monthly data allowance, your download speed is reduced and you are not charged for additional data. However, if you do not want your speed to be reduced you can elect the option of paying for excess data at a rate of \$10 per gigabyte (*for the Premium accounts only*), which is competitive and an order of magnitude lower than the rate charged by some other ISPs.

These factors, together with plans that we feel will suit the majority of members considering ADSL, were important considerations for Melb PC in deciding to select WestNet as the provider of an ADSL service.

WestNet has plans that cover a range of speeds and data allowances. Uploaded data is not counted towards the allowance or is *free*, as it is termed. There is also unlimited free traffic within the "WestNet Neighbourhood" in your State under all Premium plans. In Victoria that includes the WestNet Download Vault, a file mirror where you can download many programs and updates, the 3FL game servers that WestNet sponsors <<http://www.3fl.net>> and anything from any network that peers with Internet exchanges VIX or PIPE — which includes many ISPs, one of them being Melb PC. With all ADSL accounts you get WestNet e-mail addresses and personal Web space.

## Benefits of Signing Up Through Melb PC

We think WestNet's ADSL service will suit most members who are considering an ADSL Internet connection, and as mentioned previously Melb PC will receive a commission.

What's in it for you though? For members signing up through Melb PC, the group will provide extra value in services that we think will be important to you. These are:

- Keeping your Melb PC e-mail accounts, which are filtered for viruses and spam, so that you don't have to change all your contact details.
- Keeping your Melb PC personal Web space.
- Dial up Internet access for up to 30 minutes a day for use in case the ADSL network is down, or if you are travelling.
- Transparent access to Melb PC's mail and news services, the MOTD Web page and FTP to the members web server. Members accessing these services from other ISPs and currently required to *log in* for security reasons, need to use a secure connection for news and cannot use the mem-

bers FTP server. However, with the relationship we have built with WestNet we can allow access without these restrictions to those who have signed up through Melb PC and have a static IP address (*not available with the Lite plans*). All you will have to do is sign on once on a Web page and it will be as if you were connected to Melb PC through one of our dial up connections — only faster!

- Help with signing up: Melb PC Internet services, sharing your connection between a number of computers and general Internet use. (Please note that WestNet will provide the support for the ADSL connection and the services it provides.)

## Plans, Prices, and Options

All the details of the ADSL plans are laid out on the ADSL application form included in this issue (see page 34). It will help if you refer to that as you read the following sections. If you have decided that you want to get an ADSL Internet connection through Melb PC, then you need to decide which plan you want, the various account options and what hardware to get. For those not familiar with the types of plans and options offered with ADSL, I will step through the decisions and make some recommendations.

It will simplify some decisions first of all to be aware that Melb PC recommends you **do not** take up one of the “Lite” plans unless you are absolutely certain that you can stay within the monthly download allowance for these plans. If you exceeded the allowance you would find that what at first sight might have appeared to be the cheapest plans will quickly cost you more than other plans in the same speed bracket. For example, in the 256k/64k bracket, the Lite plan costs \$29.95 a month which is \$10 less than the next plan. However if you exceed a total download of 200 MB you will

be charged at 10¢ per MB, which works out to be one dollar for every additional 10MB. It only takes downloading an additional 100 MB before you would be paying the same amount as for the 500 MB plan which allows you 500 MB plus any free data before slowing your connection, or charging you at the much more economical rate of 1¢ per MB. Nor do the Lite plans offer the option of a static IP address. Also the 512k/512k speed is only for those who need the fastest upload speed which is really only of any benefit if you are running a server at home whose performance for others you want to maximise. Given this and that it is also the most expensive speed bracket I am not sure that it will be of interest to many members.

Table 1 shows a summary of the remaining plans (leaving out those mentioned above). To decide between the Premium plans you need to pick the speed and monthly download allowance that you would like and which fits within your budget. The best plan is the one that gives the best balance for you and will vary from person to person. For myself, the 256k/64k plan with 500 MB download allowance is fine but I know others who would find this too slow. The driving factor for me is to have an *always on* connection and leave my telephone line clear to make and receive calls. I used to avoid downloading large files not because it was too slow for me, but because it tied up the telephone line for too long. The speed boost is a very nice bonus but I don't feel the need to pay more for a higher speed.

## Speed

ADSL speeds are expressed as a pair of speeds representing the download speed first and then the upload speed, eg. 256k/64k represents a download speed of 256 kilobits per second and an upload speed of 64 kilobits per second. That is about five times the download speed and just under twice the maximum upload speed that you get from a 56k dial up modem. For most people it is the download speed

that you will notice. It is important to note that the download speed refers to the speed between your modem and WestNet and is the maximum speed you will get. If you are downloading from an overloaded Web server or there is congestion on the route between WestNet and the site from which you're downloading, the speed you experience may be slower.

