

# HomeNetworking01.info

06/01/2012 |

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## We can sell the Samsung Android tablets in Australia—for now

30/11/2011 06:34

### Article

Samsung tablet ban lifted | The Age IT (Australia)[1]

### My Comments

This latest development is part of the patent war taking place concerning mobile devices, with this round of legal action by Apple against Samsung being more of a “patent on style”. Here, the goal of the Apple lawsuit was to prevent the sale of the Samsung Galaxy tablets and smartphones because they were seen as valid competition to the iPhone and iPad and it has been known that Apple aren’t keen on licensing their patent portfolio to others.

Now the Full Federal Court in Australia overturned an injunction prohibiting the sale of the Galaxy Tab series of tablet devices in in that country; as long as the sales were accounted for. But Apple intends to go to the High Court to maintain an injunction against further sale of these devices

While the initial Federal Court injunction was in place, there were attempts to parallel-import the devices in to Australia but these were met with threatening letters from Apple’s legal team. This is even though it was feasible for people to buy or have others buy the Galaxy Tab devices in other countries that don’t have an injunction in place against them, then bringing them in or having them posted or shipped in to Australia.

This case may have the soundings of similar action that Apple took concerning GUIs and the Macintosh, with it being resolved in a more competitive manner thus allowing for a level playing field.

### Links

[1]

<http://www.theage.com.au/digital-life/tablets/samsung-tablet-ban-lifted-20111130-1o5rz.html>

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## More steps taking place in enabling Gironde for real Internet

29/11/2011 10:45

### Articles (France - French language)

Fibre optique : la Gironde s’équipe mais Bordeaux prend du retard - DegroupNews.com[1]

### My Comments

In rural France, a département at a time for real Internet

Previously I have mentioned about Gironde [2]being the location of a département-wide fibre-optic backbone rollout with an intention to reduce the digital divide that existed in that area. Now the rollout is underway with positive results coming through in that goal.

### What is happening in Gironde

The fibre-optic trunks will allow more ADSL equipment to be in place thus enabling 7600 households who couldn’t have Internet and 35000 more dial-up-modem or low-broadband households to have real proper broadband speeds.

There is public money [3]involved with a public-private partnership with Orange. But the Gironde local government will persist on the project making sure real Internet service passes more households.

### Delay with Bordeaux

But it is not all rosy at the moment. Bordeaux, the main economy in that area is being put back while the rest of the département is being covered with fibre-optic. Part of this is a presumption that there is full ADSL coverage in that city, but Bordeaux could benefit from next-gen broadband as much as anywhere else.

A main limitations is the competence of the bureaucracy concerning Bordeaux’s Internet rollout and this exposes the city to a two-tier risk as far as Internet service is concerned. This can be demonstrable with outer-urban growth corridors or resort spots that exist around the town. It can also extend to areas that may house lower socioeconomic classes But they hope to have Bordeaux covered with fibre-optic next-generation Internet by 2013.

### Conclusion

In some countries, it may take a local-government area or a regional-government area to focus on Internet-enabling that area and it may have to be a public effort.

### Links

[1]  
[http://www.degrouppnews.com/actualite/n7012-fibre\\_optique-deploiement-reseau-gironde-bordeaux.html](http://www.degrouppnews.com/actualite/n7012-fibre_optique-deploiement-reseau-gironde-bordeaux.html)  
 [2]  
[/2011/09/a-fibre-optic-backbone-in-place-to-improve-internet-access-in-gironde-france/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/2011/09/a-fibre-optic-backbone-in-place-to-improve-internet-access-in-gironde-france/#utm_source=feed&utm_medium=feed&utm_campaign=feed)  
 [3]  
[/2011/11/involvement-of-public-money-in-internet-access-improvement/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/2011/11/involvement-of-public-money-in-internet-access-improvement/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

## Product Review-Brother MFC-J6910DW A3 multifunction printer

25/11/2011 02:33

### Introduction

Previously, I reviewed Brother's first A3 multifunction printer, the MFC-6490CW[1], which was one of the first multifunction-class printer that can turn out documents on this large paper size. Estate agents, architects and the like have been licking their lips at these machines because of the availability of a compact desktop multifunction printer that can print out those building plans on the sizes of paper they are accustomed to for these documents.

Since then, HP had introduced a single-tray A3-printing multifunction in the form of the OfficeJet 7500a but Brother have worked further on the idea of A3 printing in the small office which I had talked about in my industry interview[2] with them. This has manifested in the latest run of A3 multifunction printers which the MFC-J6910DW that I am reviewing represents as the fully-equipped model.

There are cheaper versions of this model that neither support duplex scanning nor have a touchscreen LCD display. As well the cheapest model in the range, the MFC-J5910DW can only scan A4 pages where as the other single-tray unit, the MFC-J6510DW can scan A3 pages. The model just below this unit, the MFC-J6710DW has the two paper trays and can scan A3 pages. But they all can do things like print on both sides of A3 pages.

This machine is infact the printer that was used in Brother's latest TV-commercial series about using A3 paper as a tool to "expand your business horizons". This is to use the paper size to realise more impact with customers or business partners by benefiting from larger text or room for detail. It may be also worth looking at this article[3] that I wrote on making more use of A3 and similar sizes in the office when you read this review.

North-American readers should think of Ledger paper when I mention A3 paper in this review because of the fact that the paper sizes are just about the same and this printer can scan and print on this paper size. It will also scan double-sided on Letter or Legal paper, which is similar in size to A4 paper.



[4]

### Print Scan Copy Fax /

**E-mail Paper Trays Connections** Colour Colour Colour Colour  
 2 x A3 USB 2.0 Ink-jet 2400dpi resolution ID copy  
 Optimised book copy, Super G3 Multi-purpose tray Ethernet,  
 802.11g/n WPS Wi-Fi Auto-duplex Single-pass duplex ADF -  
 duplex for A4 only

A3 scanning

T.37 email-based faxing (requires free  
 download from Brother) IPv6 ready

### Prices

### Printer

Recommended Retail Price: AUD\$379

### Inks

Standard **High-Capacity** Price Pages Price Pages Black \$39.95  
 600 \$53.95 2400 Cyan \$27.00 600 \$33.95 1200 Magenta \$27.00  
 600 \$33.95 1200 Yellow \$27.00 600 \$33.95 1200

### The printer itself

### Setup and Network Connectivity



[5]

Where to plug in the USB or Ethernet cable for wired connections

If you are connecting the Brother MFC-J6910DW printer to your computer or network using Ethernet or USB, you have to open the access lid and snake the cable through to sockets installed within the printer chassis. But the phone connections for the fax functionality; as well as the power connection are exposed connections on the left side of the printer. This can be very daunting for people used to a group of sockets on the back of the printer.

The printer works with wired and Wi-Fi networks and is future-proof with IPv6, as expected for a business printer. It does support expected Wi-Fi setup functions like WPS “one-touch” setup.

### Walk-up functions

The ability to print directly from the memory card or a digital camera works properly but the paper reserve you can use is whatever is loaded in the upper tray or manual feed slot. I would like to see this improved by allowing one to select whichever paper tray to use or if they print using PictBridge, the printer checks both paper trays for the specified paper size and type.

It has the expected copy functions, with the ability to enlarge an A4 document to A3 which is commonly expected of A3 copying devices. This is done by setting the Enlarge function to 141% and setting the paper size to A3. The ID copy function is very tricky to operate for new users because you have to use the “N-in-1” option to set the ID copy for the job. As well users wouldn’t know where to place the identification document to be copied for each side of that document.

As far as copy fidelity goes, the copies come out slightly paler than the original. It also doesn’t use the memory to quickly scan subsequent pages using the automatic document feeder while the copies are being turned out.

The fax functionality supports Super G3 faxing with colour over regular phone lines as well as T.37-compliant fax over email. This IP-based “fax-over-email” functionality is limited to handling A4-sized monochrome documents. At the moment, this function is enabled through a free download program from Brother’s support Webpage[6] for this unit.



[7]

Control panel with touchscreen

This printer is equipped with a full-duplex automatic document feeder that scans both sides of the page at the same time, rather than reversing the paper over a roller to expose the other side for scanning. The main benefits that I have seen from this is that the documents are scanned very quickly and the ADF is more reliable because there isn’t any extra paper handling involved. This feature is only available for A4 or smaller documents.

### Computer functions

I would prefer that you download[8] the latest driver software for your computer’s operating system from Brother’s Website for this printer rather than install the software that comes on the supplied CDs; as I have preferred when new computer hardware is installed. This is more so with this unit because when I installed the driver software from the CDs on to my Windows 7 PC, there was a weird error message towards the end of the install routine and the driver wasn’t in place.

During printing, the software runs very lean and isn’t demanding on your computer’s resources. Even if you start a scan job from the MFC-J6910DW’s control panel, there isn’t much demand on the computer for the necessary scan monitor software. For that matter, a duplex scan job had both pages on the hard disk simultaneously. As well, you can set the printer up to scan to network (or Internet) storage resources as long using standard file-transfer protocols.

The Brother print driver’s user interface still has that excellent “at-a-glance” view of the settings that you have specified for that print job. This is something that I have seen consistently with all of Brother’s printers since I reviewed the HL-4150CDN [9]colour laser printer.

