

HOME NETWORKING 01.INFO

04/07/2011 |

France's Free Mobile service to have free femtocells

27/06/2011 12:05

Article

Iliad aims to boost Free Mobile service with free femtocells - FierceWireless:Europe[1]

My Comments

In France, Iliad's "Free" telecommunications brand is to use femtocells as a way of increasing its effective coverage. These are devices that provide mobile telephony coverage within small premises, typically one's house, but use the Internet service as the backbone to the mobile telephone network.

SFR offers a similar service for their "Neufbox Evolution" customers but this requires that they pay EUR99 per month for this service. Instead Free are offering it as a complimentary service to their "Freebox Revolution" customers. Both of the triple-play platforms will have the functionality integrated in their "n-boxes" which combine a network-Internet "edge" device (router) along with a VoIP analogue telephony adaptor.

For France, this will be seen as relevant for the mobile carriers in that country as they face an uphill battle against a strong NIMBY (Not In My Backyard) culture when it comes to deploying mobile-phone towers. This is more exacerbated as the junk science and fears concerning the side-effects of electromagnetic radiation are held as gospel in some French communities.

Issues that can affect current femto implementations

A limitation I have observed with these "femto" implementations is that they will be designed to serve up to four or five handsets, which may be enough for a household. But for a country that has the cafes and brasseries at its heart, there needs to be reference designs for femtocells that can work in a similar manner to a Wi-Fi hotspot service. Here, the device could support around 10 to 15 concurrent users. The service could support multiple-carrier traffic and provide the host carrier or even the business's owner with a service bounty for customer's voice minutes that pass through the femtocell.

Similarly, there can be the issue of assuring coverage across the property for a femtocell setup. It may be of concern with larger properties in areas of poor mobile coverage or properties that have radio obstacles like thick brick walls for example. This could be rectified by establishing a mechanism for "multi-femto" arrangements where the same backbone can serve two or more femtocells with proper seamless handover.

Other technologies

Of course there are other technology setups that may work instead of the femtocell. The classic example may be the use of Wi-Fi technology with EAP-SIM authentication and VoIP call-provisioning systems to provide "indoor" mobile-call service. This will typically require the phone to have integrated Wi-Fi functionality which most smartphones do have; but support seamless handover, quality-of-service and accounting between cellular and Wi-Fi networks.

Another issue that will affect this setup is current-generation Wi-Fi transceivers that are integrated in smartphones is energy use when in full activity. Here this will affect the mobile phone's battery runtime and typically cause the phone to require charging more frequently. Most likely this will be rectified in the upcoming generations of Wi-Fi transceivers available for these devices.

Conclusion

The French femtocell services offered by Free and SFR are worth examining as far as private femtocell and "quad-play" (TV, telephone, mobile telephone and Internet) services go. Here, it would be worth examining the technology and its relevance for mobile-telephony service goes especially where the NIMBY culture thrives; and identify the real problems where it can run into when using it to augment these service in the public and private realms.

Links

[1]

http://www.fiercewireless.com/europe/story/iliad-aims-boost-free-mobile-service-free-femtocells/2011-06-24?utm_medium=nl&utm_source=internal

Product Review-HP Pavillion DV7-6000 Series 17" multimedia laptop computer (DV7-6013TX)

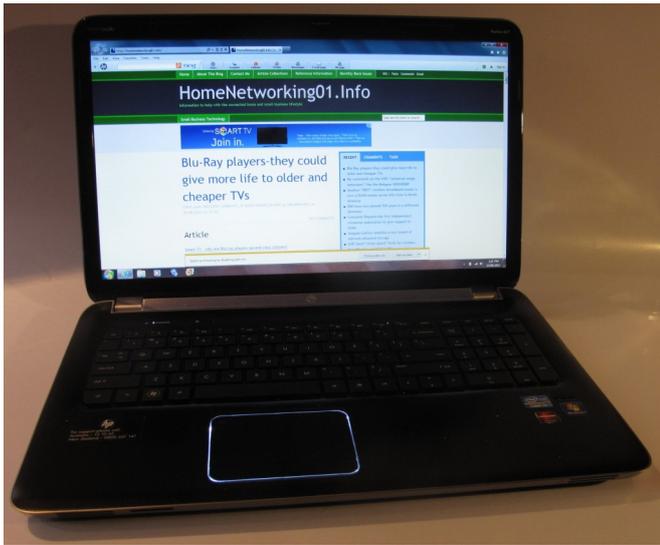
23/06/2011 05:15

Introduction

I am reviewing the Hewlett-Packard Pavillion DV7-6000 Series of 17" desktop-replacement multimedia laptop computers. The actual model that I am reviewing is the DV7-6013TX which is the top-end model of the series. The only differences between this and the other models in the series are the processor type, the hard-disk capacity and the optical-drive type.

One factor I am considering in this review is how these computers stand against the Dell XPS L702X, a similarly-equipped desktop replacement laptop which I recently

reviewed[1]. Both of these computers are driven by Intel second-generation "Sandy Bridge" chipsets which have integrated CPU/GPU processors.



[2]

Price

- this configuration AUD\$2599 Processor **Intel Core i7-2820QM Sandy Bridge** Less-expensive models: Sandy Bridge processors - Intel Core i7-2630qm (base model) or Intel Core i7-2720QM (step-up) RAM 8Gb RAM shared with graphics in integrated mode Secondary Storage **2 Tb hard disk** 1 Tb hard disk - cheaper models **Blu-Ray Disc RW drive**, Blu-Ray Disc ROM /DVD burner - least expensive model SD card reader Display Subsystem AMD Mobile Radeon HD 6770M discrete + Intel HD integrated 1Gb dedicated graphics RAM in discrete mode Screen 17" widescreen (1600 x 900) LED-backlit LCD Network Wi-Fi 802.11g/n with inherent support for Intel WiDi and Wi-Fi personal area network Bluetooth Yes Ethernet Gigabit Ethernet Connectors USB 2 x USB 2.0 2 x USB 3.0 Video HDMI, VGA Audio 2 x 3.5mm headphone jacks 1 x 3.5mm microphone jack Digital out via HDMI Operating System on supplied unit Microsoft Windows 7 Home Premium **Windows Experience Index - this configuration** Power-saving Intel Graphics mode High-Performance AMD Radeon graphics mode Overall mode 5.9 5.9 Graphics 5.9 6.9 Gaming /CAD graphics 6.3 6.9

The computer itself

Aesthetics and Build quality

The HP Pavillion DV7-6000 Series computers are finished in a black brushed-aluminium case and also have a black brushed-aluminium keyboard escutcheon. There is some of the anodised-aluminium or satin-chrome trim around the edge of the computers base and hinges, which provides for a contrasting two-tone finish.



[3]

HP logo reflects when the computer is turned off

But there is a finishing touch that hits at the Apple MacBook range very squarely. Here, the HP logo located on the bottom left of the lid reflects like a mirror when the unit is off but glows like the Apple logo on those MacBook computers when it is on. It wouldn't be noticed as readily as the Apple logo that is positioned on the centre of the lid on those computers.



[4]

HP logo glows when computer is on

Whatever, it leads to a well-built computer that doesn't feel flimsy in any way.

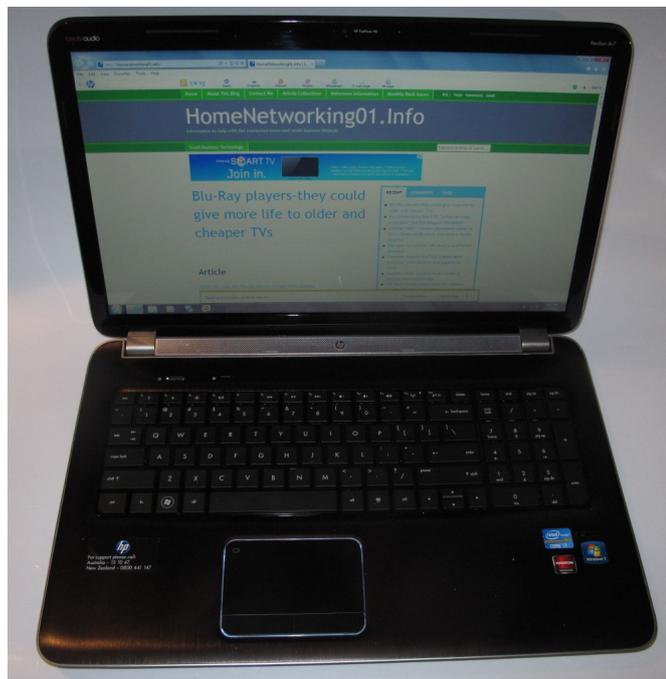
User interface

The HP Pavillion DV7-6000's keyboard is a similarly-styled chiclet keyboard to the Dell L702x but isn't illuminated. This is in fact a common keyboard style used on most laptops nowadays. The keys are a short-throw variety which may allow for quicker touch-typing but may affect user accuracy.

There isn't an option to determine whether pressing a key on the function-key row activates the laptop functions or a Windows-defined function like F5. Here, you would have to hold down the Fn key to select a Windows operating-system function.

The trackpad has its own area with separate primary and secondary buttons. This is even made easier with a white “neon-effect” ring surrounding the trackpad area. There are no speaker or other grilles on the palm-rest area that can be masked by your palms thus affecting the sound quality of cooling performance of this computer.

Another feature that the HP Pavillion DV7 has is a fingerprint scanner that is supported by Windows as a login measure. But this requires the computer to run HP software for the functionality to operate.



