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01/08/2011 |

Do we need to create “all-round” social-network clients for regular computers and tablets?

30/07/2011 07:22

There have been debates about whether Facebook, Twitter or LinkedIn should develop official client-side applications for their applications when used on regular computers (desktops and laptops) or tablets like the iPad.

When I talk of a client-side application, I am thinking of an application that is written for and runs on the client device’s operating system and interacts with the Web-based social network service through known application-programming interfaces. This is in contrast to the Web-based interface that requires interaction through the client Web browser.

Of course, other people have developed client-side applications for these social networks either as an improvement for existing software projects or as their own projects themselves. These are usually considered third-party applications by the social-network provider and may not support all functions that are being baked in to the social network as it evolves.

The issue here

It may be easy to think that you don’t have to provide these client-side applications for desktop operating systems (Windows, MacOS and Linux) and tablet computers. This is because these devices can typically allow the user to competently navigate the Web-based user interface for the typical social-network service. It is compared to the smartphone having different user-interface needs that are drawn about by the use of a physically smaller screen on these devices.

Drawcards and Benefits

A major drawcard behind the social-network client application for larger-screen devices would be high integration with the device’s operating system and other applications. The benefits of this would be obvious, such as linking the “friends/followers/connections” databases held by the social-network services to local contacts databases maintained by your personal-information-management software or exhibiting of photos and videos from these services full-screen without the chrome associated with Web browser interaction.

Other benefits would include use of the operating system’s notification abilities to “pop up” messages related to these services such as direct messages or friend requests. Even the chat functionality that is part of services like Facebook would benefit from an “instant-messaging” user experience of the likes of Windows Live Messenger and Skype. This is an

always-available presence list and application-created chat windows for each conversation. There is also the benefit of direct access to connected devices like printers or cameras.

Of course, there would be the computer-performance benefit of not needing to maintain a Web-browser session for each social-networking session. This is because the applications can be pared down to what is needed for the operating system; and can also be of benefit to those of us who use battery-operated devices like tablets or notebook computers.

For tablets, the user interface could be highly optimised for touch-based navigation and could make best use of the screen area of these devices. This is more so with this class of device being available in two major sizes – a 7” size for something that can stuff in your coat pocket or the larger 10” size. As well, it could include “right-sizing” the interface for the on-screen keyboard when the user needs to enter information to the service, such as through the log-on experience.

Drawbacks

The drawbacks to this will typically include another client application to develop and maintain for the service, which may cost further money for the service provider. It also includes evolving the application to newer versions of the operating system and incorporating the new features that are available through the operating system’s lifecycle.

As well, there will be the factor that the ad-supported Web interface may become more irrelevant and these applications may then limit access to the cash-cow that these services have to make money – users viewing those ads that are on that interface. This is because most users would be reluctant to load ad-supported software on their desktop computers due to system-performance and privacy issues that have been brought about by highly-intrusive adware.

Conclusion

It may therefore be worth the social networks considering the idea of developing client-side applications for desktop and tablet operating environments. This is in order to provide the user-experience improvements that such applications can provide for this class of usage.

Should you set up a Wi-Fi hotspot in your café or bar?

29/07/2011 02:07



[1]I have talked with a few café owners regarding the idea of implementing or maintaining public Wi-Fi Internet access at their premises and have been observing how the different premises have taken on this issue. As well, I have read articles on the topic of the café or bar becoming an increasingly-relevant business and social place in most cities. Most of these establishments may consider the provision of public Internet access more as a way of adding value to their service especially in a crowded marketplace.

Some of you may already have public Wi-Fi Internet service in place thanks to either a neighbouring business that you are friendly with or a “hotzone” run by the local government or a private entity.

The usual mitigating factors that affect the use of a public Wi-Fi hotspot in that café or bar may include the size and layout of the public areas. A small café may put off that idea due to a small public dining area with lots of furniture. Similarly the location of the premises to regular public transport (regular rail, tram /light-rail or regular bus service) may affect its worth for this feature due to the fact that the commuters would use this facility to do email updates before they head on their journey.

One café owner who has a hotspot may notice that there may be more reliance on certain traffic types and drivers to cause more patronage and make the use of a hotspot worthwhile. He cited the existence of apartment blocks as being a key driver due to the residents seeing the café as a “second lounge room” due to the typical flat (apartment) having a very small lounge area. Another driver would be tertiary education or small offices operating nearby, where the café serves as the “second office”. This would include people who work from their homes and use these places for their meetings.

Factors that may be of concern:

The space and layout of the public area can be a key factor. A wireless hotspot may work against smaller premises where there is a lot of furniture in the public area. This is because of the fact that there is an increased likelihood of personal luggage like laptop bags or briefcases ending up in the thoroughfares.

Another factor is the prevalence of smaller living or working premises near the location. Here, this could support the provision of a hotspot due to the café or bar being seen as a “second lounge room” or “second office” because of the size of the living or working area in the customers’ own areas. This may be already factored in to your business’s direction especially as development takes place in the neighbourhood concerning these kind of premises or as a significant employer sets up shop nearby.

Yet another factor that affect your idea of implementing or maintaining a public wireless Internet service would be the proximity of the premises to regular public transport. This may be based on a tram or regular full-time bus service passing your door or a rail station for a commuter-rail or mass-transit service being a few minutes walk from your door.

As well, you may also factor in the kind and frequency of your traffic. This may include whether you have your traffic arriving mainly through weekdays or weekends.

On the other hand, some café and bar operators may find that a Wi-Fi hotspot may attract “nuisance technology traffic” who may affect the mood of the café or bar. This traffic may manifest in the form of people playing games with loud sound-effects, teenagers or young people playing YouTube videos or latest downloaded music with the sound turned up loud, or customers using their laptops for long videoconferencing sessions. It may also attract “mooching” where customers exist in the premises for a long time, using the facilities but without ordering any food or drink or infrequently ordering low-value food and drink.

Surveying your traffic

It may be worth observing the kind of traffic you have before committing to a public Wi-Fi service so you can have best use. One way would be to observe and count particular traffic types through a sample period of a month or two months. Here you would notice the number of traffic that fits certain types as well as the value of the spend caused by that traffic through their stay.

Traffic types:

There are two different technology-user traffic types to look for when assessing the volume of traffic that uses technology.

Business traffic

These are people who are using your premises to do business. Typically they are equipped with a briefcase or similar case and will use a laptop computer. They may also be equipped with various business documents, paper notebooks or similar items.

This traffic will end up in two sub-classes – one where there is a meeting between two or more people; and another where the person works alone at the table or bench, going through notes or

typing /writing up the material. The latter person may come about after a meeting where one of the participants want to “do their homework” from that meeting away from the office.

Leisure portable computer users

These people use the portable-computer technology for personal use at your premises. This will typically be in the form of email, Social Web (Twitter, Facebook, etc), games (Angry Birds, etc), researching leisure-activity information (movies, concerts, etc), videoconferencing (Skype) or personal video viewing (YouTube, etc).

They may typically be younger users who may be alone or with a group of friends and be clutching on to consumer notebooks or tablet computers like the iPad.

What to factor in

When you plan for a hotspot or want to attract “technology-equipped” traffic, there are certain issues worth considering

One factor would be the premises capacity. This encompasses the seating capacity and layout in both indoor and outdoor areas. Here, technology users will come in with briefcases or other luggage that houses their technology and this can get in the way of the traffic flow. Similarly, the premises needs to have proper access to restrooms which can allow for increased traffic.

It may also be worth investigating additional power connections in the public area such as spare power outlets so that clients can charge their technology devices or run the devices on AC while at the premises. This may also involve using high-capacity powerboards when connecting lights or appliances to power outlets in the public area and anchoring these powerboards to the wall using their keyhole sockets.

Of course, it is worth finding out from your regular clients about how they would accept this traffic that would be caused by the proposed hotspot. Of course some of the regular clients may be portable-technology users themselves and may want to benefit from this kind of access themselves.

Conclusion

This article may be of interest and use to café or bar owners who are thinking or have thought about the public Wi-Fi Internet service as part of the service mix for the business. It does explain what issues may be of concern as part of providing the service and whether the service may be right for the business.

Please feel free to leave comments after this article about your experience with planning for, setting up or operating public Wi-Fi internet service in your café or bar. If you are reading this in the HomeNetworking01.info Facebook Page, you can leave comments on that page after the article. As well, please lave the name of your café or bar in the comments that you leave and /or provide a Web link to your establishment’s homepage in the Web link field so I can see it is from the establishment who has the insight.

Links

[1]
<http://homenetworking01.info/wp-content/uploads/2011/07/2011->

07-23-001-Fujitsu-Lifebook-TH550M-at-Bean-Counter-Café.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

Home automation and security-now the differentiator for ISPs and telcos

28/07/2011 06:22

Article

La Bbox seA lance dans la domotique - DegroupNews.com[1]
(France - French language)

My comments

If the marketplace for “triple-play” Internet service is so cut-throat, what can a telco, cable-TV firm or ISP offer to their loyal customers to increase service value? Could it be an Internet terminal like a T-Hub, or an Internet-connected device like an online picture frame or Internet radio?

No, it is another service that customers have previously bought through separate providers with names like Intamac or Chubb. This service is home automation and security, with monitored alarm systems and Internet-driven energy dashboards for residential users.