### Use with Brother iPrint&Scan (Android)

If you use the Brother MFC-J6910DN with the Brother iPrint&Scan mobile-printing app, you can print PDFs and photos from your device. It can accept A3 print jobs if the document is a PDF.

But, as I have seen from my Android copy of this program, the program’s current version doesn’t support printing of photos on A3 paper, nor does it support duplex and booklet printing for PDF documents. On the other hand, this app can scan both sides of a document that passes through the duplex automatic document feeder.

## Paper and ink handling



[10]

Ink cartridges loaded up front on this printer

This Brother MFC-J6910DW multifunction printer, like the other Brother inkjet printers and the HP OfficeJet 8500a Plus allows you to change the ink cartridges by opening a door on the front rather than lifting a heavy scanner lid. But because the printer, like other Brother and Epson inkjet printers uses piezoelectric inkjet technology, you have to make sure you have a spare cartridge on hand when it lets you know it is low on ink for that cartridge and be ready to replace the cartridge when the ink volume looks very low. This is to avoid a loss of print quality due to airlocks in the ink system.

It can handle heavy print runs, including auto-duplex print runs, without failing. The auto-duplex function works to the edge for A4 and lower paper sizes but requires a margin at the top and bottom of an A3 document. This can be of concern when you use this function to print out A4-size booklets on A3, which it still can do well.

I would like to see Brother add some improvements concerning the ability to use the lower tray for photo-paper or poster-print jobs. Similarly there could be the ability to load the manual feed tray at the back with up to ten sheets of paper and have that considered as a separate paper source. This can improve the workflow for multi-page photo prints or poster-print jobs.

### Print quality

The Brother MFC-J6910DW yields very sharp text from regular document print jobs, but some spot colours don't come out strong on plain paper. I even printed the PDF file of the London Tube and Rail Map on A3 as a test to assess its prowess with complicated maps, plans and diagrams and it did yield a crisp image with legible station-name text. This is because a lot of users who buy this printer will be making it turn out those floor plans, maps and similar diagrams on to big sheets of A3 or Ledger paper as part of their livelihood.



[11]

This unit does scan and print A3 pages

When you print photos on this Brother printer, the pictures yield a darker contrast and don't exhibit strong colour saturation. If the picture is of a person, the flesh tones don't come out very pale.

### Limitations and Points Of Improvement

The Brother MFC-J6910DN has could benefit from improved advanced-copy functions like an easy-to-use ID-copy function with marked out "master areas" for this function on the edge of the scanning glass. It could also benefit from a user interface that can support "one-touch-copy" functions for particular common tasks like A4-A3 enlargement, A3-A4 reduction or ID copy.

As I have said before, this printer can benefit from flexible paper handling options like the use of both trays for special-printing jobs or the ability to feed multiple sheets of paper in the manual feed slot on the back of the unit.

People who have used HP and Canon printers may find that the Brother MFC-J6910DW, like other Brother printers, misses out on "stationery-cupboard-in-a-box" printing functionality like "Quick Forms". This is where the printer can print out paper like checklists, calendars, ruled notepaper or graph paper by you operating functions on the control panel. Some of us may consider it an unnecessary frill but it can come in handy if you need ruled paper at a moment's notice.

This Brother A3 printer, like nearly all home, SOHO and small-business printers, could benefit from being able to use commonly-available SD cards as upgradable high-capacity system memory. Here this could allow for quick fail-safe printing, faxing and copying from these devices, with the ability to upgrade the memory for those devices that have higher workloads. It is also more relevant with this printer as it handles A3-size documents which will typically be graphics-rich.

## Conclusion and Placement Notes

This current series of Brother A3 multifunction printers has what it takes to bridge the A3 paper size to the multifunction printer. I would recommend the Brother MFC-J5910DW as a general office printer for work environments that are cutting their teeth on the large paper sizes. An example of this is the café owner who is wanting to get started with double-sided A3 “specials lists” that they attach to those plate-glass windows.

The MFC-J6510DW would work well as a complementary A3 scan-copy-print “specialist” printer alongside that colour-laser multifunction printer which is serving as your A4 document workhorse.

But I would specify the Brother MFC-J6910DW as an “all-round” document workhorse for people who have fully cottoned on to A3. I would even team this with the Brother HL-4150CDN [12]colour laser printer if you want a “two-box” full print solution for quickly turning out short-order flyers and other high-volume short-order A4 work. The less-expensive MFC-J6710DW could also answer the “all-round” document workhorse if you are willing to forego A4 duplex scanning or a nice touchscreen.

## Links

- [1]  
[/2010/07/product-review-brother-mfc-6490cw-a3-capable-multifunction-inkjet-printer/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://2010/07/product-review-brother-mfc-6490cw-a3-capable-multifunction-inkjet-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [2]  
[/2010/11/interview-seriesbrother-international/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://2010/11/interview-seriesbrother-international/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [3]  
[/2010/11/considering-printing-on-a3-in-the-office/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://2010/11/considering-printing-on-a3-in-the-office/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [4]  
[http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-25-002-Brother-MFC-J6910DW.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-25-002-Brother-MFC-J6910DW.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [5]  
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- [6]  
[http://welcome.solutions.brother.com/bsc/public/as/au/en/dlf/download\\_top.html?reg=as&c=au&lang=en&prod=mfcj6910dw\\_all](http://welcome.solutions.brother.com/bsc/public/as/au/en/dlf/download_top.html?reg=as&c=au&lang=en&prod=mfcj6910dw_all)
- [7]  
[http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-25-011-Brother-MFC-J6910DW-control-panel-detail.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-25-011-Brother-MFC-J6910DW-control-panel-detail.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [8]  
[http://welcome.solutions.brother.com/bsc/public/as/au/en/dlf/download\\_top.html?reg=as&c=au&lang=en&prod=mfcj6910dw\\_all](http://welcome.solutions.brother.com/bsc/public/as/au/en/dlf/download_top.html?reg=as&c=au&lang=en&prod=mfcj6910dw_all)
- [9]  
[/2010/11/product-reviewbrother-hl-4150cdn-colour-laser-printer/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://2010/11/product-reviewbrother-hl-4150cdn-colour-laser-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
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## How can the Occupy campaigns and cloud computing help the small or midsize business

24/11/2011 04:43

### Article

HP Blogs - How can Occupy Wall Street and Cloud Computing help... - The HP Blog Hub[1]

### My Comments

The recent “Occupy” movements, which were assisted by the Social Web to create the critical mass, had an intended effort to highlight the resource disparity caused by big business to ordinary people, and small and midsize businesses.

This occurred at the same time that consumers and small-to-medium business were made heavily aware of the concept of “cloud-computing” and computing-as-a-service. In some ways, this can assist in making certain computing services that would be out of the reach of the 99% accessible to this group rather than the 1% which represents the “big end of town”.

When I visited the “Big Picture Experience” computing conference that was hosted by Microsoft in Melbourne this past Wednesday (AEDT), there was a lot of emphasis on this kind of cloud-computing and computing-as-a-service to effectively make a flexible workforce. Applications that were promoted included shared-document management and unified communications; with these applications linking to the business via Internet connections.

They even proposed that small and medium business who can’t afford their own servers have this functionality by renting these services from other companies in a similar way that we can rent disk space for our Web sites from Web-hosting companies like GoDaddy[2]. It is also in a similar way to how some small business operators can work out of a garage yet are able to rent a self-storage lockup from Fort Knox[3] or Big Yellow[4] for storage of extra goods or hire a competent truck from Budget[5] or U-Haul[6] when they need extra trucks.

These concepts can open the door to the feasibility of smaller operations expanding without costing them an arm and a leg. It is because it could allow concepts like telecommuting or shared-desk business, which could lead to reducing the physical size of the business’s premises.

Cloud computing and computing-as-a-service can open up “big-business” paths to smaller operations. Examples of this may



include hosted archiving-for-compliance or access to sophisticated business systems and practices like multi-tier loyalty programs for independent business.

This kind of computing can then become the big tide that lifts many boats up and yield flexibility across business sizes. In some ways, it could allow “big-business” hopes from small and medium business owners.

#### Links

- [1] <http://h30507.www3.hp.com/t5/Enterprise-Services-Blog/How-can-Occupy-Wall-Street-and-Cloud-Computing-help-smaller-mid-ba-p/102067>
- [2] <http://x.co/bJuC>
- [3] <http://www.fortknoxselfstorage.com.au/>
- [4] <http://www.bigyellow.co.uk/>
- [5] <http://www.budget.com.au/>
- [6] <http://www.uhaul.com/>

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## Christmas Post 2011

23/11/2011 12:40



[1]Hi everyone!

No doubt, as the TV ads shout, you will be passing headlong through an intense selling period. If you are in North America, this will start just after you have had that big turkey and pumpkin-pie feast on Thanksgiving Day. But this is the time to make wise decisions about what technology to buy as Christmas gifts through this season.

I am writing this piece so that the gift that you buy doesn't end up as a real turkey in the face of the recipient or that you don't shoot yourselves in the foot when you buy those bargains during the sales.

