Skype-enabled TVs – Now Samsung is in the party

27/02/2010 04:36

Articles

Skype-Enabled TV Ecosystem Keeps On Growing | EhomeUpgrade[1]

Samsung makes Skype for new LED lit HDTVs official | Engadget [2]

From the horse's mouth

Get Skype on your TV: Samsung joins the team – Skype Blogs[3]

My comments

I have been following the idea[4] of using a common large screen TV with Skype[5] and similar videoconferencing software on a common PC as a cost-effective method to achieve family and small-business group videoconferencing. This was since Channel 7 Australia had run a news item about it being part of linking older people who were confined to a nursing home with their younger family and also myself seeing it in action with some friends establishing a video-conference with relatives in Italy using this tool on their laptop.

When Skype announced[6] that LG and Panasonic were integrating this technology in to their newer large-screen TV models at CES 2010, I was excited about this idea becoming closer for most people. Now, Samsung had announced this week that they were integrating Skype in the LED-backlit 7000 and 8000 series TVs. This has meant that another TV manufacturer has stepped up to the plate as far as Skype integration is concerned.

These implementations typically require a compatible Webcam (which has an integrated microphone) to be connected to the TV's USB port and the TV to be connected to the home network via its Ethernet port. The user can then associate their Skype account with these TV sets to start videoconferencing.

The only limitation I see about the action so far is that manufacturers who supply TV peripheral devices like PVRs and games consoles aren't providing the full Skype-based video-conferencing setup as an add-on to their devices. If this happened, especially in the form of a software download for the likes of the TiVo or the PS3, this could please people who own these devices to set themselves up for large-screen group videoconferencing.

It is also worth knowing that all of these implementations can yield a high-resolution picture but only if the computer on the other end is running Skype 4.2 or newer or if the device on the other end supports Skype HD functionality. Also the Internet service must support sufficiently-high bandwidth for the high-quality pictures.

At least this is a step closer to ubiquitous cost-effective group videoconferencing for home and small business. As well, it is one step taken to bring the videoconferencing practice out of the science-fiction novel and 1970s "future tech" book in to common reality.

Links
[1] http://www.ehomeupgrade.com/2010/02/25/skype-enabled-tv-ecosystem-keeps-on-growing/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ehomeupgrade%2Fentries+%28eHomeUpgrade+1%29
[2] http://www.engadget.com/2010/02/25/samsung-makes-skype-for-new-led-lit-hdtvs-official/
[3] http://share.skype.com/sites/en/2010/02/samsung.html?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ShareSkypeEn+%28Share+Skype%29
[4] /2008/12/video-conferencing-in-the-home-network/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[5] http://www.skype.com
[6] /2010/01/skype-videoconferencing-coming-soon-to-regular-tv-sets/#utm_source=feed&utm_medium=feed&utm_campaign=feed

Use of the Ekahau Real-Time Location System in a residential or small-business environment

26/02/2010 15:39

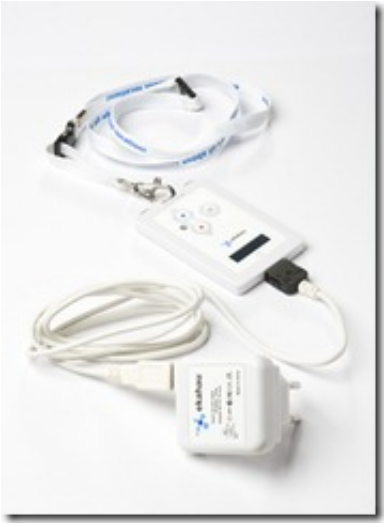
I have been talking by e-mail to Mika Kouhia from Ekahau[1] about the use of their WiFi-based real-time location technology in the typical home or small-business network. The applications that may come to mind here will typically cover an emergency-response /nurse-call system that is an integral part of the at-home care of elderly, infirm or convalescing people; or small businesses, especially those who are partners to large business, who need to track assets in a similar manner to what is done by large organisations.

What is the main complication that concerns the Ekahau Real-Time Location System

The main complication that limits this technology is the fact that most of the wireless networks deployed in this space only have one access point, typically the one that is integrated in to a wireless router. You may be lucky to use this technology on a wireless network that has an extra access point such as a wireless router that is repurposed as an extension access point and connected to the main router via a HomePlug powerline link or one of those access points that work with a HomePlug powerline backbone. On the other hand, you would have to deploy “infrared beacons” around the premises and rely on the Wi-Fi wireless link provided by the router as primarily a communications link.

The infrared beacons work on a similar infrared frequency to the remote controls used to control the majority of TV sets and other consumer-electronics devices in circulation. Thus they won’t interfere with the passive-infrared sensors used in most security systems or automatic “sensor-light” setups because these sensors are tuned to an infrared frequency emitted as part of body heat.

The primary reason for implementing the technology in the home



[2]

The primary implementation that I was talking about with Mika was to use their T301BD Wi-Fi Pager Tag[3] which hangs around the neck of a person. This tag has an integrated display and two function buttons that also work as emergency-call buttons. As well, if the tag is pulled on the neckstrap, it can initiate an emergency response. The tag supports direct paging with push-button response, which can allow it to work with a “response-check” setup where if the user doesn’t respond within a certain time to a call, the system initiates emergency action. The display could come in handy by showing the person’s name, which would be a good help with people who have memory-loss disorders.

In this implementation, there may be the need to establish Internet access to the pager tag in order to permit this device to work as part of a solution provided by an external service provider. This may involve use of hardware or software on the network that provides at least dynamic DNS functionality and integration with UPnP IGD-enabled routers to provide access to the tag. The functionality could be extended to provide local nurse-call functionality with in-house location display through a local screen and /or Web page available through the home network.

Similarly, the pager tag could work with other technology to assist people who have memory-loss disorders by enabling the use of electronically-generated “reminder screens” for particular tasks. This is relevant to an article that I wrote about in my blog [4] concerning technology that is to assist the elderly in their daily lives. Here, I had talked about a kitchen equipped with various technologies like pico-projection systems, RFID and Wii-style motion sensors to provide reminders through different food-preparation tasks.