[5]

Photo with keyboard more visible

Audio and Video

The Pavilion DV7-6000 Series laptops are equipped with dual-mode graphics with Intel HD “Sandy Bridge” graphics in power-saving “economy” mode and AMD Mobile Radeon HD graphics in “performance” mode. Unlike switching a car’s transmission between “normal /economy” mode and “sport /performance” mode, these computers require all of the applications to be shut down before you change graphics modes. This will take a few seconds to occur during switchover and the unit will suggest the operating mode to use as you change between external power and inbuilt-battery power.

The screen is a 17” LED-backlit unit which works at 1600 x 900 resolution. It could benefit from having a full-HD 1080p resolution screen even if it is offered as a differentiation option. This is compared to the Dell XPS L702x which had the full HD screen as the high-end model option.

This laptop is another example of a laptop that has its audio-playback subsystem “worked” by a company who has had strong involvement in sound recording and/or reproduction. Here, the goal of this involvement is to move away from that lifeless tinny sound that typically emanated from most laptop computers and yield some decent room-filling sound that was easy to understand.

In this case, the job was done by Dr Dre’s “Beats Audio” team, who have worked the sound subsystem in the HP Envy 15[6] that I previously reviewed. This uses a 2.1 speaker configuration with a separate bass driver. Like the JBL improvement in the Dell XPS, this has allowed the computer to deliver room-filling sound without a that horrible “tinny” sound output common to most laptop computers. It is also worth knowing that the stereo speakers are actually placed above the keyboard so your hands don’t obstruct the sound while the computer is in use. The visual evidence of this is an aluminum grille at the top of the keyboard, between the hinges.

Some benefits I have noticed when I watched some conference videos on this computer was the clarity of the sound recorded in the video including incidental traffic sound. As well, the voices of the speakers had more of the “personal depth” in them, whereas a lot of laptops would have the voices sound like an AM radio announcer as heard on a low-end pocket radio. As well, when I played “Munich” on this computer, the soundtrack had some depth with it especially with the sound effects.

Battery life

The dual-mode graphics also allows the HP Pavillion dv7-6013TX to work for a longer time on its own batteries, especially if you are doing basic computing tasks like emailing or word-processing. Here, unlike most other laptops with discrete graphics, I had noticed that the battery wasn’t running down as fast

I had done a mixture of activities on this computer; including copy-editing and viewing of videos from a “connected-TV” conference. Yet I was able to get at least two hours of battery life out of this activity. This is although I was running the computer on the Intel graphics mode.

It was able to play through a feature-length “cinema” movie with 11% battery charge remaining at the end of the credits while on the Intel power-efficiency mode while the Wi-Fi connection was alive. This shows what the Intel Sandy Bridge chipset was all about when they promised the power efficiency for graphics-intensive tasks.

Other experience notes

The HP Pavillion DV7 doesn’t run hot as easily as a lot of the laptops that I have used. Even if the fan is run at full pelt, it makes use of the grillework on the left side and the top of the base to permit proper cooling. It may be unusual for a laptop that doesn’t have a battery “lump” or kickstand that positions it at an angle, something I have seen with a few other laptops like the Dell XPS or the HP Probook 4520 stablemate.

Limitations and Points Of Improvement

The DV7-6000 Series could benefit from a 1080 Full-HD screen especially if it is to be used for preparing or viewing Full-HD content. HP could also implement a higher-performance ATI Mobility Radeon discrete graphics chipset in the higher-end model as a key product differentiator. As well, it could support dual-band Wi-Fi networking in markets where this is permitted.

Conclusion

The HP Pavillion DV7-6000 Series laptop computers are another laptop worth considering if you are moving towards a laptop-focused “New Computing Environment” for your home or small business. Similarly, it could serve its purpose as a “work-home” laptop for business owners who primarily use it in the home or workplace and primarily travel by car. Some people may find these computers being suitable for their needs if they “live out of the car boot” and frequently drive to and stay at another person’s place for nights at a time.

This may not be as strong a performer as the Dell XPS L702X but would win on memory capacity across the series (8Gb for all models) and the mid-tier and top models having 2Tb hard disk space and Blu-Ray writing. On the other hand, this level of performance may suit most average games players or most multimedia tasks.

Links

- [1]
[/2011/05/product-reviewdell-xps-l702x-multimedia-laptop-computer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [2]
[http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-23-008-HP-Pavillion-dv7-6013TX.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [3]
[http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-23-001-Reflective-HP-logo-when-off.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [4]
[http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-23-003-Glowing-HP-logo.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [5]
[http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-23-011-HP-Pavillion-dv7-6013TX.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [6]
[/2010/04/product-review-hewlett-packard-envy-15-luxury-thin-and-light-notebook-computer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)

Blu-Ray players—they could give more life to older and cheaper TVs

20/06/2011 11:55

Article

Smart TV - why are Blu-ray players second-class citizens?[1]

My comments

I agree with the principal argument that this article had put forward concerning the availability of the “smart-TV functionality” in video peripherals like Blu-Ray players or network-media adaptors. There is due to a reality that most of the consumer-electronics industry has been missing concerning

how people have purchased and owned TV sets; something I, like most of you, have seen for myself.

The reality with TV purchasing and ownership

Since the 1970s, the typical colour television set has been able to enjoy a very long and reliable service life, thanks to transistorisation. This had been underscored with the gradual introduction of electronic tuner subsystems that were more reliable than older mechanical tuner systems like the old “click-click-click” tuning knobs that were common in most markets or the “push to select, twist to tune” button arrays common on TV sets sold in the UK in the 1960s.

This long service life then allowed for a “push-down” upgrade path to exist in a similar manner to what happens with the household refrigerator. Here, one could buy a nicer newer fridge and place it in the kitchen while the older fridge that it was to replace could go in the garage or laundry and act as extra cold storage space for food and drink, such as the typical “beer fridge”. In the case of the TV, this would mean that one would buy a newer better TV, most likely with a larger screen and place it in the main lounge area. Then the original set which was to be replaced by the new set typically ended up in another room like a secondary lounge area or a bedroom or even in a holiday house.

Usually the only reason most households would scrap a TV set would be if it failed beyond repair or was damaged, Even if a set was surplus to one’s needs, it would be pushed off to another household that could benefit.

Some people may think that this practice has stopped with the arrival of the LCD or plasma flatscreen TV, but it still goes on.

Not all TVs are likely to be “smart TVs”

Not all manufacturers are likely to offer network-enabled TVs in their product cycle. This may be due to a focus on picture quality or the ability to build lower-end products to a popular price point.

It also includes sets like TV-DVD combo units or small-size models that are offered at bargain-basement prices. As well, home-theatre enthusiasts will be interested in buying the latest projector rather than the latest “smart TV”.

Addition of extra functionality to existing televisions with video peripheral devices

The consumer-electronics industry has had success with extending the useability of existing television receivers through the use of well-equipped multi-function video peripherals.

The video recorder as a TV-enablement device

The best example of a device enabling older and cheaper TV sets was the video cassette recorder as it evolved through the 1980s. This wasn’t just in the form of recording of TV shows and playback of content held on videocassettes.

It was in the form of improved television viewing due to the TV tuners integrated in these devices. By model-year 1981 in all markets, the typical video recorder was equipped with a reliable electronic TV tuner. As well, all VHS and Betamax video

recorders that implemented logic-control tape transports also implemented a “source-monitor” function when the machine wasn’t playing tapes. This would typically have the currently-selected channel on the machine’s tuner available at the machine’s output jacks including the RF output channel that the TV was tuned to.

Here, this setup gave the old TVs a new lease of life by providing them with a highly-reliable TV signal from the VCR’s tuner. In some cases, users could tune to more broadcasts than what was available on the TV set. Examples of this included cable channels received on an older “non-cable” TV in the USA or Germany; channels broadcasting on the UHF band through a mid-70s VHF-only TV in Australia and New Zealand; or access to Channel 4 on a “4-button” TV in the UK due to more channel spaces.

The ability to change channels using the video recorder’s remote control also allowed a person who had a cheaper or older TV to change channels from the comfort of their armchair, something they couldn’t previously do with those sets.

Similarly, some households would run a connection from the video recorder’s AUDIO OUT to their hi-fi system’s amplifier and have TV sound through their better-sounding hi-fi speakers. This was exploited more with stereo video recorders, especially those units that had a stereo TV tuner integrated in them, a feature that gradually appeared as TV broadcasters started to transmit in stereo sound through the 80s and 90s.

How the Blu-Ray player is able to do this

The typical well-bred Blu-Ray Disc player has the ability to connect to the home network via Ethernet or, in some cases, Wi-Fi wireless. This is typically to support “BD-Live” functionality where a user can download and view extra content held on a Blu-Ray Disc’s publisher’s servers in addition to viewing content held on the disc. As well, the Blu-Ray Disc player can connect to ordinary TV sets as well as the HDMI-equipped flat-screen TVs that are currently in circulation.

Some of the Blu-Ray players, especially recent Samsung, Sony and LG models can also pull down media from the DLNA Home Media Network and show it on these TVs. As well, some manufacturers are rolling out some Internet-ended services to these players.

In the same way as the video recorder was able to extend the functionality of the cheaper or older TV set by offering extended tuner coverage, remote control or access to better sound, the Blu-Ray player or network media adaptor could open the world of Internet-ended entertainment to these sets.

