

# HOME NETWORKING 01.INFO

01/01/2011 |

## Product Review – Hewlett-Packard Photosmart Premium Fax (C309 Series)

30/04/2010 06:18

I am now reviewing the Hewlett-Packard Photosmart Premium Fax[1] all-in-one printer, which might be considered as a “bridge” product between the devices which are pitched at the consumer market and the devices pitched at the small-business market.



[2]

The unit is finished in a gloss-white finish which may make it look the part with earlier Apple iPods or similar devices and has a good-quality fit and finish about it. You still get a CD full of drivers and software to run this printer on Windows and MacOS X but the best location for the latest driver and software files is at the HP support website[3].

### Accessibility

The printer is similar to the other HP inkjet machines I have reviewed. Here, it is easy to access the mechanism which is important when loading ink cartridges or rectifying paper jams without requiring much effort to open the access lid or mess with stays.

The unit's display, although a bit small like most colour displays used on “all-in-one” devices, is still bright and easy to read. It also can be angled up to suit your preferred viewing arrangement.

### Connectivity

One major drawback that this printer excels in is connectivity beyond the usual “direct-to-PC” USB connection.

### Network and Camera Connectivity

It can be connected to an 802.11g Wi-Fi wireless network or an Ethernet network. This also gives it an advantage when you want to have reliable network printing or use of HomePlug or MoCA “no-new-wires” wired-network technologies.

You can enrol it to any 802.11g WPA2-Personal network either using Windows Connect Now (USB /memory-card configuration transfer) or from the unit's control panel. When you enter the WPA Passphrase, you can “pick-n-choose” the characters on the LCD screen keyboard or enter it “SMS-style” using the numeric keypad.

There is a Bluetooth interface available if you want to connect your laptop or PDA to the printer for wireless printing. This also works as a method for printing pictures from standards-compliant Bluetooth-enabled mobile phones and cameras. If you use an Apple iPhone, you may have to look through iTunes for an app that supports Bluetooth Object Push Profile.

There is a USB host port for use when you print from a USB memory key or a PictBridge-enabled camera. At the moment, this port can't be used with external optical drives for printing from CDs. There is also a memory card reader for use when you want to print from your camera card. Here, it can work with SDHC cards as well as regular SD, MemoryStick, XD Picture Cards and CompactFlash cards.

The printer can work as a UPnP printer but this functionality hasn't been fully exploited in the marketplace. As well, it can work as a DPWS printer which provides for full integration with Windows Vista and 7 computers.

### Walk-up functionality

The printer supports walk-up functionality for printing from camera cards with image select on the machine's LCD screen or from DPOF print-lists or a camera operated in PictBridge mode. This is improved with the use of a separate feed tray for 4x6 paper for use with turning out prints of “happy snaps”. Here, the machine can turn out these pictures very quickly, which is important when you print from your camera card or PictBridge-connected camera.

You also have copying functionality that would be equivalent to what was offered from top-of-the-range office copiers of the late 80s, save for the ability to work with A3 paper. This includes a “RADF”-type automatic document feeder that “turns over” the original page to copy both sides as well as double-sided printing.

You can scan images or documents to USB thumbdrives or memory cards using the control panel, but if you want to scan documents to a computer on the network from the control panel, you have to install the full software on each of the computers.

The fax functionality is similar to what was offered on the OfficeJet 6500. This is with the ability to work with separate or

shared phone lines, including the ability to work with distinctive-ring fax numbers like FaxStream Duet; or answering machines. There is still the limitation concerning the memory capacity when it comes to delayed sending and the unit can only use its memory to hold incoming faxes in case of problems like paper /ink shortage.

There is also a "Quick Forms" function for printing out some paper-based games as well as pre-printed paper types like ruled notepaper, graph paper or music manuscript paper. With this function, there isn't much configuration available with printing some of these paper types. For example, the music paper is only limited to 10 staves for portrait layout or 8 staves for landscape layout. This may be a limitation for some musicians who need to score music for the organ or write "vocal melody + piano arrangement" scores, which depend on having groups of three staves.

### **Scanning**

This unit is the first all-in-one that I have used which has a "double-sided" automatic document feeder. This feature, once reserved for some high-end office copiers, can allow you to save time in scanning documents that are printed on both sides. This would make the machine more legitimate for applications like creating digital archives of paper documents or making paper documents available on the Web.

It can support "pull-scanning" with Windows Image Acquisition but you would need to install the full HP software if you want to do "push-scanning" over the network. The reason is that most of the operating systems haven't yet supported network-based "push scanning" or the ability to enumerate scan destinations to a scanner "out of the box".

### **Printing**

For a consumer machine, this unit is very flexible when it comes to printing. It has a separate photo tray for snapshot-sized paper and has a mechanism for printing on to optical discs that are capable of being printed on by inkjet printers.

There is the ability to save paper by use of an automatic duplexer that permits the printer to use both sides of the paper. This device will add 15 seconds per page to the printout time as it allows the ink to dry on one side before working on the other side.

### **Print reliability**

The printer can handle large printing jobs of up to 100 sheets adequately, but it may be better to use wired network connectivity if you do this kind of printing frequently. I had noticed that there was a squeaking noise coming from the duplexer when it was doing a double-sided print run but this may be a problem specific to a well-used review sample that was "doing the rounds".

If you are using the automatic double-sided printing facility in this printer, each side of the document may shift by as much as 5 centimetres to the other side. This may affect projects where you expect both sides to line up accurately and you may have to use manual double-sided printing for these projects.

### **Print quality**

The document print quality is very sharp, of a standard similar to most of the good inkjet printers around. But when it comes to handling photos, the Photosmart Premium Fax is very accurate especially with flesh tones. Even throwing an older picture of a old friend's "mustard collection" at this printer also showed up how it performed with an image of many different colours.

These photographic-quality tests were done using a full-size print on A4 sheets of the HP Advanced Photo Paper, so I can assess the quality of the prints more easily.

### **Limitations and Points of Improvement**

The printer could benefit from WPS easy-setup for wireless networks now that most wireless routers that are on the market now support this kind of setup and device enrolment. It could also benefit from Internet-based time synchronisation with automatically-updated daylight-savings rules so that users don't have to make sure the clock, which is important for the fax function, is kept accurate.

This machine may be positioned as a "top-shelf" consumer all-in-one printer but could support the use of OfficeJet ink cartridges as an alternative or in addition to the Photosmart cartridges. This could then allow for use of higher-capacity document-centric cartridges for document printing while the photo-centric cartridges could be used for "high-graphics" work like photo printing. This would then improve the Photosmart Premium Fax all-in-one printer's position as a "bridge" printer that stands between the consumer class and the small-business class of printers.

As I have said many times in this blog, including other printer reviews, printer manufacturers should look towards providing increased local non-volatile flash memory in to all of their network printer and all-in-one designs now that the cost of such memory has become affordable. It can be offered as a user-installed option like a separate card slot for SDHC cards or 2.5" SATA storage slot for hard disks and SSD drives; or supplied as standard with the printer. This can then increase capacity for such situations as deferred printing, scheduled "fax-to-memory" reception, scheduled fax transmission and large print or fax runs. It can also allow one to remove their camera card or PictBridge-connected camera while their pictures are being printed so they don't appear to be tying up the machine and they can continue to grab more shots.

### **Conclusion and Placement Notes**

This all-in-one printer would be best placed as the main printer for a home office, especially where there is a likelihood for people to print photos from the computer or a camera. The fax function will also be considered important for users who run a small business or organisation from their home.

On the other hand, if you are after a networkable "all-in-one" printer and you don't print many digital pictures from your camera, you may be better off going for an economy small-business model like the HP OfficeJet 6500 [4] which I have reviewed previously.

## Declaration of Benefit

After this review was published, I have taken up the offer of purchasing a new HP Photosmart Premium Fax printer directly through HP at a 50% discount as part of a standard agreement that they have with journalists, but this hasn't affected my reviews concerning HP products.

## Links

- [1]  
<http://h10010.www1.hp.com/wwpc/au/en/ho/WF05a/18972-18972-238444-410635-410635-3737192.html>
- [2]  
[http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-19-001.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-19-001.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [3]  
[http://h10025.www1.hp.com/ewfrf/wc/softwareCategory?lc=en&amp;dlc=en&amp;cc=au&amp;lang=en&amp;product=3737195&/?p=746#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://h10025.www1.hp.com/ewfrf/wc/softwareCategory?lc=en&amp;dlc=en&amp;cc=au&amp;lang=en&amp;product=3737195&/?p=746#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [4]  
[http://h10025.www1.hp.com/ewfrf/wc/softwareCategory?lc=en&amp;dlc=en&amp;cc=au&amp;lang=en&amp;product=3737195&/?p=746#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://h10025.www1.hp.com/ewfrf/wc/softwareCategory?lc=en&amp;dlc=en&amp;cc=au&amp;lang=en&amp;product=3737195&/?p=746#utm_source=feed&utm_medium=feed&utm_campaign=feed)

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# Arrival of e-paper-based sun-resistant displays for portable computer devices

29/04/2010 08:36

## News articles

Sonnenresistente Displays gehen in Massenproduktion - Der Standard (Austria - German language)[1]

## From the horse's mouth

Pixel Qi - web site[2]

## My comments on this technology

If you have ever tried to use your laptop, mobile phone or digital camera outside on a bright sunny day, you will have found it very difficult to read the device's screen in that bright sunlight. Some users may have fashioned up loupes or shades to force the sun away from the screen and others may have preferred to work in shady areas like under a tree or in a shadow.

Pixel Qi have designed a colour display which uses a combination of LCD and e-paper technology to avoid this washout problem. It has the advantage of the always-backlit standard colour LCD display but uses the e-paper technology to enable reflective viewing in brighter lighting environments. This has also allowed for the backlight to be used only as needed, thus saving power and allowing for a longer operating time when on battery power.

Some people may think that these advanced displays won't work well with video or games but they have the same refresh rate as the current-generation standard LCD display thus will work properly with these applications.