How this could be taken further

Ekahau should then consider studying this application as a technology that suits the current home-driven health-care direction.

Here, we are dealing with an older population as people of the baby boom move in to the later years of life and more people live longer. As well, there is more emphasis on home-based health-care so as to provide patients with the dignity of being looked after in their own home environment. This also includes an emphasis on independent living for elderly people, including having younger relatives be part of the older person’s life in a support role.

Similarly, there are disabled or chronically-ill people who want to be in the familiarity of their own home and family and these people can be able to work as carers, whether alone or alongside paid staff members who work on a rostered system.

The supporting software could be integrated in to computing devices that work on any of the common desktop-computing, handheld-computing, set-top box or embedded-device platforms in order to establish an assistive-technology ecosystem in the home.

Links

[1] http://www.ekahau.com
[2] http://homenetworking01.info/wp-content/uploads/2010/02/IMG_9511.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed
[3] http://www.ekahau.com/flash/t301b/ekahau_T301B.html
[4] http://homenetworking01.info/2009/04/recent-research-projects-that-lead-to-independent-and-dignified-living-for-the-elderly-and-disabled/#utm_source=feed&utm_medium=feed&utm_campaign=feed

First production car with Internet radio to be presented at Geneva Auto Show

25/02/2010 06:42

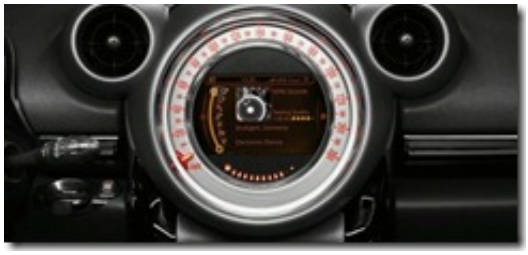
Article

Mini Countryman to be first production car with internet streaming radio? – Engadget[1]

MINI Connected Technology Adds New Infotainment Options, Debuts in Geneva | Motor Trend (USA)[2]

My comments

Previously, I had talked in this blog[3] about the idea of Internet radio in the car and the way this goal would be achieved. Now BMW have integrated Internet radio functionality of the kind that the Kogan Wi-Fi Internet Radio[4], the Revo iBlik RadioStation[5] and the Pure Evoke Flow[6] provide in to the Mini Countryman as part of the ***Mini Connected*** infotainment pack.



[7]

The article had described some of the gaps about how this goal would be achieved, but I would reckon that the technology would be based on a user-supplied 3G USB dongle or tethered 3G phone; or an integrated 3G modem working with a user-supplied USIM card. They talked of the idea of choosing a few stations from a directory akin to the vTuner /Frontier Silicon or Reciva Internet-radio directories and allocating them to presets so you can “switch around” your favourite streams. The author had suggested that there may be a reduced station list and that, for example, his favourite “speed-metal” Internet station may not be in the list. But if the software works in a manner similar to Frontier’s “wifiradio-frontier[8]” or Pure’s “Lounge[9]” portals, he could be able to add the “speed-metal” Internet station.

There is a strong likelihood of this feature being available as part of the“connected” infotainment packs supplied by vehicle builders to high-end vehicles at the moment but it could be made available to the aftermarket car-audio scene soon.

Links
[1] http://www.engadget.com/2010/02/24/mini-countryman-to-be-first-production-car-with-internet-streami/
[2] http://wot.motortrend.com/6624488/auto-shows/mini-connected-technology-adds-new-infotainment-options-debuts-in-geneva/index.html
[3] /2010/02/internet-radio-in-the-car-why-not-2/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[4] /2009/11/product-review-kogan-wi-fi-internet-table-radio-with-ipod-dock-frontier-internet-radio-platform/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[5] /2009/11/product-review-revo-iblik-radiostation-internet-clock-radio-frontier-internet-radio-platform/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[6] /2009/11/product-review-pure-evoke-flow-portable-internet-radio-frontier-internet-radio-platform/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[7] http://homenetworking01.info/wp-content/uploads/2010/02/MINIConnectedInternetradiopresspicture.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed
[8] http://www.wifiradio-frontier.com/
[9] http://www.thelounge.com/

Understanding the Browser-Choice Screen – Updated

24/02/2010 05:17

News articles

Microsoft offers web browser choice to IE users | BBC Technology (UK)[1]

Microsoft about to offer Windows users a browser choice screen | The Guardian Technology Blog (UK)[2]

La concurrence entre navigateurs web relancée en Europe | DegroupNews (France – French language)[3]

From the horse’s mouth

The Browser Choice Screen for Europe: What to Expect, When to Expect It | Microsoft On The Issues (Microsoft)[4]

UPDATE: The Browser Choice Screen for Europe – Microsoft On The Issues (Microsoft)[5]

European Union press release about the Browser Choice screen [6]

Browser Choice Screen shortcut (available anywhere in the world)

http://browserchoice.eu[7]

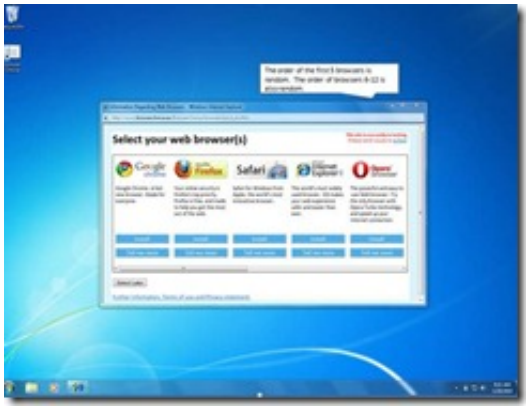
Advocacy site

OpenToChoice.org (Mozilla)[8]

My comments and further information

If you run a version of Windows XP, Vista or 7 that you bought in Europe and your default browser is Internet Explorer 8, you may be required to complete a "browser-selection" ballot screen, known as the Browser Choice screen, to determine which browser your computer should run as its default browser. It may not happen if you ran another browser as a default browser, then came back to Internet Explorer 8. It also will happen to European migrants who had brought out their Windows computers with them.