#### Network media and Internet-enabled “smart TV”

This year, Internet-based TV is being promoted by the main TV brands. This will typically be offered in the form of newer LCD TV sets being equipped with this feature, but you can enable your older or cheaper TV[2] with this technology by purchasing one of the new Blu-Ray players, Blu-Ray home-theatre systems or network media adaptors from the likes of Samsung and Sony. These devices do have that same “smart-TV” functionality but are in the form of a video peripheral that connects to your existing TV.



[3]Whether you go for a “smart TV” or a video peripheral to benefit from the interactive TV trend, make sure the TV is DLNA-compliant and resist the temptation to use Wi-Fi as the network connection method for these sets. Instead, purchase a HomePlug AV kit to link your network-enabled video equipment to the home network. There are some of these kits which have one of the HomePlug-Ethernet bridge units equipped with a four-port Ethernet switch, which could benefit those households who have more than one network-enabled AV device in the equipment rack and makes the network setup more future-proof. An example of this kind of equipment is the WD Livewire HomePlug AV kit[4] which came with 2 HomePlug AV 4-port Ethernet switches at each end which I have reviewed. Infact I had reviewed the Sony BDP-S380 Blu-Ray player[5] that works well as an Internet-TV enabler for that existing TV.

As for reviews, I have covered some network-enabled media equipment other than tabletop and portable Internet radios. I had reviewed the Sony CMT-MX750Ni micro music system[6] which could work as a secondary music system as well as a Rotel RCX-1500 CD receiver[7] which is the heart of a good-quality 3-piece hi-fi setup. These units both can connect to the home network and Internet, bringing the fun of Internet radio and the music collection on your network-attached storage to something more substantial than a table radio.

#### The “family house”

You may be having your Thanksgiving, Hanukkah or Christmas dinner at your family's main “family house”, yet you might find that the Internet setup there may not match a current reality. When I talk of the “family house” here, I am talking of the house which most likely will be lived in by your parents but is the place where the whole family gathers for family celebrations, and where some members do stay on a temporary basis.



[8]

Netgear DG834G ADSL2 wireless router

This is more so if your parents are cottoning on to the Internet or it is known around your family that there are regular houseguests staying or living at this house who make regular use of the Internet.

Here, I have written an article[9] on whether to provide full broadband Internet and a home network in this “family house” and, if so, it could be a valid gift idea when it comes to what to give your parents or grandparents. I had compared the value of one of those 3G wireless-broadband setups serving one computer versus a wireline full-broadband service that is part of an integrated telecommunications /pay-TV deal.

#### Other gift ideas



[10]I have written a buyer’s guide article on what you can buy to improve the sound quality of your computer equipment[11]. Here, I have mentioned about the speaker-system opportunities, the use of regular hi-fi equipment as well as add-on sound modules for laptops. As well I covered the issue of making sure you have good connectivity options for those iPod speaker docks [12] so you can gain more value out of them over the years.

I have also reviewed a good-quality Cooler Master laptop cooling pad[13] which would come in hand with older laptops that tend to run hot easily. As well, it is worth paying attention to the quality of other accessories you buy as gifts for laptop users. For luggage, pay attention to how well the piece is built such as the

stitching or the fasteners. Cheap poor-quality zippers can definitely cost in the long run, as I have experienced.

Those old-style tray tables are very relevant in the connected age, especially as a way to keep that laptop or tablet off the couch or bed. Why is this so because if you allow a laptop to exist on those pillows, cushions or doonas (Continental quilts /duvets /comforters), this can cause the laptop to overheat. It also avoids the risk of one sitting on and damaging that iPad that was left on the sofa.

As I have said before, if you can’t afford or feel worried about purchasing that big-ticket gift yourself, it could be worth pooling resources together to purchase that gift. This can avoid the need to resort to cheap poor-quality items as gifts.

I just wish you all a very merry Christmas and a happy and prosperous New Year,

Simon Mackay

Editor - HomeNetworking01.info

#### Links

[1]

[http://homenetworking01.info/wp-content/uploads/2011/11/2010-12-19-001-Christmas-door-wreath.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2011/11/2010-12-19-001-Christmas-door-wreath.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

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[6]

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## A suggestion to make Black Friday the day to update the software on your parents' computer

23/11/2011 11:23

### Article

Forget Shopping, Friday Is Update Your Parents' Browser Day! - Alexis Madrigal - Technology - The Atlantic[1]

### My comments

You are celebrating Thanksgiving at your parents house but you notice that the old desktop computer that is their computer (and ending up as the family computer) is running Windows XP and Internet Explorer 6. But they see it as their "comfort zone" even though newer versions of Windows and Internet Explorer have been released.

This newspaper article has been suggesting that you update your parents' computer with the latest version of the Web browser they are using for their operating system. This is because most of the Web sites are being re-engineered to work with newer Web browsers rather than the likes of Internet Explorer 6.

It could be done as part of keeping the computer in good order by doing other software and driver updates. You may even think of updating their computer to Windows 7 if it is running relatively-new hardware and use this package as a Christmas gift idea.

But the main issue with this kind of software update is that you may need to spend a lot of time teaching them the ropes of the new software with the new user interface elements. This may involve long telephone calls or regular house visits to walk them through parts of the user interface that they may find very difficult, as I have experienced with teaching people different computer skills.

### Links

[1]  
<http://www.theatlantic.com/technology/archive/2011/11/forget-shopping-friday-is-update-your-parents-browser-day/248933/>

## What is this private cloud functionality being touted with NAS devices?

22/11/2011 12:15



[1]

The NAS as the heart of the personal cloud

I am seeing increasing reference to the "cloud" concept in marketing literature for consumer and small-business network-attached storage devices by their vendors. It is typically talked of in the concept of a "personal cloud" surrounding the NAS device and is used across the product range.

Examples of this include Western Digital's My Book Live[2] NAS, PogoPlug USB file servers[3] and Iomega's "Cloud Edition" NAS range.[4]

### What it is about

This feature is primarily about an easy-to-establish remote-access system for the NAS device so you can gain access to the files on this device from the Internet. The manufacturers tout this as an alternative to storing data on public-cloud file-storage services like Dropbox, iCloud, Windows SkyDrive or setting up private FTP or HTTP access to the data-storage facility your ISP or Web host may provide.

It is based on the NAS having vendor-supplied software to link with a cloud-based service that makes it easy to locate on the Internet even if you use a regular dynamic-IP Internet service. The vendor may supply desktop and mobile software to facilitate this discovery and /or establish a user-subdomain or directory name that is part of their "remote-access" service domain.

Of course, your data still resides on the NAS with the vendor's service cloud being the Internet-side discovery link for the device. As well, all of these personal clouds use encryption of a similar standard to what is used to secure your



Internet-banking session.

This idea has been existing for over the last few years with vendors providing their simplified remote-access solutions for their NAS products but they are using the current emphasis on cloud-computing technology as a marketing tool for this functionality. This is in a similar vein to how online services have been marketed using the cloud term even though they use this concept.

### How can it be taken further

Currently this cloud concept is being exploited further with smartphones and tablets by the NAS vendors providing free data-access apps on their platforms' app stores. Here the apps allow the users to use the mobile device's user interface to transfer the desired data between the NAS and the device's local storage. Some of us would see it as a way to offload picture data from the smartphone to the DLNA-enabled NAS or pull down important data to the smartphone or tablet.

Netgear is even working with Skifta to provide remote access to media content on its ReadyNAS units and allow a PC or Android phone to share the content from the remote ReadyNAS device with DLNA-compliant AV equipment.

The Iomega solution is implementing the Personal Cloud concept as a backup and peer-to-peer replication setup; as well as a remote-access method. But as more manufacturers get on the bandwagon, there may be the issue of providing a vendor-independent "personal cloud" in order to encourage competition and innovation.

### What should my network have

The network has to have a router that is set up for UPnP IGD functionality at its network-Internet "edge" for the cloud-based remote access to run properly. This will apply to most retail and ISP-supplied routers, but you may have to make sure this function is properly enabled.

You don't need to have a fixed IP address or a "DynDNS" program running on your equipment to have this personal cloud operate because the vendor-supplied software on the NAS takes care of the location and access function. But it should have a reliable Internet connection and you may want to put the NAS and network-Internet "edge" equipment on a uninterruptable power supply to assure high availability even with rough power supply conditions. It may be worth reading this article that I wrote[5] about keeping "sanity" on your home network during periods of power unreliability if you want to keep that personal cloud alive.

But avoid the temptation to use a Wi-Fi wireless connection to connect a NAS to your router, even if the NAS does have Wi-Fi connectivity. Instead, connect it to your router with an Ethernet cable, so you have reliable operation.

### Conclusion

In the context of the consumer or small-business network-attached storage system, the "cloud" feature is simply being used as a way to describe a simplified remote-access environment for these devices.

### Links

[1]

[http://homenetworking01.info/wp-content/uploads/2011/10/2011-10-22-011-e1319462816806.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2011/10/2011-10-22-011-e1319462816806.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[2] <http://www.wdc.com/en/products/products.aspx?id=280>

[3] <https://pogoplug.com/>

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

[5]

[/2010/02/keeping-sanity-in-your-home-network-during-periods-of-power-unreliability/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/2010/02/keeping-sanity-in-your-home-network-during-periods-of-power-unreliability/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

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## Involvement of public money in Internet-access improvement

21/11/2011 11:17

There is a common requirement to improve Internet access in many communities. This may be in the form of extending high-speed broadband out to rural areas or implementing next-generation broadband service around a nation or state. It may also include providing a community of financially-disadvantaged users, such as residents of a public housing estate with computer hardware, Internet access and training.