At the moment, the only screen size that is being built with this

technology is the 10.1" widescreen which will be pitched at e-book readers, netbooks, subnotebooks, tablet devices and high-end large-screen electronic picture frames. This is mainly because they are supplying this technology to the low-power laptops that are part of the "One Laptop Per Child" project. They are yet to make smaller and larger screens for the other display applications like standard laptops, regular electronic picture frames digital cameras or HDTVs.

What I am definitely pleased about with this technology is that there is a colour LCD display that is friendly to all lighting environments and can allow portable devices to run longer.

## Links

- [1]  
<http://derstandard.at/1271375455100/Pixel-Qi-Sonnenresistente-Displays-gehen-in-Massenproduktion>
- [2] <http://pixelqi.com/>

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# 32GB MicroSDHC card from SanDisk - What could this provide

29/04/2010 06:53

## News articles

SanDisk flips out 32GB mobile phone card • The Register[1]

## My comments

### Can your device handle 32GB or larger cards?

There may be issues with SDHC-compatible devices not handling cards that are 32Gb or larger. This may result in the device refusing to mount the card (make it accessible to its operating system for storage) or file-system activities may take a long time to complete.

This may be rectified through an operating system or firmware update for your computer or device. In the case of computers, it may be worth checking the online update program for drivers or middleware that can do this job. For devices such as smartphones, check for "field-deployable" firmware updates that can allow the device to properly work with large SD cards.

There may be a limitation with devices that don't work with a field-update procedure for their firmware and, in some cases, the manufacturer may not revise the firmware at all through the device's lifespan. These situations may limit your ability to work with the large cards and you may have to wait for newer models to come out to take advantage of them.

## Use beyond smartphones

### Achieving a small neat nice design for portable equipment without forfeiting capacity

The 32Gb MicroSDHC card may also yield a valid reason for camera manufacturers to implement MicroSD cards in smaller camera designs when they equip these devices with high-resolution still or video capabilities.

This could similarly benefit handheld audio equipment like “digital notetakers” and personal media players where there is a desire to store a high quantity of higher-quality recordings yet achieve a pocketable design.

Similarly, manufacturers could cram more circuitry or room for batteries into other portable devices like portable GPS units without forfeiting storage capacity.

#### **A compact solid-state storage alternative to the 2.5” SSD.**

The SD card technology is optimised as a random storage medium in a similar way to the hard disk or the classic floppy disks. In this case, the microSDHC card can be used as a compact solid-state storage medium which is occasionally removed.

For example, a 32Gb microSDHC hidden behind a service panel could be useful as a system drive (boot, operating system, applications, hibernate file and registry) in a laptop or notebook computer with a regular 2.5” hard disk being used for user data. For printers and all-in-one devices, this card would work as a larger temporary storage for applications like keeping the print or fax queue for reliable and convenient printer operation.

#### **Conclusion**

The main reason I am blogging on the 32GB MicroSDHC card is because it is an example of the direction that solid-state secondary storage is taking, whether in a removeable or fixed form

#### **Links**

[1]  
[http://www.theregister.co.uk/2010/03/23/sandisk\\_32gb\\_microsdhc/](http://www.theregister.co.uk/2010/03/23/sandisk_32gb_microsdhc/)

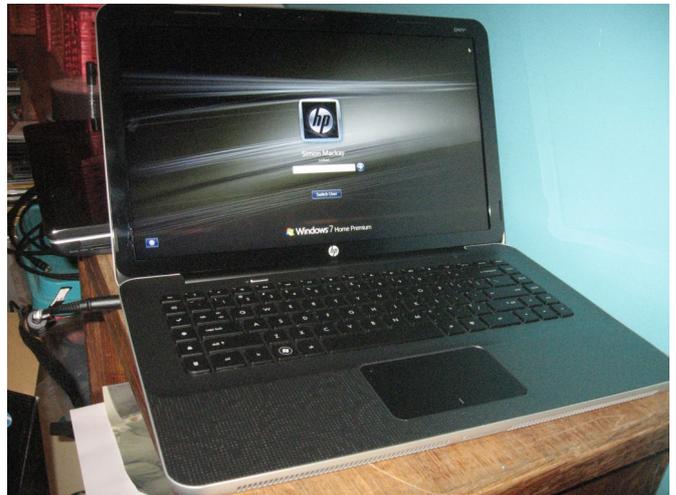
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## Product Review – Hewlett-Packard Envy 15 luxury “thin-and-light” notebook computer

28/04/2010 04:47

#### **Do you really envy the HP Envy?**

I am now reviewing the HP Envy 15, which I have talked about previously in relation to Windows 7, especially if you have noticed the AdSense ads for this computer that appeared on the blog around the time of that operating system’s launch.



[1]

This computer is a consumer-market “thin-and-light” notebook computer pitched at the luxury end of Hewlett-Packard’s notebook computer range. This review is infact the first review I have done for a “thin-and-light” travel-friendly notebook in this blog.

#### **Look and feel**

Even from the moment you unpack the Envy from its box, you will notice a look and feel that says the word “deluxe” about it. It was as though I was unwrapping something that was very special like a good watch. You would find the computer itself wrapped in a black cloth bag and the keyboard was covered with a black sheet. Even the cardboard box had the sense of “Black Label” about it.

The computer itself has a “bronze-tone” lid and keyboard escutcheon with a display that is shrouded with a black escutcheon. That same “bronze-tone” is very similar to how the Nokia 6210 mobile phone was finished. There is even a detailed pattern in the perforations on the lid an keyboard escutcheon that reminds me of a pattern associated with satin-finish or flock-finish wallpapers used by some people to achieve the “manor house” look in their homes. The casing also has a feel that reminds me of aluminium even though it is plastic.

#### **User Interface**



[2]

## Pattern detail on HP Envy lid

The keyboard has a “chiclet”-style layout which may not appeal to touch-typists and the keys don’t have a “deep throw” that most PC users are used to. Therefore, it will take some time getting used to. This may be an attempt to mimic the Apple MacBook Pro’s keyboard. You also will need to use the Fn key to gain access to the function keys, otherwise these keys are used for managing functions like sound volume, display brightness and media-player controls.

The trackpad looks just like the MacBook Pro’s trackpad, with the buttons being as though they are part of the trackpad rather than as separately distinct buttons. Here, you would use the area on each side of a white marker on the bottom of the trackpad to select your options.

## Processor and RAM

The computer works on an Intel Core i7 processor and is loaded with 8Gb RAM, which would allow for a high level of performance. This should be considered enough for the kind of performance expected from a deluxe machine.

## Secondary storage

The Envy has a 640Gb hard disk that is split between 3 partitions – a 580Gb boot partition that is used for programs and data, a 14.5Gb recovery partition and a 99 Mb HP TOOLS partition for HP’s own software.

For removable storage, there is an integrated SDHC card reader on the front edge of the machine as well as an external tray-load DVD burner that is connected via the USB ports. The external DVD burner, which is finished in a similar manner to the Envy, also has an integrated 2-port USB hub.

## Display

The Envy has a 15” widescreen LED-backlit LCD driven by an ATI Mobility Radeon HD 5830 integrated-graphics subsystem. The memory used for this display is 1Gb of main system memory, which may affect system performance. This would be adequate for most tasks and had performed very well during the DVD run-down test with “Munich”.

## Connectivity

The Envy also has “up-to-the-moment” connectivity abilities with 2 USB 3.0 sockets, 1 eSATA socket, an HDMI video/audio output socket and a jack for connecting a microphone or headphones. It doesn’t seem to work with the new 4-conductor plugs used as part of the OMTP specification for wired mobile headsets.

At the moment, HP has to supply operating software to “open up” the USB 3.0 functionality but Microsoft will rectify the problem by integrating this functionality when they release the next or subsequent service pack for Windows 7.

## Audio

The Dr. Dre Beats Audio sound tuning primarily adds a 10-band graphic equaliser and balance control to the sound controls, but the common lack of bass response is still there when you use the Envy’s integrated speakers – the small size and cramped space makes the job harder.



[3]

HP Envy alongside some premium B&O headphones

This sound tuning is best enjoyed with good sound equipment or a pair of good headphones in the order of AKG, Bang & Olufsen, Bose, or Sennheiser. In fact the sound comes through clearly with my B&O Form 2 headphones that I am using with this laptop and I would recommend these headphones as befitting the luxury style of this computer.

It may be worth noting that the Beats Audio tuning won’t affect the HDMI digital-audio output path mainly because the device that is used to reproduce the sound will be the control point for the sound output and usually offer better sound reproduction.

## Operation Issues

I had run a “DVD-rundown” test which measures battery runtime when the computer is playing a DVD. This test has the graphics subsystem constantly working as it shows the movie and also runs the DVD player constantly. Here, I was playing Stephen Spielberg’s “Munich” and had noticed that whether the wireless functionality was on or off, the computer couldn’t make it through the movie. This may also be because of a smaller battery pack built in to this computer and the fact that the DVD is played on an external DVD drive.

Sometimes the “throw-in” software that comes with a name-brand computer may be described as “crapware” can be of high calibre. One example is the MediaSmart Music Player, which behaves properly with UPnP MediaServer setups. Here, it allows you to navigate the MediaServer’s content tree in the same way as you would navigate it using a DLNA device’s user interface.

## Limitations and Points Of Improvement

A major limitation with the Envy's "thin-and-light" chassis design is that it is simply "cramped inside". This limits proper cooling which leads to the machine becoming hot after a significant time of use. It also leads to the "Beats Audio" sound-reproduction tuning being off the mark because there isn't enough room for the bass frequencies to resonate.

What HP could do to "build-out" the Envy deluxe notebook range is provide a larger "mainstream-style" notebook computer with integrated direct-load optical drive (preferably Blu-Ray) and larger battery in to the Envy series in order to set itself up with a worthy competitor to the Apple Macbook Pro computer. The suggested machine would have the same styling and Beats Audio sound-tuning as this machine and could support a larger screen.