You will have to work through a "wizard" which has an introduction screen then the list of browsers presented in a random order. Once you choose that browser, it will be determined as your default Web-browsing tool every time you go to a Web page. If the browser isn't installed on your system, the software will be downloaded from the developer's site and installed in to your system.



[9]

If you run Windows 7, the Internet Explorer "e" logo will disappear from the Taskbar, but you can still find it in your Start Menu. Then, you will be able to reattach it to your Taskbar by right-clicking on the program in the Start Menu and selecting "Pin to Taskbar".

The Browser Choice screen will subsequently become available as another method of changing default browsers, alongside the options available when you install, update or run a Web browser.

There are some issues you may run into if you move from Internet Explorer 8 to another browser. One is that you won't have your RSS feeds held in the Common Feed List which works as part of Windows Vista and 7. This may affect the addition of new feeds to programs that make use of the Common Feed List as their RSS data store. Similarly, Windows 7 users won't benefit from having the tabs viewable in Aero Peek's multi-window preview. This issue may be resolved with versions of the alternative browsers being built to work tightly with the host operating system's features, which can be achieved with the Windows application programming interface information being made available by Microsoft.

At the moment, there isn't a program that adds installed browsers to the shortcut menu when you right-click on a Web link. Such a program would benefit Web developers and bloggers who want to test a page under different browsers or people who want to "spread the Web-viewing load" amongst different clients.

Author recommendations (in no particular order)

I recommend any of these browsers because users don't have to relearn the user interface if they switch between any of them.

Mozilla Firefox[10]

Internet Explorer[11]

Opera[12]

Safari[13]

Links
[1] http://news.bbc.co.uk/2/hi/technology/8524019.stm
[2] http://www.guardian.co.uk/technology/blog/2010/feb/21/microsoft-windows-browser-ballot
[3] http://www.degroupnews.com/actualite/n4514-microsoft-internet_explorer-navigateur-europe-concurrence.html
[4] http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/02/19/the-browser-choice-screen-for-europe-what-to-expect-when-to-expect-it.aspx
[5] http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/03/02/update-the-browser-choice-screen-for-europe.aspx
[6] http://europa.eu/rapid/pressReleasesAction.do?reference=IP/10/216&format=HTML&aged=0&language=EN&guiLanguage=en
[7] http://browserchoice.eu
[8] http://opentochoice.org/
[9] http://homenetworking01.info/wp-content/uploads/2010/02/browser_choice_1_clip_image002_136F9F12.jpg#utm_source=feed&utm_medium=feed&utm_campaign=feed
[10] http://www.mozilla-europe.org/firefox/
[11] http://www.microsoft.com/windows/internet-explorer/default.aspx
[12] http://www.opera.com/
[13] http://www.apple.com/safari

Nigerian people now address their association with the 419 scams

22/02/2010 11:35

Main article

'Maga No Need Pay': Nigeria Gets Creative to Fight Cyber Scams | Microsoft On The Issues blog (Microsoft)[1]

Music video – "Maga No Need Pay"

Turn up the volume to enjoy this clip!

Direct link to YouTube clip[2] for TwonkyBeam[3] users to "push" to DLNA media players or if you can't see the clip on this page.

At the moment, there aren't any reliable sources where one can obtain the song as an MP3 file.

My comments on this action

Previously, I had written about social networking sites being used as part of 419-style scams, primarily in the form of the "lost traveller" appeal on these sites.

After reading the blog article[4] about Microsoft assisting Nigerian music talent to take steps to educate the youth against cybercrime, I was impressed about how this country can turn itself around and out of the "419-scam" quagmire.

The song was emphasised at the youth there who would think it was cool to become engaged in these scams and other cybercrime, especially thinking they could "live large" on the profits of these scams at the expense of their victims or "maga". It is part of the Microsoft-led programs which work in a similar way to "Hand Brake Turn[5]" and similar redirection programs sponsored by churches and similar non-profit organisations to steer youth who are at risk of committing crime away from it.

Here, it is definitely a break from the usual information that exists about these scams where the emphasis is on preventing people becoming victims of these scams.

Links
[1] http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/02/03/maga-no-need-pay-nigeria-fights-cybercrime-with-song.aspx
[2] http://www.youtube.com/watch?v=EGCnl6O6bnE
[3] http://www.twonkymedia.com/Beam/index.html
[4] http://microsoftontheissues.com/cs/blogs/mscorp/archive/2010/02/03/maga-no-need-pay-nigeria-fights-cybercrime-with-song.aspx
[5] http://www.concernaustralia.org.au/handbraketurn

Blog brand now – HomeNetworking01.info -

19/02/2010 06:00

Hi everyone!

I have changed this blog's title to "HomeNetworking01.info" to make it easier to remember, especially that the Web address is homenetworking01.info , thus the URL name will effectively become the blog's "brand".

However, it will still focus on home, community and small-business IT and network issues and will also include "on-the-go" network and Internet access for these communities. It also includes some articles concerning the Internet experience such as social-network use, which may perplex most people who don't use the Internet regularly.

As well, I have enabled a mobile-optimised view which will appear if you are viewing the blog from a smartphone or other handheld device. Both views have a link to allow you to choose the one most appropriate for your device in case the blog doesn't respond properly or you are using a "tablet" device which may be seen as a handheld device.

The desktop view has a "Print this article" button at the end of each article so it is easier to print out or fax the articles if you need to do so. This is because some articles, such as those I have written about Facebook use, may be wiorth printing out and attaching to a noticeboard by the computer.

With regards,

Simon

The touchscreen smartphones with the works

18/02/2010 11:13

News articles

Samsung unveils Bluetooth 3.0, 802.11n smartphone • Register Hardware[1]

MWC: Samsung Rolls Out Wave Smartphone with Bada OS | eWeek.com[2]

Samsung reveals first Android phone with DLP Pico projector | Android And Me blog[3]

My comments about these phones

I had never thought that someone would come up with touchscreen smartphones that would beat the Apple iPhone hands down in many ways. What Samsung have done with the new Wave touchscreen smartphone and the Halo Android-based touchscreen projector smartphone that they launched at the Mobile World Congress in Spain has, in my opinion, achieved this goal.