These solutions will typically link to servers or monitoring stations via the Internet link that the telecommunications company provides as part of the package. In some cases, there may be home-automation /security services that work “wholesale” and engage the telco or ISP as a reseller like they do with people like alarm installers. This is with the main goal of having these services available as an extra-cost a-la-carte option or as part of one or more premium communications service plans.

People in the security industry may discredit this move because of reasons like lack of “alarm-event response service” with security guards responding to alarm events, deployment of cheaper “quick-install” hardware rather than fully-installed systems, amongst other things. As well some of them may discredit single-box security/home-automation “panels” that can yield a single point of failure for both these functions.

The example cited in the DegroupNews news article is Bougyes Telecom providing a basic DIY system that links to their Bbox Internet gateway and uses a wireless link to the various peripherals.

This is available in two packages, with one focused on energy monitoring and remote control of appliances and the other focused on security, comfort and energy monitoring/remote control. The first package, costing EUR€5 per month, would come with a home-automation “base”, a few plug-in appliance controllers and an electricity-meter interface which works with the newer smart meters being deployed in France. The second one, costing EUR€9 per month, has extra sensors for temperature and humidity, PIR motion detectors and

a magnet-reed door-contact sensor; with the ability to send an SMS alert in case of alarm conditions.

The article described the provision of these services in a telecommunications package as “quintuple play” i.e. fixed telephone, Internet, pay-TV, mobile telephone, home automation /security.

This effort of ISPs and telcos providing home automation could make the concept become mainstream and appealing to most householders. This is rather than the DIY “tinkerers” who have the time to mess around with these systems or rich people who own pimped-out “MTV Cribbs” and have the money to have professionals design highly-customised home-automation systems.

For this to work effectively, the hardware and software infrastructure needs to work with known standards in order to permit these systems to be evolved through their long lifecycles. As well, these systems must work in a manner where they “just work” properly and exhibit graceful degradation to primary functionality when other systems in the network or key network links fail.

As well, a professionally-designed system must be able to be “re-worked” by other knowledgeable professionals or the householder. This is so that if anything happens with the regular or original installer, the system can be kept in good working order or evolved to newer needs.

I would think that the trend of telecommunications companies and Internet providers providing home automation and security services will become an interesting trend to observe.

Links

[1]

http://www.degrouppnews.com/actualite/n6621-bbox-domotique-bouygues_telecom-ijenko-mat%C3%A9riel.html?xtor=RSS-1

Now the Danish king of design approaches the DLNA Home Media Network

26/07/2011 11:04

Product Information

BeoSound 5 Encore - Bang & Olufsen[1]

My Comments

The Sonos networked music distribution system is facing a challenge, this time from Bang & Olufsen. This Danish name, associated with design masterpieces that yield high-quality sound and pictures, is now showing up a music system that can have the same navigability and control that the Sonos has been known for.

Infact B&O have worked on hard-disc-based music systems since the late 90s with the Beosound 3300 which uses a hard disc for storing favourite CDs. They have also worked on the concept of multi-room control of audio equipment since 1981 with their Master Control Link setup which had remote-control receivers

associated with secondary speakers that are connected to a music system. This is in addition to being the first company to provide interlinked operation of “multi-box” AV systems.

But they have been holding back on integration with the home media network This is even though a few other European-based premium-audio names like Linn and Naim have presented network-capable audio equipment, typically in the form of network media receivers or CD receivers with network media and Internet radio functionality. Most likely, they had held back on networked AV until they were sure that it was going to work and work in an elegant and easy-to-use manner befitting of their name.

I have previously covered this brand on HomeNetworking01.info through their “working” of the sound subsystems [2]in ASUS premium and multimedia laptops as well as reviewing a pair of Form 2 headphones[3].

This Danish design piece is in the form of a control panel that has all the connections to the network, 2 USB storage devices, a line-level input as well as a pair of B&O Beolab speakers. It can work as a client device to an existing Beosound 5 /Beomaster 5 hard-disc-based music system It can be connected to an Ethernet network or a 5GHz 802.11n Wi-Fi segment and can play music held on a DLNA-capable media server or stream through Internet radio.

There is a question worth asking about this setup in relation to use with established B&O music system setups. It is whether the unit can work with an existing B&O Beolink multi-room setup, especially in the form of gaining access to the network and Internet sources through the remote speakers of that setup.

This is now showing that the Beosound 5 Encore is providing those Beo-enthusiasts access to DLNA-based network audio in a manner that befits the heritage that they have always valued. It may even be something that the trendy inner-urban café, wine bar or beauty salon may consider for their music system.

Links

[1] <http://www.bang-olufsen.com/beosound5-encore>

[2]

[/2010/01/a-laptop-that-will-directly-please-the-beo-enthusiasts/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)

[3]

[/2011/02/product-reviewbang-olufsen-form-2-headphones/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)

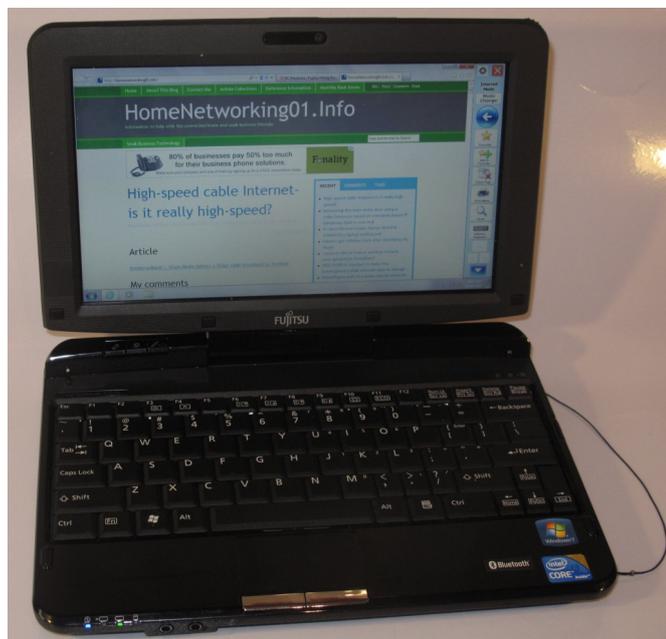
Product Review-Fujitsu Lifebook TH550M convertible netbook computer

26/07/2011 02:33

Introduction

I am reviewing the Fujitsu TH550M netbook-sized convertible notebook. This is a notebook computer which has a touchscreen or stylus-operable screen that swivels to become a tablet computer.

It is the first of this kind of notebook that I have had for review and is an example of what the proposed "netvertible" form factor could look like. This is although it runs the Windows 7 desktop operating system with touch and stylus operation built in to it as well as having full processor capabilities rather than the netbook-grade processor capabilities.



[1]

Price

- this configuration AUD\$1998 Processor Intel Core i3-380UM RAM 2Gb shared with graphics Secondary Storage **500Gb hard disk**

cheaper option - 320Gb hard disk SDHC card reader Display Subsystem Intel HD graphics Screen 11" widescreen (1366x768 resolution) LED-backlit LCD Network Wi-Fi 802.11g/n Ethernet Gigabit Ethernet Bluetooth 2,1 EDR Connectors USB 3 x USB 2.0 Video VGA, HDMI Audio 3.5mm hradophone jack 3.5mm microphone jack

Digital out via HDMI connector Operating System on supplied unit Microsoft Windows 7 Professional Insert other variants with price shift, bold or highlight this configuration

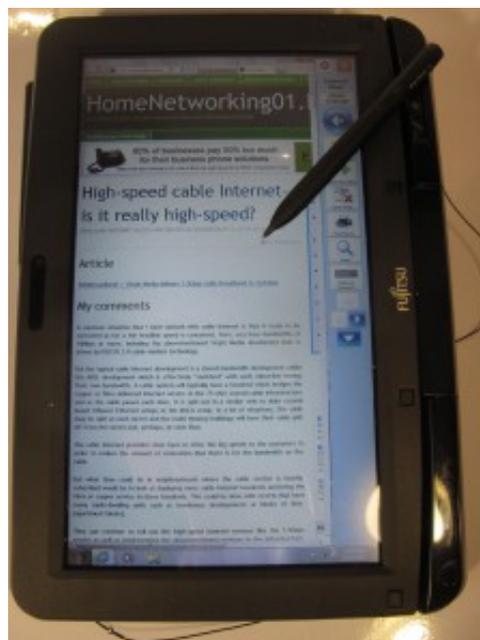
The computer itself



[2]

The display swivels to become a tablet

The Fujitsu TH550M convertible notebook is really about squeezing a quart in to a pint pot. Here, the "engine" is an Intel Core i3 processor which would be at home in a 13" ultraportable and the hard disk has a total capacity of 500Gb with cheaper variants having a 320Gb hard disk. Even the supplied operating system is Windows 7 Professional which is the "business package" version.



[3]

The notebook as a tablet

This is compared to a typical netbook which would be Intel Atom powered, have 250Gb on the hard disk at the most and run Windows 7 Home Premium. The only thing in common is the amount of RAM available which is 2Gb that is shared with the

display memory.

Aesthetics and Build quality

The Fujitsu TH550M is about the size of a small book and is finished in a piano-black gloss finish. There is the sense of very good build quality especially with the flip-screen mechanism.

