

MOBILE HOTSPOTS

Do business anywhere with high-speed Internet access.

There were 11.1 percent more mobile devices sold in 2011 than in 2010, according to IDC. These include everything from smartphones and tablets to e-readers, wireless printers and other devices used for business, entertainment, learning and an array of diverse applications. What they all have in common is that they must connect to the Internet to achieve maximum functionality. Some are available with onboard modems, but others rely on Wi-Fi or exterior modems, which is where mobile hotspots come in. A mobile hotspot creates a Wi-Fi environment that can connect as many as ten devices anywhere there is Internet coverage. This is a powerful tool for companies and organizations that need to do business outside the confines of their facilities. Now, with the expansion of 4G, and especially LTE, mobile hotspots can provide the high-speed Internet connections necessary to handle almost any mobile business need.

WHY MOBILE HOTSPOT FOR BUSINESSES?

The biggest benefits mobile hotspots offer businesses are:

Productivity – By creating a Wi-Fi environment for several devices anywhere there is a cellular connection, team members can do business virtually anytime and in any location. This creates

more collaboration, less down time and faster responses to customer and company needs.

Efficiency – As a single source for up to ten Internet connections, mobile hotspots eliminate the need to equip every mobile device with its own onboard model. It also connects more devices with the business network, especially if using a virtual desktop cloud-based environment (VDI).

Cost Savings – A few mobile hotspots cost much less than purchasing many new devices equipped with onboard modems. Mobile hotspots can also significantly extend the life older devices that only have Wi-Fi capabilities.

WHAT ARE MOBILE HOTSPOTS?

Mobile hotspots (or Mi-Fi) are portable wireless broadband devices approximately the size credit cards that simultaneously function as a modem, router and Internet access point. They are equipped with modems that access a wireless signal from the carriers and utilize an internal router to share the connection with users and devices – usually five, but up to ten at time of publishing this article.

How Mobile Hotspots Work

Mobile hotspots connect to the Internet through a wireless carrier using the same technology as smartphones. They then create a Wi-Fi environment for up to thirty feet around the hotspot that any Wi-



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Fi-enabled device can access, if they have the proper security code. Most mobile hotspots work with all major operating systems and are compatible with mainstream browsers, such as Android™, Chrome™, Firefox®, Internet Explorer®, Safari™ and Mobile Safari™. Some can also be globally enabled to work in other countries. Be aware that international data charges may be much higher than US plans, so check with the carrier before travelling. Special plans may exist.

Data Speed

Many mobile hotspots operate on 3G networks, but most of the devices being offered today are 4G-enabled. These are usually back-compatible with 3G, as well. The significantly higher speed of 4G networks (4G LTE is best) is far preferable for businesses that will use mobile hotspots for several users and data-intensive applications, like video conferencing, media streaming and other similar purposes. For a 4G LTE connection from Verizon Wireless, for example, typical download speeds of 5–12 Mbps and upload speeds of 2–5 Mbps are achieved. These speeds can be as much as ten times faster than 3G and more than twice the speed of non-LTE 4G.

Mobile Hotspot Security

Mobile hotspots are equipped with security safeguards to protect user data and restrict access to the Wi-Fi network. For companies that need

more rigorous security for corporate standards or compliance with government and other requirements, some mobile hotspots can be configured with more advanced security features.

Functionality

Unlike smartphones, mobile hotspots are very simple to use. They are essentially ready to go, right out of the box after initial charging, activation and minor setup. Just turning them on triggers an auto-connect feature on many models. If a carrier signal is present, the Wi-Fi connections are immediately available. Individual devices may have other features and capabilities (like SMS), but basic operation has virtually no learning curve.

HOW TO USE MOBILE HOTSPOTS FOR BUSINESS

Mobile hotspots are an excellent business solution for companies, organizations and individuals who:

- Do business outside of the company facilities.
- Use multiple mobile devices.
- Operate in teams – simultaneously connecting to the Internet.
- Utilize field offices/operations.
- Go where no Internet connections are available.
- Have mobile devices that do not have internal modems.
- Want to use mobile VoIP through Wi-Fi.



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A wide variety of devices that are Wi-Fi-enabled can connect directly to the Internet through mobile hotspots, including:

- Tablets
- Netbook Computers
- E-Readers (Nook, Kindle, etc.)
- Digital Cameras – immediately upload photos
- Wireless Printers
- Blu-Ray Players
- LED TVs
- MP3 Players
- Music Systems
- Game Systems
- Virtually any other Wi-Fi-equipped device

Three Sample Mobile Hotspot Solutions

- 1) A construction general contractor must maintain multiple field offices at building sites in locations where landline Internet connections are not available. They use a mobile hotspot to connect multiple computers and tablets to the Internet and network a wireless printer for the modest cost of a one device and a single wireless connection.
- 2) A manufacturing company frequently sends out teams of installation and repair

technicians to customer sites. Each member must connect by Internet to the corporate knowledge base using tablets. One mobile hotspot and wireless connection does it for a fraction of the cost of 4-8 individual devices with onboard modems.

- 3) A medical supply sales team often needs multiple data connection simultaneously while doing presentations to physicians and hospital purchasing staff. A mobile hotspot provides secure, low-cost Internet access without having to top into the hospital network.

CHOOSING THE RIGHT MOBILE HOTSPOT

When selecting a mobile hotspot, consider the following:

Number of Devices – Most mobile hotspot support five or more devices simultaneously. Some connect up to ten on 4G.

Features – While most mobile hotspots are fairly simple and straightforward, there can be some differences in capabilities, size, controls, display, etc.

Speed – 3G mobile hotspots are quickly being phased out by carriers who have good 4G coverage. Almost all 4G devices are back-compatible to 3G. The advantages of 4G are huge, especially when sever users are connected.



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Coverage – Businesses should make sure the carrier they select has high enough speeds in the coverage areas where the mobile hotspots will be used.

Security/Compliance – Security requirements should be taken into account. Some mobile hotspots have higher levels of security than others for compliance with company and agency standards.

Cost – Compared to smartphones, mobile hotspots are quite inexpensive. In some cases they are free with a two-year contract. Check out the options.

DATA USAGE CONSIDERATION

When choosing mobile hotspots, it is very important to consider the amount of data that will be used and select a data plan that will be most economical for the business's specific situation. With the phasing out of unlimited data plans among most of the major carriers, it can get quite costly if the amount used

exceeds the plan. Teleconferencing, media streaming and other data-intense applications can use a lot of data very quickly. Make sure to track usage. Also, turning off the mobile hotspot when not in use will save data.

SUMMARY

The technological advancement and rapid proliferation of mobile devices are providing huge benefits to businesses, from increased capabilities and business development to greater productivity and cost savings. Mobile hotspots are playing an increasingly important role in the mobilization of business processes and applications. By providing Wi-Fi connections for several devices through one wireless connection, companies can cost-effectively deploy more mobile devices for less cost. That is why they are one of the hottest trends in wireless technology. Check them out.

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