One feature that I liked about the Wave and Halo phone were that they were the first few touchscreen smartphone devices to use the OLED technology for its display. This display, which I commented about in my review of my Nokia N85 smartphone [4], has a lot of advantages over the common LCD display used, such as high contrast and improved energy efficiency. I have often described these displays as being "vacuum-fluorescent displays for battery-operated devices" because they have the same high-contrast display as the vacuum-fluorescent displays found on most home-installed consumer-electronics devices, yet they don't need as much power to operate as those displays.

Other things that I have liked about the Wave phone include the use of a Bluetooth stack that works to the current Bluetooth 3.0 standard which allows for high-speed data transfer when used in conjunction with the phone's Wi-Fi transceiver. Speaking of that, the Wi-Fi transceiver is capable of working as a single-stream 802.11n unit which can allow higher throughput on 802.11n Wi-Fi networks. The Android-powered Halo has Bluetooth to 2.1, but has the 802.11n single-stream Wi-Fi.

As well as launching this smartphone at Mobile World Congress, Samsung had established an app-store and developer network so they can compete with Apple when it comes to applications that extend the phone's function. They are also part of the Wholesale Applications Community which will improve the marketplace for smartphone applications.

Both phones use a micro-SD card slot for memory expansion or "cassette-style" operation when used as a media player. They use a USB connection and a 3.5mm headset jack which makes them compatible with most standards-based mobile phones and accessories. The Android-equipped Halo smartphone will, as far as I know, offer DLNA home media network integration of some sort.

From all that I have heard about these phones, Samsung, who are part of the "New Japan", has "dipped their toes" in many smartphone platforms and has offered OLED touchscreen smartphones in two different platforms.

Links
[1] http://www.reghardware.co.uk/2010/02/15/samsung_unveils_bada_wave/
[2] http://www.eweek.com/c/a/Midmarket/MWC-Samsung-Rolls-Out-Wave-Smartphone-with-Bada-OS-383061/
[3] http://androidandme.com/2010/02/news/samsung-reveals-first-android-phone-with-dlp-pico-projector/
[4] /2009/11/product-review-nokia-n85-3g-multimedia-phone-symbian-s60-version-3/#utm_source=feed&utm_medium=feed&utm_campaign=feed

AAPT setting the cat amongst the Australian ISP pigeons with a no-limit broadband plan

17/02/2010 03:27

News articles

AAPT launches no limit broadband plan | The Australian[1]

No cap on downloads as AAPT's truly unlimited internet sets new standard[2]

From the horse's mouth

AAPT Plan Information Page – AAPT Entertainment Bundle with 24/7 Unlimited Broadband[3]

AAPT Press Release[4]

My comments on this scenario

Anyone who has used broadband Internet in Australia would be aware that all of the services have a usage limit and if you go past this limit, you would either have your Internet service throttled to a very low bandwidth rate or pay for the extra bandwidth used. Some service providers have modified these plans to allow for peak /off-peak limits with separate metering and a higher limit for off-peak hours. This idea is also being investigated in the US by cable companies, especially Comcast, as a way of shaping Internet traffic, mainly to keep IP-based independent video traffic off their networks.

Now AAPT have offered a $A99.95 residential broadband plan that is in the same vein as US or European Internet service plans i.e. it has no usage limits. This has now become an attempt to "one-up" everybody else in the Australian market. This firm had introduced plans with off-peak hours that were limit-free but this has become the most bold act that any major Australian ISP had offered.

This has happened even though Telstra and Optus had recently revised their plans to permit larger usage allowances due to the increased bandwidth available for international Internet traffic to Australia. Other issues that may have encouraged this include use of IP-based entertainment services like Internet radio and IPTV /video-on-demand; as well as the up-and-coming National Broadband Network.

It will be interesting to see what happens further with this deal – whether AAPT rolls it out on to other residential and/or small-business plans and whether other major-league ISPs will roll out "limit-free-all-day" plans and whether these will be offered across the board.

Links
[1] http://www.theaustralian.com.au/australian-it/aapt-launches-no-limit-broadband-plan/story-e6frgakx-1225830479094?referrer=email&source=AIT_email_nl
[2] http://www.news.com.au/technology/no-cap-on-downloads-as-aapts-truly-unlimited-internet-sets-new-standard/story-e6frfro0-1225830392369
[3] http://www.aapt-broadband.com.au/unlimited-broadband-music-downloads/24–7-unlimited-bundle
[4] http://aapt.com.au/our-company/news/2010/aapt-becomes-first-major-telco-offer-no-limit-adsl2-broadband

Keeping sanity in your home network during periods of power unreliability

16/02/2010 07:03

You may be in an area where the mains power cables are strung between poles and there are many trees alongside the cables, Similarly, your neighbourhood may use very old infrastructure for its mains power supply. As well, your electricity supply utility may be regularly engaging in "load-shedding" practices where it may reduce power to certain customers in order to avoid the need to generate extra power.

Sometimes, the premises that you are in may have very old electrical infrastructure that is undersized for modern needs and you may experience situations where the fuses blow too frequently. You may also have an appliance that is "on its last legs" so much so that it causes the fuses to blow or the circuit breaker or earth-leakage circuit breaker (safety switch) to trip when it is used.

In these situations, there is an increased likelihood of unreliable power and whenever the power comes back on, you may have

problems getting your home network and Internet service up and running.

Equipment reset procedures

One task you may have to do every time the power comes back after a power cut or surge would be to reset the network-Internet "edge" equipment. If you have a modem integrated in to your router, like most ADSL setups, you may be able to get away with just powering down the router, waiting 10 seconds, then powering up the router.