What the industry should do

The industry could work towards achieving similar interactive functionality for the network-enabled video peripherals as the network-enabled TVs. They could achieve this through the establishment of a “platform design” with similar applications and capabilities across a consumer-video product lineup. It is in fact what Sony is doing for their consumer-video products at the moment with very little difference in interactive-service lineup between their TVs and their Blu-Ray players.

Here, the interactive-TV software is consistent across the whole lineup of TVs, Blu-Ray players, Blu-Ray-equipped home-theatre

systems and other video peripherals. The manufacturer may vary the software according to the device’s function by omitting functions relating to particular hardware requirements like screens, optical drives or broadcast tuners in order to make it relevant to the device class. Of course, there could be support for user-attached peripheral devices like USB Webcams, Bluetooth-enabled mobile phones, UPnP-compliant printers and the like to extend functionality for particular software applications like video-conferencing.

The software may be fully revised every few years to build in new functionality and accommodate better hardware. It may also be a chance to improve the operation experience for the software concerned. Yet this could maintain the branding and skinning that the manufacturer and software partners do desire.

Conclusion

There is a different reality that exists when buying TV equipment and this function should be supported equally in video peripheral equipment like Blu-Ray players and network media adaptors as in TV sets.

Links

[1]

<http://www.theage.com.au/digital-life/computers/blogs/gadgets-on-the-go/smart-tv-why-are-bluray-players-secondclass-citizens-20110620-1galn.html>

My comments on the WiFi “universal range extenders” like the Netgear WN3000RP

20/06/2011 06:37

Product Page

Netgear WN3000RP[1]

My Comments

There has been some increased Internet publicity about Netgear’s WN3000RP “universal range extender” which is intended to extend Wi-Fi coverage in to a network’s dead spot. Devices like this one are billed as being able to work with any 2.4GHz Wi-Fi network segment such as an ISP-supplied “Internet-network edge” wireless router.

But these devices work in a particular manner that may cause problems with network use. Here, they work as a wireless client bridge to the existing network and set themselves up as a Wi-Fi access point that is its own “extended service set” or Wi-Fi network segment. Most of these devices will typically have an Ethernet connection for use with Ethernet-ended network devices like PCs, network printers or games consoles and work as a Wi-Fi client bridge for these devices.

What can go wrong

Positioning in the wireless network

There is in fact a lot that can go wrong in setting up and using these devices. One issue is how the device is positioned in the master wireless segment that is to be extended. You have to locate these devices just off the fringe of that wireless segment in order to avoid unreliable service from the client devices on both network segments. Usually, you would have to keep an eye on two indicator lights - one which shows reception quality relative to the master wireless segment and one which shows the quality of the wireless segment created by the device.

Operation of Wi-Fi client devices

As well, users will need to make sure that their laptop computers, smartphones or other devices point to the SSID associated with the range extender. In the case of the Netgear device that is set up using WPS to the "master segment", the SSID will be a combination of "master_segment_SSID" + "_EXT"; like "BIGPOND-1234_EXT" for a hypothetical Telstra-supplied Wi-Fi router whose SSID is "BIGPOND-1234". Of course, the WPA security parameters will be the same as that for the "master segment". It may also require users to make sure their devices "latch on" to the SSID that is strongest for the area they are in; which may be a problem with laptop computers running some desktop operating systems; or some network devices like some Internet radios.

Bandwidth availability and advanced Wi-Fi setups

Another factor that is also worth considering is that the data bandwidth available in this newly-created segment will be smaller than that available in the master segment due to the device working from a weaker point of the master segment. Of course, never expect these devices to offer advanced network behaviour like client isolation for use with hotspots or support for multi-SSID access points for example. With the latter example, these devices will only work with one of the SSIDs available from these access points.

WPS network setup

A key point of confusion that can occur with Netgear's wireless range extenders is the way the WPS "push-to-connect" function works. These devices have one WPS button on their control surface, which handles associating with the "master segment" or associating with a client device on its own segment. When you set up the range-extender for the first time with a WPS-enabled access point or router on the master segment, you are meant to press this button on this range extender to start the WPS cycle then press the button on the WPS-enabled access point to complete the process. Then you enroll a WPS-capable client device on this range extender's segment by starting the WPS-configuration process on that device then pressing the WPS button on this range extender. What can happen is that a person who is enrolling the client device could press the button on the range extender before starting the WPS-setup process on the client and this could make the device assume it is connecting to another master segment rather than enrolling the new client.

What could be done to make these devices better

Firmware that suits multi-function operation

Of course the current firmware with these devices prohibits using them as a "pure" Wi-Fi access point with a wired backbone to the network. This is although they work properly as an access point for the new segment with the Wi-Fi "master segment" as their backbone. Rather, I would prefer that these devices have a "multi-function" firmware in place which allows at least three operation modes: a wireless range extender with one wireless segment as the backbone and another covering the area; a wireless access point with a wired backbone; and a wireless client bridge serving Ethernet-connected devices.

Improved designs could use a hardware switch that selects between the operation modes. This can then lead to a logical foolproof WPS operation mode with the WPS button only used for enrolling client devices in modes other than "Client Bridge" whereupon it would be used to enrol with the master segment. The user would be required to set the unit to "Client Bridge" mode when they want to establish a wireless backbone, then set the unit to "Range Extender" mode for operation as a range extender with a distinct satellite segment.

Improved WPS operation

Similarly, these devices could have improved WPS-button logic such as a "long press" for setup with a master segment and a "short press" for client setup. This can avoid further operation complications due to someone who intends to enrol a client device causing these range extenders to "hunt" for new master segments and affecting access to the network by established devices.

Conclusion and my opinion on these devices

If I was to extend the coverage of a wireless network segment[2], I wouldn't necessarily use the wireless backbone method that is encouraged with these devices. Instead I would use access points run off a wired (Ethernet or HomePlug AV) backbone. This would then make sure that there is the full bandwidth available across the coverage of the network

Links

- [1] <http://www.netgear.com/home/products/wireless-range-extenders/wireless-range-extenders/wn3000rp.aspx>
- [2] /2008/11/feature-article-extending-your-wireless-networks-coverage/#utm_source=feed&utm_medium=feed&utm_campaign=feed

Another “MiFi” wireless-broadband router is now a DLNA media server–this time in North America

18/06/2011 10:08

Article

Mobile Hotspot Devices Are Starting to Add DLNA Media Server Functionality | eHomeUpgrade[1]

[Link to the video](#)[2]

My Comments

Previously, I had reported on a Vodafone “MiFi” wireless-broadband router[3] being able to be a DLNA-compliant media server for its local network. This was available in most of the European countries that Vodafone have presence in.

But now the DLNA-enabled “MiFi” is now touching the North-American market through Novatel Wireless and currently available through AT&T[4]; although I would suggest that you check with your wireless-broadband carrier if their “MiFi” has this upgrade. This is available through their current wireless-broadband router model, being the MiFi 2372[5], after it has been loaded with the latest firmware. This could then become the case for some of the other “MiFi”s based on this unit’s design and offered through other carriers.

Like the Vodafone unit, you insert a MicroSD card (up to 32GB) full of images, audio or video content and use the Web management interface on this device to enable the DLNA media server for the Wi-Fi local network. Then you can find and play that content from your DLNA-compliant device’s user interface or push the media to another DLNA MediaRenderer device on the Wi-Fi network using Windows 7, TwonkyManager /TwonkyMobile, Samsung AllShare or similar control-point programs.

There will be an issue with these devices becoming media servers, where their battery runtime will be reduced with this function enabled. This may not be of concern if the device is connected to external power or a long-range battery pack through its USB connection; but will be of concern when you run it on its own batteries. As well, most tablets and smartphones will need to run a DLNA media client for this feature to work.

This feature may be more prevalent with more of the current-model or next-model “MiFi” units if they have a microSD slot that is for file storage; and could be available “out of the box” or through a subsequent free firmware update. This could then lead to these devices becoming a “traveller’s best friend” for the network age, whether on a long journey, at the trade fair or at the holiday house.

Links

[1] <http://www.ehomeupgrade.com/2011/06/10/mobile-hotspot-devic>

[es-are-starting-to-add-dlna-media-server-functionality/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+eHomeUpgrade%2Fentries+%28eHomeUpgrade+1%29](#)

[2] <http://www.viddler.com/BGR/videos/9/>

[3]

[/2010/09/vodafone-mobile-wi-fi-r201-mi-fi-wireless-broadband-router-raising-the-bar-for-this-class-of-device/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)

[4]

<http://www.wireless.att.com/businesscenter/devices/att-mobile-hotspot-mifi-2372.jsp>

[5]

http://www.novatelwireless.com/index.php?option=com_content&view=article&id=142&Itemid=49

IBM have now passed 100 years in a different direction

18/06/2011 08:17

Article

BBC News – IBM at 100: From typewriters to the cloud[1]

My Comments

When International Business Machines (IBM) had come on to the scene as an office technology company, there weren’t many technologies around that made office life more productive. Now this company has built up a steady path of innovation in this field and it has culminated with the development and refinement of the mainframe computer through the 1960s and 1970s; and the establishment of a highly-desirable office electric typewriter equipped with an interchangeable “golf-ball” typehead, known as the “Selectric”.

But this company had a strong hand in the personal-computing scene with the arrival of the IBM PC. This desktop computer, which was based on Intel electronics and a Microsoft operating system had set the benchmark for an affordable desktop computer for small businesses. Through the 1980s, this computer was refined through the use of colour graphics, hard disks and faster processors. Australian readers may know that a lot of these computers sold in that market were built in a factory in Wangaratta, Victoria.

