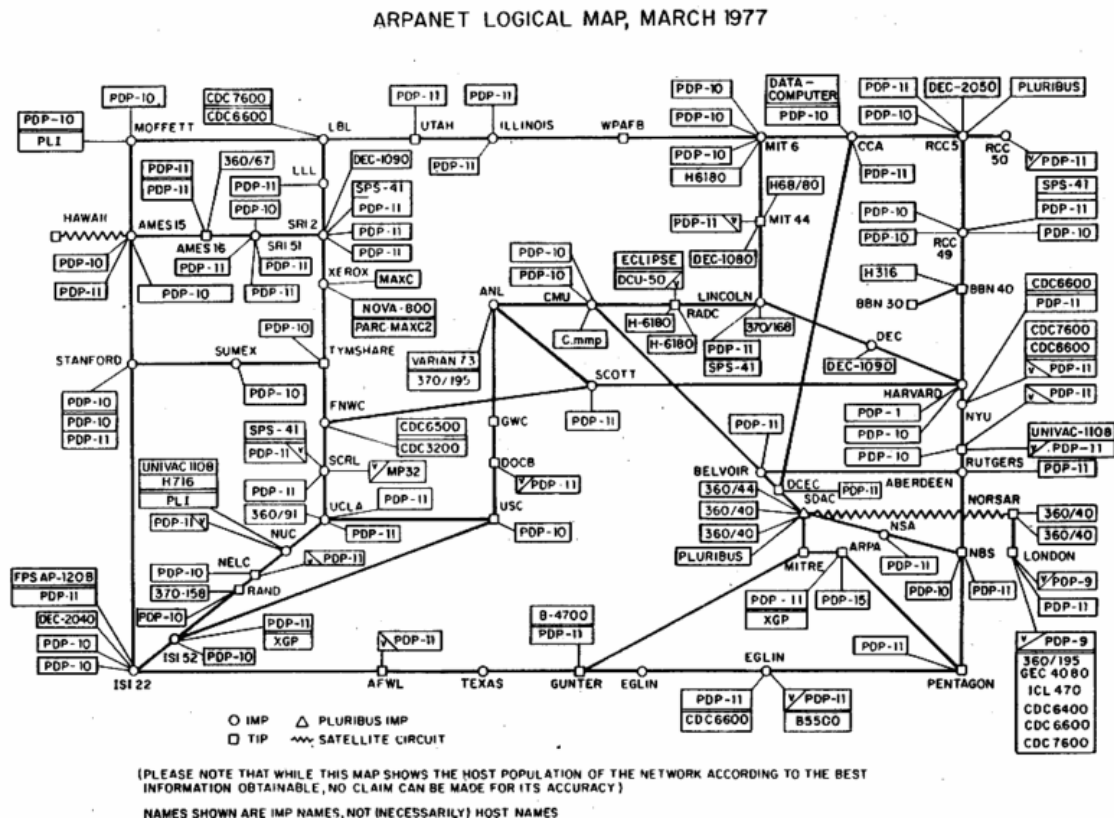


# Internet

A brief history of the internet is on page 61 of the *Computing for Complete Beginner* book. In other sources you might come across ARPANET being the beginning of the internet. ARPANET is the **Advanced Research Projects Agency Network** (ARPANET) developed by [ARPA](#) of the U.S. [Department of Defense](#). It was the world's first operational [packet switching](#) network, and the beginning of the global [Internet](#).



Notice the use of the word POP in this diagram. It stands for **Post Office Protocol**, and really means e-mail facility, and was amongst one of the most useful facets of ARPANET!

The two most important abbreviations we now see on the internet is TCP/IP. We often refer to that as the protocol that makes all computers connect and allow them to communicate with each other. It stands for the [Transmission Control Protocol](#) (TCP) and the [Internet Protocol](#) (IP), which were also the first two defined protocols on the internet. With TCP/IP protocols it became possible to join almost any computer network together, no matter what their operating systems were (UNIX, windows, apple, Linux, OS2...).