On the other hand, if you have a cable modem, FTTH fibre-optic modem, DSL modem (including high-speed VDSL2 modems that are part of some next-generation broadband setups) or similar equipment connected to the broadband router via an Ethernet cable and powered by its own power supply, you may have to use a different procedure when resetting your network.

This is to avoid the common access-mismatch situation when you power both devices up at the same time. In this situation, the router attempts to gain network-availability information from the external modem while the external modem is trying to re-establish its link with the Internet service provider and it may not have that link established by the time the router needs it. This usually leads to the router using a "private network" or "Auto-IP" address as its broadband (WAN) address rather than the proper Internet service IP address.

You then reset your network using this procedure outlined below:

1. Disconnect both the router and the external modem from the power
2. Wait 10 seconds
3. Connect the external modem to the power
4. Wait for the external modem's CABLE or other media-specific connection light to become stable
5. Then wait for the "service" or "Internet" light to glow steady.
6. Once that has happened, connect the router to the power
7. Wait for the router's "Internet", "Broadband" or "WAN" light to become stable. You should then have a stable connection by then

Some installations such as certain FTTH installations may have a separate modem located outside the house and you may not be able to reset that unit. Here, you may just get away with just resetting your router by powering it down, waiting 10 seconds then powering it up again.

After this, you may have to restart or reset network-attached storage devices and other equipment in order to make sure they know where they are on the network and they make themselves known to the rest of the network. This also means that you may have to either reboot your computers that were on or force them to re-obtain their IP address from the broadband router.

Use of an uninterruptible power supply unit with your network equipment

It may be worth using an uninterruptible power supply with the network-Internet "edge" equipment to keep the equipment working properly in an environment known for an unstable power supply. You may get away with the lower-capacity UPS devices like the APC Back-UPS ES series[1] if you intend to provide this kind of power to the network-Internet "edge" and, perhaps, a VoIP ATA or cordless phone base station. This would be an imperative where the household phone service is provided by a VoIP service like the many "n-boxes" (Livebox, Freebox, etc) in France, or the newly launched iiNet "Bob" base station in Australia.

It is also a good idea to connect a high-capacity UPS to your network-attached storage device if you run one on your network. This unit can make sure that the NAS unit is managed properly through the power outages to avoid data corruption and hard-disk damage. Here, you could perhaps use the same higher-capacity unit also to run the network-Internet "edge" equipment or run this equipment on a separate low-capacity UPS.

You may deploy a UPS for your computer, perhaps to provide a graceful shutdown when the power goes down. Here, you would still need the separate UPS for the network equipmentin order to avoid competition for the reserve power that may be needed for your computer or server to complete a proper shutdown if need be.

Conclusion

When you know how to properly manage your home network when the mains power becomes unstable, you will be able to assure long service life for your equipment and "keep your head on" when these times come around.

Links
[1] http://www.apc.com/products/family/index.cfm?id=21

Another threat to Apple being the king of "all things cool"

13/02/2010 05:40

Acer developing 'ace in the hole' ultrathin, putting MacBook Air on notice — Engadget[1]

My comments on this topic

When Windows 7 was launched, I wrote an article on this blog[2] about an intent by Windows-based PC manufacturers, especially laptop manufacturers to upstage the Apple Macintosh platform in the beauty, reliability and performance stakes. This was also ran in conjunction with HP launching their Envy laptop series which reminded me of the Apple Macbook Pro laptops. Later on, I had blogged[3] about an ASUS laptop that would appeal to people who love the design masterpieces that are the Bang & Olufsen TVs and music systems.

In the earlier article, there had been some mention about Acer designing a multi-touch all-in-one PC. They had also come good on an ultra-thin Windows 7 laptop that is intended to upstage the Apple Macbook Air series of laptops. This Intel Core-powered unit will be designed with a thickness goal of 1.9cm (0.7 inches) and, of course, will be relatively light. Acer have an intention to release the machine sometime "this year" but I would place its availability sometime before the end of the next financial year.

This certainly shows that since Apple Snow Leopard and Microsoft Windows 7 were launched, the competition for computer hardware that pleases most everyday users has become more intense.

Links
[1] http://www.engadget.com/2010/02/12/acer-developing-ace-in-the-hole-ultrathin-putting-macbook-air/
[2] /2009/10/windows-7-hardware-intended-to-upstage-the-apple-mac-hardware/#utm_source=feed&utm_medium=feed&utm_campaign=feed
[3] /2010/01/a-laptop-that-will-directly-please-the-beo-enthusiasts/#utm_source=feed&utm_medium=feed&utm_campaign=feed

Use of broadcast-network tuners to democratise pay-TV

12/02/2010 01:46

TiVo, Sony and others to FCC: 'gateways' should replace CableCARD — Engadget HD[1]

My comments on this idea

The common situation with most TV households is that if they sign up to a pay-TV service like Foxtel (Australia), a local cable-TV franchise in the USA, DirecTV (USA) or Sky TV (UK), they can only watch TV through the set-top box provided by the service provider. The TV remote control ends up becoming redundant as they have to use the set-top box's remote control for their TV viewing.

If they want to use a DVR i.e.. a "personal TV service", they have to use the DVR option provided by the pay-TV provider rather than get a retail DVR solution like TiVo, a home-theatre PC such as Windows Media Center or one offered by a major consumer-electronics brand. In some situations like some cable-TV implementations in the US, you may be able to use a retail DVR solution along with a special "CableCARD" and, perhaps, a "tuning adaptor". But this doesn't provide the full service that the customer has put money up for, such as interactive TV or access to "pay-per-view" or "on-demand" content.

As well, a lot of these providers often charge an extra fee if the user wants to deploy a set-top box in other rooms. This typically means that one TV set, usually the one installed in the main lounge room or family room, is subscribed to the pay-TV service. At best, most users may deploy the second set-top box in a secondary lounge area like the rumpus /games room.

What is the layout preferred by TiVo, Sony and others?