So, what speed do you choose? The best thing to do would be to find out who amongst your friends has a broadband connection and ask if you can try them out to get a feel for the different speeds, but for many that will not be an option. As a very rough guide if you mainly use the Internet for Web browsing and e-mail, and are not terribly frustrated with the speed of dial up, then 256k/64k may be enough for you and will put a bit of zip into your browsing at up to 5 times faster than dial up. However, those who are very frustrated with the speed of dial up, frequently download large files or play multiplayer gaming will probably want to get 512k/128k which can be about 10 times faster than dial up. Absolute speed freaks or small businesses with a number of people using the connection concurrently may want 1.5M/256k. But, I don't think anyone just making the transition from dial up will need that level of speed.

## Monthly Download Allowance

And now we come to selecting the monthly data allowance. At the very minimum you should get the amount of data that you currently download over dial up. However, it is more than probable that you will end up downloading more than that when your Internet connection is faster and always on, so you should bear that in mind. This will apply particularly to those who plan to do more downloading of programs, MP3s, and videos, using streaming audio and video or multiplayer gaming. These can lead you to download large amounts of data, although maximising the

amount you download from within the WestNet Neighbourhood will help.

To gauge the minimum amount of data that you are likely to use, you can click on the "Check Your Own Logins" link on the MOTD page. After accepting the certificate and logging in, click on the "View Historical" link, pick a date range of at least 30 days and click on the "Go" button. The report produced will show you the data downloaded, in the "Bytes Out" column, in each dial up session. The report wasn't designed as a monthly download calculator so you will have to add up the figures yourself, but this will give you an indication of your minimum monthly download allowance if you have no idea.

You are not locked in to the decision you make on speed and monthly download allowance and you can request that it be changed at any time. Any changes will take affect from the first day of the next month. Changes to your ADSL speed will incur a fee of \$55, but download allowance changes do not incur any fee.

### Excess Data Option

An important decision to make is whether or not you want your account to be "Shaped" or be charged for any data over your monthly allowance at a rate of \$10 per GB. With the shaped account option, your download speed will be reduced to 72 Kbit/s once you reach the monthly allowance and then reduced again to 33 Kbit/s at 150% of the monthly allowance. If you elect to pay for excess data, you will be charged an additional \$10 per gigabyte for any data over your monthly allowance. This is a fairly good rate for excess data, but you may well end up paying more than the next highest plan so you should monitor it closely if you select this option.

Traffic from the *WestNet Neighbourhood* and uploaded data do not count towards your monthly allowance and

Speed (Down/upstream)	Monthly Allowance		Monthly Fee
	Peak	Off-Peak	
Premium 256k/64k	500 MB total		\$39.95
Premium 256k/64k	3 GB	3 GB	\$49.95
Premium 256k/64k	8 GB	8 GB	\$59.95
Premium 512k/128k	4 GB	4 GB	\$59.95
Premium 512k/128k	8 GB	8 GB	\$69.95
Premium 512k/128k	16 GB	16 GB	\$79.95
Premium 1.5Mb/256k	5 GB	5 GB	\$89.95
Premium 1.5Mb/256k	15 GB	15 GB	\$109.95
Premium 1.5Mb/256k	30 GB	30 GB	\$139.95

Table 1.

you are not charged for it. It is also not affected by shaping and continues at full speed, when other downloads are slowed down.

### Static IP Address Option

We would like all those signing up for ADSL to select the static IP address option. This will enable Melb PC to make access to servers on the group's site easier — just as if you were using one of our dial up connections in fact. A static IP address is available only with the Premium plans.

You may hear or read that a dynamic IP address is safer than a static IP address. That is debatable. In practice however, it makes no difference to the precautions you should take. You should have a firewall (whether in a modem, on your computer or both); antivirus software that you update frequently; and if you run Microsoft Windows, your Windows system patched with all critical updates whichever type of IP address you have. If you have taken all these precautions, then you will be no worse off with a static IP address.

### Hardware Options

To use an ADSL connection you need an ADSL modem. More and more these days people are using units that are an ADSL modem combined with a router as the price of these units has come down. The router enables you

to have a firewall that hides your PC or home network from the Internet.