User interface

Like the typical netbook, this Fujitsu T-Series notebook uses a keyboard that is cramped and it may be difficult to touch-type accurately on this computer. There is also a very small trackpad with chrome-finished buttons and a rough tracking surface. This makes it easy to determine the sensitive area of the trackpad without you looking.

The main feature is the screen being a touchscreen that can respond to your fingers or the supplied stylus. The small screen size may make it hard to select certain operating-system icons like the icons on the edge of the windows.



[4]

Keyboard and trackpad

Audio and Video

This Fujitsu TH550M convertible notebook is driven by an Intel HD graphics subsystem which would be adequate for most tasks, even basic video playback. It can be connected to an external display via a VGA or HDMI connector.

The touchscreen is that typical glossy finish that can yield annoying reflections but in other cases, does the job adequately.

Battery life

The Fujitsu can last for many hours on regular tasks even though it was on the power-saving setting by default. This included an evening's worth of use of the Social Web where I was monitoring and interacting with the #HackGate hashtag on Twitter during the ABC24 live broadcast of the inquiry in to the phone hacking scandal concerning the Murdoch press in the UK.

Other experience notes

I showed this computer to a woman friend and she had considered it as a viable "personal computer" that would suit her needs. This is after she had previously talked with us about personal-computing solutions like tablets and small laptop computers that had impressed her

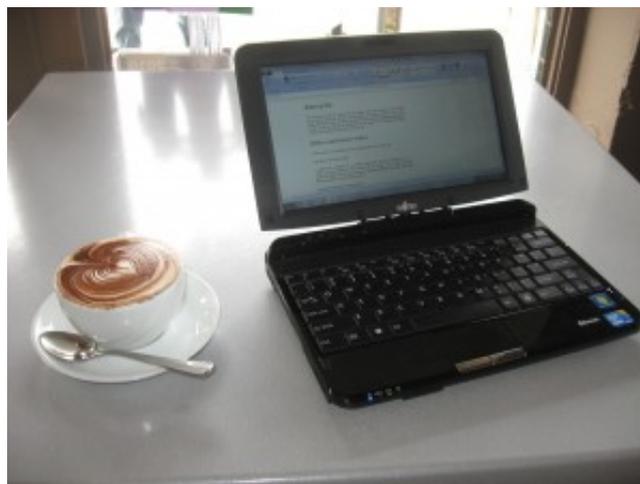
Limitations and Points Of Improvement

An improvement that I would like to see for convertible notebooks would be a touch-optimised shell for the Windows 7 operating system, so these computers can be a worthy competitor to the iPad and Android tablet computers. This could include the extension of "newspaper apps" and "book-reading apps" to the Windows desktop platform rather than focusing them to the Apple iPad.

This situation may be rectified with the installation of Windows 8 on these convertible notebooks when it arrives or a dual-boot setup with Android and Windows 7 for current-issue machines.

For this model, I would like to have the cord that tethers the stylus to the computer able to retract in to the unit in a similar vein to the typical vacuum-cleaner's retractable power cord. Here, this can avoid further damage to the cord, pen or notebook if the cord is snagged on items in the typical briefcase or laptop bag.

Conclusion



[5]I would consider the Fujitsu TH550M as a computer for those who want a "bridge" between a tablet computer and a netbook; rather than carrying around an accessory keyboard with a 10" tablet computer like an iPad. This is more so i, offer the bf you mainly use line-of-business applications or create content.

As well, other members of the Fujitsu T-Series convertible notebook range would, with their different screen sizes, offer the bridge between the tablet and the regular notebook with this distinct interface kind.

Links

[1]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-26-003.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[2]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-26-005-Swivel-display.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed
[3]
http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-26-009-Tablet-form.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed
[4]
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[5]
http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-23-001-Fujitsu-Lifebook-TH550M-at-Bean-Counter-Café.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

High-speed cable Internet-is it really high-speed?

25/07/2011 06:56

Article

thinkbroadband :: Virgin Media delivers 1.5Gbps cable broadband to TechHub[1]

My comments

A common situation that I have noticed with cable Internet is that it tends to be overrated as far as the headline speed is concerned. Here, you have bandwidths of 10Mbps or more, including the abovementioned Virgin Media development that is driven by DOCSIS 3.0 cable-modem technology.

But the typical cable Internet development is a shared-bandwidth development unlike the ADSL development which is effectively "switched" with each subscriber having their own bandwidth. A cable system will typically have a headend which bridges the copper or fibre-delivered Internet service to the 75-ohm coaxial cable infrastructure and as the cable passes each door, it is split out in a similar vein to older coaxial-based 10Base2 Ethernet setups or the MoCA setup. In a lot of situations, the cable may be split at each street and the multi-tenancy buildings will have their cable split off from the street and, perhaps, at each floor.

The cable Internet providers then have to offer the big speeds to the customers in order to reduce the amount of contention that there is for the bandwidth on the cable.

But what they could do in neighbourhoods where the cable service is heavily subscribed would be to look at deploying more cable-Internet headends and bring the fibre or copper service to these headends. This could be done with streets that have many multi-dwelling units such as townhouse developments or blocks of flats (apartment blocks).

They can continue to roll out the high-speed Internet services like the 1.5Gbps service as well as implementing the abovementioned revisions to the infrastructure. It can then permit the cable services to achieve the headline speeds in most of the neighbourhoods with plenty of room to spare for subscriber growth.

Links

[1]
<http://www.thinkbroadband.com/news/4738-virgin-media-delivers-1-5gbps-cable-broadband-to-techhub.html>

Answering the main entry door using a video intercom based on standards-based IP telephony-that is now real

25/07/2011 06:17

Articles - From the horse's mouth

T24 IP Video Door Station - Mobotix Website[1]

My comments

The Mobotix T24 video entryphone (door intercom) system piqued my interest with this site because it is a device of its kind that is primarily driven by IP connectivity with access provided through a standard IP-based network.

This has allowed you to "release that door" to a world of innovation as far as these systems are concerned because there is the ability to build out a cost-effective and flexible door intercom setup for that apartment block or gated community.

Standard IP connectivity

Here, the resident or tenant can use an IP-based SIP-compliant hardware or software videophone (or a VoIP telephone for voice only) connected to their Internet service. It can be feasible for the door intercom to be connected to its own Internet service, which may be the case for tenants who want to let in visitors using their smartphone while out at the shops for example; or for use at the entry gates of a larger property or gated community, where you can't affordably extend the main Internet service to those gates.

What the door intercom offers

Of course, this unit has all the features necessary for a door intercom of its class that would pique the apartment-block /gated-community market. For example, it has its own access control system for the associated door or gate, which can be driven by a PIN number or an RFID (near-field communication) card.

As well, by virtue of innovation, the system has recording abilities for logging what happened as well as a feature not often associated with the door intercom setup. This is a video-mail system that allows visitors to leave "while you were out" messages for tenants.

Questions worth raising

A major reality that will affect the door intercom over its lifetime is how the unit is set up as far as the equipment installed in the resident's or tenant's unit is concerned. This is more so as VoIP telephony becomes mainstream with triple-play services, VoIP business telephony and cut-price long-distance VoIP telephone services coming on the scene.

There needs to be knowledge about how this unit can be provisioned in to IP telephony setups especially as different residents or tenants, with differing technology skill levels, move in to and out of the units over the development's life. It also includes enrolling additional handsets to the intercom so that users can answer the door from the device they feel comfortable with and are near.

Similarly, there needs to be support for a "function key" setup for devices like this when they are integrated with standards-based IP telephony setups so that one can know which button to press to unlock the door for example.

As well, there should be knowledge on how the residents or tenants can get at the messages that are left on the video-mail system while visitor-resident privacy is assured. This also includes support for and integration with standards-based email or unified-communications setups.

Conclusion

The Mobotix T24 IP video door station has set the cat amongst the pigeons as far as IP-telephony is concerned. Here, it has defined a particular device and usage class that will become increasingly real especially as residents or tenants in multiple-tenancy units and gated communities welcome the arrival of IP-based telephony technology.

It also allows further innovation to take place with these devices, such as improved security and aesthetics and the potential to improve the user experience for both the resident and the visitor.

Links

[1]

<http://www.mobotix.com/other/Products/T24-IP-Video-Door-Station>

Product Review-Cooler Master NotePal Infinite Evo laptop cooling pad

21/07/2011 04:41

I am reviewing the Cooler Master NotePal infinite Evo laptop cooling pad which is one of many laptop rests that are equipped with a forced-air cooling subsystem. Here, these units use this fan-forced air to cool the underside of the laptop which, in a lot of older and "thin-and-light" designs, can become very hot. An example of this was the HP Envy 15 laptop that I had previously reviewed[1] on this site. Here, this unit wouldn't take long to become uncomfortably hot during operation.

This situation may lead to the computer being uncomfortable to

use after a significant amount of time and there can be a chance of heat building up under the computer, thus causing overheating and a shortened lifespan for that laptop.

Cooler Master is a name primarily associated with the manufacture of aftermarket computer cooling systems for desktop PCs. These are usually in the form of CPU fan subsystems or add-on case fans that are used as part of tuning-up "LAN-party" PCs for maximum gaming performance, similar to "hotting up" cars for maximum street performance.