The layout would consist of the following:

- A "gateway device" or broadcast-network tuner connected to the cable service or satellite dish which "tunes" the pay-TV services and manages access to these services. It then makes them available over the home network using IP-based standards and technologies. This device can also pass back information relating to "pay-per-view" content orders or interactive television from the endpoint devices. It can also handle on-demand content offered by pay-TV providers in the convention context and fulfil the content to the desired end-devices.
- Standards-compliant endpoint devices (TV sets, DVRs, etc) that are connected to the home network and discover the services and content using technologies like DLNA. These devices can work with interactive services provided by the TV service provider and provide the viewer's responses to the gateway device via the home network.

This is similar to the "broadcast-network tuner" setups like Devolo's dLAN Sat[2], the Tivit ATSC mobile DTV WiFi tuner and the HD HomeRun[3] tuner, where there is a digital-broadcast tuner that passes the signal via an IP-based home network to a hardware set-top box or software player program in a general-purpose computer so people can view the TV programme. These solutions typically used a non-standard control method and, in most cases, a single RF front-end so that only one TV set could operate at a time and they couldn't work with a DVR or similar device.

Why develop this layout?

There is a desire for true competition in the multichannel pay-TV industry concerning end-user devices that is similar to what has occurred with telephone hardware since the Carterfone Decision in the USA and the Davidson Inquiry in Australia. One of the goals is to provide a TV navigation interface that encompasses off-air, pay-TV and IP-delivered content in the one electronic programme guide. This guide's interface would be "skinned" to match the host device's branding or any user customisations that are available to the device's user. It also means that the user only needs to deal with one remote control to find whatever they want to watch.

This kind of layout could allow each TV set and each computer in the house to have access to all of the pay-TV services, rather than the common situation of having to deploy pay-TV set-top boxes to each place where there is a TV set.

There is the ability to upgrade the gateway to suit changing technological needs such as change of infrastructure or improvement in transmission or security protocols. That same ability also exists if the user wants to change providers or sign up to a supplementary-content service. Here, in all the situations above, there is no need to replace the end-user's devices like DVRs or Internet-enabled TV sets, nor is there a need to replace software on any of the computers in the house to accommodate these changes.. In these cases, the software or firmware can discover the new services that are provided through the new

hardware.

What needs to happen

One thing that needs to happen is high-profile implementation of common standard technologies like UPnP AV in the broadcast-reception sphere. This includes having endpoint and recording devices work to these standards when discovering and receiving broadcast signals via an IP network. It also includes the recognition of electronic-programme-guide data provided by these gateway devices, especially if the device that benefits from the data is a recording device like a "personal TV service". It doesn't matter whether the client device has the programme-guide data or the broadcast-network tuner has that data. This also includes handling situations where the same broadcast service can be received through different paths such as one or more over-the-air channels and /or a cable or satellite service.

In a similar light, broadband routers that work as the network-Internet "edge" could work as a "gateway" for IPTV services by storing channel lineups and service-authority information for these services. This device may also have to support handling of interactive-TV sessions in situations where the endpoint device cannot handle the sessions itself.

As well, interactive-TV setups would need to work with an IP backhaul irrespective of whether the TV signal is delivered via RF (cable, classic-TV-aerial or satellite) means or via an IP feed. This also includes allowing access to downloaded assets associated with interactive content.

Conclusion

As mentioned before, what needs to happen is the use of common standards and device classes to support broadcast-network tuners; standard viewing and recording devices; and the home network in order to democratise the provision of pay-TV services.

Links
[1] http://hd.engadget.com/2009/12/23/tivo-sony-and-others-tell-the-fcc-gateways-should-replace-cab/
[2] http://www.devolo.com/consumer/53_dlan-tv-sat-pc_starter-kit_product-presentation_1.html?l=en
[3] http://www.hdhomerun.com/

State of Internet access in Switzerland

11/02/2010 14:25

71 % des foyers suisses ont accès à Internet – DegroupNews.com (France – French language)[1]

My comments about this article, including facts that I have translated from the article

This article appeared in DegroupNews (France's home networking and IT portal) close to when Switzerland was announcing the rollout of their very-high-speed FTTH Internet service. This service is intended to start appearing through that country this year and is intended to be a multi-network setup where different provider groups can use their own fibre cluster like in France.

The article was stating that 71% of households in that country had the broadband "hot and cold running Internet" either through ADSL or cable technology. It also stated that most households were opting for "mid-tier" plans which would yield 2-10Mbps and that the market placed value on quality of service. There was also less likelihood for households to "jump ship" between the ISPs.

But there are some questions worth asking about this situation. One was whether the merger between Orange-Suisse and Sunrise was likely to have impact on the Swiss Internet market as in effect on prices or quality of service.

The other question that sorely needs to be answered is whether the rural neighbourhoods including those charming mountainside chalets are part of the 71% of households that have broadband Internet. This includes whether the rural services are being provided at the rated speeds that the customers agreed on. This rural-access issue has always been raised by me in this blog because it is too easy for an ISP or carrier to install a DSLAM in the rural telephone exchange and establish the Internet backbone yet forget to check on the quality of the telephone lines to the customers. This could lead to customers missing out on broadband Internet or receiving below-par service.

These facts can be easily skewed by the size of the country, its population and the size of that country's urban areas compared to the size of a larger country like France, Germany, UK, the US or Australia. But it is worth noting what has happened in Switzerland which is a predominantly mountainous country, when factoring the provision of Internet service in to hilly areas.

Links
[1] http://www.degroupnews.com/actualite/n4479-haut_debit-suisse-reseau-ofcom-internet.html?xtor=RSS-1

Internet radio in the car – why not?

11/02/2010 07:16

A few weeks ago, a young teenager friend of mine had the Kogan internet radio[1], which I previously reviewed a sample of[2] and had bought, "tuned" to an Iranian pop-music station that was broadcasting via the Internet. This youth, who had just turned 18 and was about to get his driver's licence, was asking whether Internet radio in the car would be a reality.

Issues that limit this concept

One of the main issues would be for the wireless-broadband standards like 3G and WiMAX to support media-streaming in a reliable manner and at a cost-effective rate. Recently, there were issues with AT&T raising concerning about Apple iPhone users drawing down too much data, especially multimedia and another 3G provider wrote in to their subscriber terms and conditions a prohibition against media streaming.

