
Mobile broadband or WiFi? You betcha

Horses for wireless courses

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Originally published



Our increasing appetite for sending and receiving data on the move fuels ever increasing need for wireless connectivity. Wi-Fi access and mobile broadband are usual ways of meeting this need. So what's best?

At this stage, WiFi is ahead in convenience terms, but it is debatable by how much - particularly when roaming - and for how long. Most notebooks shipping today incorporate embedded WiFi connectivity – which is about as convenient as it gets.

Mobile broadband today typically requires a USB dongle or data card, which a user has to buy, remember to carry around with them, as well as ensure it doesn't get lost or damaged. But we are now starting to see the emergence of laptops with integrated mobile broadband. In terms of accessibility, this should put mobile broadband on par with WiFi.

The gap begins to widen when assessing fitness for purpose. At this stage, users should ask themselves what they require connectivity for, how long they need it, and where they will be when they need to connect. Factors include what the connection is being used for, e.g. reading/sending email, document access, browsing, and whether connectivity is required at a static location, or on the move, e.g. on a train.

WiFi generally offers high speeds via a reliable connection, although speed may be affected if the wireless network is heavily congested. WiFi also limits mobility to the range of the WiFi network – typically around 100m. When locating hotspots, at first glance there are a vast number. But advance research is necessary to verify if the available hotspots suit the user requirement. Often, hotspots are limited to locations such as cafes and bars, and do not necessarily cover other locations such as train stations (although new hotspots are continually appearing). Also, users need to arrange access to wireless networks, many of which come at a price.

Ándale! Ándale! Arriba!

Mobile broadband already provides almost ubiquitous connectivity, without the issue of network range and accessibility. This comes at a price, as mobile broadband is often slower than a WiFi connection. But this is an ever-evolving picture, with mobile operators determined to stay in the game. Vodafone Spain, for example, recently completed a successful mobile broadband trial, which achieved peak data download rates of up to 16 Mbps.

The story gets more complex when it comes to costs. WiFi in the home or office results in no new costs after configuration costs to hook in to the network. When users move beyond these boundaries, additional costs are incurred for access to public hotspot. Some locations offer free WiFi access, and in an ideal world, a user would assess, well in advance, the pros and cons

associated with a given hotspot. This isn't always practical or simple and users need to ensure their computer is configured to minimise the risks – we discuss this below.

Mobile broadband pricing is increasingly competitive, with low priced monthly subscriptions becoming more common. And pay as you go offers are coming onto the market. But packages are often accompanied by restrictive download limit: service providers want to control the high cost associated with transferring data across the 3G network and prevent the network from being overloaded. But users with heavy download requirements can rack up high charges very quickly, particularly if they do not actively monitor their usage.

International roaming is another complication. With mobile roaming charges often at high levels it makes sense to investigate available WiFi options at utilised locations, for example within a hotel.

Security blanket

Security is the most compelling issue to consider when assessing the pros and cons of WiFi versus mobile broadband. Security will (and must) take priority over all other factors, including cost: falling short is not an option. Public WiFi is under particular scrutiny on this score, thanks to some notorious examples of serious fraudulent activity.

Security measures that users should take when using public WiFi, include opting for more secure access points where available, ensuring that the PC firewall is switched on, disabling file and printer sharing, making files private (or even removing them), and encrypting data. Enterprises, by default, should ensure that employees' laptops are configured to optimise security when travelling. They should also issue staff with a check list of good practice.

Additionally, remote access vendors such as iPass protect WiFi hotspot access through a variety of security and authentication protocols, as well as helping to protect against rogue access points set up by crooks.

Mobile broadband is considered more secure than WiFi as everything is already encrypted through the mobile service provider's network. This eliminates the need for configuring/enabling security settings on the laptop. Probably the only security issue with mobile broadband is loss or theft of the USB dongle or data card, and with it a user's access credentials. This issue will disappear as mobile broadband is increasingly integrated into laptops.

The choice of connectivity today needs to take into account a whole range of factors, and we have tried to touch on the main ones. Some users may be served sufficiently by WiFi alone, and others by mobile broadband. Both markets are evolving, and ultimately, one may dominate the other, but for now, these should be viewed by both the user and the enterprise as complementary access options. Indeed, remote access specialists such as iPass and Fiberlink, along with traditional service providers already recognise and address this dual need and are in a prime position to move forward in this market.

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