Melb PC recommends you select the hardware that WestNet provides if you have a single computer or wish to share the ADSL connection between computers via Ethernet cable. The hardware will be delivered to you once ADSL availability is confirmed and WestNet support will be most experienced with these models. For a single computer select the *USB/Ethernet modem* (a Netcomm NB1300) and for a cabled network select the *Ethernet Router* (a Netcomm NB1300Plus4). Both units combine an ADSL modem and router, have a firewall, have one USB port and at least one Ethernet port.

If you have specific requirements that these units do not provide, eg. an included wireless access point, or you wish to research what is available and purchase another type of modem you will be pleased to know that WestNet supports all Austel approved modems. We will not be able to advise you on other modems, other than to refer you to information resources on the topic.

If you plan to purchase a modem elsewhere, do not make the purchase until WestNet have confirmed to you that final checks have been done and that your telephone line will support an ADSL service. That does not mean the availability checkers where you

enter your telephone number into a Web page. That only gives an early indication of ADSL availability in your area.

You will also need to plug in a line filter between the telephone wall socket and any telephone, answering machine, fax machine, dial-up modem or any other device (apart from the ADSL modem) that make use of the telephone line. One line filter is supplied with the modems sold by WestNet, but you will need to order more if you need more than one. For example, if you have three telephones plugged into three separate wall sockets you will need to order two additional line filters. However, if you have more than four such devices, fitting a central filter is preferable for reliable operation of the ADSL service and may be more cost effective. You may also need to have a central splitter if you have a monitored alarm system on the line to be used for ADSL and you will need to contact your security company to check this. Central filters are required to be installed by a licensed cable installer.

## How to Apply

Once you have decided on the above options, applying is easy. If you are paying by credit card and you don't already have an ADSL service you can apply over the Internet from a link on the Melb PC Web site. You can also complete the application form you will find in this magazine (page 34) or on our Web site and fax it to the office on 96996499. If you are paying by direct debit you will need to download the direct debit form from our Web site and complete it along with the application form and fax it to Melb PC. A connection fee of \$99 will be charged. If you are connected and cancel the service within six months an early cancellation fee of \$55 will be charged. Telstra charges ISPs for connecting ADSL service to lines and for cancelling it within six

months of the connection. Moving the service to another line counts as a cancellation of the service and a new installation.

If you do already have an ADSL service, then you will need to proceed differently. If your current ISP is a participant of the ADSL transfer process see <<http://www.westnet.com.au/products/broadband/adsl/transferprocess.shtm>> you will need to download and complete the ADSL transfer authorisation form and fax it to us with the application form. If you use this transfer process the fee will be lower (*it can be zero*) and you will experience just a short outage while the service is transferred. If your existing ISP does not participate in the process, then you would have to cancel your existing service and make a new application for ADSL once that service is cancelled.

When completing the application form over the Web or with pen and paper, you will have to enter personal details, ADSL line number, plan type and options, payment details and an account name and password. Make sure you get the ADSL line number correct and keep a safe record of your password! The ADSL line number is the telephone number of the line where you want your ADSL service to operate.

## What Happens After the Application

Once you make your application it will be checked and then Telstra will be requested to provision your ADSL line. They will make final checks on the availability of ADSL at your local exchange and test your telephone line to see that it is suitable for an ADSL service. At this stage the activation of your ADSL service will be scheduled, which all takes place at the exchange and not at your property. When the service has been activated, Telstra will notify WestNet and they will set up your account and notify you.

The whole process can be tracked online if you wish. There is a link on the Melb PC Web site. You will need a job tracking number and the password you entered in your application. If you made your application via the Web you will have been given this number; if you sent in an application form then you can contact Melb PC for the number. For setting up, refer to the separate article in this issue titled "Setting Up Your Melb PC ADSL"

## That's All For Now

We hope that those of you who are considering going over to ADSL will find the combination of WestNet's ADSL service and the added value from Melb PC to be as good as we think they are.

Melb PC will assist you by answering any questions you may have about the ADSL service, making an application and following how your application is progressing. Please look on the group's Web site for further information and contact us at [adsl@melbpc.org.au](mailto:adsl@melbpc.org.au) for anything you can't find. Please do not contact the office other than in regard to faxing completed application forms.

In forthcoming issues we will focus on some of the aspects of ADSL that we haven't touched, or only lightly touched upon here: networking the computers in your home to share your Internet connection, wandering the WestNet Neighbourhood, multiplayer gaming on the 3FL network and administering your account online.

## About The Author

James Cox is a member of the Internet *admin* and *help* teams. He has recently signed up for WestNet's ADSL service and is loving it. □