DSL Access Technology

Pacific Internet, a leading provider of Digital Subscriber Line (DSL) services, was the first Australian Internet Communications Service Provider to launch business grade broadband and has developed a unique reputation for delivering innovative broadband solutions. DSL supplies significantly faster data transfer speeds than dial-up Internet, without a huge investment. It is a cost effective and convenient permanent connection.

Pacific Internet DSL services can be used to securely network your offices and employees across Australia, or to supply high-speed Internet and email access into your office.

What is DSL technology?

DSL is a proven standard 'always on' alternative to ISDN and other leased line options, with affordable installation and service costs. Simply installing DSL on your existing PSTN line and purchasing a DSL modem/router allows businesses of all sizes to access high speed broadband at a relatively low cost.

DSL refers to technology and equipment deployed on the existing copper wire telephone infrastructure to enable multi-channel, high speed access. In the case of Business DSL, the technology converts the single twisted-pair phone line to enable it to be used for high-speed data transmission, without disrupting the telephone signal.

Copper wire lines are designed to carry voice or modem signals of a frequency band up to 3.4 kHz, providing maximum data speeds of 56kbps. Now higher data speeds are possible by utilising a broader range of frequencies. Each range of frequencies acts as a separate channel on the same copper wire to enable additional data to be transmitted, providing greater bandwidth availabilities for your business applications.

What is broadband DSL?

Digital Subscriber Line (DSL) delivers broadband connectivity through copper wire lines. The technology converts the single twisted-pair copper phone line to enable it to transmit digital information at high speeds to your business. DSL can be Asymmetrical (ADSL) or Symmetric (SHDSL). ADSL allows data to be transferred at different speeds: the downstream (downloading) data speeds are faster than upstream (uploading) data speeds. SHDSL allows data to be transferred at identical speeds both downstream and upstream with guaranteed throughput.

For data applications needing high-upstream bit rates, such as Voice over IP, symmetric DSL delivers a fully inter-operable solution.

Features and Benefits

- 99% Service Level Guarantee for Business DSL and up to 99.9% Service Level Agreement for Premium DSL
- 24x7 permanent connection with no down-time, busy signals or drop-outs
- 24x7 business grade technical support team
- Dedicated provisioning team to fast-track your application and streamline your transition
- Premium DSL offers a 20 business day service provisioning guarantee
- High speed data transfers of up to 30 times faster than dial-up Internet with DSL and up to 110 times faster for Premium DSL
- Multiple user capabilities to enable networking of all of your offices
- Free included multiple static IPs* to run servers or multi networks
Wireless Professional Broadband

Wireless Professional Broadband is a highly secure broadband solution that utilises "military grade" 128-bit encryption across the licensed radio spectrum network. This ensures privacy is maintained for data traffic between the wireless base station and your wireless modem. It's ideal for users who are on the move by utilising proprietary "Smart Antenna Technology", which allows you to access high speeds as you roam freely anywhere within the wireless network coverage area. Handovers between base stations are automatic and completely transparent as connections are continuously optimised for best signal strength and network loading balance.

The Premium DSL difference

Premium DSL offers a guaranteed limit to the number of users sharing a particular segment of the network and is terminated as a true Layer 2 interconnection between your office and Pacific Internet. This allows a guarantee of bandwidth availability on the service. The guaranteed Grade of Service (GoS) on the connection allows you to utilise affordable DSL technology to run applications like Voice over IP (VoIP) and video conferencing that rely on a high quality network. Premium DSL is delivered as a Bridged Ethernet service, therefore requires no authentication.

In addition, Premium DSL is set up on a dedicated copper line ^, so you don't need line filters to protect your telephone and fax from the DSL service.

Classes of Service

Pacific Internet can deliver either a VBR-nrt or a UBR Class of Service across DSL.

Variable Bit Rate (VBR) – VBR services are designed to be of higher quality. They suit businesses that are concerned with consistent and reliable speed at reasonable prices. They are best suited to latency sensitive requirements and applications such as VoIP.

Unspecified Bit Rate (UBR) – UBR services have no guaranteed bandwidth. This means they are best suited for applications such as general public Internet access.

Minimum requirements

To utilise a DSL connection from Pacific Internet, you require the following:

- Compatible and approved DSL modem/router
- Pacific Internet highly recommends a software or hardware-based firewall
- Business DSL is terminated as a Layer 2 connection between the DSL network and Pacific Internet and requires the use of either PPPoA or PPPoE encapsulation
- A separate copper pair will need to be identified and isolated, or installed new at your premises for the Premium DSL service ^

^ Subject to approval
^ Pacific Internet will install a dedicated phone line at your service address where telecommunications infrastructure permits