In most of these improvements, there is the involvement of government in facilitating the rollouts and the funds are derived from the money pools that the government has access to courtesy of the taxes that it raises.

Examples of the projects typically range from a local council implementing a Wi-Fi hotzone in its towns or a regional government funding a fibre-optic rollout in its area of responsibility to a national government subsidising Internet rollout projects across the country.

I have covered instances where action concerning Internet-accessibility improvement has been assisted with public money of some sort, such as improvements in Gironde[1] and Vaucluse[2] in France; and many other rural-broadband improvements[3] in the UK.

Here, the question that is often raised is whether such operations should be funded by this public money and assisted by these government entities. This is typically raised by conservative organisations who prefer that little public money be spent on this kind of service delivery and would prefer that this is the responsibility of a private free market.

### The free-market argument

The free-market argument underscores the fact that the public money is the "property of the taxpayer" and that government shouldn't waste their money on these Internet-improvement projects. Instead they would rather that market forces determine the kind of Internet service that is provided.

Similarly the free-market no-public-money argument also underscores a rationale that the money to assist Internet

deployment in underserved areas could be better spent on other services like health or road /rail infrastructure. There is also the fear that taxes will be increased in the area so as to cover the Internet-deployment project.

### **Limitations**

This may be OK if there is a vibrant competitive Internet-service market in every part of the country. But where there is a monopoly or cartel managing the Internet service for an area, there can be problems with a totally free-market approach.

For example, it is easier to fail to serve communities based on perceived lack of short-term profitability. This can be aided by various personal prejudices like fear of serving neighbourhoods dominated by minorities. With this, there is less of a likelihood of catering to a changing customer mix in a community. This is more so if the change involves establishing infrastructure in a community where there could be new perceived demand, such as a neighbourhood that has been gentrified or has acquired a new employer.

Infact some of the incumbent monopoly operators in the US have been known to cry foul and organise PR and legal campaigns against municipal hotzone efforts. This is because they fear that the Internet service offered by the hotzone is to provide a competing service and undermine their monopoly over their operating area.

### **Why use public money**

The use of public money to provide proper Internet service to underserved communities is effectively a “leg-up” for private Internet providers to provide the service to these communities. This is especially where they wouldn’t find this kind of operation profitable especially in the short-term.

### **Common public-money sources for Internet-service provision**

#### **Local government**

I also find that the local government is in a better position to underpin local projects because they know what the local needs are. They are infact more representative of the local community and are dependent on a primary income base - the council rates or taxes — that is sensitive to local area value. Here a high-quality Internet service can attract a high-value employer which will raise the area’s effective value and income base.

#### **Universal-service funds**

Another public money source that is relevant to Internet-service improvement are universal-service funds. These are funds that are provided to communications companies and utilities to offset the cost of difficult service rollouts in order to provide a baseline level of service to all communities.

These funds may be resourced from a standard levy charged to all customers for the provision of their service, another tax base like the TV licence fee in the UK or a line of spending in a government’s budget. But these service funds would be specifically allocated for providing the communications service to the community. They are typically underscored by laws that

define a minimum standard for Internet service through the nation in a similar manner to what is implemented for the telephone.

But there are other sources such as baseline federal assistance for communications and technology enrichment projects as well as international funding from multi-nation groups like the European Commission.

### **Public-Private Partnerships**

The projects would be typically rolled out in a public-private partnership where the telco or ISP finance some of the project’s costs while the public funds finance the rest of the project’s costs.

They are exemplified through entities who represent the government and the private operators and are responsible for managing the project and tendering out the work that is necessary for it to go ahead. What is important about them is that the projects are subject to value-for-money tests yet have exposure to the benefits of free-market competition and the public money goes a long way towards the project with less drain on the public budget.

### **Conclusion**

What i value is that public money can be used to assist in improving Internet access for disadvantaged communities or establishing a newer Internet technology with minimal private risk.

### **Links**

- [1]  
[/2011/09/a-fibre-optic-backbone-in-place-to-improve-internet-acce-ss-in-gironde-france/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](#)
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## Product Review–Toshiba Satellite L730 ultraportable notebook computer

18/11/2011 06:05

### **Introduction**

Early last year, I had reviewed a Dell Inspiron 13z [1]notebook which was positioned as a consumer-focused “subnotebook” or “ultraportable” computer. This was equipped with a full-sized keyboard and a 13” screen and was optimised for on-road use, especially for creating content while travelling. Now I am reviewing the Toshiba Satellite L730 which is another ultraportable computer that is focused at the same class of consumer users with similar needs.

But this computer is finished in a manner that excels on beauty with its white housing rather than the grey housing that the Dell had and is specified to current needs with Intel Sandy-Bridge processor hardware.



[2]

#### Price

– this configuration RRP for reviewed configuration Processor Intel Sandy Bridge i5-2410M RAM 4Gb RAM shared with graphics Secondary Storage 640Gb hard disk DVD burner, SD card reader Display Subsystem Intel HD graphics Screen 13.3" widescreen (1366 x 768) LED-backlit LCD Network Wi-Fi 802.11g/n Ethernet Gigabit Ethernet Bluetooth Bluetooth 3.0 Connectors USB 2 x USB 2.0 1 x USB 3.0 with Sleep & Charge Video VGA, HDMI Audio 3.5mm stereo output jack 3.5mm stereo input jack Operating System on supplied unit Microsoft Windows 7 Home Edition Windows Experience Index Overall Graphics Advanced Graphics

#### The computer itself

#### Aesthetics and Build quality



[3]

It fits comfortably on that coffee bar at that café

The Toshiba Satellite L730 is small and light enough to suit most travelling needs. It can be stuffed in to most shoulder bags and similar luggage without it standing out and doesn't add much extra weight to the luggage. It is also small enough to comfortably occupy the coffee bar in that café or the airline tray table in the economy-class cabin.

This notebook is finished in a gloss-white finish across the lid and keyboard area. In some ways, the white finish may appeal to the "personal-computer" purchasers who want to restyle the unit with various stickers. The speaker grilles are accented in chrome and the underbody is in the usual charcoal finish. It is still a well-built good-quality computer. Preferably, I would go for a darker screen escutcheon in order to make the screen more visible.

#### User interface

The Satellite is equipped with a full-size keyboard which permits you to comfortably touch-type on it. I have noticed that the function keys grouped into clusters of four which makes them easy to find visually and by feel. The keyboard has that smooth glossy surface typical of consumer portable computers and some users may describe it as looking very cheap and nasty. Yet it is still springy enough to allow you to touch-type very quickly and accurately.



[4]

Left-hand-side connectors — DVD burner, 2 USB 2.0 ports, SD card reader under USB ports

The Satellite L730 is equipped with a similar rough-surface trackpad to what has been used on this computer's bigger brother, the Satellite L750. This can be hard to find visually but easier to find by feel. There are the chrome selection buttons for "clicking" and "right-clicking" with. It still has the tendency to "jump around" but can be defeated by you pressing a "trackpad defeat" button just under the spacebar.

#### Connectivity and Expansion

Like the Toshiba Portege R830, this unit has an integrated DVD burner which is a feature that will become rare for this class of computer, but can be handy if you turn out DVDs of photos or "video rushes"; or simply rent DVDs from video stores for light entertainment while traveling.



[5]

A DVD burner — a feature that will disappear from this class of laptop

Of course, the Satellite L730 is equipped with an SD card reader for use with your camera cards as well as 3 USB sockets. One of these is a USB 3.0 with that “Sleep and Charge” functionality offered across most of the current Toshiba range, where you can charge your smartphone off the computer’s battery or AC supply while it is off. The SD card reader is infact wedged under the 2 USB sockets on the left hand side of the laptop and this position can be awkward if you are using both USB ports, especially if one is used for a wireless-broadband dongle.

There is the expected audio and video connectivity with a VGA and HDMI socket for external displays and a 3.5mm audio input and output sockets for headphones or external microphones. The Satellite L730 also has expected network abilities with a Gigabit Ethernet socket, 802.11g/m Wi-Fi and Bluetooth 3.0 connectivity.

If you are a travel “pack-rat” or take heaps of pictures and movies with your digital camera, the 640Gb hard disk offers whatever you need for storage. This hard disk is protected by a vibration sensor that parks the read/write heads when it senses vibration or shock as a way of protecting your data. Here, the vibration sensor has come in to its own when I used this Toshiba notebook on a public-transport bus which typically had to pass potholes and go around many corners. You have to make sure that the vibration-sensor warning doesn’t pop up frequently if you don’t want your work interrupted when you are working during that bus ride.

#### Audio and Video



[6]

Right-hand-side — VGA, HDMI, USB 3.0 with Sleep And Charge, headphone out, microphone in

The Toshiba Satellite L750 performed very capably with multimedia tasks using the Intel HD graphics. The sound was also very smooth but the speakers, like most laptops, don’t fare well for the sound.

One main limitation that I see for this notebook computer is that the screen is very glossy. This limits its use in bright environments like outdoors on a sunny day, especially if the screen has to be dim in order to extend the computer’s battery runtime.