In a similar vein, another company called Lotus had developed the quintessential desktop spreadsheet application known as Lotus 1–2–3. Due to its flexibility and capability, this program became the preferred spreadsheet application to be run on an IBM PC.

But these computers had effectively brought the desktop computer out of the realms of the hobbyist and in to the hands of business. This was initially in to the hands of the bookkeepers and similar employees but, in the late 80s and early 90s with the arrival of cost-effective computer networks, ended up in the hands of most office workers from the top floor to the bottom.

The PS/2 era was a markedly different era with an attempt by IBM to develop their own operating system and graphic user

interface, which was known as OS/2. These computers also used a high-speed interface bus, known as the Micro Channel Bus, that was different from the EISA bus that was used by the rest of the industry. The main benefits that these computers had provided for the industry-standard Intel-based computing environment included the use of micro-DIN keyboard and mouse interface ports, including a standard interface for the mouse; a small power-supply reference design which allowed for the power switch to be located on the front panel; and the use of 1.44Mb 3.5" diskettes on the Intel-based PC platform.

Through the late 90s, IBM had shifted away from its hardware roots and moved towards its role as a hardware-software "solutions provider" for big business. This was evident with them devolving their main hardware lines to other companies; like Lexmark for printing and imaging, Hitachi for data storage, and Lenovo for personal computer systems. It was although they bought out Lotus and implemented Lotus, who had shifted to "Notes" as an information-management system, in their solutions. Here, it has led to them being able to work on "cloud-based" computing projects that can help these businesses manage their information across many locations.

Infact, I would consider the existence of IBM to be a "**milestone to the connected lifestyle**" in itself due to its development and refinement of both "back-end" and desktop computing equipment central to this lifestyle.

Happy 100th Birthday, IBM

Links

[1] <http://www.bbc.co.uk/news/business-13726776>

Consumer Reports—the first independent consumer publication to give support to DLNA

18/06/2011 04:36

Article

DLNA and why it matters | Consumer Reports[1]

My Comments

There are those of you who use magazines like "Which[2]", "Consumer Reports[3]" or "Choice[4]" to assess the calibre of consumer products that you buy. This is because the organisations behind these magazines assess the products on the basis of how a consumer would experience these products and want to stay at arm's length from the suppliers' public-relations efforts. Similarly these same organisations work in their own territory as general consumer advocacy organisations on topics like junk-food consumption and the like.

Now Consumers Union, the American-based consumer information and advocacy organisation, have used their "Consumers Reports" platform to identify consumer electronics devices that work with the DLNA Home Media Network by using this feature as a distinct attribute in their products' attribute

lists. The main reason I support this is that they support the level of interoperability that this standard provides for media distribution over the home network.

Here, it could be a good idea for other organisations of the same calibre as Consumers Union, like Australian Consumers Association ("Choice") to use their reviewing platforms to support this standard. One of the reasons is that this standard isn't controlled by one product vendor but set up for cross-vendor compatibility; and is infact the reason HomeNetworking01.info stands for this technology as a preferred platform for media management via the home or small-business network.

Links

[1]

<http://news.consumerreports.org/electronics/2011/06/dlna-and-why-it-matters.html>

[2] <http://www.which.co.uk/>

[3] <http://www.consumerreports.org/>

[4] <http://www.choice.com.au>

Seagate GoFlex Satellite—a new breed of network-attached storage

17/06/2011 11:14

Article

Seagate GoFlex Satellite : Father's Day Gift Guide: Geeky Patriarch Edition[1]

From the horse's mouth

Seagate's Web site for this device[2]

My Comments

The Seagate GoFlex Satellite network-attached storage is representing a new breed of network device design that is becoming more prominent with Wi-Fi devices. Here, the device has an integrated access point and DHCP server and works with dedicated client apps or integrated Web server to share files.

There are limitations with this class of device in that they cannot connect to an existing Wi-Fi network. Here, the user has to point their client device to the network-attached storage device's SSID in order to benefit from the device. In the case of the GoFlex Satellite, the user would have to visit a Web page hosted by the device and /or use dedicated client software to gain access to the files.

Of course, with this GoFlex Satellite, it is intended for the user to connect the unit directly to a computer as an external hard disk using a USB 3.0 connection when loading content on to it or using it as a backup device.

This is compared to some newer "MiFi" wireless-broadband routers that have SD card readers and treat the mounted SD cards as network drives. Here, they use standard network-drive protocols for sharing the storage space and share media-file directories using UPnP AV /DLNA standards.

I find that it would be easier to have these kind of drives work with client devices through standardised protocols. If the device is to work with an Apple iOS client, the manufacturer could license or develop CIFS and DLNA client apps for integration with these devices' file systems.

As for network connectivity, these devices could support the ability to join an existing Wi-Fi small-network segment, whether through "push-to-join" WPS, Windows Connect Now-USB or manual setup. Then they could serve content to that Wi-Fi segment. Of course, they could still work as their own network if they have to, such as serving content to devices that have no Internet; have Internet served via a wireless-broadband setup with integrated modem or computers in the throes of being commissioned.

The main issue with this design is that it is very much designed around the Apple iOS ecosystem and is not likely to work well beyond that.

Links

[1]

<http://www.tomsguide.com/us/Fathers-Day-Guide-MSI-Lenovo-ThinkPad-Canon-Acer,review-1662-4.html>

[2]

<http://www.seagate.com/www/en-us/products/external/external-hard-drive/goflex-satellite/?intcmp=bac-en-us-home-hero1-goflex-satellite>

UHF-band "white-space" tests for wireless broadband successful in UK

17/06/2011 05:08

Article

BT: Tests using white space for rural broadband are 'very encouraging' - FierceWireless:Europe[1]

My Comments

There have been a few tests taking place in various countries to use bandwidth vacated by TV stations when they gone digital for use as the wireless last-mile in broadband service delivery. This application of the "white space[2]" will be used primarily to deliver real high-speed broadband in to households and small businesses in rural and remote communities.

The BT Openreach tests that occurred recently and were cited in this article were performed on the UHF TV band and were covering the Isle Of Bute in Scotland. This exploited the ability for this band to be received on indoor antennas (aerials) like the typical "rabbit's ears" used on portable TVs, as well as outdoor aerials.

A good question that may be worth raising with a UHF-based "white space" setup may be whether such setups may cause digital-TV reception problems for stations broadcasting on that band. This is more so in areas where the UHF band is being used as a "repeater" /"translator" broadcast band to fill in reception black spots in a TV broadcaster's market area. In a rural area,

there will be these transmitters being used for each TV broadcaster that is to be received in the area alongside any "white-space" Internet-delivery setup.

Other questions worth asking include whether such a setup will use "fibre-to-the-transmitter" or other high-speed wired backbones, what kind of bandwidth is available to the customer and whether it will be a "shared bandwidth" setup like DOCSIS cable-modem setups or a "dedicated bandwidth" setup like what Ethernet and DSL setups can provide.

Links

[1]

<http://www.fiercewireless.com/europe/story/bt-tests-using-white-space-rural-broadband-are-very-encouraging/2011-06-15>

[2]

[/2010/09/super-wi-fi-or-the-use-of-vacated-vhfuhf-radio-spectrum-for-wireless-networks-is-it-the-right-application/#utm_source=feed&utm_medium=feed&utm_campaign=feed](http://www.fiercewireless.com/europe/story/super-wi-fi-or-the-use-of-vacated-vhfuhf-radio-spectrum-for-wireless-networks-is-it-the-right-application/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

Choosing a Brother small-business printer or HP inkjet printer could become like choosing a car

15/06/2011 06:55

Recently, I had reviewed a few Brother printers and had observed a particular trend in how the products are being positioned. It is becoming more akin to how the typical vehicle builder is positioning a particular vehicle model or series of vehicles.

It is also becoming very similar with Hewlett-Packard's Photosmart and OfficeJet inkjet printer ranges where there are a few common mechanisms implemented in the products. But, in HP's case, the different models have differing cosmetic designs so as to integrate different feature sets and make the more expensive machines look classier.

A lineup of models with varying feature sets and throughput speeds but with the same design

In the vehicle world, an example of this was Holden's large family cars sold through the 1960s to the 1970s. These vehicles had different model names depending on their level of luxury and /or their powertrain, with the "Premier" representing the top-of-the-line standard-wheelbase vehicle. Low-end vehicles were referred to initially as "Standard" or "Belmont" vehicles until the early-70s "HQ" series while "step-up" or "mid-tier" vehicles had model names like "Special" or "Kingswood". This was until the "HQ" series where vehicles in that and subsequent series had "package" suffixes to differentiate entry-level and mid-tier vehicles.

For example, I had noticed that the HL-2240D direct-connect duplex monochrome laser printer was part of a series of laser printers based around a new printer design and print engine. There was a low-end model known as the HL-2130 which couldn't print both sides as well as the HL-2250DN which was equipped with Ethernet networking and the HL-2280DW being

equipped with Wi-Fi networking. Similarly, the more expensive models in the lineups also benefit from higher page throughput due to more powerful components in the design.

A model range derived from another model range

But the practice becomes very similar to how the vehicle builders derive a model range design from another concurrently-running model range design. An example of this would be them designing a longer-wheelbase luxury “executive” car as a derivative of a standard large family car like what Ford have done when they derived the Fairlane and LTD designs from the Falcon designs.