## How to access the internet

### ***Dialup***

Today the Internet is very accessible. From basic dialup internet you can use a telephone modem (about \$50 and found in most computers) to dial into an Internet Provider (ie. Dodo or BigPond) who gives you an IP address and connects you to The Internet for a reasonable price (\$10-\$25 per month). This is relatively slow, but perfectly fine for email and checking 'The Internet' (finding information, photos, schedules, hotels, internet banking and shopping). Just remember that your phone will be busy when you are connected to the internet, and accordingly, you will pay a local call fee every time you dial in. Some people experience difficulties with dial-up, usually in the form of getting 'kicked' off regularly and having to dial back in! Do not be surprised if your phone bill goes up by \$10 per month just to cater for these extra calls!

Beware of friends sending you large emails with video clips, family photos and other large attachments. It may take 10-20 minutes to download your mail sometimes if people are not considerate of you having dialup internet!

### ***ADSL***

ADSL or **Asymmetric Digital Subscriber Line** is a technology that enables faster data transmission over [telephone](#) lines than a conventional [modem](#) can provide. ADSL uses two separate frequency bands which are not used by the telephone network. This means you can be connected day and night and you can still use your phone even though ADSL actually uses the same copper wire.

Not everybody can get ADSL; it depends on whether your local telephone exchange is equipped for it (with a *DSLAM*) and how far away it is from you. Most *Internet Service Providers* (ISPs) will let you enter your telephone number on their website which automatically checks availability. You can always go to Whirlpool to check what Internet Service Providers and services are available to you: <http://whirlpool.net.au>.

ADSL often starts at low connection prices which have limited data transfers. Watch out for the 'plans' that give you less than 1 Gigabyte (1000 Megabytes) of throughput per month as you may well exceed it. After that they will often bill you for additional data. Standard browsing and email is not likely to take much data, but friends or family coming over and downloading music and video, games and other large files will! Some plans 'throttle' your speed to a lower connection speed instead of charging you for more data, and others have a 'cap' so you know it will not go above a certain monthly price.

Prices range from \$30 per month for a reasonable plan to about \$50 for a good plan and \$100 for very fast limitless plans. There is often a startup cost which might be \$100-\$200, but is often waived when you sign up for 1-2 years. Generally ISPs will let you change plan upwards, so if they get better plans for the same cost you can switch to them.

ADSL is an excellent choice if it is available to you. You can always be on the internet without any trouble, no local call costs, no long waits for downloads. Receiving photos from relatives in the mail will not be a problem!

### ***Other options.***

The Whirlpool Website (<http://whirlpool.net.au>) will let you know what is available in your area. Satellite is one that we can all get, but it is expensive to set up and generally not a cost effective option.

Cable internet is an option that is even faster than the standard ADSL we have now. You can get it in big cities where they have cable TV and is generally well priced (\$50-\$100 per month for a very fast internet service).

Some mainland cities have wireless internet available. This must be great if you own a laptop and don't often leave the city. Tends to be more expensive.

ADSL2+ is a new generation of ADSL which will see speeds much greater than what we have now. With ADSL2+, as with cable internet, you could watch high quality TV via the internet.

## **How do I surf the internet?**

If your computer is connected to the internet, as it is in our class room, all you have to do to 'go on the Internet' is press Internet Explorer and type something in the address bar. Most people like to type [www.google.com.au](http://www.google.com.au) and start a search for something they are interested in!

After a while you might have added FAVOURITES to your list and can go straight to where you want to.

Just remember that LINKS on the internet connect you to other places on the internet. You can tell a link by the look of the text. It is often a different colour and is underlined when your mouse moves over it! All you have to do is click your left mouse button, the action button, on it and it will appear.

How soon the new page appears depends on your connection to the internet, your ISP's connection to the internet and the internet connection of the company hosting the page. If for instance Ford brings out a new model car many people may look at their website and it may be slower to watch if Ford did not prepare for the extra 'traffic'.