#### Battery life

This particular unit had shown problems with battery runtime where the estimated runtime was less than that shown on the specification sheet. Typically Windows had rated a full-charged battery for around two hours and the DVD rundown test ran for around 1 hour 50 minutes.

This may be specific to the sample unit or the fact that this unit is a review unit that has passed many hands without the battery being allowed to fully charge, but I hope that the production units can work close to the stated five hours.

#### Limitations and Points Of Improvement

As I have mentioned before, the glossy screen, along with the white screen bezel, may perturb some users when they travel; and could be replaced with a matte-finish screen.

I would also like to see some more variations in this model such as a cheaper variety with an i3 processor and a hard disk of say 500Gb, which is pitched as an auxiliary portable computer; or a premium unit with an i7 processor and either a solid-state storage, 8Gb RAM or a larger hard disk. As well, members of the series could be finished in the same style as the L750 15” laptop.

Similarly, I would like to see a higher-capacity battery offered as an accessory through Toshiba’s consumer-retail channels so we can run these computers for a long time on the road.



## Conclusion



[7]I would recommend the Toshiba Satellite L730 as an entry-level ultraportable notebook for those of us who value a high level of functionality. It is still small and light enough to stash in a shoulder bag when you go travelling yet has a flexible level of functionality.

It would be more ideal for the hotspot surfer who wants to escape the office with work-in-progress or a lnotebook for giving that teenager when they head off on their first world trip; and, if the battery works right, could become an entry-level “journalist’s friend”.

## Links

- [1]  
[/2010/05/product-review-dell-inspiron-13z-notebook-computer/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://2010/05/product-review-dell-inspiron-13z-notebook-computer/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [2]  
[http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-18-011-Toshiba-Satellite-L730.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-18-011-Toshiba-Satellite-L730.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [3]  
[http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-08-002-Toshiba-Satellite-L730-on-coffee-bar-at-Green-Bean.jpg#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](http://homenetworking01.info/wp-content/uploads/2011/11/2011-11-08-002-Toshiba-Satellite-L730-on-coffee-bar-at-Green-Bean.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed)
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# Now DLNA is officially part of the WiFi Direct personal network

17/11/2011 05:07

## Article

WiFi Direct and DLNA get friendly, make streaming media a little bit easier — Engadget[1]

## My Comments

Just lately, the media-streaming use case has been brought to the WiFi Direct personal-area network as a competitor to the Bluetooth A2DP /AVRCP media-streaming applications.

There is an important fact that any WiFi-capable DLNA device could be a client device in this network setup as long as the host computer or smartphone is WiFi-Direct capable and running DLNA-compliant media management software. This could mean that your Intel WiDi laptop could be set to play video on that Samsung Smart TV or music on the Sony CMT-MX750Ni without needing to use an established WiFi router or access point.

What I see about WiFi Direct is that it is effectively being run as an alternative to Bluetooth for the personal-area network or standards-based peripheral link. But I am not sure whether it will succeed due to heavy emphasis by industry on the use of Bluetooth for this application and little consumer promotion of WiFi Direct capabilities.

## Links

- [1]  
<http://www.engadget.com/2011/11/16/wifi-direct-and-dlna-get-friendly-make-streaming-media-a-little/>

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# Don't forget that the Browser Choice Screen is your one-stop Web browser port-of-call

17/11/2011 03:12

## Previous Coverage - HomeNetworking01.info

Understanding The Browser Choice Screen (EN[1], FR[2])

## Web site

Browser Choice Screen - <http://browserchoice.eu>[3]

## My Comments

Previously, I have covered the Browser Choice Screen, which was par of Microsoft's anti-trust settlement with the European Commission concerning Internet Explorer. This was to be for consumer and small-business Windows setups in the European Union where people were to be offered a choice of Web browser for their operating environment.

But I still see this menu Web page as a “one-stop” port-of-call for people anywhere in the world who want to install new Web browsers or repair a damaged Web-browser installation. This resource came in handy when I was repairing a houseguest’s computer that was damaged by a “system-repair” Trojan Horse. Here, I could know where to go to collect the installation files for the Firefox Web browser that I was to repair so I can restore their Web environment.

If you are creating a system-repair toolkit on a USB memory key, you may visit this resource to download installation packages for the Web browsers to that memory key. Or you can create a shortcut file to this site and store it on the memory key b

#### Links

- [1]  
[/2010/02/understanding-the-browser-choice-screen/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/2010/02/understanding-the-browser-choice-screen/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [2]  
[/2010/04/comprendre-lecrans-%c2%abchoix-de-navigateur%c2%bb-mis-a-jour/#utm\\_source=feed&utm\\_medium=feed&utm\\_campaign=feed](/2010/04/comprendre-lecrans-%c2%abchoix-de-navigateur%c2%bb-mis-a-jour/#utm_source=feed&utm_medium=feed&utm_campaign=feed)
- [3] <http://browserchoice.eu>

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## DLNA in the hotel room

12/11/2011 02:51

#### Article

Ericsson’s proof-of-concept solution for DLNA in the hotel room (PDF)[1]



[2]

An example of a hotel or serviced apartment block which would be relevant to DLNA

#### My comments

#### Why DLNA in the hotel room?

#### Increased availability of affordable DLNA-compliant entertainment equipment

Most manufacturers who sell consumer electronics are offering electronic entertainment devices that can be connected to a home network and can pull down content from that network or the Internet. When it comes to obtaining media from the home network, these manufacturers will use the established UPnP AV /DLNA technology rather than reinvent the wheel. This feature is being promoted as a distinct product differentiator and will soon end up being offered across all of a manufacturer’s lineup except, perhaps, the very-low-end models.

Some of this equipment is available in form factors that would suit the typical hotel room, suite or serviced apartment. Examples of this include the Sony CMT-MX750Ni [3]/CMT-MX700Ni and the Rotel RCX-1500[4] music systems that I have reviewed on this site as well as the increasing number of “smart TVs” offered by LG, Samsung, Panasonic and Sony. In the same context, a DLNA-compliant network media adaptor could displace a solution-specific option as the gateway to premium content in the hotel as has been investigated for residential cable TV.



[5]

Sony CMT-MX750Ni — an example of a DLNA-compliant music system for a hotel room or serviced apartment

In the case of some of the network media adaptors and “smart TVs”, it could be feasible to integrate site-specific apps or Web links to facilitate interactive services like room-service ordering or in-room checkout that have been part of hotel-based video systems.

#### Access to online content through mobile computing devices

Most people are making use of online content services like Internet radio, Last.fm, YouTube and Netflix on the mobile computing devices that they take with them all around the world. This also includes use of the Social Web where Facebook and Twitter profiles and pages are replete with photo and video content hosted or referred to by the profile’s /page’s owners.

#### Multimedia content held on users’ mobile computing devices

Another fact is that guests want to be able to bring their own content. Examples of this include music that is held on a smartphone or reviewing just-taken digital images or footage held on a digital camera or laptop on the large-screen TV.



[6]

Acer Iconia Tab A500 — an Android example of a platform tablet computer

This is being taken further by the fact that platform smartphones and tablets have DLNA controller abilities either with them or as a low-cost or free app; and that mid-range and premium cameras will be equipped with Wi-Fi and “show-on-DLNA” functionality as a product differentiator.

This concept can allow better use of site-specific media like the pay-per-view movies. For example, a movie that is started on the lounge TV in a suite or apartment could be completed on the bedroom TV or a guest could view one of those pay-per-view movies on their iPad or similar tablet.

Personally I also see this concept as part of the desire by the hospitality sector that your hotel room or apartment is your home away from home.

### Requirements Of This Setup

#### Different Media Pools

There are three different media pools that one has to consider when implementing DLNA technology in the hotel environment.

##### “Own media pool”

This represents the media files that are owned and maintained by the guests. They would be held on secondary storage in a portable computer, mobile device or camera or held on a network-attached-storage device.

Examples of these include music and image collections held on a notebook computer or just-taken digital images and movies held on a camera, camcorder or mobile phone. This could encompass content that is offloaded to a compact NAS device like Thecus’s N0204 “pocket rocket” NAS.

##### Property-local media pool

This media pool represents all media available to the guests courtesy of the hotel. It would typically be held on servers located within the property and the most obvious application would be those pay-per-view movies that guests can buy and view on their room’s TV.

But it can encompass any “broadcast-to-network” feeds used for distributing regular, cable or satellite TV through the building via the LAN or line-level media feeds used to pipe audio or video content from cabarets, conference suites or similar locations around the hotel.

#### Global media pool

The global media pool is representative of media that is owned by third parties and held on servers accessible to the hotel via Internet. The guest would simply select the content from the service provider and have it appear on their TV.

Examples of this would include IPTV services; Internet radio; online-media services like catch-up TV, YouTube or Netflix; the Social Web or cloud-driven remote access to one’s home media pool like Skifta.

#### A distinct logical realm of control

The room or apartment where the guest stays has to be seen as a distinct realm of control for the guest. This also includes situations where two or more rooms or apartments are hired by the one guest to be used effectively as one room, such as the common “connecting rooms” setup.