Here, this is reflected in how the designs for this company’s laser-printer lineup are used. I had observed that the multifunction series including the MFC-7360N that I reviewed were derived from the previously-mentioned dedicated laser printer series that the HL-2240D was part of. Here, all the units in both printer lineups used the same print engine and the same replacement parts.

Benefits for product choice

This will allow for a granular range of products in a product class where a person can choose or specify the right kind of printer based on their needs and budget; without needing to create new designs in order to satisfy the different market segments. This also allows the manufacturer to keep product prices within affordable territory because there is the ability to reuse parts across the different models. It also can allow a salesman room to upsell customers to better products or make deals that offer better value.

In most cases, the mid-tier product will offer best value for most users. For example, in these two printer lineups, the mid-tier models (HL-2250DN dedicated printer and MFC-7460DN) will offer the two currently-desirable features – double-sided printing which saves paper; and network connectivity. In some other cases like the dedicated colour laser printers based on Brother’s latest high-throughput colour-laser print engine, the HL-4150CDN which just has Ethernet network connectivity and reduced-time-penalty colour duplex printing would suit most users.

Conclusion

The creation of a granular product range with incremental functionality but a few common design bases and /or descendent product classes can then allow manufacturers to keep consistent value for money when they want to build out a product range.

Cable TV now on the Skype video-conferencing bandwagon

15/06/2011 04:13

Articles

Skype to bring video chat to Comcast subscribers | Signal Strength - CNET News[1]

Comcast brings Skype calls to TV | Total Telecom[2]

My Comments

Previously, Samsung[3], LG and Panasonic[4] have implemented a Skype videoconferencing endpoint in their Internet-enabled TVs for use with an optional Webcam. This was to allow users to have the ability to make videocalls with the ability to hear their correspondent from the TV’s speakers and see them on the TV screen.

Now Comcast, a major US cable-TV provider, has got in on the act by installing Skype on their new set-top boxes. But, typically, what will happen is that customers will have to purchase a special USB webcam through Comcast to enable the service. The backhaul for this service will be the Comcast cable-Internet infrastructure and the service will appeal to people who have Comcast also as their Internet service provider.

Could this open up the door for pay TV companies to enable their set-top boxes as Skype endpoints especially as they see themselves losing relevance in the Internet age? This is mainly due to the “cord-cutting” trend where people are downscaling or cancelling current pay-TV subscriptions or refusing to subscribe to pay-TV and use “over-the-top” Internet-delivered video-on-demand services.

On the other hand, this step, taken by set-top-box makers and cable-TV companies, could allow people who have existing TV equipment to make or take Skype calls on their favourite big-screen TVs. For satellite-based or terrestrial-based setups, it will require the use of a backhaul via the customer’s Internet service, which wouldn’t be difficult if the operator implements other Internet-based services like catch-up TV or view-on-demand. It will be interesting to see who else will roll this service in to their set-top box platforms even as TV manufacturers enable their sets for Internet TV.

It has therefore become the first time that Skype has become available in a popular set-top-box platform, especially delivered by a pay-TV provider rather than requiring the customer to buy a new set-top box for this function.

Links

[1] http://news.cnet.com/8301-30686_3-20070930-266/skype-to-bring-video-chat-to-comcast-subscribers/

[2] <http://www.totaltele.com/view.aspx?ID=465549>

[3] [/2010/02/skype-enabled-tvs-now-samsung-is-in-the-party/#utm_source=feed&utm_medium=feed&utm_campaign=feed](http://www.totaltele.com/view.aspx?ID=465549)

[4]

Apple's update to the MacOS X platform—a more visible update

13/06/2011 13:22

When Apple[1] launched the “Snow Leopard” version of the MacOS X platform, there were initial doubts[2] expressed in the computing press about Apple Macintosh users upgrading their existing equipment to this newer platform. The doubts that were expressed were primarily directed at the operating system not exposing new functionality at the user interface. This was because a lot of the work was done “under the hood” through a code rebuild for the Intel processors.

Over the past two years that I have seen MacOS X “Snow Leopard” in the field; I have talked with various Macintosh users about how their computer has fared under it. There have been some users who have bought it pre-installed on a new Macintosh-platform computer or have upgraded their existing Mac to this platform. Remarks I have heard included relative performance improvement as well as a reduction in the disk space required for the operating system compared to prior versions of the MacOS X platform.

This year sees the imminent release of the “Lion” version[3] of this same platform, where there has been a lot of key changes and improvements made to the operating system. Examples of these functionality improvements included: enabling the Macintosh platform for touchscreen use, the implementation of “full-screen” operation for Macintosh applications without the need to have the Apple Menu Bar in view all the time; a multi-window view of all the currently-running programs; an iOS-style icon screen for all the programs installed on the Mac as well as the previously-mentioned[4] iTunes App Store for the Macintosh.

What it seems like for me is that Apple have decided to take the job of improving the Macintosh platform in to two stages; the first one being primarily an “under-the-hood” effort which culminated with “Snow Leopard” and the second one with all the user-visible improvements culminating with “Lion”.

If you intend to upgrade your Macintosh to the “Lion” version, you will need to make sure it is based on an Intel Core-based or Xeon-based processor which means most relatively-recent Macs; and runs the latest version of “Snow Leopard”. The upgrade will be available as an electronic download available at the App Store for US\$29.99 and downloads straight to your Mac.

Links

[1] <http://www.apple.com/>

[2]

[/2009/08/apple-snow-leopard-is-it-worth-it-for-your-existing-mac/#utm_source=feed&utm_medium=feed&utm_campaign=feed](http://2009/08/apple-snow-leopard-is-it-worth-it-for-your-existing-mac/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[3] <http://www.apple.com/macosx/>

[4]

[/2010/12/the-mac-app-store-what-could-this-mean-for-the-apple-macintosh-platform/#utm_source=feed&utm_medium=feed&utm_](http://2010/12/the-mac-app-store-what-could-this-mean-for-the-apple-macintosh-platform/#utm_source=feed&utm_medium=feed&utm_)

Apple iOS 5—To be updated without the need to tether your device

13/06/2011 09:26

Articles

[Apple iOS 5 Updated Over the Air - InternetNews.com\[1\]](#)

My Comments

The latest incarnation of Apple's iOS platform is intended to be about integration with an Apple-based iCloud cloud-based computing environment. This is alongside the dream that Steve Jobs has about less reliance on the desktop computing environment. But there is an advantage that will benefit users of any iPhone, iPad or iPod Touch whether they just use their device alongside a regular computer or independently.

This advantage is about “over-the-air” software updating for the operating environment. Some mobile phone platforms, such as a few Android installations, were able to be updated without the need to tether the phone to the computer. As well, iOS users could keep their device's app collection up to date independently of the computer, a practice similar to adding an app to these devices. Now this will be implemented across the iOS platform so you don't need to connect up that iPhone or iPad to your computer and fire up iTunes whenever Apple revises the platform.

One benefit that I would see out of this is if one's computer is down for any reason, they can still update the iOS device. Also you don't need to know where that white USB lead that connects your iPhone to your PC is.

Similarly, the update experience is more reliable for most Mac or PC users. This is because there is less risk of the device being “bricked” (put out of action) due to reasons like a software crash or hang; a slow computer or the USB cable coming out of the device's Dock connector.

There may be disadvantages with this setup, especially for devices that are primarily operated on a wireless-broadband network. This is where the update may become a significant cost due to the data allowance on most low-end wireless-broadband plans. This may not be of concern for those of us who use the iPhone with Wi-Fi networks associated with most home or business wireline broadband services.

A good question with this update that may concern owners of existing iOS devices is whether the device needs to be prepared for “over-the-air” updating or not. This may be dependent on what version of the iOS system you are running. Here, the device could be enabled through an operating-system update or the installation of an “enabler” app from the iTunes App Store.

It will be interesting to then see whether all the iPhone and iPad users will find it easier to keep these ubiquitous mobile computing devices up to date.

Links

[1] <http://www.internetnews.com/bus-news/article.php/3935261>

Product Review–Brother MFC-7360N monochrome multifunction laser printer

11/06/2011 07:17

Introduction

I am now reviewing the Brother MFC-7360N monochrome multifunction laser printer which is part of a series of newly-released monochrome-laser multifunction printers released by this company. This unit is positioned as a “step-up” model above the MFC-7360 entry-level direct-connect model. The midrange model in this series is the MFC-7460DN which can print on both sides of the page as well as become future-proof by supporting T.37-compliant Internet faxing[1]. The top-shelf model is the MFC-7860DW which also has 802.11g WPA2 WPS-compliant Wi-Fi connectivity and can accept output from smartphones and tablets equipped with the Brother iPrint&Scan app.

They all have the same new “compact monochrome laser” print engine as the Brother HL-2240D printer [2]that I previously reviewed and its peers such as the HL-2270DN network model that I also recommend. Here, this xerographic-print engine is a full laser type and can yield a simplex print speed of 24 pages per minute.



[3]

Print Scan Copy Fax /
E-mail Paper Trays Connections B/W Colour B/W B/W 1 x A4
USB 2.0 Laser Xerographic 2400dpi G3 Multi-purpose slot
Ethernet Automatic Document Feeder IPv6

Prices

Printer

The machine’s standard price: AUD\$349.99

Inks and Toners

Standard **High-Capacity** Price Pages Price Pages Black 69.99
1200 \$118.99 2600

Servicing and Other Parts (Laser Printers)

Price Pages Drum Kit AUD\$129.95 12000

The printer itself

This unit uses the typical control panel layout as common with most machines in its class but the LCD display could benefit from backlighting. Here, I had to set the display contrast to maximum to gain best readability; and is something that could be improved upon.