[2]

Recommended Retail Price: AUD\$59

The unit itself



[3]

USB input, Fan controls and DC input

This NotePal Infinite Evo is based around an aluminium panel with rubber strips to hold the laptop on. This panel is positioned at an angle and has two small fans underneath it to create the air draught under the computer. This is the reverse to the typical fan heater which draws the cold air in the top and forces the heated air out the heater's front grille. Both of these fans are variable-speed fans that are adjusted by use of a thumbwheel on the left side of the unit.



[4]

USB hub connections

This is powered through a USB connection to the host laptop computer and there are 3 USB 2.0 ports on the right side of the laptop cooling mat. This is unlike most of the cheaper laptop cooling pads that don't have a USB hub, thus leaving you without a USB connection when you use them. There is also a 5V DC power connection for use with a 5V power adaptor if you need to run this unit as a self-powered USB hub. Here, the external power supply would be required if you were to connect the typical 2.5" USB hard disk to the unit's hub while using it as a cooling pad.



[5]

Rear-mounted intake grilles

The air is drawn in through large grilles on the back of the unit and expelled through a small air scoop just under where the computer sits.

Usage

Judging from how I handled the Cooler Master laptop cooling pad, I noticed that it was very well built. There was nothing loose about it and the controls operated properly and smoothly as on good-quality equipment.

The NotePal Infinite Evo mat is lighter than the typical 15" laptop which makes it easier to transport with the laptop. There are large rubber pads to prevent the pad slipping across table tops and protect those polished wooden dining or coffee tables from scratches.

During operation, there is a slight buzz from the fan at high speed, which is well below typical conversation level. I have observed this with a regular laptop being placed on the cooling pad. I have checked for excessive vibration while the fan is at the

same high speed and there wasn't any of that vibration.

The USB hub works according to the standards for a USB hub without the need for driver CDs. Remember that it is a bus-powered USB hub unless you connect a 5VDC power supply to the DC-IN jack on the left of the unit.

Points Of Improvement

One point of improvement that I would like to see is a version that suits subnotebook /ultraportable computers and is big enough for them, without sacrificing the build quality and quiet operation.

As well, Cooler Master could provide an external power supply kit as an option for the NotePal Infinite Evo units so they can work as a self-powered USB hub when used with USB hard disks or as a charging bar for mobile phones.

Conclusion

I would recommend that people who find that their laptop computer runs hot too easily during games or graphics-intensive work should purchase the Cooler Master NotePal Infinite Evo cooling pad. It does the job without intruding on one's computing life and is designed to last a long time. As well you don't lose the functionality of the USB socket it is connected to.

Links

[1]

[/2010/04/product-review-hewlett-packard-envy-15-luxury-thin-and-light-notebook-computer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](#)

[2]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-21-001-Cooler-Master-NotePal-Infinite-Evo.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[3]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-21-004-Fan-controls.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[4]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-21-003-USB-hub.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[5]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-21-006-Rear-grilles.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

Parents get children back after testifying via Skype

19/07/2011 07:43

Article

Parents get children back after testifying via Skype | The Age Technology[1]

My Comments

The courts of justice [2]are again being used as a proving ground for today's Internet-driven technology. This time it is the use of Skype[3]in a child-protection case occurring in the USA concerning immigrant parents who were deported back to Mexico. Here, the US-based court had used Skype as a tool for taking the Mexico-based parents' testimony due to cost and logistical reasons. Video-conferencing has been used in the courtroom for a lot of cases such as high-profile crime trials where it is desirable to keep a high-risk defendant or "supergrass" confined at a secure jail through the hearing. These setups typically use a direct link between known locations like a courthouse and a major prison, or an expensive-to-hire videoconferencing setup for temporary arrangements.

Of course, the Skype-based solution had facilitated the use of cost-effective equipment that didn't need intense technical help to set up. This has allowed the parents to prove to the court that they were fit and appropriate parents for the children concerned even though they were limited in funds and based in Mexico.

This case could benefit other civil, family and similar cases in most jurisdictions where a key participant or witness is separated from the main court of hearing by significant distance or ill-health. Typically most of these situations would require an expensive video-conferencing setup which may not be feasible in most rural areas and the setups would require a lot of specialist time to set up and run. Or they would require the lawyers representing both sides of the case to travel out to the witness's location and make a video recording of their testimony which doesn't have the immediacy and constant judicial oversight of the live testimony.

Here, a Skype setup on an ordinary 15" or 17" laptop, like most of the laptops reviewed[4]on HomeNetworking01.info, connected via a broadband link can be established by most computer-competent people. These same setups could be transported in the typical briefcase, laptop bag or backpack as cabin luggage on a flight or in the boot (trunk) of a typical car.

One step of progress I would like to see for Skype in the courtroom as a remote-testimony tool is for a similar situation to work with a criminal trial, especially one heard by a judge and jury. In this situation, there would be a requirement to test the case beyond reasonable doubt and these cases may be more exacting than the civil case mentioned above.

Links

[1] <http://www.theage.com.au/technology/technology-news/parents-get-children-back-after-testifying-via-skype-20110719-1hmij.html>
[2]

/2011/03/bridging-common-internet-technology-with-the-courtroom/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[3] <http://www.skype.com/>
[4] /article-collections/product-reviews/laptop-notebook-and-netbook-computers/#utm_source=feed&utm_medium=feed&utm_campaign=feed

Vaucluse (84) in France working towards next-generation broadband

16/07/2011 09:09

Article

Le Vaucluse veut se doter d'un réseau très haut débit | La Provence[1] (France - French language)

My comments and information obtained from this article

Vaucluse, a department in the Provence area of France is known for features like Avignon with that famous bridge. But it has a sizeable amount of rural space with its eastern half being mountainous and 17% of the population in the rural areas. Of course, there are the 5 major urban hubs being Avignon, Orange, Carpentras, Cavaillon, and Apt.

What is relevant to this site is that 5 of the exchanges in that department are fully dégroupé - served by all the competing Internet service providers independently. This is part of a digital divide that exists through this area with not all areas having a broadband service that is "up to snuff".

The département's local government have realised what is going on in this area and are to work on the issue of proper access to real broadband, both ADSL and next-generation service. Here, they will do a stocktake of the existing infrastructure and identify areas that need the work.

They reckon that this work will take 20 years for next-generation service to cover this département. The UMP party who are in opposition consider this as being too long because of the time that the technology takes to evolve in the Internet.

Of course, there are the key problems that beset rural and outer-urban areas when it comes to telecommunications, like ageing or derelict infrastructure. These have to be looked at as much as the existence of service at each of the exchanges. This stocktake may factor these issues in and assess the quality of this infrastructure.

Good marks to the Vaucluse local government in France in tackling this problem of adequate Internet service in rural areas. Here, this is an example of UK and France achieving a lively competitive and accessible Internet service for all.

Links

[1] <http://www.laprovence.com/article/a-la-une/le-vaucluse-veut-se-doter-dun-reseau-tres-haut-debit>

IEEE P1905-A standard to make the heterogenous small network easy to manage

12/07/2011 05:48

Articles

HomePlug® Powerline Alliance Announces Support for IEEE P1905 Convergent Digital Home Network Standard – HomePlug Powerline Alliance[1]

IEEE P1905 Standard page[2]

My Comments

Realities

More home networks implementing two or more media backbones

As the typical home network evolves, there will be a time when another interface type will be implemented in that network.

There are two examples of this common situation. One is where a person who has run an Ethernet network from the network-Internet edge to their computer decides to “go wireless” with their laptop computers and upgrades to a wireless router yet maintains the Ethernet connection for desktop computers. Another example that is increasingly common in Europe and will become so with the prevalence of IP-delivered TV would be a household that has a Wi-Fi network for the laptop but implements a HomePlug powerline network to serve the set-top box or IP-enabled TV in the lounge.

Infact I have advocated these kinds of network setups in this site in order to encourage a flexible home or small-business network that suits all situations that are thrown at it. This includes handling radio-difficult environments like double-brick walls or foil-lined insulation that can exist in many houses.

Network endpoint devices with multiple network interfaces

An increasing number of network-endpoint devices like computers, printers and Internet media devices are being required to support multiple types of network interfaces. This may be provided out of the box; or the user may have to install a hardware network adaptor for a particular network interface in to the device even though the device has an integrated network adaptor for another interface.

A very common example that I have seen for myself is laptop users switching between a wired Ethernet connection and a Wi-Fi wireless connection. Typically the laptop user who is getting used to the “New Computing Environment” and what it offers will plug their computer into the router’s Ethernet socket while they work at their desk; then disconnect from the Ethernet socket and “go wireless” when they want to use the laptop in other parts of the house. This typically can cause problems due to network storms or switchover problems; and often requires

the user to disable or enable Wi-Fi on the laptop as they change connections.

Similarly, most of the network-enabled multifunction printers that I have reviewed at HomeNetworking01.info are equipped with an Ethernet socket as well as an integrated WPA2-secured Wi-Fi interface. This is becoming very common with most network-enabled media players, especially “smart TVs” and BD-Live Blu-Ray players.

Setup and management difficulties with these networks

These networks can yield their fair share of difficulties as users have to set up each network segment or device for secure reliable operation. This can include initial provisioning needs that a media type has like SSID and WPA-PSK security keys for Wi-Fi segments to management of segment-specific problems like Wi-Fi reception issues.

