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Business Class Internet

The future beyond ADSL

DATANET.CO.UK White Paper

The ADSL Explosion

Over the last few years, ADSL has become a must-have for businesses and home users alike. With so much of our economy now being run online, having access to the Internet is increasingly important.

ADSL was a revelation when it was introduced in the late 1990s, offering speeds vastly superior to the previous staple of dial-up. But in recent years ADSL has begun to slip off its pedestal.

Offers of higher and higher bandwidth are not being borne out by user experience and with businesses wanting to do more with their connectivity than simply surf the Internet, ADSL is reaching the limits of its usability, for businesses in particular.

Why is ADSL falling short of the hype?

ADSL has become a victim of its own success, contention ratios (of 50:1 and 20:1) are often the hidden reason behind less than expected performance. This is particularly true in urban areas where there is a real possibility that another 50 people are using the line at the same time as you.

The introduction of higher rates, such as 8Mb and above, have been seen as further progress but in actuality very few customers will get the full advertised rates. Line quality and geographic distance from the exchange mean an extremely variable service that rarely reaches the higher levels of total bandwidth availability.

Upload speeds are often overlooked when planning connectivity and were never really considered when Internet browsing was the primary use for connectivity. But with the adoption of VoIP by many businesses, as well as the requirement to share business-critical applications between offices, the speed at which traffic now leaves the site is just as important as the speed at which it arrives.

Our demands on, and expectations of, our inter-office connections have increased dramatically in just a few years, and unfortunately, ADSL has not been able to keep up with current requirements in the same way that dial-up could not.

The next step in office connectivity

Where connectivity is expected to carry increasingly complex and "heavy" traffic, the adoption of private circuits by businesses of all kinds has become more widespread and attractive.

As uncontended circuits with guaranteed bandwidth, options for symmetric upload and download speeds and traffic prioritisation, private circuits can meet the needs of a growing number of businesses who want and need to do more than surf the Internet.

Private circuits are very flexible with many different types of solution including MPLS, E1 leased lines and LAN extension services. The bandwidth available is also much greater with capacity starting at 2Mb and going up to 1Gb and beyond.

What benefits can a private circuit offer?

A private circuit can provide guaranteed bandwidth, giving increased stability to enable the sharing of applications between offices for common use of data and software.

The use of VoIP and video conferencing is becoming increasingly popular but relies on guaranteed bandwidth and packet prioritisation to be used successfully, two elements that cannot be provided by ADSL. The growth of this convergence trend looks set to continue to provide increases in efficiency and cost saving benefits, but only when implemented properly over a suitable connection.

With security being uppermost in the minds of all businesses, private circuits are inherently more secure and allow for more comprehensive offsite back-up options.

Looking to the future

We are only just starting to maximise the opportunities offered to us by Internet related technologies. However, in order to fully make the most of the technology and its benefits, our infrastructure needs to be capable of coping with the demands we make on it today, and in the future. Existing ADSL technology is unlikely to be able to keep up with these changes and demands and now is the time to start looking at alternatives.