[4]

Control panel

Setup

This unit has the same Brother fax-setup wizard with one name and fax number as a station ID, so you don’t have to determine a separate station ID for transmitting and receiving. It also can work properly with a dedicated fax line or a shared fax line, whether through a distinctive ring (Faxstream Duet) setup or a CNG-detect arrangement.

It can be set up on an Ethernet (or HomePlug) network with plug-and-play operation for most small networks and is IPv6 ready. Of course, when the time comes to enable the network for IPv6, the user just has to go to the Network menu on the control panel and select “IPv6” and set that to “On” before turning the unit off and on in order to have it as part of the IPv6 network.

It could benefit from NTP-based Internet time synchronisation with time-zone selection so the user doesn’t have to set the clock when they set up or shift this machine or after a power blackout.

Walk-up functions

This unit has the basic copy and fax functions, and allows walk-up scanning to network-connected computers only. Here, the host computer needs to run Brother-supplied scan monitor software

The more-expensive models; the MFC7460DN and MFC-7860DW, have the ability to support scan-to-email and T.37-compliant Internet-fax endpoint functionality. These features should be available across the range as we move away from the circuit-based telephone setup towards packet-based telephony.setups courtesy of the next-generation broadband infrastructure plans.



[5]

Automatic Document Feeder with document loaded

The printer's automatic document feeder may look as though it is missing something because of the absence of the paper input tray. But this tray is actually the lid that swings open to the right when you use the document feeder. This is infact a style that is becoming common with Brother small-business multifunction printers that have this feature; and allows for a machine to look more neater. It also assures more reliable operation of the document feeder because the input chute isn't always exposed to dust and other foreign objects.

Computer functions

The software is very easy and trouble-free to load and has that same "at-a-glance" view for the print job settings that all of the Brother printer drivers have always had. As well, it makes proper use of the Windows 7 Device Stage for managing the printer's functionality.

This is in fact where you manage the printer's unobtrusive and reliable scan monitor software, which has been a sore point with many of the multifunction devices that I have used and reviewed. Here, you can determine what form the image file should be and which application should open the file.

Print Quality

The Brother MFC-7360N, like the previously-reviewed HL-2240D [6]and others based on the same print engine, does the job properly by starting quickly and turning each page out quickly. Like most laser printers and multifunction units, it requires the user to press tie Start button after they replenish the paper tray during a print job.

The print quality is as sharp as expected for a monochrome laser printer especially when it comes to turning out documents. For photographs, it will reproduce the images as expected for black-and-white images when set to 600dpi in the print driver but can have issues with image contrast especially at higher dpi settings. Luckily, the printer didn't complain of memory overload when I sent through the 1200dpi photo print job but it yielded an image that appeared too dark and with little contrast.

It also the similar consumables to the HL-2240D and requires the user to take the drum-unit assembly out and detach the toner cartridge from the assembly to replace the toner. This of course will have the same room for error by allowing the drum unit to be exposed to dirt unless it is on a clean surface when the user replaces the toner.

Limitations and Points Of Improvement

One improvement that I would like to see for the range would be to have the LCD display showing a high-contrast image. This could be augmented by having the display backlit during operation even with just a basic LED arrangement; akin to what is done with the HL-4150CDN.

There is still the common issue that this machine has with other Brother printers based on the new compact monochrome laser-printer engine that can impair the useability. This is where the user has to remove the drum unit from the printer to replace the toner. It could be improved upon with a similar arrangement to what is used for the colour lasers where the drum unit assembly is pulled out like a drawer so the user can replace the toner cartridge.

The feature limitations like the lack of duplex printing and inability to support Internet-based faxing may be necessary to keep the printer as a step-up model within the multifunction range.

Conclusion and Placement Notes



[7] This printer can work well as an entry-level or supplementary monochrome laser printer where basic copying, scanning and faxing are desired. But I would recommend the MFC-7460DN, which is the model above it, if you expect to do a lot of document printing or place value on having future-proof Internet fax abilities.

Links

- [1]
[/2010/11/faxing-and-machine-to-machine-communications-in-the-ip-based-telephony-age/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [2]
[/2011/05/product-reviewbrother-hl-2240d-compact-direct-connect-monochrome-laser-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [3]
http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-09-009-Brother-MFC-7360N.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed
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[/2011/05/product-reviewbrother-hl-2240d-compact-direct-connect-monochrome-laser-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)
- [7]
http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-09-007-Brother-MFC-7360N.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

Twitter—who see what and when

08/06/2011 07:53

Another increasingly-popular social network service is Twitter. This was intended as a “microblogging” service but some people have been implementing it as another social network.

Like the similar Facebook article that I have written for Facebook novices, this will list who will see which information you post when you use Twitter. Here, I would recommend this as a bookmark or favourite or as something to print out and keep near the computer or have available on the business intranet.

Twitter lexicon

Tweet A public Twitter post. Also to leave a public post on Twitter
Follow To subscribe to a Twitter user’s Tweets (public comments)
Follower A person who subscribes to a user’s Tweets. Is also capable of receiving direct messages from the users they follow.
Hashtag A reference tag that is preceded by a # (hash) symbol and is used for filtering Tweets on a topic. Used primarily in front of cities, TV shows, brands, etc.
Mention or Reply A Tweet that features a Twitter user with that user’s name preceded by an @ symbol.

Who sees what

What you do
Who sees this When you post a Tweet All your Twitter Followers
When you Retweet someone’s else’s Tweet All your Twitter Followers
Your followers will see the original Tweet suffixed by “Retweeted by ”
When you reply to someone else’s Tweet or mention another user in your Tweet All your Twitter Followers
The Tweet will have the other person’s username preceded by the @ symbol and the user will be able to see the mentions or replies in the “reply /mention” filter
When you send a direct message to a Follower Only that specific Follower that you address
Your Follower has to be following you to be able to be contacted by a Direct Message

What to do where on Twitter

General comment or broadcast message
Post a Tweet
Be careful what you write as all followers or potential followers can see what you write.
Reply to someone else’s Tweet or mention a Twitter user where confidentiality isn’t required
Post the tweet using the Reply or Mention tools
Again, be careful what you say when you write these posts.

This can be good for congratulating the user or offering some sympathy on an event they Tweeted about.

Direct private message to a Follower
Post a Direct Message

If someone follows you on your Twitter account, it may be a good idea to check that person out when you receive the notification by email. Here, you could then consider following that person and being able to use direct messaging as appropriately.

It is also worth noting that a lot of social Twitter users use “textspeak” (abbreviations and acronyms for common expressions used when sending SMS messages) when they send out Tweets. So you may have to use resources like the Urban

Dictionary to help you understand some of this lingo.

Further proof that outer-urban areas are at broadband-service-starvation risk

07/06/2011 07:52

The current situation that faces these areas

There is a common issue with Internet service provision for customers that live outside of a major metropolitan area and this issue will become of concern as these metropolitan areas edge out to the country areas. This is where a town or district has old and decrepit telephony connections that are repaired or improved in a "patchwork" manner.

Typically, ADSL service would be rolled out to the towns by the installation of DSLAM equipment in the telephone exchange by the various providers. This happens with the old telephone wiring and connections still in place and, of course, any work that is done on the wiring infrastructure may be in response to disaster events or simply damaged lines such as a tree falling across a phone line. The old and decrepit phone infrastructure may be just good enough for a voice call or a fax transmission with modest equipment at each end of the line.

In some areas, there may be some work done on the telephone infrastructure covering the core business area of a small town i.e. the shopping strip and areas surrounding the hospital, police station or council offices. A large employer who is attracting business to the town may cause the telephony infrastructure provider to provide improved infrastructure for their business premises and some nearby areas.

The examples

Previously, I had seen a friend of mine who lived in Yarra Glen, which is in the Yarra Valley Wine District just east of Melbourne about their Internet connection.

The symptom was no successful connection to the ISP. They tried a new modem router just in case the old one had packed it in and the problem was the same. Then their retail ISP had found through Telstra who was the infrastructure provider in Australia that there were connections between the exchange and my friend's residence that were simply rotten. They were good enough for voice telephony but not good enough for ADSL service.

Another example was found out through a conversation with a small-business owner who runs bottle shops (liquor stores /off-licences) in two towns in the Dandenongs that are a short distance apart from each other.

At one of the shops, there was poor quality-of-service for the Internet connection servicing that premises. He received different quotes for the "distance to the exchange" metric which affects the ADSL Internet service, even though the business was very close to the town's exchange.

At that time, there was work being done by Telstra in the neighbourhood to replace some problematic wiring. This was then causing the different readings for the "distance to exchange" metric due to the different quality of wiring and the connection that existed.

An industry problem that may affect service providers and customers

A question that typically faces the user and the retail broadband provider is who is to blame for the substandard service? That is whether it is the infrastructure provider, the wholesale broadband provider or the retail ADSL ISP?

This ends up with the buck being passed between the different parties and can become more aggravating especially where the fault lies with decrepit infrastructure. In some situations, this can place the customer in a position of liability for troubleshooting work that had taken place because the retail ISP's equipment wasn't at fault.

If the fault lies with the infrastructure between the exchange where the ISP's ADSL equipment is located and the customer's premises, it should be made clear that the fault lies at that point and the infrastructure provider is required to repair that fault.

What can be done

Infrastructure assessment as part of service deployment

Typically, whenever ADSL broadband is rolled out to a town in a rural, regional or peri-urban area, the work that typically occurs is to have the DSLAM equipment installed at the exchange plus some modifications at the exchange end of the service infrastructure. There isn't a chance for the wiring infrastructure to be assessed for service problems, such as poor-quality connections or old and decrepit wiring.

This should be done more so as retain Internet service providers that provide their services on an "unbundled local loop" basis start rolling their services out in to that area or as multiple retail Internet service providers share the same DSLAM equipment in the exchange.

What should really happen is that if customers in an area register for ADSL service and the service arrives at the exchange; the condition of the wiring to that area should be assessed for proper ADSL throughput. At that point, any and all repairs should then be performed for all of the telephone subscribers in that area; including removal of pair-gain wiring setups that limit modem throughput.

Public-private engagement

Of course, it may be considered too costly especially in these areas, but there also needs to be the benefits assessed for that work to take place. This may include increased service utilisation which may yield more revenue and an incremental improvement for businesses who work in the area where their goods and services gain increased value.

In some ways, this kind of effort could be a public-private partnership where government is involved in the improvement effort. My suggestion of the use of government involved with money sourced from the taxes that we pay may be scoffed at by

the “free-market, no-public-money” advocates but it may have to be the way we would go to seek these improvements. This is more so if there isn’t any sort of universal-service-obligation mechanism established for broadband Internet service.

In this case, the local government which is the shire or city council could be engaged in funding these service improvements that are specific to their local area. This could then allow the local government to attract more business or maintain a highly-viable business ecosystem in their area; especially if the area is driven by many small businesses like most of these areas.

This has been performed successfully in various British villages like Lyddington [1] in Leicestershire whenever next-generation broadband Internet was delivered to these villages.

Conclusion

We just can’t think of improving broadband in particular rural areas when we give real broadband to sparsely-populated areas. Rather we also need to factor in the sparsely-populated areas that exist on the edge of our cities and, in some cases, serve as attraction districts for these urban areas like wine districts or beauty districts as part of broadband-service improvement plans.

Links

[1]
[/2010/04/more-rural-broadband-activity-in-the-uk-lyddington-leicestershire/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)

Product Review–Western Digital LiveWire HomePlug AV kit

06/06/2011 06:41

Introduction

I am reviewing the Western Digital LiveWire HomePlug AV kit, which is a pair of Ethernet switches that also have HomePlug AV connectivity. Here, this kit is being pitched at people who want to connect Internet-enabled video equipment to the home network and Internet connection without laying down new wiring to the router.



[1]

Price:

Recommended Retail Price AUD\$169.99 for a two-unit kit

LAN Connectivity

Connectivity for each unit Ethernet 4 ports HomePlug HomePlug AV SimpleConnect

The device itself

Setup



[2]

The HomePlug switch as connected up

The Western Digital LiveWire kit is able to be used in a “plug-and-play” manner with a secure HomePlug AV segment.

There is the ability to create a separate HomePlug AV network segment by you pressing the “Simple-Connect” buttons (labelled

SYNC) on each device one after another quickly. Here, you don't have to think of new network identifiers or device passcodes for each of the member devices in this segment.

Performance

This unit can demonstrate a good level of resilience to known interference like switch-mode power supplies or electrical motors on the same circuit and yield a useable HomePlug connection. It may initially yield a low connection speed until the link is assessed by each HomePlug device on each end. This is more so with links that are on different circuits and may show up heavily on older electrical installations.

Of course, the HomePlug AV segment created by these devices worked properly alongside an existing HomePlug 1.0 Turbo (85Mbps) segment that has been working as the main household HomePlug segment for the network. As I have known before the segments that work on the different HomePlug standards aren't compatible but can coexist as separate segments.

As well, unlike some cheaper Gigabit Ethernet switches that I have used, this kit works properly with UPnP devices like the WDTV Live network media adaptor which I tested it with. Here, it worked as expected for media playback from the Internet and my WD MyBook World network-attached storage which worked as a UPnP AV media server.

Limitations and Points Of Improvement

The WD LiveWire units could benefit from the SYNC button and HomePlug light working to a proper cadence especially when integrating another HomePlug AV device to the same segment. This is more so if the network setup involves multiple established devices scattered around the house.

As well, there could be a variant model released that uses a four-port Gigabit Ethernet switch which can be of benefit if the switch is to be connected to two or more devices like a network-attached storage and a recent-issue computer. It would also be of benefit if the switch is to serve as a HomePlug AV "on-ramp" for a Gigabit-Ethernet equipped router or Ethernet backbone. This may not happen until HomePlug AV2, which is a higher-throughput HomePlug standard, is properly ratified.

Similarly, there could be a variant of this switch that can be an 802.3af/802.3at compliant Power-Over-Ethernet power supply for four devices that get their power over the Ethernet cable. This would come in handy with those IP telephones, network-based surveillance cameras and access points that work to this standard for network-based power.

Of course, you may not expect much from a company whose interest is more on storage devices rather than network infrastructure hardware.

Conclusion

I would still recommend this HomePlug AV kit as being suitable for use when connecting a cluster of network-connected equipment like Internet-enabled home-entertainment equipment to the home network. The fact that both the HomePlug AV adaptors come with integrated multi-port Ethernet switches can increase their utility value such as increasing Ethernet points with routers that have Ethernet ports that are all used up including single-port routers like most entry-level ADSL modems.

Similarly, one of these units can be used as part of a setup for bridging data between a legacy HomePlug 1.0 segment and a HomePlug AV segment or "pushing out" a HomePlug AV segment on a country property by creating another HomePlug AV segment. With these units, this can be done while maintaining Ethernet connectivity for network devices at these points.

Declaration Of Benefit

After I have reviewed the WD LiveWire HomePlug AV kit, I offered to buy the actual review sample units from Western Digital via their PR agency and they sold it at around 30% off the recommended retail price. This has not affected and does not affect my relationship with this company or how I review their products.

Links

[1]
http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-03-012.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[2]
http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-03-013.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

Windows 8-How it looks and operates is now defined

05/06/2011 08:22

Articles

Windows 8 And Its Incredibly Cool New Touch Interface | Gizmodo.com[1]

Windows 8 Gets A Radical Facelift And Touch Functionality (Videos) | eHomeUpgrade[2]

Windows 8, iOS 6 set for tablet face-off in 2012 | CNET[3]

My Comments

Basic comments about Windows 8's touch screen user-interface

A key user-interface concept in the next version of Windows will be a "Start Screen" that looks like a cross between Windows Phone 7's home screen and the Windows Media Center interface. Here, this dashboard will have "Live Tiles" which present always-updated information in the window panes.

The applications represented on the "Live Tiles" can be

a fully-fledged Windows application or a HTML5/JavaScript “mobile-like” app that links to a Web resource. This is taken further with Internet Explorer 10 implementing this functionality.

There will be the full integrated support for tablet computers and similar devices with an interface that works best with these devices as well as a regular keyboard /mouse interface. One issue that may affect software developers is that they may have to work the software so it can behave properly with a “no-keyboard” interface as well as a “keyboard” interface. Of course, the touchscreen keyboard interface will support a split layout so that the user can work the keys with their thumbs.

For some programs that primarily use mouse interaction like strategy or puzzle games, there won’t need to be much work done on having the programs work between a keyboard interface or a touch interface. But on the other hand, programs that rely on text entry such as email, the program may have to work with remapping the user interface to permit use of the virtual keyboard interfaces.

But where could this all lead to when it comes to the design of Windows-based computers?

Ever since Windows allowed for “tablet-style” computing with the Windows XP Tablet PC Edition, where the computer is operated using a stylus rather than by touch, there have been two form factors put forward to the market. One was the “slate” form factor which is like the tablet computers such as the iPad, where there isn’t a keyboard but the computer could work with a USB-connected keyboard; and the other was a “convertible” notebook computer with a screen that swivelled 180 degrees and folded flat to become a stylus-operated PC. There have been a few touchscreen variants of these form factors released subsequently once Windows Vista provided the touchscreen interface option.

The “slate” or “tablet” form factor could exist as an alternative to the iPad and Android-based tablet computers; and they could allow for operation with small keyboards for word-processing and emailing. But the computer press have forgotten about the “convertible” notebook form factor which has seen some resurgence with some manufacturers running with “netvertibles” – netbooks that have a touchscreen which can swivel between a traditional layout and a tablet layout.

Windows 8 vs the Apple platforms.

Another article had raised issues about Windows 8 becoming a competitor for a subsequent version of Apple’s iOS platform, especially the iPad implementation.

But they also raised the spectre of it competing with the next version of MacOS X, known as “Lion”. The main factor about this is that Apple were viewing the MacOS platform as a “horizontal” platform and the iOS platform as a “vertical” platform; with scant mention of any touch-enabled Macintosh computers coming on the scene.

The possibility of a granular touch-based computer marketplace

What I would see with these touch-based operating systems is the ability for hardware manufacturers to provide a granular marketplace for touch-based computing devices. This means that there could be a touch-based computing device that could suit particular users’ needs and budgets.

It would range from the 7” coat-pocket tablets serving as an alternative to a dedicated ebook reader through 10” tablets like the iPad fulfilling most general-purpose “dedicated-tablet” needs to 13”-14” convertible notebooks appealing to those of us who do plenty of emailing, word-processing or similar work on the road.