It will become more difficult as advanced networking requirements such as quality-of-service, synchronous media streaming, multiple logical networks and robust security are required out of these small heterogenous networks.

In the case of the devices, it will include making sure that the device works with the best network interface available even if both interfaces are physically connected. The most common example of this is making sure that the Wi-Fi-enabled laptop or printer works on a wired link if connected to the network via that link and works with the Wi-Fi link in other cases without the need for a manual switchover procedure.

What is this new standard intending to provide

You may think that there are standards out there to help with managing a computer network but most of these standards work to a particular network media type. As well, a lot of them require management by an IT team, something which few households or small businesses can have on hand all the time.

One major benefit is simplified media-level control across different media types on the same network. This isn’t achieved through the use of higher-level configuration routines managed by IP or application-level protocols like SNMP or UPnP, but these protocols can be adapted for this standard.

There will also be a focus on end-to-end performance such as allowing a device to choose the network interface that provides best throughput and quality-of-service. It can also allow “end-to-end” quality-of-service to be achieved from the network-Internet “edge” to the end device for IP telephony, multimedia streaming or Internet gaming.

Similarly, there is the ability to manage the media-level network security and energy-management needs that are required for the network in an easier form. This includes coordinating device wakeup across different media types so that a device can exist in an energy-saving quiescent mode yet “come to” when someone else on the network need it no matter how it is connected.

This standard recognises the reality that no one network type suits all needs, different horses for different courses.

Here, a typical setup may use Cat5 Ethernet as a high-speed backbone between floors or across the house, a HomePlug AV segment as a high-reliability wired “no-new-wires” setup for

temporary applications and a Wi-Fi wireless segment that is primarily for portable devices.

The main focus that will be achieved is that bridge or switch devices that work across the multiple media types can perform these jobs more efficiently without needing to use higher-level protocols to achieve this goal; and be assured that the requirements for the network data are met as the data travels these devices.

Unanswered questions

Support for and management of VLAN networks

An unanswered question about this standard is whether it can support a VLAN network. This is a network that hosts multiple logical networks across the same physical infrastructure. It would be relevant in the small network space for “guest /hotspot networks” and IPTV setups where end-to-end content protection is required.

Features that may be considered of importance in this regard include replicating VLAN setups across the network as infrastructure devices are added to the network. An example of this could be to use an extension access point to “build out” a Wi-Fi network yet maintain the “guest network” and the “private network” as separate entities with separate SSIDs.

It also includes multi-tenancy-building environments where there is common “LAN” network infrastructure like cable runs that exist to interlink units (apartments, shops, offices, etc) or multi-SSID access points installed to service common areas (common gardens, swimming pools, food courts, etc). Here, it would be required to establish a VLAN interlink between two or more premises under the control of the same entity or establish a link to a common multi-SSID access point with the same SSID and security parameters as your main access point.

Wi-Fi devices and their operating mode

Another question that may affect the management of Wi-Fi devices is what kind of operating mode the device should be in. This is whether it is a client device or an access point; or to implement “direct link” or WDS or newer-standard network repeater functionality.

This would cater for an increasing number of “multi-function” access points which was a trend brought about by newer firmware versions for the Linksys WAP54G wireless access point. Here, the access point could be set up to be on the end of a direct wireless link, or be a client bridge for an existing Wi-Fi segment, a Wi-Fi repeater as well as being an access point.

This standard could provide support for a wireless endpoint such as a “multi-function” access point or the Wi-Fi functionality in a printer or other device to work as a client device or as an access point. It could then allow for these devices to quickly serve as infill access points when they are connected to a wired backbone after working on the Wi-Fi network.

Conclusion

At least the IEEE P1905 standard will make some effort towards making the establishment, management and development of the typical heterogeneous small network become an easier task that is less painful.

Links

[1]

http://www.homeplug.org/news/pr/view?item_key=81031f55f27ed5952c04bf2f7442322bafcd565f

[2] http://grouper.ieee.org/groups/1905/1/Scope_Purpose.htm

HomePlug as part of a home-vehicle network for electric and hybrid vehicles

08/07/2011 04:54

Articles

Your BMW wants email; the Merc wants Netflix | ITworld[1]

HomePlug GP Networking Specification | The Tech Journal[2]

My comments

The HomePlug Powerline Alliance have cemented the “Green PHY” standard for energy-efficient powerline networking and energy management in stone,

Now the major German vehicle builders have defined a power connection standard to connect their electric or plug-in-hybrid vehicles to the mains power supply for charging. This includes using these HomePlug standards for transferring required data between the vehicle and the host power supply for charging-process control, metering and other similar applications.

The core benefit is to achieve a successful level playing field for connecting these vehicles to the “smart grid” for overnight and rapid charging. This also includes particular requirements like costing of energy used by “guest vehicles”, road-tax implications as well as grid integration such as off-peak charging or vehicle-to-grid setups for offsetting energy peaks.

This also facilitates IP linking to the Internet service via this connection thus allowing for some possibilities beyond the “obvious Internet applications”. One application I have often thought of in this context is the ability to integrate the vehicle’s infotainment system in to the home network.

Here, it could lead to synchronisation of maps, contact lists and media files between the home network and the vehicle or the ability to simply benefit from the data held on the vehicle’s infotainment system in the home network. This would be the networked equivalent of bringing a tape or CD that was in the vehicle’s glovebox or sound system in to your home so you can play it on your music system there.

At least there is an attempt to achieve a level playing field across the vehicle industry to support electric vehicles while catering for flexible setups.

Links

[1]

<http://www.itworld.com/networking/170749/your-bmw-wants-email-merc-wants-netflix>

[2]

<http://thetechjournal.com/auto/homeplug-gp-networking-specification.xhtml>

GSM Mobile Telephony has now turned 20 this year

08/07/2011 03:56

Article

GSM turns 20 today, still rocking the world — Engadget[1]

My Comments

GSM Mobile telephony has now turned 20 this year and has become a technological milestone in itself as far as “on-the-go” mobile communication is concerned,

Here, this service had brought through a highly-reliable digital transmission system which could allow many users to use mobile phones in a given area. It had extended the mobile phone beyond voice towards data-driven activities like SMS text messaging and concurrent packet data transmission.

Infact SMS had even brought about a language of shorthand slang known as “textspeak” that ended up as part of email and instant-messaging culture as well and had made the pager redundant. Here, we now see teenagers and other young people working their phones to frantically tap out a message with one hand the moment they hear that phone beep to indicate a text had arrived. This technology had been taken further with MMS which allows photographs, audio or video clips to be sent this way.

The GPRS packet-data system has become the foundation stone of the mobile Internet, allowing for the phone to become an mobile email client and Web browser. This has been emphasised more with technologies like EDGE.

This technology has brought about cost-effective handsets and phone services with a sense of service portability through the use of SIM cards. Here, a person could upgrade to different handsets or “rope in” another handset like a loan phone to their service by transferring a SIM card between these handsets. It also allowed carriers in a competitive market to strut their stuff by offering service that is affordable to most people.

Infact GSM has mad the mobile phone become a mature ubiquitous technology that is available to all. It even has put the traditional landline phone and the payphone “on notice” as far as young users are concerned.

Therefore I would consider the GSM mobile telephone system a milestone to the connected lifestyle.

Happy 20th Birthday GSM Mobile Telephony

Links

[1]

<http://www.engadget.com/2011/07/01/gsm-turns-20-today-still-rocking-the-world/>

Another attempt at the “smart cordless phone” for the regular telephone service

07/07/2011 05:31

Article

DECT-Telefon mit Android: Archos 35 Smart Home Phone - COMPUTER BILD[1] (Germany - German language)

My Comments

I have previously covered[2] various attempts by landline-telephony carriers and electronics manufacturers to restore faith in the classic telephone service. This is more so as younger people are thinking more of the mobile phone as their main telephone device and ditching the classic landline telephone.

The two main examples of this was a DECT cordless telephone handset which worked on the Android operating system but looked like an early-generation car phone as well as the Telstra T-Hub with a separate screen which linked to the home Wi-Fi network.

Now Archos have taken this further with a DECT cordless telephone that is styled like the typical smartphone. As well, they have run this phone on the Android platform with the ability to download software to the phone through the Wi-Fi network. They even have run TuneIn Radio, which is an Internet-radio client, on this phone so it can offer the same Internet-radio experience as the T-Hub’s Internet-radio client.

Archos have emphasised the DECT cordless-phone setup because most of the Internet-gateway devices that are part of a fully-featured “triple-play” service in Europe, especially the Germanic countries (Germany, Austria and Switzerland), can work as VoIP base stations for these handsets. This allows for centralised management of the handsets and for the assured quality-of-service that DECT offers.

It will be interesting to know who else will try to run with a “smart household phone” system to keep the classic home-based voice telephone service alive and relevant in the mobile world.