## Conclusion and Placement Notes

I would place the Envy towards people who are wanting the look of one of the "thin and light" Apple MacBook Air computers but want to have something cheaper or stay on a "standards-based" computer operating environment.

Women may like this computer because of its emphasis on aesthetics, especially if they are enamoured by the "old-class" manor-house styling. The "thin-and-light" chassis may not fit in to a handbag but would fit well in a small briefcase or large shoulder bag.

Functionally, I would still class it as an all-rounder for most data-intensive applications. Some multimedia applications may require the computer to be on an external power source. The Beats Audio sound tuning would be justified when used with external sound equipment or good-quality headphones.

## Links

[1]

[http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-23-004.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-23-004.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[2]

[http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-23-003.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-23-003.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[3]

[http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-28-001.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-28-001.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

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# AVM FritzWLAN Repeater NG - competition to the Apple Airport Express

26/04/2010 05:40

## Product Page

AVM FritzWLAN Repeater NG - manufacturer's page[1] (German language)

## My comments

This gadget had intrigued me not just because it was a WDS-compliant Wi-Fi network repeater for all of the Wi-Fi networks but was a DLNA-compliant media player without a control surface.

It plugs in to an AC outlet in a similar manner to a HomePlug wireless access point like a Netcomm NP290W, Solwise '85PEW or Devolo dLAN Wireless unit. But this connection only exists to power the unit and, at the moment, is available only to fit the Continental-European power outlet.

The main strength in my opinion is its prowess as a network music player for the DLNA Home Media Network. It can be controlled by Windows Media Player 12, recent Nokia phones, TwonkyMedia Manager, an iPhone running PlugPlayer; and other UPnP AV Control Points or through its Web user interface. That same Web user interface can be used to select between six different Internet-radio streams of your choice but you would have to know the URLs of these streams.

You can connect it directly to a music system via its line input or digital input or enable a built-in "flea-power" FM transmitter to have it play through an FM radio tuned to a frequency that you nominate through the Web interface.

The closest competition to this device would be the Apple Airport Express which works as a USB print server, wireless-only router or network music player that only works with iTunes.

What I would like to see for this device would be to have it able to work beyond Continental Europe i.e. available with plugs to suit North America, UK, Australia and other markets. If extra value were to be applied to this device. It could also be improved with HomePlug AV and Ethernet connectivity in a similar manner to the aforementioned HomePlug wireless access points and work properly in an extended service set with client roaming to latest specifications.

The Internet-radio functionality could be improved by having the FritzWLAN Repeater work with an established Internet-radio directory like vTuner, Reciva or RadioTime to select the radio streams. This could then be taken further with access to the user favourites functions that the directories have.

The main take from this is that AVM have pushed the boundaries by adding a standards-based media player to a Wi-Fi network repeater instead of following the crowd.

## Links

[1]

# Product Review - Dell Studio 15 notebook computer (Windows 7 Home Premium)

22/04/2010 15:15

I am now reviewing the Dell Studio 15 multimedia notebook computer, which is the first notebook computer to be reviewed in this blog. It is pitched as a portable multimedia computer, in an attempt to push in on the Apple MacBook's territory as part of the recent general-purpose computing system showdown since Apple and Microsoft reworked their respective desktop operating systems last year.

It is worth knowing that if you buy a computer through Dell, you have a large range of options available to you in how you customise your unit. It ranges from processor types or memory and hard-disk capacities to optical drives, screens or batteries, through software even to how you want the computer to look. So it is worth knowing that the computer that you may specify may not be the same as the one that I have reviewed, and I have prepared a table at the end of the review outlining some variations including the unit I have reviewed.

## Look and feel



[1]The unit has a glossy piano-black top which can be customised with different colours when you order it through Dell's website/The back of the computer is rounded when closed but has the hinges brought forward. On the right-hand side, the hinge pin acts as the system's ON-OFF switch which will light up in white when it is on.

Like most of the recent laptop /notebook designs made by other manufacturers, Dell has moved away from using latches to keep the lid closed. This has made an accessibility improvement which is a boon for people who may have dexterity limitations.

Therefore, all the connections are located on each side of the keyboard, which has been a departure from the norm of laptop design. Similarly, there isn't any latches that you need to operate to allow the lid to open, which can be a bonus with older people

pr people with dexterity problems.

## Features

### Processor and RAM

The computer is based around an Intel Core i5 multi-core chipset which is considered reasonable by today's standards for a laptop computer. The review system also comes with 4Gb or RAM on board and works to a 64-bit architecture. The unit can be scaled up to 6Gb at \$250 extra.

### Keyboard

The Studio 15's keyboard has a regular look, touch and feel, which goes against an Apple-inspired trend of using "chiclet" keys which look like a calculator keypad. This would appeal to those of us who are good at touch-typing. You can have this machine with a backlit keyboard as an extra-cost option, which may be of benefit for people who travel on night journeys.

An issue that may confuse users is the requirement to press "Fn" with the function key to gain access to their regular functionality, otherwise they become system control keys (display, WiFi, speaker volume, etc). This is infact becoming common as the the keyboard area becomes more cramped on these portable computers.

Another thing worth noticing was that you don't have an ON-OFF switch on the keyboard area or other obvious areas unlike most other notebooks. Here, the switch is part of the unit's lid hinge pin on the right hand side and is illuminated in white when the machine is in use.



[2]

On-off switch as part of lid hinge

## Trackpad

The unit uses a multi-touch trackpad which is highly-integrated with the palm rest below the keyboard. There are only two buttons below the trackpad for use as the equivalent of the mouse buttons. The design yields a dust-proof design which would lead to highly-reliable operation.

## Display

The display and graphics subsystem is based on ATI graphics technology and shows up on an LED-backlit, LCD. You can use an external display that is connected via a VGA socket or an HDMI socket. If you use a DVI display, you would need to use a DVI-HDMI adaptor.

The LED-backlit LCD screen is typical of most LCD screens and there is no colour difference between this display and a regular CCFL display. The main benefit you may have is extended runtime when on the battery and a slimmer lid.

## Secondary storage

This unit has a 500Gb hard disk but can be ordered with a 640Gb hard disk at extra cost. What impressed me about this computer was that the whole hard disk was prepared as a single logical volume (drive letter) with space set aside for the operating system and supplied applications.



[3]

Slot-load Blu-Ray drive /DVD burner

The review sample came with a slot-load BD-ROM /DVD-RW burner which can play Blu-Ray discs and burn to DVD discs. You will save around \$200 if you opt for the same computer without the Blu-Ray option, which may be more of concern if you aren't interested in "future-proofing" this notebook.

There is the feasibility for one to connect an eSATA-enabled external storage device to an eSATA /USB socket on the left hand side of the machine. As well, there is a built-in multi-format memory-card drive for use with digital-camera memory cards.

## Networking

This computer is well-endowed when it comes to networking capabilities. It can work with 802.11n wireless networks that work on either the 2.4GHz or 5GHz bands and also has integrated Bluetooth wireless support. There is a Gigabit Ethernet port on the left-hand side for use with Ethernet (or HomePlug) networks.

## Sound

The sound comes through as being "full and clean", otherwise it is typical for a laptop. I had tested the sound by running a DVD of the "Live Aid" global fund-raiser concert that happened in July 1985. It is also worth knowing that the computer is available to order with a Creative-Labs sound chipset if you want that bit more out of the sound.

## Connectivity



[4]

Sockets on left side including 1394 socket

The computer does well on connectivity by supplying 3 USB sockets with one being an eSATA socket, an IEEE1394 socket, video out via a VGA or HDMI socket, a Gigabit Ethernet socket as well as audio connectivity via a MIC/LINE-IN and two headphone/LINE-OUT sockets.,

This has certainly become a positive highlight for this machine, especially if it is being intended as a multimedia-focused unit.

## Battery performance and usage notes

I had done a "DVD rundown test" on the laptop to find out what the battery lifespan is like under difficult conditions like multimedia activities. This time, I played the aforementioned "Live Aid" DVD straight through and it completed the concert disc which lasted 2 hours, 17 minutes with the wireless-network functionality off. Also, I had run the computer on the default power scheme with the standard battery that came with it and had made sure the battery was charged up. The battery level was at less than 10 percent when measured with the Windows battery meter when the disc had finished.

I have looked on the Dell Website and they only have a 9-cell extended range battery available either supplied with the system as part of your configuration or as an accessory you can

purchase later. Sadly, Dell, like most other laptop vendors, doesn't supply any DC adaptors which allow you to work with this laptop from a car battery or an airliner's DC power-supply system. You may have to then look for such adaptors from third-party suppliers like Targus.

The machine doesn't get hot very quickly and is not likely to burn your knees after a good run of use. This may be typical of most regular-sized mainstream business laptops.

### **Pricing for test system and recommended configurations**

I have created a table with some selected configuration options, especially concerning secondary storage and the price that is highlighted in bold represents the configuration that I am reviewing.

All of these specifications are delivered with Windows 7 Home Premium but I would prefer business owners to look at the Windows 7 Professional which will cost \$60.50 extra. Windows 7 Ultimate, which is important if you have sensitive data on your system will cost you \$140.80 extra.

500Gb HDD 640Gb HDD - maximum hard disk space DVD-burner  
\$1299.00 \$1383.70 Blu-Ray and DVD-burner **\$1537.70** \$1622.40

### **Conclusion and placement notes.**

I would recommend this machine as a future-proof "work-home" laptop, preferably for those who drive between locations. It would also find that it works well as a desktop replacement for business and multimedia use, rather than intense gaming.

It may also appeal to those of you who want to do multimedia work on a Windows-based portable machine, especially if you have are working with miniDV camcorders or other FireWire-equipped video equipment.