This means that the guests have to be able to push the media they want to view to any of the DLNA-compliant devices in their room, whether they bring the devices themselves or use the hotel-supplied devices. It also means that they have access to all of the content they can use, whether it’s the media on their laptop, the pay-per-view movies in the hotel or content on their Netflix or YouTube subscription.

But they can’t push the content to neighbouring guests’ TVs without invitation nor can they gain access to content pools they aren’t normally entitled to.

#### Ericsson’s proof-of-concept solution

This is a “proof-of-concept” setup that works on the assumption that there is no Wi-Fi Internet service in the premises and the mobile device is using wireless-broadband i.e. a 3G data plan for its Internet.

The hotel will need computer equipment on its network that performs the following functions: a Residential Gateway which links the hotel network to the Internet; and a Residential Control Device which controls access to DLNA devices in the guest rooms or apartments.

The guest’s smartphone will need a handler app which is part of the process of establishing the relationship between the mobile devices and the room devices and is performed whether the Internet connection is via Wi-Fi or wireless broadband. This app maps the DLNA equipment in the hotel room to the “global media pool” available through the online media service based on a unique identifier which is generated when the guest checks in for their hotel stay.

This identifier could be obtained by the handler app through a QR or similar code that is shown on the room’s TV screen when the guest enters the room; or printed on the room keycard that the reception staff hand to the guest. A phone capable of working with near-field-communication setups could obtain the identifier

through this path, again at checkin or when the guest lets themselves in to their room if the room lock uses NFC technology; such as some of the newer VingCard RFID setups[7].

Then the handler would list out the DLNA devices in that room as “content sinks” for the guest to enjoy their content on.

## **Missing Factors**

### **In-house public Wi-Fi**

There is a missing factor with the Ericsson proof-of-concept setup. Here, most hotels will want to provide Wi-Fi Internet service as a value-added or extra-cost amenity. As well, all smartphones and tablet computers have integrated Wi-Fi wireless functionality.

The typical way of provisioning Wi-Fi in the hospitality industry is to implement a site-wide public Wi-Fi extended-service-set covering the whole of the building. As well, if the public Wi-Fi network is properly setup, there isn't the ability to link data between the Wi-Fi-enabled computing devices, so as to assure privacy and security for each computer user. I have raised on this site the idea of evolving this secure-network setup further to allow clusters of device

There hasn't been work done on the idea of implementing a room-unique or guest-unique network setup for the hotel industry. This is although some hotels were trying out the use of “MiFi” routers to provide guest-unique network setups, which I learnt in an article[8] in the HotelChatter[9] blog; as well as the many Wi-Fi routers that I had seen[10] set up at the Australian Audio & AV Show in the Melbourne Marriott Hotel[11] in order to provide DLNA media networks for demonstrating network-driven music distribution.

### **Access to local media**

Another missing factor is the ability to provide held in the guest's own media pool to the room's DLNA ecosystem. Here, we may want access to the media held on our devices, whether it is music held on a smartphone, videos held on a tablet or just-taken images held on our Ultrabook.

Here, there wasn't any question about gaining access to media held on these devices via the hotel's public-access network infrastructure either through “pull” (access through DLNA playback device's controls) or “push” (source device's control app) methods.

### **Multiple rooms**

The last factor that wasn't considered is the desire to pass media between rooms of a cluster such as guestrooms hired by a family or a conference room hired by a business alongside the guestrooms for the conference guests as part of a “block booking”.

These multi-room bookings may provide for arrangements like allowing users to shift the content to other rooms under limited circumstances. Similarly, it could be feasible to have content held on one device in one room viewable on devices in other rooms used by the group.

On the other hand, it would be desirable to prevent content

being push-played by one group member to the room of another group member as a way to assure privacy and security for that member.

This situation can be catered for using the Residential Control Device software by allowing bridging between the unique IDs under certain circumstances.

## **What would be essential for successful DLNA setups in the hotel sector**

### **Local logical network serving one or more physical networks**

Here, you would need to create a local subnet (logical network) for each room/apartment or cluster of rooms. The physical Wi-Fi networks that are part of this local subnet would need to work with a unique SSID and stay-unique Primary Shared Key for their security. They would be served by a local Wi-Fi router that would be managed by the hotel's “back end” software.

This software would bootstrap the router so that it is set up to the guest's needs and allow guest-supplied equipment to simply and securely enter the subnet, linking it to the Internet and the hotel-supplied DLNA equipment. This would be set up with NFC or QR-Code technology or WPS-PBC setup when the guest enters their room.

Upon checkout, this router would be set up to a “ground-zero” mode which doesn't provide casual access to the Internet or the DLNA devices until another guest subsequently checks in.

### **A consistent connection and discovery experience**

When you connect your computer equipment to this network, the discovery experience for DLNA-compliant equipment must be the same as for when you use your computer at home.

The local logical network can make this feasible by exposing only the DLNA-compliant AV equipment that exists within the guest room/apartment at the exclusion of equipment and computers in neighbouring rooms. Yet the content-discovery experience is what would be expected for the class of equipment. This includes the use of control points to “push” content to playback devices.

### **IPv6 - a main facilitator**

A major facilitator for this setup would be the use of IPv6 networks. The address pool offered by this standard is much bigger than the address pool offered by the legacy IPv4 technology and there is inherent support for secure tunnels between logical networks.

In this application, an IPv6 setup can comfortably create local logical networks for each and every guest room in a large Vegas-class resort or downtown (central business district) hotel. There is no need to implement network-address-translation to permit the local logical networks and the back-end systems aren't destabilised. There is the ability for IPv6 routers to create v6-v4 links to legacy IPv4 devices which represent most DLNA media playback devices and this has to be supported and functioning properly in these devices.



## Conclusion

What needs to happen to facilitate the concept of DLNA-based media management in the hotel environment is for further research and study to take place. Here, it would need to be based on technologies that are currently available to the hotelier and potential guests, such as in-house public Wi-Fi networks and near-field communications.

The functionality could also be implemented in network-infrastructure equipment through the use of software that is deployed to the equipment while it is in use, rather than through replacing or adding new hardware. Any DLNA-enablement setup should not preclude the use of media devices that are available to the consumer marketplace.

## Links

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# ADSL Internet competition arrives to Darwin and Alice Springs

12/11/2011 01:09

## Article

Internode adds Darwin POP • The Register[1]

## My Comments

In Australia, Darwin has benefited from the expansion of competing backhaul networks through the country. Previously, this city only had access to a single Internet backhaul line provided through Telstra, which led to higher prices and poor service quality due to an oversubscribed data pipeline. This didn't provide for a competitive environment where the end-users could benefit through lower service prices and higher Internet throughput.

Here, the second backhaul that is passing Darwin allows competing operators to use an independent data path and wholesale service. This has led to Internode being able to establish a point-of-presence in this town, thus offering an unbundled local loop Internet service to customers in that area; which would be feasible by early 2012 when this backhaul between Adelaide and Brisbane is enabled.

What I would see out of this is that Darwin is able to benefit economically whether through one or more larger employers setting up shop there or the development of research facilities in that town.

## Links

- [1]  
[http://www.theregister.co.uk/2011/11/07/internode\\_adds\\_darwin/](http://www.theregister.co.uk/2011/11/07/internode_adds_darwin/)

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# Comcast-the first US cable provider to roll out IPv6

11/11/2011 06:22

## Article

Comcast shifts some customers to IPv6, promises it won't hurt — Engadget[1]

## From the horse's mouth

Comcast IPv6 Information Center[2]

## My comments

Comcast are rolling out a pilot deployment of IPv6[3]-based Internet service. Here the customers will be those using a computer that is connected directly to a compatible DOCSIS 3.0 cable modem.

The computer will have to run Windows Vista or 7 for the Windows platform or MacOS X Lion for the Macintosh platform. This is because these operating systems are known to support

a dual-stacked IPv4/IPv6 setup which the service will be based on. As well, these services will be provided with a unique full IPv6 address. Of course, Comcast will have 6to4 IP gateways in the network to bridge the IPv6 and IPv4 networks.

At the moment, there will be the rough edges through the deployment of this trial setup while the bugs are ironed out. A subsequent trial in the near future will then look at the use of home networks, but I would like to have this trial examine networks that are comprised of IPv4-only devices as well as dual-stack IPv4/IPv6 devices. This would also encompass access to legacy and IPv6 Internet services from both the legacy and the IPv6 devices.

Most likely this rollout will appeal and be targeted to some of the computer “geeks” who want to dabble in the latest setups. But I see it as a chance for Comcast, a mass-market cable-Internet provider, to put IPv6 through its paces before the full deployment commences. It also is an open chance for Comcast to put their findings about how their IPv6 deployment went to other cable-Internet providers who will be facing a requirement to roll up to this technology.

#### Links

- [1] <http://www.engadget.com/2011/11/10/comcast-shifts-some-customers-to-ipv6-promises-it-wont-hurt/>
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## What Sony has to say about entering a “new form of television”

11/11/2011 05:28

#### Article

Sony Hopes To Debut “A New Form Of Television” | TechCrunch [1]

#### My Comments

Here, Sony is raising an issue about entering TV’s new direction. This includes coping with the current marketplace dimension

In the article, Sony’s CEO, Howard Stringer was underlining the ability for his company to be able to ride through rough times and smooth times. He cited the fact that the TV industry was going through a rough time due to economic crisis with customers preferring to buy budget brands or smaller sets if they were in the market for a TV. As I have mentioned before in this site[2], TVs do have a long service life and are typically “pushed down” when a newer and better set is acquired.