Links

[1]

<http://www.computerbild.de/artikel/cb-News-Handy-Archos-35-Smart-Home-Phone-Android-DECT-6309932.html>

[2]

[/2010/04/what-is-happening-to-the-common-household-telephone-today/#utm_source=feed&utm_medium=feed&utm_campaign=feed](http://www.computerbild.de/artikel/cb-News-Handy-Archos-35-Smart-Home-Phone-Android-DECT-6309932.html)

Facebook's chat facility now approaching Windows Live Messenger and Yahoo Messenger but a long way to go

07/07/2011 03:38

Articles

Facebook unveils video chatting, thanks to Skype | The Digital Home - CNET News[1]

Facebook intros group chats, new chat tool design | The Digital Home - CNET News[2]

Facebook Reveals Video Chat Powered By Skype | Mashable[3]

My Comments

Facebook's chat functionality has now become a mature adult now that it offers group chatting and is about to offer Skype-powered videocall functionality.

What I do like about this is that rather than reinventing the wheel as Windows Live Messenger and Yahoo Messenger did to develop their video-chat services, Facebook have taken a sensible path. Here they have implemented Skype technology to power their video chat functionality.

The main reason I see this is going on is because Google are encroaching on Facebook's territory with their Google+ social network service and Facebook have to provide a reason to keep their userbase loyal to their social network. It may also affect Skype's native userbase who may use Facebook as a static notification tool while using the Skype client for text, audio and video chatting.

Native support

It may require Facebook to provide native support for this new level of chat functionality in their client-side applications. This is especially important for people who have used desktop instant-messaging services like ICQ or Windows Live Messenger and like the ability of these programs to operate in the background while they undertake their main activities.

Similarly, it could support the mobile, VoIP and "big-screen" platforms and take advantage of what each of these platforms can offer, such as "big-screen" video conferencing on larger TV sets for example.

This goal can be achieved more easily through the use of Skype code with Facebook interlinking and could be implemented in devices and platforms that have either of these functions written in to their base, such as the "smart-TV" platforms.

Links

[1] http://news.cnet.com/8301-13506_3-20077231-17/facebook-unveils-video-chatting-thanks-to-skype/?tag=nl.e404
[2]

http://news.cnet.com/8301-13506_3-20077238-17/facebook-intros-group-chats-new-chat-tool-design/?tag=mncol;txt
[3] <http://mashable.com/2011/07/06/facebook-video-skype/>

How can we differentiate the Android tablet further?

06/07/2011 02:57

Article

Vizio VIA - Tablets with special features (photos) - CNET Reviews[1]

My Comments

Previously, I thought that there would be very little that manufacturers can use to differentiate their Android tablet computers from one another. Typically, this will end up with the tablets working in the same way and having some sort of cosmetic difference.

Here, the customer would be able to think of a 7" model for the coat pocket or a 10" model for the briefcase or coffee table. They may be able to choose between the models that have Wi-Fi only or models that also have built-in wireless broadband, as well as different memory capacities.

But some companies have worked further on this by making sure some of their tablet computers are able to stand out from the pack. In this article, Sony had a unit that used two screens in a similar vein to the Nintendo DS handheld games console while Vizio ran with a model that has an infrared emitter and universal remote-control app which would allow it to earn its place on the coffee table. As well, Panasonic had run with a ruggedised tablet that suits those environments that may yield rough treatment to the typical tablet device.

What I have seen of this is that there is a chance for manufacturers to try new features for the Android tablet platform and use these features to make their models different not just cosmetically but in a functional way.

Links

[1] http://reviews.cnet.com/2300-3126_7-10008331.html?s=0&=&=10008331&tag=mncol;page

Being ready for IPv6

05/07/2011 06:39

Articles

What You Need To Know About IPv6 - PCWorld[1]

My Comments

There has been a lot of talk about IPv6 as becoming the next major change for the Internet ecosystem.

This talk increased since late 2010 with the fact that the Internet is running out of globally-assignable IPv4 addresses, which are used to identify Internet services to other endpoints on the public

Internet. There would then be the requirement to frequently reuse these addresses which can lead to a confused Internet setup.

It has also been augmented by the “World IPv6 Day” taking place on June 8 2011 where most of the popular sites had to run a dual IPv4/IPv6 setup to test whether IPv6 is ready for prime time. This test passed with flying colours for all of these sites and some of them still run with IPv6 compatibility in one form or another,

It is a technology that will be put on the map more so with the arrival of next-generation broadband setups, either as a way of opening up more IP addresses or as a statement to say the these services are all about “next generation Internet”,

What does IPv6 offer?

Greater number of IP addresses

There is a greater number of unique IP addresses available in the IPv6 Internet than there would be for the current-technology IPv4 Internet.

This requires the use of long address strings that may be hard to understand. For example, a typical IPv4 Internet address would be something like **211.234.5.1** whereas the IPv6 Internet address would be something like **2001:0530:ac12:2333:03aa:12f3:fe21:53f2** . This is why some shorthands have been introduced like the one mentioned in the next paragraph.

If an address had four zeros in it like **0000**, the shorthand for this would be two colons as in **fe80::ac12:2333:03aa:12f3:fe21:53f2** being equivalent to **fe80:0000:ac12:2333:03aa:12f3:fe21:53f2** . It is worth noting that any IPv6 address that starts with **fe80:: (fe80:0000:** in longhand) is a stateless link-local address that would be “worked out” between network devices unless there is an IPv6 router that has a DHCPv6 server handing out the addresses.

Different network addressing setup

In the current IPv4 world, an ISP would allocate each customer’s network an outside IP address like 211.234.5.1 with a netmask of 255.255.255.0 . All devices within the network would be allocated a site-local IP address and it would be the job of the router to map through using Network Address Translation a “port number” to an inside device’s address. This has often caused problems for network setup whenever a device had to receive information from the Internet, an activity that is becoming more common with applications like Internet gaming and IP telephony.

An ISP can now issue a network prefix to a subscriber like this: **2001:0530:ac12:2333** and the DHCP server in an IPv6 router can allocate a unique “full” IPv6 address for each of the network devices. There isn’t even the need for netmasks anymore because a network can be singled out by the use of the IPv6 prefixes.

It will also therefore provide for proper direct access to each unique node on an IPv6 network.

Therefore, you will end up with more unique IP addresses for your home or small-business network than the whole of the current-generation IPv4 Internet.

Different take on network security

The fact that each network device in an IPv6 network can be globally accessible requires a rethink of the role that the network-Internet “edge” device provides.

The role of these devices in a small IPv6 network will typically be to work as a security firewall for the logical network that is behind it. It will also be asked to work as a bridge between the IPv4 network, the IPv6 network and Internet services that work purely with IPv4 and IPv6. It will be augmented with Improved designed-in security with IPSec secure-network support.

What is the reality with IPv6

Most of us may think that our small networks in our homes, shops and small offices won’t touch IPv6. But there is a strong likelihood that it will be part of next-generation broadband Internet sometime in the near future.

Compatibility setups

The dual-stack network

The fact is that some of the devices you use for the Internet may be infact ready to work with the IPv6 Internet. They will typically work with the IPv6 Internet in a “**dual-stack**” form where they can support IPv6 or IPv4 network traffic over the same interface. This means that each device will be known on the network via an IPv4 address and an IPv6 address. It also leads to the fact that the network will work as though it is two different networks - an IPv4 network and an IPv6 network with the same physical infrastructure.

If you establish a network with two or more dual-stack IPv4/IPv6 devices with the IPv6 function enabled, you will end up with a dual-stack network with each device being known by a stateless IPv6 address. This is even though the network has a router that can only support IPv4 network setups and hand out IPv4 IP addresses from its DHCP server.

Inter-protocol tunnelling

As well, most routers that support IPv6 will implement tunnel setups that interlink data between regular IPv4 host systems and IPv6 host systems both within and outside the network. These are typically in the form of ISATAP or 6to4 protocols which manage this process automatically. Here, the routers will set up VPN-like tunnels between IPv4 networks over the IPv6 networks to link the resources that are behind these networks.

Who’s ready and who isn’t

Standard computers, tablets and smartphones

The regular computer and the smartphone will be ready for IPv6. This has been achieved with inherent operating-system support in the newer versions of the popular desktop and smartphone operating systems.

For example, Windows has inherent support from Vista onwards and has a “kludged-in” support arrangement for Windows XP. Macintosh users will have IPv6 support from at least MacOS X Snow Leopard onwards.

The two popular smartphone platforms, iOS (iPhone) and Android have inherent support in their current versions. This is because some of the mobile carriers run IPv6 networks for their wireless-broadband services.

Network-enabled equipment

Most small-business printers that are released by the big names over the past two years are IPv6 ready. This doesn't hold true for consumer network printers or most consumer network media hardware for that matter. It also holds true for network-capable consumer electronics like the Internet radios that I have reviewed.

A selection of high-end consumer and small-business routers do support IPv6 in some way; usually in a dual-stack method and/or providing IPv6/IPv4 routing functionality according to one or more common algorithms like 6to4 or ISATAP. It is still worth checking with your router vendor whether there will be IPv6-capable firmware available for your existing equipment or equipment that you plan to buy.

What I will be doing at HomeNetworking01.info is that when I review network-enabled equipment and find that it has IPv6 capability, I will identify it as being IPv6-ready in its connectivity list. This will allow users to know that the equipment they plan to buy or specify can be ready to work in the IPv6 age.

Internet services

At the moment, nearly all residential and small-business Internet services aren't running IPv6-compliant Internet services. They may run an IPv6 network as part of their backbone or own-office infrastructure but won't enable IPv6 with their customer-facing services or the network links that reach their customers.