The main issues were how these networks handle real-time content and whether they can stream this content reliably when the vehicle is travelling at highway speeds or faster. This also includes how to achieve this cost-effectively without limiting users' ability to enjoy their service.

One way that it could be mitigated would be for mobile carriers and ISPs to look towards providing "sweeter" wireless-broadband deals, such as integrating voice and data in to single plans. Similarly,the providers could optimise their services to cater fir this kind of use.

Ways of bringing Internet radio to the speakers

Internet radio functionality integrated in car audio equipment

In this setup, the car-audio equipment, whether as part of the in-dash "head unit" or as an accessory tuner box, has access to a TCP/IP LAN and Internet through a modem or an outboard router. It uses any of the common Internet-radio directories like vTuner or Reciva to allow the user to select any of the audio streams that they want to listen to.

Wireless broadband modem integrated in or connected to car audio equipment

The car-audio equipment would have a wireless-broadband modem integrated in the unit or connected to it. The latter situation could be in the form of a USB "dongle" plugged in to the unit, or a mobile phone that supports wireless broadband being "tethered" by USB or Bluetooth to the unit. If the setup involves an integrated modem or an attached USB "dongle", the setup may use authentication, authorisation and accounting data from a SIM installed in the unit or "dongle"; or simply use the data from a phone that uses Bluetooth SIM Access Profile.

This practice had been implemented in a Blaupunkt car stereo which was being used as a "proof-of-concept" for Internet radio in the car.

Use of an external wireless-broadband router

This method involves the use of a mobile wireless-broadband router which has an Ethernet connection and /or USB upstream connection with a standard "network-adaptor" device class along with a WiFi connection. Of course, the device would have a wireless-broadband connection on the WAN side, either integrated in to it or in the form of a user-supplied USB modem dongle or USB-tethered mobile phone. A typical example of this device would be the "Autonet" WiFi Internet-access systems being pitched for high-end North-American Chrysler-built vehicles or the "Ford Sync" integrated automotive network available on high-end North-American Ford-built vehicles that gains Internet access with a user-supplied USB wireless-broadband dongle.

Here, the car-audio equipment would have a network connection of some sort, usually an Ethernet connection or a USB connection that supports a common "network interface" device class and would be able to "pick up" Internet radio as mentioned before.

Internet radio functionality integrated in an Internet-access terminal

At the moment, this will become the way to bring Internet radio to most car setups in circulations for some time. The setup would typically represent a mobile phone or laptop computer with an integrated or connected wireless-broadband modem. This would have software or Internet access to the Internet-radio directories and stream the audio through Bluetooth A2DP, an FM transmitter or hardwired through a line-level audio connection, a cassette adaptor or an FM modulator.

Increasingly, there is interest from car-audio firms and Internet-media software firms to establish an application-programming interface between a computer or smartphone running selected Internet-radio directory software and the car sound system. This would typically require use of Bluetooth or USB and use a control method of navigating the directory, in a similar manner to how most current-issue car-audio equipment can control an attached Apple iPod.

The primary platform where this activity may take place would be the Apple iPhone, because of it being the most popular programmable smartphone platform amongst the young men whom the car-sound market targets.The setup was demonstrated at the Consumer Electronics Show 2010 in the form of Pioneer and Alpine premium head units controlling a front-end app for the Pandora "custom Internet radio" service installed in an iPhone connected to the head unit via the special connection cable that comes with that unit.

On the other hand, if a smartphone or MID that is linked to the head unit via Bluetooth A2DP does support the AVRCP profile properly, an Internet-radio application installed on that smartphone could achieve the same goal. This would require that the directory applications are able to expose links to the AVRCP commands and requests.There will also have to be requirements to allow "source selection" between multimedia applications through the AVRCP protocol.

Further comments

This concept will become part of the "connected vehicle" idea which provides real-time access to navigation, telematics, communication and entertainment in a moving vehicle or craft, especially as companies involved in this segment intend to differentiate their offerings. It may also be very desireable as an alternative to regular radio in those areas where most regular radio broadcasts leave a lot to be desired.

Once the cost and quality of wireless broadband Internet is brought down to a level that is par with reasonably-priced wired broadband service, then the concept of Internet radio in the car will become reality.

Links
[1]
http://www.kogan.com.au/shop/kogan-wi-fi-digital-radio-ipod-docking-station/
[2]
/2009/11/product-review-kogan-wi-fi-internet-table-radio-with-ipod-dock-frontier-internet-radio-platform/#utm_source=feed&utm_medium=feed&utm_campaign=feed

Switchable graphics – an "overdrive switch" for PC graphics

11/02/2010 07:10

Articles

NVIDIA's Optimus Technology Brings New Level of Switchable Graphics – Windows Experience Blog – The Windows Blog[1]

From the horse's mouth

NVIDIA's article about the Optimus graphics system[2]

My comments and explanation

The common graphics setup

The "IBM PC"-based computing platform started off with a "discrete" graphics setup where the system used a separate display card to put up data on the screen for the user to see. This allowed users to buy the graphics capability that they needed at the time of the system's purchase yet upgrade this capability when their needs changed.

Then motherboard manufacturers and graphics-chip vendors moved towards placing the display circuitry on the motherboard, a practice that most other computer manufacturers engaged in for their platforms. This was preferred for computers that had an integrated display; as well as computers that were based on smaller stylish chassis designs. It also became a cost-saving measure for computer resellers whenever they designed their budget-priced models.

This method required that some of the system's RAM (primary memory) was to be used for the graphics functionality and, in some cases, made use of the system's CPU "brain" for some of the graphics work. This typically limited the performance of computer setups and those of us who valued graphics performance, such as gamers, designers or people involved in video production preferred to use the original "discrete" graphics arrangements.

Most systems, especially desktop systems, that had the integrated graphics chipsets also had an expansion slot for use with graphics cards and these setups typically had the graphics card that was in the expansion slot override the integrated graphics functionality. As well, a user who was upgrading a computer to discrete graphics also had to disconnect the monitor from the motherboard's display output and reconnect it to the discrete graphics card's display output.

As for laptop computers, there was a limitation in using discrete graphics there because it would lead to the computer running for a short time on its batteries, whereas a computer with low-end integrated graphics could run for a long time on its batteries. This also affected other applications where it was desirable to conserve power.

What does "Switchable Graphics" provide for the Intel-based computer platform.

The NVIDIA Optimus technology has brought around the concept of "switchable" graphics where a computer can have both integrated and discrete graphics. This practice is similar to a car that is equipped with an overdrive or "performance/economy" control. Here, the driver runs the car in the "economy" mode or disengages the overdrive when they do their regular driving so they can conserve fuel. On the other hand, they engage the overdrive or set the transmission to "performance" mode if they want that bit of "pep" in the driving, such as for highway runs.

These computers will have a graphics chipset that can perform in a "discrete" manner for performance and use dedicated memory or in an "integrated" manner for power economy and use "spare" system memory. This will be accomplished with NVIDIA software that comes with computers that have this technology and run Windows 7. There is a special program in the software that works like the overdrive or "performance/economy" switch in the car. The program can be set up so the user switches modes manually or can be set to change modes dependent on whether the computer is running on external power or whether certain programs like games or video-editing software are being run.

Further comments

At the moment, the technology has just had its first public airing. This will usually mean that certain reliability issues will surface as the bugs get ironed out. It is also just optimised for laptop use but could be implemented in a "dual-chipset" manner for desktop and similar applications. In the desktop environment, the integrated graphics subsystem could work alongside an discrete aftermarket graphics subsystem and share outputs. This could allow, for example, a "gaming rig" to be less noisy and power-demanding while it is not being used for games and other graphics-intense tasks because the integrated graphics chipset could come in handy for the Windows shell or office applications.

Once this concept is worked out, this would allow users to avoid power and system heat tradeoffs if they want high-end graphics in their computing environment.

Links
[1] http://windowsteamblog.com/blogs/windowsexperience/archive/2010/02/10/nvidia-s-optimus-technology-brings-new-level-of-switchable-graphics.aspx
[2] http://www.nvidia.com/object/optimus_technology.html

Why I value the UPnP AV /DLNA Home Media Network standards

02/02/2010 08:18

If anyone is wanting to question why my blog is geared towards UPnP-based network management standards, especially the UPnP AV /DLNA Home Media Network standards, I am writing this piece to state what I am about.

I am not a spokesman for UPnP or DLNA or any of the companies that are behind these standards, but do place a high value on networks, network hardware and network media software supporting any of the UPnP AV /DLNA Home Media Network Standards. One of the main reasons I value these standards is that they work across any IP-standard subnet and allow hardware manufacturers and software developers to integrate the home media network in to their creations without reinventing the wheel.

Due to the nature of UPnP, the user doesn't need to "run backwards and forwards" between devices to make sure devices are pointing to the correct network shares and that usernames and passwords are correct on both the client device and the server. This can become more of a headache for devices that don't have the full QWERTY keyboard on them and require the user to use "SMS-style" or "pick-n-choose" text entry which can increase room for user frustration and mistakes. They also make the establishment of these multimedia networks as idiot-proof as possible, which would benefit home and small-business users where there isn't a dedicated IT team available..

I also agree that a standards-based IT environment encourages hardware and software innovation as well as encouraging a "common-sense" approach to technology. It can also lead to these concepts being implemented in the most cost-effective manner, which makes the device affordable for most people, yet there is the ability to provide premium-grade equipment. This has led to hardware that is compliant with this standard becoming increasingly ubiquitous.

I know that Windows supports the standard through Windows Media Player 10 and has full "three-box" implementation in Windows Media Player 12 which is part of Windows 7. As well, I have noted that the open-source community have developed servers and similar software that can work with a Linux system. This feature is now considered "par for the course" for nearly all consumer and small-business network-attached storage units.

As well, the Microsoft XBox360 and the Sony PS3, which are considered "must-haves" as far as games consoles are concerned, have support for this technology. Samsung and Sony are also gradually implementing UPnP AV /DLNA in to their "main lounge area" televisions, with Sony nearly implementing the technology in to all television applications. Most of the big-time electronics manufacturers who have a line-up of home-theatre receivers have this feature in at least the high-end models, with some manufacturers pushing the feature in to the mid-range models. As well, nearly all Internet radios can play audio material held on DLNA-based media servers.

So the main reason I place a lot of value in the UPnP AV /DLNA Home Media Network is because of the ease that there is in establishing a heterogeneous multimedia network with products that suit what you want to do.

Smartphone Version of TwonkyMedia's DLNA /UPnP Server Now Available | eHomeUpgrade

02/02/2010 03:24

Smartphone Version of TwonkyMedia's DLNA /UPnP Server Now Available | eHomeUpgrade[1]

Now the Android platform is moving closer to the DLNA Home Media Network. Other platforms like the Symbian S60 (Nokia N-Series) and the Apple iPhone have had software solutions that expose content held on their storage location to the DLNA Home Media Network, either as native software in the case of the Symbian S60 platform or as an "app" available through the platform's usual software resources.

This implementation is very similar to TwonkyMedia Server in that it doesn't have a "media controller" which could allow the user to "push" media to a "MediaRenderer" device like one of the Sony BRAVIA TVs. It may come about if TwonkyMediia port the TwonkyMedia Manager program or a developer ports one of the iPhone DLNA controller apps to the Android platform.

It will be interesting to see who will come through with a media controller which will become more realistic with the Android smartphone and MID platform.

Links
[1] http://www.ehomeupgrade.com/2010/01/07/smartphone-version-of-twonkymedias-dlna-upnp-server-now-available/?utm_source=feedburner&utm_medium=feed&utm_campaign=Feed%3A+ehomeupgrade%2Fentries+%28eHomeUpgrade+1%29