### **Links**

- [1]  
[http://homenetworking01.info/wp-content/uploads/2010/04/Dell-Studio-15-laptop.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/Dell-Studio-15-laptop.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [2]  
[http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-23-001.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/2010-04-23-001.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [3]  
[http://homenetworking01.info/wp-content/uploads/2010/04/Slot-load-Blu-Ray-drive.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/Slot-load-Blu-Ray-drive.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [4]  
[http://homenetworking01.info/wp-content/uploads/2010/04/Sockets-on-left-side.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/Sockets-on-left-side.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

# Keeping the WiFi public hotspot industry safe

21/04/2010 13:41

**Originally published: 12 March 2009 - Latest update 20 April 2010**

There are an increasing number of WiFi wireless hotspots being set up, mainly as a customer-service extra by café and bar operators. But there have been a few security issues that are likely to put users, especially business users off benefiting from these hotspots.

This is becoming more real due to netbooks, mobile Internet devices, WiFi-capable smartphones and other easily-portable computing devices becoming more common. The hotspots will become increasingly important as people take these devices with them everywhere they go and manage their personal or business data on them.

### **The primary risk to hotspot security**

The main risk is the "fake hotspot" or "evil twin". These are computers or smart routers that are set up in a café or bar frequented by travellers, business people or others who expect Internet access. They can be set up in competition to an existing hotspot that offers paid-for or limited-access service or on the fringes of an existing hotspot or hotzone. They offer the promise of free Internet access but exist for catching users' private information and/or sending users to malware-laden fake Websites hosted on the computers.

### **Standard customer-education practices**

The common rhetoric that is given for wireless-hotspot security is for the customer to put most of their effort into protecting their own data without the business owner realising that their hotspot service could be turning in to a liability. This can then lead to the hotspot service gathering dust due to disuse by the customers it was intended to serve.

The typical advice given to users is to check whether the premises is running a wireless hotspot or if there is a hotzone operating in the neighbourhood before switching on the wireless network ability in your laptop computer. Then make sure that you log on to a network identified by a legitimate ESSID when you switch on the wireless network ability.

Other suggestions include use of VPNs for all Web activity, which can become difficult for most personal Web users such as those with limited computer experience. Some people even advise against using public Internet facilities like Internet cafes and wireless hotspots for any computing activity that is confidential on a personal or business level.

But everyone involved in providing the free or paid-for hotspot service will need to put effort into assuring a secure yet accessible hotspot which provides a high service quality for all users. This encompasses the equipment vendors, wireless Internet service providers and the premises owners.

## Signage and operating practices

When Intel promoted the Centrino chipset for laptop computers, they promoted wireless hotspot areas that were trusted by having a sticker with the Centrino butterfly logo at eye level on the door and the premises being scattered with table tent cards with that same logo. Similarly hotspot service providers and wireless Internet service providers used similar signage to promote their hotspots.

But most business operators, especially small independently-run cafes and bars, commonly deploy "hotspot-in-a-box" solutions where they connect a special wireless router that they have bought to their Internet service and do their own promotion of the service. This may simply be in the form of a home-printed sign on the door or window or a home-printed display sign near the cash register advising of WiFi hotspot service.

An improvement on this could be in the form of the ESSID matching the business's name and listed on the signage, which should have the business's official logo. Similarly, the network could be set up with WPA-PSK security at least with the passphrase given to the customers by the business's staff members when they order hotspot service. Most "hotspot in a box" setups that list the customer's username and password on a paper docket also list the ESSID and WPA-PSK passphrase on these dockets. As well, I would modify the login page to convey the business's look with the business's logo and colours. A complimentary-use hotspot could be secured with a WPA-PSK passphrase and the customer having to ask the staff member about the passphrase. This could allow the facility to know who is using the hotspot and the organisation who runs that hotspot can have better control over it.

It may be worth the industry investigating the feasibility of using WPA-Enterprise security which is associated with different usernames and passwords for access to the wireless network. Most portable computers and handheld devices in current use can support WPA-Enterprise networks. This can be implemented with the typical "paper-docket" model used by most "hotspot-in-a-box" setups if the authentication system used in these units works as a RADIUS server and the built-in wireless access point supports WPA-Enterprise with the unit's built-in RADIUS server. The same setup could work well with a membership-based hotspot service like a public library with the RADIUS server linked to the membership database. But it may not work easily with hotspot setups that work on a "self-service" model such as paid-service hotspots that require the user to key in their credit-card number through a Webpage or free-service hotspots that use a "click-wrap" arrangement for honouring their usage terms and conditions.

The organisation who runs the hotspot should also be aware of other public-access wireless networks operating in their vicinity, such as an outdoor hotzone or municipal wireless network that covers their neighbourhood, and regularly monitor the quality of service provided by their hotspot. Also, they need to pay attention to any customer issues regarding the hotspot's operation such as "dead zones" or unexpected disconnections.

People who own private-access wireless networks should also keep these networks secure through setting up WPA-secured wireless networks. They should also check the quality of their network's service and keep an eye on sudden changes in their

network's behaviour.

When wireless-network operators keep regular tabs on the network's quality of service, they can be in a better position to identify rogue "evil-twin" hotspots

## Improved standards for authenticating wireless networks

There needs to be some technical improvement on various WiFi standards to permit authentication of WiFi networks in a manner similar to how SSL-secured Web sites are authenticated. This could be based around a "digital certificate" which has information about the hotspot, especially:

- the ESSID of the network ,
- the BSSID (wireless network MAC) of each of the access points,
- the LAN IP address and MAC number of the Internet gateway
- the venue name and address and
- the business's official name and address.

The certificate, which would be signed by public-key /private-key method could be part of the "beacon" which announces the network. It would work with the software which manages the wireless network client so it can identify a wireless network as being secure or trusted if the signature is intact and the network client is attached to the network from the listed BSSIDs and is linking to the gateway LAN IP.

The user experience would be very similar to most Internet-based banking or shopping Websites where there is a "padlock" symbol to denote that the user is using an SSL-secured Website with an intact certificate. It will also be like Internet Explorer 7 and 8 where the address bar turns green for a "High-Assurance" certificate which requires higher standards. In this case, the user interface could use colour-coding and /or a distinctive icon for indicating a verified public network.

## The provision of cost-effective wireless-network management software

There are some programs that can turn a laptop computer in to a wireless-network survey tool, but most of them don't show much useful information, are hard to operate for anyone other than a network technician; or are too costly. They miss the needs of people who run home or small-business wireless networks or wireless hotspots.

What needs to exist is low-cost wireless-network management software that can work with the common Microsoft or Apple platforms on computers that have common wireless . The software should be able to use commonly-available wireless network adaptors such as the Intel Centrino platform to perform site surveys on the WiFi bands and display the activity on these bands in an easy-to-view but comprehensive manner. The software should be easy to use for most people so they can spot interference to their wireless network easily and can "tune" their wireless network for best performance.

An application that is matching this need is MetaGeek's inSSIDer [1], a free wireless-network site survey tool for the Windows platform which I have reviewed in this blog[2]. It has the ability

to list all the networks receivable by signal strength, MAC address, SSID or channel; or plot a graph of the networks by signal strength over time; or plot a graph of all the access points by signal strength over channel. This may help with managing your hotspot by identifying rogue access points and “evil-twin” hotspots.

Similarly the popular smartphone and PDA platforms like Apple iPhone, Android, Symbian S60 /UIQ, Blackberry and Microsoft Windows Mobile could have low-cost wireless-network management software written for them so they can make a handheld PDA or mobile phone work as a site-survey tool for assessing quality of service.

Once this kind of software is available for small business and home users, it empowers them to assure proper coverage of their network and check for any “evil twin” or other rogue hotspots being set up to catch customers.

### Summary

There needs to be more effort put in to setting up secure public-access wireless networks so that people can benefit from portable computing anywhere without forfeiting the confidentiality of their personal or corporate data.

It also will encourage people to gain the maximum value out of their WiFi-enabled portable information devices whether for their business life or their personal life.

### Links

[1] <http://www.metageek.net/products/inssider>

[2]

[/?p=819#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://p=819#utm_source=feed&utm_medium=feed&utm_campaign=feed)

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## Mother's Day Post (Mother's Day - USA, Canada, Australia, New Zealand)

21/04/2010 07:37

Mother's Day is usually the day not just to give a small gift to Mum, but some families may see this day and Father's Day as opportunities to “pool resources” and purchase a higher-value gift. So I am writing blog posts that appear on these days to provide guidance in purchasing and setting up consumer-electronics and IT-related gifts for your parents.

The kind of gifts that may appeal to Mum include:

- Electronic picture frames
- Internet radios and similar network-based media devices
- A computer that is suited to Mum's needs and
- Internet service (if there isn't any at the place she lives at)

### Electronic picture frames

You may think of picking up that cheap digital picture frame at a “big-box” discount store for use as a gift, but there can be some nasty limitations concerning its use. For example, a lot of cheap frames may only source their pictures from a memory card or USB thumb-drive plugged in to the side of the frame. This can cause the frame to be useless if you or someone in your family need to remove the media to revise the pictures held on the frame. This is a very typical situation because you might place a small collection of pictures on an SD card or thumb-drive just to “get it going”, then remove that card or thumbdrive to fill it with pictures derived from various household photo collections.

I would suggest keeping an eye out for frames that either have a large integrated memory or can work with two or more memory devices at the same time. Better off, I would keep an eye out for Wi-Fi picture frames that can work with a home network and bring content in from an Internet service. The service should support “email-to-frame” functionality so you can send a picture from your computer or smartphone directly to the frame. This functionality would be very important when there are the family events like a wedding or the arrival of a new baby.

A Wi-Fi frame with UPnP AV /DLNA functionality can work with a network-attached-storage device that is used as a primary image library. This can be of benefit if you keep adding pictures from different household collections as each family occasion passes through; or as you scan more regular pictures out of the family photo collections.

### Internet radios



[1] If your mum likes radio content from a favourite country, you may wish to provide here with an Internet radio. These units offer access to the kind of radio listened to by locals of a favoured country, or other radio programming through the use of Internet audio streams. In some cases, there are channels which play a lot of the “old-time” radio serials like “The Goons”.

These sets are very flexible in the way that they work because of the provision of an auxiliary-input jack and /or an iPod dock. Most of these sets can work with a DLNA-compliant network-attached storage and turn this device into a multimedia jukebox.

The more-expensive sets can work as a primary audio system for a studio or other small apartment due to them having high-quality sound. It may also be worth looking out for Internet-radio “tuners” like the Revo Mondo RadioStation or the

Sagean WFT-1 Series, that connect to an existing stereo system so your parents can have Internet radio through their favourite stereo system.

I have written an Internet radio buyer's guide[2] and have reviewed three Internet tabletop radios - the Kogan WiFi Digital Radio with iPod Dock[3] and two Revo radios - the iBlik RadioStation[4] and the Domino[5]; as well as an Internet portable radio - the Pure Evoke Flow[6].

### **DLNA-compliant NAS**

An upgradeable DLNA-compliant network-attached storage device can work well alongside a compatible Wi-Fi electronic picture frame or Internet radio as a media library. These units don't necessarily need to have a computer on the scene at all times. It then means that you can transfer media from a laptop computer that you bring around to one of these devices, which can be of benefit if the only reason for the home network is to provide media to these devices.

### **Getting Mum who isn't tech-literate set up at home**

A modest laptop with a built-in Webcam and running Windows 7 Home Premium or MacOS X Snow Leopard could work well as an email terminal for your parents. This could be connected to the Internet through an entry-level wireless router on the network-Internet edge and a modest Internet plan. You may gain best value with an Internet service provided by the Internet arm of the retail telephony carrier that they use. The email should be provided through an entry-level desktop client like Windows Live Mail, Mozilla Thunderbird or Apple Mail in conjunction with the POP3 /IMAP email system provided by the ISP.

If they like to be able to type mementos and similar things, you could deploy OpenOffice, Apple iWork (Mac OS X) or Microsoft Office Home And Student Edition (Windows, MacOS X). These suites can give you an adequate word processor, spreadsheet and presentation creator for a cheap price.

You may have to pre-configure the computer to suit the Internet service and email arrangements that your parents use, and may have to set them up for Skype[7]. As well, you will have to teach them how to use the computer for these basic tasks and, perhaps, point them to services run by the local council or other community groups to help with computer familiarisation.

You might consider buying Mum one of those "tablet" computing devices like the Apple iPad, but most of these devices may be very expensive and some of them may lock you in to their platform tightly. For example, you may have to pay dearly if you want to use a keyboard. Another more affordable alternative may be to get a "convertible" notebook which has the screen on a "swivel" head and the screen is able to work as a touch screen or as a stylus-operated tablet screen. This can cater for people who still can type but like the idea of the touchscreen.

### **Conclusion**

Once you know how to go about choosing and setting up that consumer-electronics or IT-related high-value gift for Mum, you can be sure that she will enjoy using it fully for a long time.

### **Note:**

This post will appear in March, to cater for UK and European readers who celebrate Mother's Day in March; and again at the end of April to cater for US, Canadian, Australian and New Zealand readers who celebrate it on the first Sunday of May.

### **Links**

[1]

[http://homenetworking01.info/wp-content/uploads/2010/03/Revo-Domino3.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/03/Revo-Domino3.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[2]

[/?p=453#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://?p=453#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[3]

[/?p=477#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://?p=477#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[4]

[/?p=468#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://?p=468#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[5]

[/?p=697#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://?p=697#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[6]

[/?p=521#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://?p=521#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[7] <http://www.skype.com>

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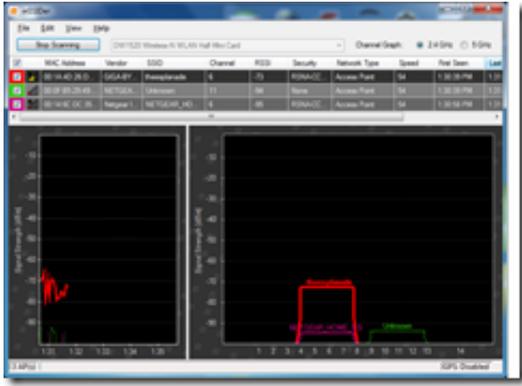
## **Product Review - MetaGeek inSSIDer Wireless Network Analyser**

19/04/2010 07:25

The program is a free download from the MetaGeek Website[1] or other download directories like TuCOWS or CNet. There is another application from this same team that works with a 2.4GHz spectrum analyzer for use in determining interference on this band, but it comes at extra cost.

The installation routine didn't take long when I installed it on a Dell Studio 15 laptop that was lent to me as a review sample. It could work with the standard Wi-Fi network card that came with this laptop and could therefore work with any Wi-Fi network adaptor that is used with the host computer.

The program provides a "dashboard" with three concurrent views:



[2]

- a table which lists the Wi-Fi networks that the program can find with their SSID, BSSID (MAC address) and channel for each detected wireless network.
- a signal-strength /time graph for all of the discovered Wi-Fi networks
- a signal-strength /channel graph for all of the discovered Wi-Fi networks

As far as I am concerned, the highlight of this program is the signal-strength /channel graph which is useful for identifying channel clashes or blank channels that you can tune the wireless access point to.

One of the main limitations is that it doesn't detect "extended service set" networks nor does it support detection of multi-SSID access points which become a wireless on-ramp for many networks.. This may be of concern when using this program to manage routers with "guest-network" functionality or managing hotspots. Another improvement that I would like to see would be to provide for network grouping by SSID or BSSID (MAC address) so you can identify "foreign" networks easily. This would then help in identifying rogue access points or "evil-twin" hotspots easily.

I would then determine it as being very useful for "tuning" a wireless access point or router so it can coexist with other Wi-Fi networks, either as part of setting one up or troubleshooting a network. I would also recommend it as an essential tool for hotspot owners who want to keep their hotspot networks operating in an optimum manner and providing good customer service. It can also work well in "smoking out" rogue access points or fake "evil-twin" hotspots.

**Links**

[1] <http://www.metageek.net/products/inssider>

[2]

[http://homenetworking01.info/wp-content/uploads/2010/04/inssiderscreen.png#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/inssiderscreen.png#utm_source=feed&utm_medium=feed&utm_campaign=feed)

# SSD drives now available for IDE-based computers

16/04/2010 17:12

**News articles**

Du SSD pour les "vieilles" bécanes | Le Journal du Geek[1] (France - French language)

**My comments**

You may be keeping an older IDE-based computer going or have a computer which has one IDE bus but plenty of SATA connectors on the motherboard. Hey, you may think of adding a solid-state drive to this computer in order to benefit from high operating speeds and low energy consumption but the fact that the only vacant secondary-storage interface is IDE-based throws your plans haywire.

What Buffalo has now done is to provide an SSD which connects to the IDE bus on these computers. The main limitation with this is that they only come in a 2.5" chassis, which means that you may have to use a 2.5" mounting kit and adaptor plugs if the computer you plan to upgrade is your desktop rig. They have a 64Mb cache and come in capacities of 32Gb, 64Gb and 128Gb with a price list of USD\$250, USD\$360 and USD\$630 respectively. This may be a steep premium to pay if you want that quicker boot time for your older computer.

In my opinion, I would place the 64Gb drive as a drop-in replacement for the system drive (operating system, program files) in a multi-drive computer while keeping the "data" drives as regular rotary drives. Here, this could lead to quick boots and application starts without much power being used. The 128Gb drive may be useful as a drop-in replacement for the hard drives in older laptops that have a fair bit of life in them so as to keep them running longer on their batteries.

**Links**

[1]

[http://www.journaldugeek.com/2010/04/16/du-ssd-pour-les-vieilles-becanes/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+LeJournalDuGeek+%28le+Journal+du+Geek%29](http://www.journaldugeek.com/2010/04/16/du-ssd-pour-les-vieilles-becanes/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+LeJournalDuGeek+%28le+Journal+du+Geek%29)

# More rural broadband activity in the UK - Lyddington, Leicestershire

16/04/2010 16:31

**News article**

thinkbroadband :: Fibre optic broadband in rural areas: Lyddington[1]

**From the horse's mouth**

Rutland Telecom - Web site[2]

## My comments on this topic

The main thing that impressed me about this news was that a small local operator took up the gauntlet to establish a backhaul and next-generation Internet service for a rural village in England. It's so easy to expect the big-time companies like the incumbent or competing telecommunications firms or established ISPs to provide this kind of service, but a small firm has decided to lay the groundwork with its fibre-to-the-cabinet operation for Lyddington and the surrounding villages.

There is an expectation for a service with 48Mbps maximum /25Mbps average headline speed for this network, which was similar to what would be expected for most suburban next-generation broadband rollouts. It will be based on FTTC (fibre-to-the-cabinet) technology with the copper run to the customer's door being based on VDSL2 technology. This technology has a greater throughput than the commonly-deployed ADSL2+ but is designed for short copper runs. Here, it will be installed as a sub-loop unbundled setup where the street cabinet exists between the main telephone exchange and the customer's telephone.

This deployment was considered feasible for environments where the service would facilitate a full take-up of 40-50 customers in a not-so-dense area.

The prices averaged around GBP30 /month including line rental and 600 minutes of calls to any landline in the UK. The hardware would be part of the installation cost and included a VDSL modem and a broadband router that isn't wireless. It would be the time to look towards choosing a wireless broadband router of the kind that works with cable Internet for this setup if you want the wireless home network. A wireless router would cost GBP45 extra if you bought it from them.

## Location issues

There are still a few questions that need to be asked concerning the Lyddington FTTC rollout and would affect next-generation broadband efforts in rural Britain. One is whether and how the larger properties like the farms would be covered by the next-generation broadband efforts? Could this mean that a street cabinet has to be deployed near a cluster of farm gates with longer VDSL2 runs?

Similarly, there could be a classic estate with a large manor house or similar building and smaller houses scattered further afield on the same property. Some of these estates may have the manor house occupied by the appropriate aristocrat or the manor house may be a National Trust museum or upscale boutique hotel. Here, there may be issues with making sure each lodging on the estate has access to the next-generation broadband, and there could be issues with whether to locate the FTTC street cabinet in these estates and where they should be located, especially to make sure that "His Lordship" in the manor has very good bandwidth.

## Equipment issues

Another issue worth raising is whether the VDSL2 modems will be made available without a router so that customers can purchase their own wireless broadband router from a preferred retailer. One reason is that an increasing number of manufacturers may supply "future-proof" dual-WAN home-network routers that have a built-in ADSL2 modem as well as a Gigabit Ethernet port on the broadband side. The other reason is that people who know the ins and outs of Internet and home networking may know the best broadband router for their needs and may find the supplied unit not suiting their needs and just another box in their junk box.

## Conclusion

At least a small company who has the country at its heart is making real efforts to provide next-generation Internet to the British countryside and could open the floodgates towards competitive rollout of such technology to this class of people.

I am not a paid spokesman for Rutland Telecom[3] but, as I have said before in this blog[4], I do stand for the idea that people who live or work in the country don't deserve second-class Internet service. Therefore I applaud those efforts that are taking place to improve the Internet-access lot for these users.

## STOP PRESS

If anyone is living in Denby Dale - the "Pie Village", in West Yorkshire, Rutland Telecom are inviting people to register[5] for next-generation broadband in this village and neighbouring villages. They need a target of at least 450 households and small businesses in this area to make their next FTTC project for this town come to fruition.

The registration form[6] for this campaign is at the Rutland Telecom Website.

## Links

[1] <http://www.thinkbroadband.com/news/4212-fibre-optic-broadband-in-rural-areas-lyddington.html>

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

[3] <http://www.rutlandtelecom.co.uk/>

[4]

[/2010/03/why-i-cover-rural-broadband-access-in-this-blog/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/2010/03/why-i-cover-rural-broadband-access-in-this-blog/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[5] <http://www.relay-rutlandtelecom.co.uk/denbydale/index.htm>

[6] <http://www.relay-rutlandtelecom.co.uk/denbydale/index.htm>

# What is happening to the common household telephone nowadays?

15/04/2010 15:09

## What was the common household telephone?

The household telephone became common during the years of prosperity that occurred after World War II ended and technology made it affordable for most householders to have a telephone service. This was a telephone handset that was installed in a common area of the house like a kitchen, hall, main lounge room or dining room. This phone, which was initially black, was allocated a number by the monopoly telephone provider and family, friends, employers and neighbours of any of the household's members knew this number to contact the household's members. These same members could place calls from that phone or receive calls on it whenever anybody who knew the number rang in. Sometimes it was seen as part of the wedding celebrations for a married couple to list their names in the standard telephone directory as " & ".



[1]

Using a common household telephone in the kitchen

There wasn't the expectation of privacy from other members of the household during a phone call and, in a lot of cases, whenever the phone rang, members of the household would be "on edge" if the call was for them or not and whether the call had anything to do with them or not. If the intended call recipient wasn't available, it was the job of whoever answered the phone to write down any messages that the caller may leave and, in some cases, call out those messages to the intended recipient. Typically this involved making sure there was a notepad or message book and a working pen near the phone and there were may occasions where there would be frustration due to the pen that was meant to be near the phone going missing. This has led to companies manufacturing pens that are tethered to a holder that is attached to the phone.

There used to be the option of having extra phone sockets installed around a house so you could move the phone amongst particular locations. On the other hand, some households installed an extra phone in the master bedroom, home office or

similar locations so they could make or take calls from these locations. One person whom I know who used to run a dairy had 4 or 5 phones with three in the main living area, one in the office and another in the bedroom so he could take milk orders as soon as possible.

The cordless phone, which became popular through the 1980s and the 1990s, had changed the dynamics of the common household telephone and had allowed for some privacy and for handling calls in one's preferred location.

This was the way with telephony for everyone until the 1990s when the mobile phone became affordable for most people due to competing service providers, subsidised handsets and prepaid mobile services. Similarly, there are many households with two or more lines where another of the lines is used as a household member's private line because of the cost of telephone service going downhill.

## What is now happening with the common household telephone

The mobile phone has made the common household telephone less relevant for engaging in personally-sensitive calls because the person can give out their own mobile phone number for such calls and can take these calls in their bedroom or outside with their mobile phone. Therefore these phones just end up being used for calls where there aren't any privacy expectations.

In some households, especially share-houses with many young people, there isn't a common household telephone installed. Instead, the phone line is used primarily for Internet access or other data-based activity. In other households, the common household telephone is simply seen by adults and teenagers as a failover line or a "call-anyone" line for that household.

The reduced traffic on these lines due to the mobile phone and VoIP-based low-cost-calling services has made the telecommunications companies (telcos), especially incumbent telcos who traditionally provided this service, worried because of the loss of call revenue that these lines yield. Some of these companies who run Internet or mobile services make up for this loss through the revenue derived from these services, but they have to maintain the infrastructure that is part of this elementary phone service.

## The arrival of the sophisticated multi-function telephone

Now electronics manufacturers and telcos are developing implementations of the sophisticated multifunction home telephone. These are Internet-connected telephone devices which have a regular phone handset or cordless phone unit, but have a large colour touchscreen for many different purposes. Examples of these include Telstra's "T-Hub[2]" cordless phone with touchscreen base and the DSP Group's Android-driven Wi-Fi cordless phone[3] that looks like a smartphone.



[4]

Telstra T-Hub cordless multifunction telephone

The main driver behind the arrival of these terminals is the arrival of “single-pipe triple-play” fixed-location communications services which encompass Internet, landline telephony and multichannel television. These phones are being pitched as a more-sophisticated alternative to connecting a regular telephone to the Internet gateway device and using that device’s analogue telephony adaptor as the VoIP on-ramp.

These phones are able to work as a landline SMS terminal, email terminal and gateway to the popular social-networking Websites. A lot of them will have a general Web browser that works in a similar manner to how one browses the Web on a smartphone. Some of them will be able to play streamed or downloaded audio and video material with the sound coming out of a speaker that would normally be used for speakerphone applications; and the vision appearing on the phone’s touchscreen. It may also include the ability to use content held on local storage or network storage. These features are being used as a justification for replacing the phone that was placed in the kitchen or other common area because of their relevance to that area.

The phones that are part of a VoIP-based setup will also offer functionality not dissimilar to that of a business phone system with such call-handling functions like call transfer and park, conference calling, free intercom calling and the like. Some operators who sell the classic switched-circuit phone services will also offer hybrid VoIP-switched-circuit services with VoIP providing extra sophisticated functionality and a switched-circuit as a fallback.

### Individualised communications

Another trend that is shaping the role of the common household telephone is the concept of individualised communications. This has started off with mobile telephones and businesses signing up to “direct-inward-dial” numbers for their staff members, but is now being made real with VoIP-based landline telephony services. It was also augmented with the idea of locale and device-independent “personal” telephone numbers being made available to people.

Here, a VoIP-based landline telephony system could allow users to determine which phone will ring and in what way (tone or cadence) if a particular personal number is called. This may be achieved through an interactive “log-on” routine that the user performs when they want to use that phone. It may also allow for individualised call accounting including the concept of “own telephone account”, which may be useful for households with

teenagers, lodgers or small businesses.

In the same context, users who already maintain their own mobile phones could annex these phones in to a VoIP-based landline telephone system that supports individualised communications and elect to make or take calls from the system’s phones or their mobile phone with connection-appropriate charging taking place to their account.

### Action being taken to standardise these concepts

The Home Gateway Initiative is a trade group who are establishing reference standards for network hardware for the home and small business. They have established a reference standard for home network gateway devices like the routers, but more so the Internet gateway devices that have integrated VoIP functionality. They have also looked at the device setup scenarios where there are external modems like most cable Internet setups, but will encompass next-generation Internet setups. They are working on reference standards for VoIP telephony and could end up determining such standards for the multi-function telephones.

### Conclusion

If these companies can look at ways of extending value out of the common household telephone by integrating it in today’s online world, they could stand a chance at seeing it more than just a communications device for the sidelined communities.

### Links

[1]

[http://homenetworking01.info/wp-content/uploads/2010/04/001.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/001.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[2] <http://www.telstra.com.au/homephone/phones/thub.html>

[3]

[/?p=683#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/?p=683#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[4]

[http://homenetworking01.info/wp-content/uploads/2010/04/t-hub-products-hires.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/04/t-hub-products-hires.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

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## More reviews coming soon

15/04/2010 03:05

I am going to add a good run of reviews to this blog, including two multimedia laptops, a consumer-level multifunction printer and some software. This may help with building this blog as a good-quality buying guide.

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# Competitive FTTH fibre-optic deployment in multi-unit developments

10/04/2010 05:16

ARCEP white paper for people in multi-unit developments  
(French language)[1]

ARCEP had established a regulation where if a telecommunications operator provides fibre-optic infrastructure in a multi-unit building, this infrastructure must be available to competing operators. This means that each unit owner /tenant must be able to choose whoever provides their super-fast broadband service and avoids the building owner or body corporate determining who provides that service to that building through exclusive “cosy” deals.

## Two different methods

### Mono-fibre

Each operator runs their fibre-optic infrastructure to a wiring closet where there is a fibre-optic switch that is programmed to run the operator’s service to the customers in that building. Each unit has one fibre-optic connection to that fibre-optic switch.

The service routing would be based on a VLAN or similar setup affecting the main fibre-optic infrastructure in the building. Operators would then have to make sure that the fibre-optic switch is programmed to pass service from their customers’ units to their street-based backbone.

The main advantage of this setup is that there is only one fibre-optic cable needed to be laid to each unit, thus allowing for reduced costs and infrastructure complexity. On the other hand, each operator will have to have access to the fibre-optic switch to make sure they can manage their services.

### Multi-fibre

Each operator has their own fibre-optic infrastructure to each of the units, where there is a multi-entry socket for the customer-premises equipment. If a customer wants a particular service, the provider then visits the customer’s unit and connects the fibre for their service to the socket.

If a site can allow two or more optical-network sockets, two or more operators could be terminated in a socket for each of the operators. This may appeal to “geeks” or business customers who want to establish multi-WAN setups for reasons like bandwidth aggregation, load-balancing or fault-tolerance.

The main advantage for operators is that they have control and responsibility of their infrastructure to the customer’s unit, but each service change may require a field visit from the operator’s service staff. Similarly, there would be the issue of complicated infrastructure runs existing in the building, which may affect further infrastructure deployment.

## Opportunities and Questions

A major opportunity that may exist for operators who are running optical fibre through a multi-unit building would be to use the cable as a wireline backbone for a cellular base station installed on the roof. This may be relevant to buildings with nine or more storeys and /or operators that run their own mobile telephone or wireless broadband service.

A primary question that may need to be answered is that if a group of broadband service providers share the same infrastructure run, usually as a cost-saving measure or easier entry point for new operators, would they have to create new fibre-optic runs to each unit in a multi-fibre setup or could they continue to share the same infrastructure to the unit’s door.

Another main question concerning the provision of IP-based infrastructure like the fibre-optic infrastructure in multi-unit buildings is how to cater for “all-unit” Internet services. This could range from a Web site with information for all of the units through unit-occupier access to vision from IP-based video-surveillance systems to multi-SSID Wi-Fi access points in common areas with each SSID linking to the home network in each unit. Issues that may have to be answered include VLAN establishment and /or use of ancillary DNS servers that cover only the services that are provisioned in the building and these setups may end up appearing to be complex to anybody that doesn’t have much computing experience.

## Conclusion

What is happening with the fibre-optic next-gen broadband services in France, where there is likely to be lively competition, is worth observing, especially for all classes of multi-unit developments, whether all units exist in one building or in many buildings on one piece of land.

The white papers and other material on this topic at the ARCEP web site may then be worth reading by other communications regulators, building authorities, ISPs, building /development owners and management committees.

## Links

[1]

[http://www.arcep.fr/uploads/tx\\_gspublication/guide-fibre-conso-fev2010.pdf](http://www.arcep.fr/uploads/tx_gspublication/guide-fibre-conso-fev2010.pdf)

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## Comprendre l’écrans «Choix de Navigateur» – Mis à jour

08/04/2010 14:03

[1]

## Articles du Presse

Microsoft offre un choix navigateur Web pour les utilisateurs d’IE | BBC Technology (Royanne-Uni - Anglais)[2]

Microsoft s’apprête à offrir aux utilisateurs de Windows un écran de choix du navigateur | The Guardian Technology Blog (Royanne-Uni - Anglais)[3]

La concurrence entre navigateurs web relancée en Europe |

DegroupNews (France)[4]

### De la bouche du cheval

Le navigateur de choix d'écrans pour l'Europe: à quoi s'attendre, quand l'attendre | Microsoft sur les enjeux (Microsoft - Anglais) [5]

MIS À JOUR: Le navigateur de choix d'écrans pour l'Europe - Les enjeux de Microsoft (Microsoft - Anglais)[6]

Union européenne communiqué de presse sur l'écran Choix du navigateur[7]

### Le raccourci d'écran de choix des navigateurs (disponible partout dans le monde)

[http://browserchoice.eu\[8\]](http://browserchoice.eu[8])

### Site de plaidoyer

OpenToChoice.org (Mozilla)[9]

### Mes commentaires et informations complémentaires



[10] Si vous exécutez une version de Windows XP, Vista ou 7 que vous avez achetées en Europe et votre navigateur par défaut est Internet Explorer 8, vous pouvez être tenus de remplir un navigateur "sélection" écran scrutin, connu sous l'écran "Choix du navigateur", afin de déterminer dont le navigateur de votre ordinateur doit exécuter comme navigateur par défaut. Mais il ne se produira pas si vous avez exécuté un autre navigateur comme navigateur par défaut, puis revient à Internet Explorer 8. Il a également qu'il adviendra de migrants européens qui ont apporté leurs ordinateurs de Windows avec eux.

Vous aurez à travailler à travers un "assistant" qui a un écran d'introduction, puis la liste des navigateurs présentés dans un ordre aléatoire. Donc quand vous choisissez ce navigateur, il sera déterminé comme votre par défaut l'outil de navigation Web chaque fois que vous passez à une page Web. Si le navigateur n'est pas installé sur votre ordinateur, le logiciel va être téléchargé depuis le site du développeur et installés sur votre système. [12][11][12]

Si vous exécutez Windows 7, Internet Explorer «e» logo disparaît de la barre des tâches, mais vous pouvez toujours le trouver dans votre menu Démarrer. Ensuite, vous serez en mesure de le rattacher à votre barre des tâches en cliquant droit sur le

programme dans le menu Démarrer et en sélectionnant "Pin à la barre des tâches".

L'écran "Choix du navigateur" deviendra par la suite disponible comme une autre méthode pour changer les navigateurs par défaut, à côté des options disponibles lorsque vous installez, mettez à jour ou de lancer un navigateur Web.

Il y a certaines questions que vous exécutez en mai si vous passez de Internet Explorer 8 à un autre navigateur. L'une est que vous n'aurez pas vos flux RSS qui s'est tenue à la liste de flux commun qui fonctionne en tant que partie de Windows Vista et 7. Cette mai affecter l'ajout d'aliments nouveaux destinés à des logiciels qui font usage de la liste de flux commun que leur magasin de données RSS. De même, Windows 7 utilisateurs ne bénéficieront pas d'avoir les onglets visibles dans plusieurs fenêtre d'aperçu «Aero Peek». Cette question peut être résolue avec les versions des navigateurs alternatifs en cours de construction à travailler étroitement avec des caractéristiques de l'hôte système d'exploitation, qui peut être réalisé avec la programmation d'application Windows informations sur les interfaces mises à disposition par Microsoft.

À l'heure actuelle, il n'est pas un programme qui ajoute des navigateurs installés dans le menu contextuel lorsque vous cliquez-droit sur un lien Web. Un tel programme pourrait bénéficier les développeurs Web et des blogueurs qui veulent tester une page sous différents navigateurs ou les personnes qui veulent «répandre la Web-charge de la visualisation» parmi les différents clients.

### Recommandations d'Auteur (sans ordre particulier)

Je recommande aucun de ces navigateurs car les utilisateurs n'ont pas besoin de réapprendre l'interface utilisateur si elles basculer entre aucun d'eux.

Mozilla Firefox[13]

Internet Explorer[14]

Opera[15]

Safari[16]

### Links

[1]

[http://translate.googleusercontent.com/translate\\_c?hl=en&ie=UTF-8&sl=en&tl=fr&u=http://homenetworking01.info/2010/02/understanding-the-browser-choice-screen/&prev=\\_t&rurl=translate.google.com&twu=1&usg=ALkJrh4UpZ8yLuv3eNu2MDvtzklY7ZqQA](http://translate.googleusercontent.com/translate_c?hl=en&ie=UTF-8&sl=en&tl=fr&u=http://homenetworking01.info/2010/02/understanding-the-browser-choice-screen/&prev=_t&rurl=translate.google.com&twu=1&usg=ALkJrh4UpZ8yLuv3eNu2MDvtzklY7ZqQA)

[2] <http://news.bbc.co.uk/2/hi/technology/8524019.stm>

[3]

<http://www.guardian.co.uk/technology/blog/2010/feb/21/microsoft-windows-browser-ballot>

[4]

[http://www.degroupnews.com/actualite/n4514-microsoft-internet\\_explorer-navigateur-europe-concurrence.html](http://www.degroupnews.com/actualite/n4514-microsoft-internet_explorer-navigateur-europe-concurrence.html)

[5]

<http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/02/19/the-browser-choice-screen-for-europe-what-to-expect-when-to-expect-it.aspx>

[6]

<http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/03>

/02/update-the-browser-choice-screen-for-europe.aspx  
 [7] <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/216&format=HTML&aged=0&language=FR&amp;guiLanguage=FR>  
 [8] <http://browserchoice.eu>  
 [9] <http://opentochoice.org/fr/>  
 [10] [http://homenetworking01.info/wp-content/uploads/2010/02/browser\\_choice\\_1\\_clip\\_image002\\_136F9F12.jpg#utm\\_source=feed&amp;utm\\_medium=feed&amp;utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/02/browser_choice_1_clip_image002_136F9F12.jpg#utm_source=feed&amp;utm_medium=feed&amp;utm_campaign=feed)  
 [11] [http://homenetworking01.info/wp-content/uploads/2010/02/browser\\_choice\\_1\\_clip\\_image002\\_136F9F12.jpg#utm\\_source=feed&amp;utm\\_medium=feed&amp;utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/02/browser_choice_1_clip_image002_136F9F12.jpg#utm_source=feed&amp;utm_medium=feed&amp;utm_campaign=feed)  
 [12] [http://homenetworking01.info/wp-content/uploads/2010/02/browser\\_choice\\_1\\_clip\\_image002\\_136F9F12.jpg#utm\\_source=feed&amp;utm\\_medium=feed&amp;utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2010/02/browser_choice_1_clip_image002_136F9F12.jpg#utm_source=feed&amp;utm_medium=feed&amp;utm_campaign=feed)  
 [13] <http://www.mozilla-europe.org/firefox/>  
 [14] <http://www.microsoft.com/france/windows/internet-explorer/>  
 [15] <http://www.opera.com>  
 [16] <http://www.apple.com/fr/safari/>

## Product Review: Facebook Friend Wheel

07/04/2010 02:37



I had talked about on this blog [1] about the kind of influence different posts you make in Facebook will have in your Facebook Friend circle. In one of the articles, I had mentioned a Facebook application called Friend Wheel which shows a graphical representation of your Friend List.

You enable this free application by adding it to your Facebook Profile like you would with a social game like Farmville.