This situation may change with ISPs that are part of a next-generation broadband service or who provide "geek-friendly" Internet service with the latest and the greatest technology. But I would suspect that most ISPs will provide a dual-stack Internet service when they get around to providing the customer-facing IPv6 service.

Access to and hosting the Web

If you do set up a Web page with a service provider, you may have a different IPv6-readiness issue. Most Web hosts will run IPv6 on their backbone networks and may run IPv6 as a beta-testing service which isn't all that "polished"; but they won't have fully-functional IPv6 for their customer-facing Web sites or the sites that they host. This is because, at the moment, most systems and networks won't cope properly with "dual-stack" (IPv4 /IPv6) Web-host setups because of the primary reliance on IPv4 infrastructure.

After "World IPv6 Day", most of the big sites like Google and Facebook had found they could operate as a dual-stack arrangement without "keeling over" or having negative impact on the end-user experience. This is even though most traffic that visits these sites originates from IPv4 networks. Therefore some of the major sites are still running dual-stack or maintaining their test IPv6 site as a separate subdomain.

What will this lead to

It may lead to the ability for many devices to be globally addressed in a small network and this may be of importance if these devices are to be directly accessible from the Internet. This will be of importance with gaming and remote-access applications, and may encompass the ability to have networks addressable through a premises-unique easy-to-remember subdomain.

It could also allow for multi-premises setups to be easier to establish and maintain due to the fact that a logical network can be set up to cover the different locations. This is as long as they work on one service account. It may not hold true of portable devices that are typically serviced by different providers' accounts.

It may yield some controversies concerning individuals' privacy and security because of the ability to provide globally-unique addressability for each device. This is along with the arrival of cost-effective network-based monitoring setups that could track every individuals' movements.

Conclusion

This article is informing you about what is to be expected out of the IPv6 technology that is being highly talked about through this year. It also may be of relevance as we move towards households and small businesses being served by next-generation broadband services such as the many fibre-optic networks.

Links

[1] http://www.pcworld.com/businesscenter/article/200580/what_you_need_to_know_about_ipv6.html

Implementing HP ePrint as a public-printer setup

04/07/2011 02:40

Introduction



[1]

HP Envy 100 all-in-one printer

Most of the new network-capable Hewlett-Packard home and small-business printers are now offering ePrint, which is an email-driven cloud-based driverless printing service ran by HP. This service has increased the appeal of running a printer as a courtesy printer service for business partners, clients, guests or patrons. This is due to there being no need to require the right driver to be on the computer for one to print out a document.

What is HP ePrint

The ePrint service is a cloud-based printing setup operated by Hewlett-Packard that allows one to send a print job by email to one of many recently-released HP printers via email.



[2]

HP Photosmart B110a — the cheapest ePrint-enabled printer

I have in fact reviewed some of these printers on HomeNetworking01.info, such as the Photosmart B110a[3], Envy 100[4], OfficeJet Pro 8500a Plus[5], Colour LaserJet CM1415fnw [6] and LaserJet M1536dnf[7]. As well, I have covered HP ePrint in another article [8] to do with a product launch that had occurred last year in Singapore.

Here, you just send an email to the printer with the file that you want hard copy of as an attachment. The file can be one of the common file formats like PDF, text, HTML, JPEG or a Microsoft Office file.

If you want hard copy of an email, you can forward the email to the ePrint address or add the ePrint address as a BCC address in the email you are sending. You could even send an MMS message from your mobile phone to your HP ePrint printer by using the ePrint address as the destination address for that message.

Technical requirements



[9]

HP LaserJet M1536dnf monochrome laser multifunction printer

The requirement is that the HP printer has to have access to an Internet connection. Since these printers have an Ethernet and /or Wi-Fi wireless connection to a local network, the printer needs to be on a network served by a network-Internet “edge” device such as a router.

The client devices can be connected to the Internet via any network. This can range from a smartphone or tablet connected directly to a wireless-broadband service to a computer connected to a Wi-Fi hotspot or a computer connected to the same local network as the printer. This can allow for deployment scenarios like a printer connected to a private network yet serving a Wi-Fi hotspot or a printer connected to a café’s network but allowing hard-copy for people who use iPads that are connected to the wireless carriers.

ePrint in the public-printer or complimentary-printer context

A typical public-use setup is represented by the example that I have outlined below.

Example setup

This example of an ePrint-enabled HP printer working as a public printer was the HP Envy 100 [10] installed at Stay On Beverly [11] which is a backpackers’ hostel in Los Angeles. How I learnt of this was through a comment posted on this site by Bo Lorentzen who is the hostel’s owner in response to a review [12] of this printer that I had done, just after I published that review.



[13]

HP Envy 100 (left of image) used as public printer at Stay On Beverly

He had set this up as a no-fuss way of allowing the travellers that stay at this hostel to print out documents like airline tickets and boarding passes that they receive via email as part of purchasing air travel through the Internet. I had further conversation with Bo and he had told me that he had put a notice with the ePrint address on the top of the printer so guests know where to print to.

Conveying the ePrint address to your customers

You can let your customers' know of your printer's ePrint address through a handout that your staff give to the customers as and when they want to use the public printing service. This would be more effective where only the staff members have access to the printer. A self-service setup like the above-mentioned HP Envy 100 at "Stay On Beverly" will require the printer to be in an area accessible to patrons or guests rather than the general public and the address would be fixed to a label on the machine. On the other hand, there could be instructions on how to print out the ePrint Info Sheet displayed near the printer.

Problems



[14]

HP OfficeJet Pro 8500a Plus — a high-end business inkjet multifunction printer

One key limitation with the email-based ePrint system is that once the user has the ePrint address, they can send further

documents to the printer just by using that address. This could be held in an email contact list or the "email-history" lists like the Sent Items in most email clients. Here, this could lead to the printer being used to print out

As well, in some areas, a public "free-to-use" environment can allow for abuse of the printer facilities. This could range from people using the printer to print material that can offend to "barrelling out" a very large document that uses up all of the machine's resources.

How can you gain control over your ePrint printer

Resetting your ePrint address

If you do end up with your printer spewing out jobs that shouldn't be printed, you may have to reset the ePrint address.



[15]

HP ePrintCenter management page

You will have to remove your printer's ePrint address from your ePrintCenter[16]account. This is done by bringing the printer up on the ePrintCenter dashboard and clicking on "Remove Printer". Then you use the printer's control panel or Web interface (accessible at the printer's IP address) to **remove Web services**. After that you then use this same interface to **enable Web services**. Here, you print out a new info sheet with the new ePrint address.

After that, you enrol the new ePrint address with your ePrintCenter account and are ready to go. If you do run ePrint Apps, you will have to reconfigure the mix of apps you have on your printer.

Suspending ePrint operation



[17]

ePrint ON/OFF option on printer control panel

You may have to suspend your printer's ePrint operation so it doesn't print out ePrint jobs. Here, this could be done as part of closing up your premises at the end of trading to stop people who aren't at your premises using your machine for example.

This can be done at your printer's control panel by selecting the "ePrint on /off" option or at the printer's Web page which will have a similar option.

Use of a "white list" in HP ePrintCenter

You may want to control ePrint access to your public HP printer so that only your guests or patrons are using the printer. Here, you use the HP ePrintCenter to manage a "white-list" of people who can send jobs via email to the printer. The limit you can have for this list is 50 users.

This method may benefit a hotel, B&B or similar lodging place where you can ask for your guests' email addresses as part of the booking or check-in process. Then you use the HP ePrintCenter to enable printing for that guest when they check in; then use this same interface to disable printing for the same guest on the day they check out. Similarly, a small café or bar who knows their customers can benefit from this setup by allowing unrestricted access to the printer for trusted and known customers.

Features that could be provided



[18]

HP LaserJet Pro CM1415fnw colour laser multifunction printer

One feature that I would like to see for HP ePrint if it is to work in the public printer concept is the ability for print jobs to be manually released. This could be through the use of a client job number that is emailed back to the client device once they send out the job and/or an operator password that is keyed in before the job is printed. This above scenario can work well for those businesses that want to charge by the page for printing if the job queue list shows the number of pages.

A machine like the HP Colour LaserJet CM1415fnw or OfficeJet Pro 8500a Plus, which has a large LCD screen could benefit from a "job preview" function so that the operator can vet jobs before they are printed. As well, there could be an option for an origin class to be blocked. Here, this could, for example, prevent MMS messages, which is a common path for "sexting" and

mobile-phone bullying, that are just sent to the printer from being printed out.

Of course, when an MMS message is printed out by an HP ePrint printer, it should be passed through as a formatted text page rather than two pages with one that has regular text and one that has formatted text.

Conclusion

At the moment, the HP ePrint technology can be a basic way of providing public driver-free print service to a trusted user base that is highly mobile but there needs to be a lot more done to it in order to yield a highly-controllable service.