But I would affirm that the video peripherals matter as much as TVs when it comes to developing a video platform. Here, one could replace a DVD player with a Blu-Ray player that supports an interactive-TV platform. Similarly, Sony has integrated their interactive-TV platform in to the PlayStation 3 games console

through the use of firmware upgrades.

It would also include the idea of using “other screens” such as the computer, smartphone or tablet as complementary or competing display surfaces. Personally I would see the other screens being able to work in both roles such as personal viewing of video material during a long train ride or finding supporting information on the TV show you are watching on the big screen.

Sony are also in a position to use open standards to build out their video platform rather than reinvent the wheel which they previously have done. This is accomplished through their support for DLNA home media networks and their implementation of Android in their tablet and smartphone devices. Even the VAIO computers work on the Windows desktop operating systems; and they were trialling the Google TV platform in the TV and Blu-Ray player form factor.

But they have contributed to other efforts through the supply of subsystems to technology manufacturers on an OEM basis. Initial examples of this included the supply of colour Trinitron CRTs to Apple for their Macintosh colour monitors to the current supply of LCD screens to other TV manufacturers and even the camera subsystem in the iPhone 4S.

What do you really do if you are trying to establish an integrated video-services platform that uses the many screens that the customer has? Do you need to make it highly-integrated in the way Apple has done or build a platform that can be worked across other devices and designs offered by other manufacturers.

In some ways it depends on the kind of customer you are targeting. Some concepts like what Apple offers would appeal to those who are sold on brand alone whereas other concepts would appeal more to those customers who “know what they are after”.

#### Links

- [1] [http://techcrunch.com/2011/11/10/sony-hopes-to-debut-a-new-form-of-television/?utm\\_source=feedburner&utm\\_medium=feed&utm\\_campaign=Feed%3A+Techcrunch+%28TechCrunch%29](http://techcrunch.com/2011/11/10/sony-hopes-to-debut-a-new-form-of-television/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+Techcrunch+%28TechCrunch%29)
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## Buyer’s Guide – Giving your portable computer equipment better sound

05/11/2011 03:06

A very common criticism that I have heard concerning laptop computers is that most of them don’t yield very good sound quality. Here, the sound quality is very weak and tinny, which can impair your enjoyment of music or movies on these systems. Similarly a lot of popularly-priced tabletop Internet radios give sound quality that is comparable to a 1970s-era portable radio or cassette recorder.

How can we improve the sound quality of these devices. Firstly, I would make sure that the device has a headphone or line-out connection. All laptops and most Internet radios would be

equipped with this connection and if I review an Internet radio and it doesn't have that kind of connection, I would list that as a failure.

I will be using audio terminology through this article and if you are unfamiliar with these terms, have a look at this reference page[1]that I have created.

### Existing sound equipment

A lot of existing sound systems that have a line-level input for connection to other devices can help to improve the sound output of laptops, tablets, Internet radios and similar devices. Typically you would connect the source device to this sound system, select the input that your device is connected to on that system.

Then you would need to set the source device's output level to a point where the sound will come through strongly and clearly and have any tone control on the source disabled or set to "flat". You would subsequently adjust the sound volume and tone by using the controls on your existing sound equipment that your device is play into.

### New life for older equipment

This practice is a common use for older hi-fi equipment that has been supplanted by newer and better equipment ever since computer audio came on the scene. In a similar way, the 1980s-era "ghetto blasters" continued to earn their keep even if the cassette mechanism failed by just becoming amplified speakers for computer equipment. These audio relics were simply dusted off and connected to the computer's audio output and continued their service that way.

### Connection types

#### Line-level connections

The line-level inputs are typically labelled "Tape", "CD", "Tuner", "Aux" or something similar. But don't use the inputs intended for direct connection to turntables that have magnetic-cartridge pickups, which are typically labelled "PHONO".

There are some amplifiers that may have a PHONO input that is able to work with ceramic-cartridge pickups or magnetic-cartridge pickups by you flicking a switch between "CERAMIC" or "XTAL" and "MAGNETIC" or "MM". In this case, you would have to select the "CERAMIC" option on this switch. This practice is also used with some "ghetto blasters" and other low-end equipment that uses a PHONO/LINE connection for one set of RCA inputs.

This is usually achieved through a 3.5mm-stereo-phone-plug - 3.5mm-stereo-phone-plug cable if the amplifying device has a 3.5mm input jack or the common 3.5mm-stereo-phone-plug to 2-RCA-plugs cable for most other equipment.

#### Digital connections

You may be able to use a digital link of some sort between the source device and the destination if both have a similar kind of digital connection.

### SPDIF

This may be found on some Internet radios or some laptops, usually as an optical connection. As well, all home-theatre receivers and some high-end stereo receivers and amplifiers have this kind of input, either as a coaxial or optical connection.

The coaxial SPDIF connection is commonly in the form of an RCA socket but a handful of equipment from high-end audio manufacturers may use a BNC socket similar to what was used for the old-style coaxial Ethernet connections.

The optical connection typically uses a square "Toslink" plug for most mains-powered equipment but some laptops and other low-profile equipment may use a 3.5mm optical socket.

You may have to configure computer SPDIF outputs to pass PCM audio signals rather than a bitstream signal if the playback device is a device other than a Dolby-Digital-equipped home-theatre receiver. This setting is the lowest common denominator for all equipment such as stereo digital amplifiers and digital-analogue-converter components.

### HDMI

This connection type is used on most recent-issue laptops and works with large flatscreen TVs and all recent-issue home-theatre receivers.

But there are catches with using this connector. Some low-end home-theatre receivers use these connections only to switch video sources to the connected TV screen without reproducing the sound that comes across this connection. Similarly, some DisplayPort-HDMI adaptors won't pass sound to the HDMI connector unless they have appropriate connections.

### Extension speaker systems



[2]You can purchase amplified speaker systems for use with your computer or similar equipment. A lot of these speakers don't have a volume control on them and are intended to be adjusted using the host device's volume control, with the amplifiers being simply power amplifiers.

There are the two-piece speakers, known as 2.0 setups, which are simply a pair of amplified speakers. Examples of these include the B&O Beolab 4 PC[3] or the JBL Duet II[4]. A lot of them use a stereo amplifier on one speaker housing with the other speaker plugged in to the amplified housing whereas other

better-quality units use separate amplifiers in each housing.

Another type of amplified-speaker system that is common for computers and similar applications is the 2.1 setup, exemplified by the Sony SRS-DB500 [5] that I previously reviewed or the Logitech Z623 [6]. This consists of two small speakers capable of reproducing midrange and treble frequencies in stereo that are connected to a bass module, commonly known as a “subwoofer”. This module has the amplification for all of the speakers as well as the speaker for reproducing the bass frequencies. These systems are well known for very good bass response due to their separate bass module and typically have a separate bass-level control to manage that response.

A variation on this theme that I have noticed is a “5.1” surround speaker setup with five of the small speakers and separate input channels for each of the speakers. Examples of these include the Creative SRS-A520 [7] and the Logitech Z506 [8]. These are typically pitched at games enthusiasts who want the full punch of the sound effects in their games.

Good-quality single-piece iPod speaker docks that I have mentioned previously in this site, like the Bose SoundDock [9] speakers or the B&O Beosound 8 [10] can work well as extension speakers in situations where speaker placement isn’t critical, such as music playback from a laptop or mobile device.

Most of the speakers are connected to the headphone output or line output of the sound sources. But more expensive variants of these speakers have integrated digital-decoding circuitry and connect to the sound source using a regular SPDIF or HDMI digital interconnect or USB connection.

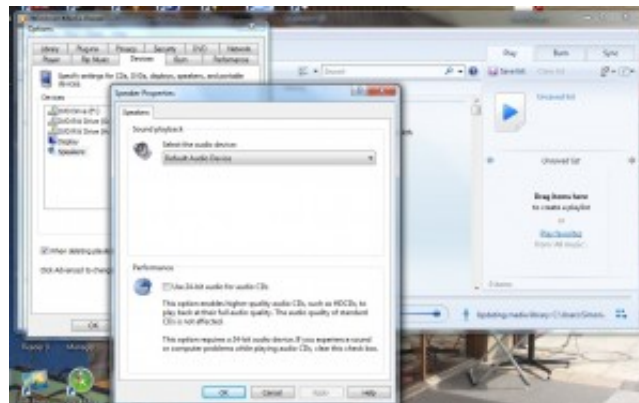
As with buying hi-fi speaker systems, it pays to take your time, shop around and hear how the speakers sound if you want to buy a set that you will enjoy listening to. Keep an eye on the reviews in the computer and audio press and blogosphere so you can hear from other users about their experience. In a lot of cases, you will pay more for better-quality speakers.

### USB and ExpressCard sound modules

There is an increasing number of external sound modules available that connect to laptops using a vacant USB port or ExpressCard slot. Examples of these modules include Creative’s Sound Blaster X-Fi Go Pro [11] and Sound Blaster X-Fi Surround 5.1 Pro [12].

Most such modules work as full external sound cards which connect to a line input on an external sound system or a pair of powered speakers, with some having their own power amplifier so they can drive a set of regular speakers themselves.

But an increasing number of these devices have a coaxial or optical SPDIF digital output which passes a digital signal stream to a home theatre receiver, digital preamplifier or similar device either as a PCM or Dolby Digital bitstream. This connection is usually to permit playback of surround-sound content like game soundtracks through Dolby-Digital-equipped home-theatre receivers; but can allow you to exploit hi-fi-grade digital-analogue circuitry in the good digital-enabled sound equipment.



[13]

You can select a sound-output device for Windows Media Player

These devices present themselves to the operating system as an extra sound device and you would have to set your media-playback software to use these devices if you want the sound coming out of the speakers that are connected to these modules. This can be done through the “Options” or “Preferences” menus in the media playback software.

They, like the add-on sound cards installed in desktop computers, offer improved sound quality for most laptops due to having improved dedicated sound circuitry in them. Some of these modules are made for use with high-quality audio applications and may have input circuitry that also works with good-quality microphones, electronic musical instruments or good-quality equipment. They are usually targeted at professional musicians, production recording, broadcast and similar applications and are very dear; but are worth their salt if you place high value on sound quality.

### Connecting USB speakers or external sound modules to your computer

Most of the USB speakers or sound modules present themselves as a “class device” to the computer’s operating system. This means that computers running Windows, MacOS X or Linux won’t need you to install driver software in order to have the audio device run. Some of the speakers or sound modules may require the use of manufacturer-supplied software in order to enable device-specific advanced functionality and this would be on a CD supplied with the hardware or available from the manufacturer’s site.





[14]

All sound-output devices in Windows 7

They will typically present themselves as another sound-output device or “sound card” which you can select in your operating system’s sound-configuration menus. It is also worth noting that most media-playback software and some games can allow you to choose the audio device that you want the program to use. This can allow you to use the regular sound setup like a laptop’s integrated speakers for audio prompts while a good-quality USB sound module connected to a good amplifier and speakers is used for music playback from Windows Media Player. Other programs may require you to change your default sound output device, which means that all the sounds, including the audio prompt sounds will come through the good-quality audio playback setup.

## Conclusion

Once you know what to buy, you can then choose the right audio equipment to bring life in to your laptop’s, smartphone’s, Internet radio’s or other device’s sound output.

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# Laser and LED xerographic printing-what is the difference

04/11/2011 06:54

When you are looking at laser printers to buy for yourself or specify for an organisation, you will come across printers that are known as “LED printers”.

## What are these LED printers?

A LED printer and a laser printer are very similar types of printers in so much as how the paper is marked. They use the same dry-process xerographic /photostatic printing method that has been used for years with photocopiers, where there is an electrostatically-charged imaging drum which attracts powdered toner depending on whether it has been subject to light or not. Then this toner is transferred from the drum to electrostatically-charged paper and “ironed on” using hot fuser rollers.

But the main difference is how this imaging drum is illuminated with the digital representation of your document. A laser printer uses a laser beam and swivelling mirrors or pentagonal prisms to scan the document’s image on to the drum. On the other hand, an LED printer uses a fixed row of light-emitting diodes that turn on and off to scan the image to the drum. This LED array would be similar to what is used to illuminate a document when it is being scanned in the typical scanner and each LED light represents a horizontal pixel that is part of the line being printed.

This has benefits for printer design due to the elimination of the complex light path that laser printers use. Here, you don’t need to use mirrors and servo motors to control the laser’s light path, thus you reduce the number of parts that can go wrong. It also leads to the ability to design xerographic page printers that are more compact and lightweight compared to the laser-based units.

## Further comments with OKI Data about LED printers

I had engaged in an email interview with Chris Thorley from OKI Data's Australian head office to learn more about this. Here, I had learnt that they had pioneered this xerographic printing technology in 1981 and are now on their ninth-generation LED print engine.

Most other printer manufacturers use this LED technology on some of their low-end models. The main reason is a reduced part count allowing for reduced material costs; as well as the impact of unforeseen technological issues not being considered significant for this market position, compared with using the trusted laser technology on their mid-tier and high-end models.

But OKI Data have implemented this technology across the board with their colour LED printers known to be yielding high colour production quality. It may also be known that some other manufacturers implement the OKI technology in to their production printing devices on an OEM (Other Equipment Manufacturer) basis. This practice is where a manufacturer uses an already-designed subsystem from another manufacturer (the OEM) in their own project.

## Conclusion

It is worth considering the LED printers for your page-printer needs as long as they have the kind of specifications that you have in mind. This includes machine reliability, image quality, print speed including colour and auto-duplex print speed, functionality and running costs including availability of toner cartridges at differing capacity levels.

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# The Universal Service Fund now extends its remit to the USA's rural broadband needs

02/11/2011 04:50

## Article

FCC's 'Connect America Fund' redirects phone fees to provide rural broadband - Engadget[1]

## From the horse's mouth

Press Release[2] - PDF

Executive Summary of FCC order[3] - PDF

Connecting America page[4]

## My Comments

The FCC have taken further steps to bring the reality of proper broadband service to rural areas closer to America.

Here, they have passed an Order to reform the Universal Service Fund and intercarrier compensation schemes in order to cut out waste and extend the scope of this universal-service-obligation mechanism to broadband data and cellular wireless service. This scheme has also been renamed the "Connect America Fund" due

to this new remit.

They see it as a job-creating economy stimulus because of the concept of extending real broadband Internet to the rural areas. This could be true due to the ability for larger employers who value broadband like research-driven industries to set up shop in small towns where the land is cheaper. Other established small businesses like Main-Street shops or "Motel-6"-style motels are in a position to benefit in many ways.

This fund also has established a "Mobility Fund" which helps cellular-telephony /wireless-broadband carriers to extend their wireless footprint into the rural areas, including the Tribal areas.

The FCC have placed requirements for proper accountability regarding service provision. Here, it must be proven that the carriers are actually deploying the broadband services to the rural areas in question and that the services are real modern networks.

But there is a gap concerning the definition of the broadband services in this press release. Here, there isn't a determined headline speed for the data services and the FCC haven't qualified the point of measurement for a rural broadband service. This can lead to installation of DSLAMs in an exchange yet link these modems to the customers via decrepit telephone infrastructure. As I have observed, this environment leads to reduced DSL service reliability and bandwidth.

There is also another gap concerning the improvement of broadband coverage in peri-urban areas which were standalone rural towns. As I have said before, these areas may be servicing a farming industry or an area of outstanding beauty but they could be working with decrepit communications infrastructure. These areas should be worked on when it comes to building out telecommunications coverage.

They have also modernised the intercarrier compensation funding régime to encompass VoIP services. This is especially as more American households and businesses head towards VoIP telephony setups, whether to reduce call costs or take advantage of features in these setups.

From this, I have seen some positive steps to cover the rural parts of the US with real broadband and I hope that the FCC doesn't become a toothless tiger in this respect.

## Links

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<http://www.engadget.com/2011/10/27/fccs-connect-america-fund-redirects-phone-fees-to-provide-rur/>

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# Bluetooth Smart-What does it mean for Bluetooth devices

02/11/2011 03:21

## Article - from the horse's mouth

Bluetooth SIG - "Bluetooth Smart"[1]

### My Comments

Bluetooth 4.0 Low Power technology, formerly known as Wibree technology has been put on the market this year. This technology is pitched more for "sensor/controller" devices that primarily provide data to another device; and are required to run for a long time on two AA batteries or a "button-style" battery. Examples of these devices include watches, heart-rate monitors, shoe-attached pedometers, door-window security sensors and the like.

These devices are being marketed as Bluetooth Smart devices and Bluetooth terminals like smartphones and computers that can work with these devices are marketed as Bluetooth Smart Ready devices.

A Bluetooth Smart device like the heart-rate monitor or door security sensor has to be compliant to Bluetooth 4.0 Low Power as a single-mode device and support GATT functionality. These devices cannot work with legacy Bluetooth devices that don't support this standard.

Bluetooth Smart Ready is used to describe a Bluetooth device, typically a "hub" device like a computer or smartphone that works with these Bluetooth Smart devices. The Bluetooth Smart Ready device must have Bluetooth 4.0 enablement with GATT support. It also has to have a dual-mode low-energy Bluetooth transceiver and updatable software. This would typically benefit regular and mobile/embedded computing devices that work to a "platform" like Windows, MacOS X, iOS or Android. These devices can connect to the Bluetooth Smart devices as well as regular Bluetooth devices.

At the moment Apple has the Smart Ready devices in the form of the iPhone 4S and the latest iterations of the MacBook Air and Mac Mini computers. But this technology will be rolled out in to newer computers and Bluetooth modules. The Bluetooth Smart technology will be a point of innovation as companies develop the sensor devices and software for this newer hardware platform.

I would also see this as an improvement for Bluetooth keyboards, mice and controllers due to the idea of having these devices run on a pair of AA batteries that assure reliable operation for a long time without needing to be charged frequently.

It will open up the Bluetooth universe to a larger collection of devices, services and applications that most of us wouldn't have thought of.

### Links

[1] <http://www.bluetooth.com/Pages/Smart-Logos.aspx>