Of course, the operating environments for units that are 10” or above will differ across the marketplace in a similar way to what is happening with the smartphones. Here, users may place emphasis on factors like software availability, operating-system flexibility, battery runtime and system performance as they choose the operating environment.

Conclusion

The proposed Windows 8 environment could then become a game change when it comes to the touch-based computing environment.

Links

[1] <http://gizmodo.com/5807615/#>

[2]

<http://www.ehomeupgrade.com/2011/06/01/windows-8-gets-a-radical-facelift-and-touch-functionality/>

[3]

http://news.cnet.com/8301-27076_3-20068142-248/windows-8-ios-6-set-for-tablet-face-off-in-2012/?tag=nl.e404

Product Review–Western Digital WDTV Live network media adaptor

03/06/2011 07:26

Introduction

I am reviewing the Western Digital WDTV Live network media adaptor. This is an adaptor that connects to an external display like a TV, monitor or projector and/or an external amplifier in order to play media files held on a local storage device like a USB memory key or via a small network.



[1]

Price

Recommended Retail Price: AUD\$299.99

Functions

Internet Radio RadioTime Internet Radio
 Pandora Internet Radio Internet TV YouTube Internet Photo
 Services Flickr Interactive Services Facebook Network Media
 UPnP AV /DLNA MediaRenderer Stored Memory USB
 Mass-Storage Devices

Connections

Output Audio Line output 3.5mm AV jack Digital Audio output
 PCM /Bitstream via Toslink optical jack or HDMI jack Video Line
 output 3.5mm AV jack Component Video output Separate 3.5mm
 AV jack - YCC only Video HDMI output Yes **Network** Wi-Fi
 Optional dongle adaptor Ethernet Yes

The device itself



[2]

The unit's remote control

It is a small device about the size of two packets of cigarettes

stacked on top of each other and is powered using a power adaptor. Users operate it with a very small remote control that has the main transport functions and a D-pad for navigating around the user interface.

Setup



[3]

How this connects to your TV

The device connects to the TV using an AV cable that plugs in to a four-conductor 3.5mm jack on the back of the unit. There is another 3.5mm four-conductor jack for connecting to the component-video connections on a suitably-equipped display device with a separate patch cable. Of course, this unit can be connected to HDMI-equipped display devices like most plasma and LCD TVs; and it has an optical SPDIF socket for connection to equipment with an optical digital input like most surround receivers.

Sadly, this device doesn't support connection to display devices that use RGB inputs in any form. This may affect those of us who want the best out of monitors or projectors that use such connectors like most SCART-equipped European TVs, business-focused "data projectors", classic "3-gun" projectors or professional-grade video displays. You may get around this by connecting the device to the display via one of the "HDFury[4]" HDMI-RGB adaptors

It has the ability to play media that is held on USB-attached storage devices like memory keys or USB hard drives. This can be useful for playing media that you have held on one of these devices.

As for video codecs and file types, it can natively handle most audio and video file types including the DivX and Matroska MKV family of file and codec types.

Network setup

The WDTV Live HD can be connected directly to an Ethernet network or HomePlug AV network with the appropriate "homeplug" bridge device, But it is one of these "wireless-ready" devices that connects to a Wi-Fi network using an optional Wi-Fi dongle available from Western Digital or through one of their retailers.

Use



[5]

This can work with any display device including older TVs

The user interface is a “full-screen” one which works to the edge of the screen. This may be of concern with those of us who have hooked the WDTV Live up to an older CRT-based TV set that has the orthodox curved screen edges. As well, the logos for the Internet services are rendered in a dull manner and could benefit from “true-colour” display with a highlight around the currently-selected service.

Of course, there is a screen-saver function which can be overridden for displays that aren’t affected by long-time display of images or set to appear after a time between 5 minutes to 15 minutes. Here, it just shows the WD logo; but could show now-playing information during audio playback.

Online services

The Facebook service has the expected functions like viewing one’s own news feed, contributing to a Status Update or writing one’s Status Update as well as the ability to view one’s Photo Albums or a Friend’s Photo Albums. All text entry is based on “pick-n-choose” methods and the pictures do come up properly on the full screen.

I have tested the YouTube service with this device and have used it to play some videos including the service’s “poster child” video which is the “Keyboard Cat” video. The user interface is what would be expected for a 10’ interface and the users would be required to use the “pick-n-choose” method for any text entry like account login or video searching.

The “Tune In” Internet-radio function works properly for Internet radio access and allows the Internet radio stream to play in the background while you navigate the menus. During the day, It had performed well on quality-of-service when streaming Internet radio; but like all Internet services, this will depend on how congested the connection is.

UPnP AV /DLNA media access

The UPnP AV /DLNA functionality on the WDTV Live works properly when you use the remote control to call up the content on your UPnP AV /DLNA Media Server. In previous firmwares, this media player had problems when playing out media under the control of a UPnP AV Control Point like Windows 7 or TwonkyManager. Here, it would play only one item at a time and require the user to advance the media to the next item using the remote control or the Control Point.

Now, units that have firmware newer than version 1.65 can play multi-item playlists and slideshows without needing to be “pushed on”. There is still a problem with this function, especially with image slideshows and video playlists where the unit will show its menu every time a new image or video is loaded up before it plays that image. This could be improved with “read-ahead” buffering for subsequent media items.

Limitations and Points Of Improvement

I would like to see the user-interface improved in various ways, such as use of brighter colours or full-colour logos for the Internet services. The screen-saver could also support “service-driven” behaviour like showing now-playing information for audio sources.

As well, this device could benefit from integration with local online-video services like the local “catch-up TV /video-on-demand” services offered by the local TV stations. Of course, I would like to see an improvement on the media changeover behaviour when the device is used as a UPnP AV /DLNA MediaRenderer under the control of an external control point.

This device’s form factor could be taken further with an integrated digital-TV tuner for implementation as a digital-TV set-top box that could have online and network media access as well as digital-TV access.

Conclusion

I would recommend the Western Digital WDTV Live or any of its successor models as a cost-effective device that can be useful for pressing a cheap or old TV, monitor or projector in to service as a network media playback device in the UPnP AV /DLNA Home Media Network.

Links

[1]

http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-03-003-WDTV-Live.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[2]

http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-03-009-Remote-Control.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[3]

http://homenetworking01.info/wp-content/uploads/2011/06/2011-06-03-002-Connections.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[4] <http://www.hdfury.com/>

[5]

<http://homenetworking01.info/wp-content/uploads/2011/06/2011->

With two new standards in the works, we could be approaching the Gigabit wireless network

01/06/2011 06:52

Articles

Understanding gigabit Wireless LAN: 802.11ac and 802.11ad[1]

My comments

What is it all about

At the moment, 802.11n on both the 2.4GHz and 5GHz wavebands is the current link standard for the Wi-Fi wireless network. But the IEEE have decided to work on standards for providing increased-bandwidth wireless networks.

The two standards are 802.11ac, which will primarily work on the 2.4GHz and 5GHz radio bands and be seen as a migration path from the current 802.11n technology; as well as 802.11ad which works on the 60GHz waveband and has a very short range. The latter technology would be considered best for peer-to-peer applications like short-range wireless backhaul.

Both of these systems will use MIMO (Multiple Input Multiple Output) radio technology; a "front-end diversity" system with multiple transceivers which is what the 802.11n network uses. But this technology will work with at least four "front-ends"; known as "4x4" due to four signals coming in and four going out.

Dedicated bandwidth options

One major benefit that I see with these technologies will provide is dedicated-bandwidth wireless networking which each access point compliant to these standards can do. This is brought on through the use of MU-MIMO (Multi-User Multi-Input Multi-Output) Here, it extends "transmit beamforming" technology which provides improved signal quality in an 802.11n network to allow the access point to provide "switched" Wi-Fi with dedicated bandwidth to stations; similar to the way the typical wired Ethernet network works.

It may be an improvement for network setups with many SSIDs per access point like so-called "guest /hotspot" + "private" networks, shared hotspot access points or many university networks; by allowing full bandwidth to each SSID.

The realities

Of course, the actual throughput that a network link will achieve will typically be less than headline link speed due to overheads associated with the link's transmission requirements. Here, the average real world maximum throughput will be 867Mbps and the figure may be quoted for first-generation equipment or mature-generation equipment.

How it affects my small network

What will be asked of a small network like a home network would be a 5GHz segment that provides the 802.11ac network.

It may provide for dedicated throughput to client devices like laptops or tablet computers. For those networks that run as dual networks like hotspots or guest networks that share the same wireless router as the private network, the dedicated throughput for each wireless-network segment will be a bonus.

Of course, 2.4GHz will still be used as an 802.11n segment for existing devices and there may be a compatibility mode so that existing 802.11n devices can operate on the same segment.

Other issues

If the 802.11ad technology is to be used as a wireless-backhaul for many 802.11ac access points, there will have to be work on a complementary mesh-network technology. It will then provide a level of fault-tolerance in the wireless backhaul as well as a chance for each station to have and pass on full bandwidth networking. This is something that the IEEE standards body are working on with the 802.11s draft standard.

Conclusion.

It therefore shows that when there is a standard in place, there will be a chance to "raise the bar" with the technology that it covers. This will mean that a Wi-Fi wireless network could become close to the goal of a switched Gigabit network.

Links

[1]

http://searchnetworking.techtarget.com/tip/Understanding-gigabit-Wireless-LAN-80211ac-and-80211ad?asrc=EM_NLN_13939668&track=NL-79&ad=834130&