Links

[1] http://homenetworking01.info/wp-content/uploads/2011/03/2011-03-19-007.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[2] http://homenetworking01.info/wp-content/uploads/2010/08/2010-08-17-004.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[3] /2010/08/product-review-hp-photosmart-wireless-e-multifunction-printer-b110a/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[4] /2011/03/product-reviewhp-envy-100-eprint-enabled-all-in-one-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[5] /2011/05/product-reviewhp-officejet-pro-8500a-plus-multifunction-inkjet-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[6] /2010/12/product-reviewhp-laserjet-pro-cm1415fnw-colour-laser-multifunction-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[7] /2011/07/product-reviewhp-laserjet-m1536dnf-mono-laser-multifunction-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[8] /2010/10/hp-asia-pacific-innovation-summitmy-take-on-it/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[9] http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-02-006-HP-LaserJet-M1536dnf.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[10] <http://h10010.www1.hp.com/wwpc/au/en/ho/WF05a/18972-18972-238444-410635-410635-4073853.html>

[11] <http://www.stayonbeverly.com>

[12] /2011/03/product-reviewhp-envy-100-eprint-enabled-all-in-one-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed

[13] http://homenetworking01.info/wp-content/uploads/2011/07/Envy-100-print-station.png#utm_source=feed&utm_medium=feed

d&utm_campaign=feed

[14]

http://homenetworking01.info/wp-content/uploads/2011/05/2011-04-30-001.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[15]

http://homenetworking01.info/wp-content/uploads/2010/08/HP-ePrintCenter.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[16] <http://www.hp.com/go/eprintcenter>

[17]

http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-02-007-ePrint-control.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[18]

http://homenetworking01.info/wp-content/uploads/2010/12/2010-12-21-001.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

Product Review-HP LaserJet M1536dnf mono laser multifunction printer

02/07/2011 03:42

Introduction

I am reviewing the HP LaserJet Pro M1536dnf monochrome laser multifunction printer which is another printer in this class that provides most of today's expected features to the professional user. It is based on the print engine that HP has implemented in the LaserJet Pro P1560 [1]direct-connect printer that I previously reviewed and the network-connectable duplex-capable LaserJet Pro P1600 printer.



[2]

Print Scan Copy Fax /

E-mail Paper Trays Connections B/W Colour B/W B/W 1 x A4
USB 2.0 Laser

xerographic 1200 dpi Resolution ID copy Super G3 Multi-purpose tray Ethernet Auto-duplex Automatic Document Feeder ePrint email-to-print receive IPv6 ready

Prices

Printer

The machine's standard price: AUD\$548.00

Toner

Standard Price Pages Black AUD\$116.88 2100

Other Costs

The HP ePrint "print-to-email" service is free of charge. This includes maintaining your printer's email address and the documents that you receive through that address.

The printer itself

The HP LaserJet Pro M1536 supports the functionality that is desirable for a multifunction laser printer targeted at the small business or professional, like duplex printing, proper fax functionality for regular fax services as well as connectivity to an Ethernet network.

Typically the fact that a printer doesn't support Wi-Fi wireless networking may count against it as far as network functionality, especially "no-new-wires" networking, goes for this market space. But the Ethernet connectivity allows this printer to work with a HomePlug network or Wi-Fi network as long as you use one of those "homeplugs" or a Wi-Fi client bridge. As well, the LaserJet, like most current-model small-business printers that connect to a network, is able to work with an IPv6 network, thus making it future-proof for next-generation networks.

Setup

This printer was easy to set up without any need for convoluted procedures, which is an advantage of HP's integrated cartridge design used in all of the small-business LaserJets. This included connecting it to a typical small network via Ethernet. There is the option to manually configure the network settings for difficult networks.



[3]

Walk-up functions

The HP LaserJet M1536dnf can work as a convenience photocopier or a fax machine and, like most of the machines of this type, it supports "ID copy" functionality for copying documents like driving licences. As well it can digitally enlarge or reduce documents with this function being accessed from one button. Similarly, the user can do "double-sided" copying as long as they flip the original document over.

Like the HP LaserJet Pro CM1415 [4] that I previously reviewed, this LaserJet printer uses flash memory rather than RAM to store received and pending faxes. This provides for a "power-safe" operating environment where if the power fails or fluctuates, you don't lose received faxes that are to be printed or faxes yet to be transmitted. It also works well with the private-receive function which uses this memory as a "fax vault" where the machine receives faxes but doesn't print these faxes until you enter a PIN code to release them. This is a feature that I would consider important if you work with confidential material in a premises that has uncontrolled access to the office technology.

Like most of the current-model HP multifunction printers and an increasing number of Canon high-end multifunction printers, this printer offers a "quick forms" feature where the printer can turn out notepaper, graph paper, music staves or similar ruled paper at the touch of a button. This is only available through the Setup menus. You still have the problem of a limited choice of ruled paper. Examples of these limitations include 10 staves for portrait-format music paper (which affects writing for certain music ensembles like vocal and piano or quartets) as well as the inability to print certain "quick forms" like notepaper or checklists on both sides.

This printer supports ePrint "email-to-print" functionality but only for receiving print jobs sent to its email address. This function could also benefit from the same "private receive" function that is available for faxes.

Computer functions

The HP LaserJet M1536dnf's driver software had loaded very quickly in to my machine and there weren't any particular problems associated with running it. Even practices like choosing the duplex-printing style are made easier through a "bound-document" graphic which shows how the document will come out after it is printed.

This HP LaserJet doesn't support control-panel-initiated scan-to-computer functionality unlike most of its peers, so it didn't need to run a scan monitor program. Other than that, the scanner is a colour unit that is able to do what is expected for this class of equipment. Of course, HP has provided scanning software that allows for "scan-to-PDF", a function that Microsoft could provide within the Windows operating system.

Useability

The display on this unit is a large backlit LCD display with easy-to-read text. Most of the walk-up functions are a button-press away and the text and icons on the control panel are easy to see.

This laser printer, like the other HP LaserJet printers that I have

reviewed, uses an integrated print-cartridge system which has the toner supply and drum unit in one user-replaceable cartridge. This makes it easier to replace the cartridges through the machine's working life and there isn't any need to think of having to replace a drum kit. The only limitation with this setup is that the printer isn't as economical to run as a printer that has a separately-replaceable drum unit like the Brother laser printers.

Here, the user just has to open two lids and pull out the used cartridge and drop in the new cartridge. There isn't any need to push extra hard to make sure the cartridge is in place.

Like a lot of these monochrome laser printers, there isn't a way of knowing at a glance where you stand as far as your toner supply goes. Here, you have to go to the printer's embedded Web server to check how much toner is left or print out a "Supplies Status" report to obtain this same data. There is a light on the printer's control panel that comes on when you are really low on toner.

Print quality

The documents had come out of the LaserJet M1536dnf with the typical crispness of a laser printer's output. This is even so with output that has pictures and text.

I had printed a photo through this printer and the picture doesn't have a strong contrast as the same picture printed on the previously-reviewed Brother mono laser printers.

As far as print speed is concerned, the HP LaserJet was able to achieve the required speed for a monochrome laser printer. There is still the time penalty associated with duplex printing that is common with most printers that have this feature but this penalty is around twice as long as printing a single side. It is also worth noting that whether the printer has just been used recently or not, the first page of a job is out in 6 seconds with the print mechanism working at proper operating temperature.

Limitations and Points Of Improvement

This printer, like the other HP LaserJets could benefit from the availability of optional extra-cost high-capacity print cartridges. This can allow for a business to use cheaper standard cartridges through normal times yet cater for peak printing times like larger projects.

I would also like to see a "fuel-gauge" indicator on the LCD display that indicates how much toner is available in the print cartridge, so you can know whether you need to buy more toner after those large printing project.

The fax subsystem could benefit from T.37 /T.38 standards-based Internet-driven faxing and a "scan-to-email" function in order to cater for IP-based telephony infrastructure. The ePrint email-to-print, which is an HP-driven concept, does provide some of this functionality but it could offer more.

As well, the flash-memory that is used for the unit's fax functionality could be used as the printer's memory this allowing for improved fail-safe printing. It can be augmented through the use of SD cards as a way of allowing the user to expand the printer's memory as they see fit.

Conclusion and Placement Notes



[5]The HP LaserJet M1536dnf is one of these laser printers that would fit in a very tight competitive market, a unit that would please the professional who needs to turn out many of the documents and reports as part of their business life.

The only major problem for someone who wants these desirable features from an HP LaserJet multifunction laser printer is the price of the unit compared to that of competing models that print the same way offered by other manufacturers like Brother. If a person places value on the HP ePrint service such as to print from smartphones; power-safe flash memory for faxes; a well-built machine or a simple-to-replace toner cartridge, they could go for this printer where as most other people could just opt for the Brother MFC-7460DN for their network-connected duplex-printing monochrome laser multifunction.

Links

[1]
[/2010/05/product-review-hp-laserjet-pro-p1560-series-desktop-laser-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](http://2010/05/product-review-hp-laserjet-pro-p1560-series-desktop-laser-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[2]
http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-02-004-HP-LaserJet-M1536dnf.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[3]
http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-02-007-Control-Panel.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed

[4]
[/2010/12/product-reviewhp-laserjet-pro-cm1415fnw-colour-laser-multifunction-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed](http://2010/12/product-reviewhp-laserjet-pro-cm1415fnw-colour-laser-multifunction-printer/#utm_source=feed&utm_medium=feed&utm_campaign=feed)

[5]
http://homenetworking01.info/wp-content/uploads/2011/07/2011-07-02-006-HP-LaserJet-M1536dnf.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed