Hitting the Road Again

By Mike Bromwich, Technical Director, PDMS

One of the promises of the telecommunications revolution was a society in which we spend less time travelling, and more time communicating at a distance. The vision presented was of a world where commuting was replaced by computing, and meetings we held by videophone or by donning a virtual reality headset. Aspects of what was perceived as the lifestyle epitome have indeed been realized, but in practice there are many activities which we need, or choose, to carry out in person.

Just fifteen years ago, one of the attractions of travelling was to indulge in some solitude. When out of the office, you were for all intents and purposes incommunicado. You only spoke to somebody by telephone if you chose to. Although there is no doubt that over the last fifteen years many such lifestyle advantages have come to fruition, it is very much a double-edged sword - almost everyone now has a mobile telephone which can provide endless interruptions at the most inopportune of moments.

Alongside the telephone, the PC has also become a vital communication tool. Coupled with the corporate network and the Internet, many of us communicate more using E-Mail than we do by telephone, fax and letter combined. Furthermore, connecting to the office network from home using a VPN (Virtual Private Network) is now commonplace, and has contributed to the stretching of the working day for many of us.

This capability is also available when travelling, and although the subject of much hype and publicity, the technology is still immature. Wireless Hotspots are available in many public places, and an increasing number of hotels provide High Speed Internet connections. In the case of the former you need to be equipped with a wireless card for your laptop, and in the case of the latter, a standard Ethernet port will suffice.

Either way, you also need to buy your bandwidth from somebody. Hotels sometimes provide this within your room charge, but it is more usual to buy service either by way of a subscription or by pre-paying for online minutes using a credit card. This is where the immaturity of the model is apparent – although limited roaming agreements between hotspot providers exist, you still need to have agreements with a large number of providers in order to guarantee coverage wherever you are. I am sure that it will not be long before these disparate arrangements coalesce as they have done for GSM mobile telephones.

One area where impressive ground has been gained is the network technology provided at the hotspot. Normally when you connect to your corporate network you have to configure your machine appropriately. In some cases, this configuration happens automatically – if your machine is suitably configured. When using a hotspot, you are on a totally different network with a different set of parameters, and to make things worse, every hotspot is different. The stroke of genius which has removed all this complication is the ability for the hotspot to operate whatever

the configuration of your machine (within reason), and even to direct you to the welcome page of the hotspot provider without changing the home page configured into you browser. All that is needed now is for this technology to extend to corporate networks, and the life of the typical IT manager will become a lot easier.

On a recent trip, I knew that I would need to access our corporate network from my hotel the evening before an important presentation. I therefore did what I could to ensure that this connectivity would be in place. Using the jiwire service (http://www.jiwire.com), I searched for hotels in the appropriate area. I then booked a room using the hotel chain's website. When I arrived at the hotel, not only was there no apparent WiFi signal in my room, the staff at reception had no idea what I was talking about. In the end I took to wandering up-and-down the corridors of the hotel using my laptop as a WiFi divining rod – I noted the areas of the hotel where a signal could be received, and arranged to be transferred to a suitable room. There is clearly some work still to be done.

What about security? The security of WiFi has taken a beating since its inception, and there are flaws. However, when using a VPN to your office, then the VPN itself provides an additional level of protection if it is configured correctly. When accessing web sites containing sensitive data then the site itself should provide security (using HTTPS – the padlock/key on your browser), and so the inherent insecurity of WiFi should not be a serious concern. The only area where you may want to be more careful is when using E-Mail – in their most basic form, the protocols which support E-Mail are not secure, although most E-Mail programs and providers support mechanisms for plugging this particular gap. If you use web-based mail, then HTTPS should be used where possible.

What about when you need connectivity when you are truly 'on the road' – outside the confines of a hotel or Starbucks Coffee Shop? There are a number of alternatives. Mobile telephone technology has developed to the point where 2.5G services are readily available and 3G services are emerging. These provide a reasonable level of connectivity. 2.5G services provide connectivity suitable for exchanging E-Mail messages and small documents, whereas 3G supports services with more demanding requirements such as high-speed browsing, multimedia and VPN access. I find 2.5G 'push' technology invaluable in keeping in touch with my inbox – whenever somebody sends me an E-Mail, it pops-up on my Blackberry as readily as an SMS message arriving on my phone.

Many people spend a lot of time using public transport – travelling on trains and aircraft for example. Initiatives and pilot projects have recently been launched to provide high-speed internet access in locations such as this. The cost of using such services is very attractive, especially if it means that a seven hour flight to New York can be turned into seven hours of productive time away from the telephone. It will be interesting to see whether the proliferation of such services across the railway network will tempt more of us out of our cars. Finally, back to that pesky telephone which keeps ringing at inconvenient moments. Several manufacturers are working on telephones which use Voice over IP in conjunction with WiFi/Hotspots to allow us to take our office extension with us wherever we go. Intel are even demonstrating telephones which can use a WiFi hotspot where available, and revert back to being standard GSM telephone elsewhere. It seems that there is no escape from productivity.

Tel: +44 (0)1624 823833 Fax: +44 (0)1624 825640 E-mail: enquiries@pdms.com