This application works through your Facebook friend list and identifies any situations where your Facebook Friends have other Facebook Friends that are in your list in their lists. Then it resolves these relationships in a graphical manner by plotting each Friend's name as a node on the edge of a circle and showing each link as a line. It can show clusters of people who know each other through a particular community by "bunching" the people together. There is the ability not to plot friends that aren't connected to other Facebook Friends in your list, which may be beneficial to those who have links with larger social circles.

The Wheel can be shown as a static image or, for most of us who have Flash-enabled Web environment (which doesn't include the Apple iPad), there is a Flash version which allows you to hover over the name of a Facebook Friend and show their connections to any of your other Facebook Friends.

It can be slow with larger Facebook Friend lists, especially those that are well connected because of having to plot many nodes and draw many lines. But it is speedy with most Friend lists. There isn't an option to take advantage of the "lists" function so that you can plot the Friend Wheel on the social sets that you define using these lists. As well, it doesn't identify Facebook Friends who have subscribed to any particular Fan Pages or Groups.

One main use that I would find for this application is if you are investigating the "reach" of comments or other material posted on particular Facebook Friends' Walls.

### Links

[1] [/?p=516#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://p=516#utm_source=feed&utm_medium=feed&utm_campaign=feed)

## Swedish TV manufacturers implement Android in a flatscreen TV

06/04/2010 04:20

### Articles

Swedish TV Manufacture, People of Lava, Intros Worlds First Android-Powered HDTV | eHomeUpgrade[1]

Une TV sous Android chez Lava | Le Journal du Geek (France - French language)[2]

### From the horse's mouth

People Of Lava - Company page[3]

Product Page[4]



### My comments

I was not surprised with the Google Android software being implemented as an embedded-applications platform beyond the smartphone and Internet tablet. Here, "People Of Lava" have introduced a range of Internet-connected main-lounge-area television sets that use Android as their operating firmware. In fact, what's more is that these sets are open to the Google Android Marketplace so that users can add extra functionality to them by drawing-down the appropriate apps.

What I also liked about this design was that a lot of the design costs were cut out for the manufacturer because they didn't need to design an operating environment from the ground up when

they wanted to design the equipment. It has also provided an easier path for user customisation, which may be of benefit with Internet-based TV services like IPTV and catch-up TV; and sets deployed in hotels and similar businesses.

This has then proven that the Google Android platform can become a serious contender for the embedded and dedicated-purpose operating system marketplace.

#### Links

[1] [http://www.ehomeupgrade.com/2010/04/05/swedish-tv-manufacture-people-of-lava-intros-worlds-first-android-powered-hdtv/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+ehomeupgrade%2Fentries+%28eHomeUpgrade+1%29](http://www.ehomeupgrade.com/2010/04/05/swedish-tv-manufacture-people-of-lava-intros-worlds-first-android-powered-hdtv/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ehomeupgrade%2Fentries+%28eHomeUpgrade+1%29)

[2] [http://www.journaldugeek.com/2010/04/08/une-tv-sous-android-chez-lava/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+LeJournalDuGeek+%28le+Journal+du+Geek%29](http://www.journaldugeek.com/2010/04/08/une-tv-sous-android-chez-lava/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+LeJournalDuGeek+%28le+Journal+du+Geek%29)

[3] <http://www.peopleoflava.com>

[4] <http://www.peopleoflava.com/television/scandinavia/>

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## Network-Attached Storage with Built-in Battery Backup

05/04/2010 11:17

Thecus NAS server ( Network attached storage ) | Unbeatable Protection with Thecus® Battery Backup Module[1]

Product Page[2]

#### My Comments

Most of us who run a network-attached storage device will realise that these devices will need to have constant power supply in order to keep the data safe. The common solution that we would take would be to connect the NAS's AC power supply through an uninterruptible power supply. These devices have a built-in battery to provide enough power to allow for an orderly shutdown of the device or allow the device to run longer through a short outage.

Now Thecus have taken a cue from a common security-system design practice. This is where an alarm system has an integrated battery that is maintained by the system's power supply. It is so that the alarm system can continue to protect the premises if there is a power outage.

They have extended this concept by providing an optional battery-backup module for the N4200 "muscle-NAS" unit as an alternative to a UPS setup, with the battery allowing enough power for an orderly shutdown or completion of firmware installation. This can also cater for power outages including situations where the device may be accidentally unplugged and may be enough for most home and small-business environments. If the NAS is used with an UPS, it could allow a larger safety margin for the data through the provision of "dual-layered" battery backup arrangement.

The concept may be worth it for equipment that is used in the home or by small businesses and would be a must for places

where the power supply is likely to be unreliable. It also is another example where the manufacturers are racing to build the best example of a top-end network-attached storage device for the home or small business in a similar way to what Ford, GM and Chrysler were doing in the late 60s and early 70s with the "muscle cars".

#### Links

[1] [http://www.thecus.com/news\\_contentx.php?nid=1881](http://www.thecus.com/news_contentx.php?nid=1881)

[2]

[http://www.thecus.com/products\\_over.php?cid=10&pid=220&set\\_language=english](http://www.thecus.com/products_over.php?cid=10&pid=220&set_language=english)

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## What is the National Broadband Plan for the USA?

05/04/2010 07:27

#### Articles

National Broadband Plan: An Effort For The Ages | Microsoft On The Issues[1]

FCC releases its national broadband plan for the US | ThinkBroadband (UK)[2]

#### From the horse's mouth

National Broadband Plan - broadband.gov[3]

#### My comments

One of the main goals with the US National Broadband Plan was to make sure that an affordable broadband Internet service with a minimum headline speed of 100Mbps downstream /50Mbps upstream passes at least 100 million households across that country.

The main limitation concerning this goal is that, at the moment, one third of the US population cannot benefit from broadband Internet. In my opinion, most of this would be in sparsely-populated rural areas.

#### Need for universal Internet service similar to what is required for the telephone

In the US, the universal landline telephone service (private phone with directories for all households, plus commonly-accessible public payphones) is provided by the local incumbent telephony service provider, with the costs paid for by a levy on all telephone services in that country.

Part of the plan would be to release money from Universal Service Fund which is funded by the aforementioned levy to fund a universal broadband service.

## **Need for highly-competitive service with barriers to entry taken down**

Part of this same requirement also includes a highly-competitive service in all markets with any and all barriers to competition taken down. This is in a similar manner to what has happened with the local “dial-tone” phone service in the US and other countries where this same service can be provided by competing service providers.

## **Coverage improvements**

The improvement to universal Internet service goals will also lead to coverage improvements. This may not be an issue with most of the USA because of the country being densely populated but will be of concern with places like Alaska. Of course, there are rural patches within the contiguous 48 states where not many people are living and these will have to be serviced with proper broadband. This will be looked at with the improvements to the Universal Service Fund.

Similarly, this plan will also satisfy the desire to make sure that next-generation broadband service passes anchor institutions like schools, colleges, hospitals, libraries and the like. It also includes making sure that military bases have access to next-generation broadband.

## **Implementation**

The issue of access to basic broadband Internet service by the poor is being dealt with. Here, the FCC are putting forward the idea of extending the scope of the Lifeline and Link-Up communications financial-assistance programs to include this level of Internet access.

It will also include opening up radio spectrum, most likely “digital dividend” TV spectrum, for use in providing wireless broadband service, especially to rural areas. This may also include competitive mobile wireless broadband in urban areas.

Another part of the program is to mandate cost-effective access to telecommunications infrastructure like telegraph poles, underground conduits, towers /building rooftops, land patches and the like. This includes a “dig-once” policy which allows multiple companies to use the same telegraph poles and underground conduits for their own wiring as well as commonly-known infrastructure details to facilitate efficient Internet-service rollout.

## **Net Neutrality**

An issue that hasn’t been talked about in the Broadband Plan is the concept of Net Neutrality. This divisive issue concerns whether certain Internet services and applications have better throughput versus the idea of all Internet applications and services having equal access. It is also of importance whenever telephone and TV move to IP-based transmission and this concept would assure that competitive and complementary services can exist on the same pipe with proper quality of service. This subject also leads to:

## **Multi-Channel TV**

The American populace has been disaffected by the way multi-channel TV, especially cable TV, has been handled by the service providers, which are mainly cable-TV monopolies like Comcast.

One main disaffection was that the set-top boxes are literally controlled by the multi-channel TV providers and customers cannot buy and install set-top boxes or similar devices from retail outlets. There have been attempts to achieve a customer-controlled level playing field for set-top-box supply such as the CableCARD system but the cable industry have frustrated these attempts with measures like requiring a cable-TV technician to visit the customer’s premises to supply the card.

Part of this plan is to require the supply of a broadcast-IP tuner gateway[4] to be provided by the cable company and connected to the customer’s home network and these same customers connecting their own IP-based equipment to the same home network. Here, the main goal would be to provide a competitive program-navigation system for customers to benefit from.

## **Integration in US public life; and IT literacy**

Another goal with the US National Broadband Program is to integrate the high-speed broadband service in to US public life such as providing access to “e-government” at all levels and integrating the service with public education for example.

The plan also includes IT awareness through the community, but as I have noticed, there will be people who will find technology hard to use and will need further assistance. This is exemplified by people who find operating consumer electronics very difficult and are likely to resist using devices like a set-top box beyond changing channels for example.

## **Summary**

What this all leads to is that one of the cornerstones of the US National Broadband Plan is to liberate broadband Internet and multi-channel TV service in a similar way to what has happened to the US telephone service since the Carterfone Decision and the AT&T anti-trust investigation of the late 70s.

## **Links**

- [1] <http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/03/16/national-broadband-plan-an-effort-for-the-ages.aspx>
  - [2] <http://www.thinkbroadband.com/news/4185-fcc-release-the-national-broadband-plan-for-the-us.html>
  - [3] <http://www.broadband.gov/plan/>
  - [4] [http://www.broadband.gov/plan/?p=626#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://www.broadband.gov/plan/?p=626#utm_source=feed&utm_medium=feed&utm_campaign=feed)
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