Absolute Beginner's Guide to Home Networking

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07 06 05 04 4 3 2 1

Pg	Error	Correction
24	Figure 2.1: replaced	

24	Last paragraph replaced ~~What about Wireless-A? Wireless-A was developed to provide better performance and longer range than Wireless-B provides; it's used primarily by corporate wireless networks. However, because it uses a different radio frequency (5GHz), Wireless-A hardware can't connect to a Wireless-G or Wireless-B network. If you plan to move a notebook computer or PDA between a home network using Wireless-B or Wireless-G and a corporate network which uses Wireless-A, you can get a dual-frequency adapter card which supports both networks. Otherwise, don't worry about Wireless-A. Wireless-G provides the same speed as Wireless-A and it has the advantage of working with Wireless-B home network hardware and public hotspots.~~	**What about Wireless-A? Wireless-A was originally developed to provide better performance and longer range in a corporate environment than Wireless-B. Wireless-A uses a different radio frequency (5GHz) than a Wireless-G or Wireless-B network (2.4GHz), so it can't connect to these networks unless dual-band (A+B or A+G) hardware is used. Dual-mode A+G network adapters enable a computer to connect to home and corporate wireless networks and public hotspots with a single adapter. Linksys has developed dual-band A+G hardware for home networks that routes streaming video and other high-bandwidth traffic over the 5GHz frequency while web surfing and other traffic is routed over the 2.4GHz frequency.**

51	Table 3.1 **Entry 5:** Online streaming video	10/100 Ethernet	~~802.11g~~	Cable; DSL	Online streaming video	10/100 Ethernet	802.11g**,** **dual-band 802.11a+g**	Cable; DSL
	Entry 7: Playback of PC-based video	10/100 Ethernet	~~802.11g~~	—	Playback of PC-based video	10/100 Ethernet	802.11g**,** **dual-band 802.11a+g**	—
	Entry 9: ~~Video chat~~	10/100 Ethernet	~~802.11g~~	Cable; DSL	Video chat, **Voice over IP (VoIP)**	10/100 Ethernet	802.11g**,** **dual-band 802.11a+g**	Cable; DSL

52	Table 3.2 **Entry 3:** Online streaming video 10/100 Ethernet ~~802.11g~~ Cable; DSL **Entry 5:** Playback of PC-based video 10/100 Ethernet ~~802.11g~~ —	Online streaming video 10/100 Ethernet 802.11g**, dual-band 802.11a+g** Cable; DSL Playback of PC-based video 10/100 Ethernet 802.11g**, dual-band 802.11a+g** —
84	Caution, last two sentences: ...~~However, residential customers still get the 360 modem (requires Windows) for now. Check with StarBand for upgrade options~~.	**Residential customers can save money with the 360 modem (requires Windows) or opt for the more expensive but more flexible 481 satellite modem.**
88	Last line on page ...chains that offer this option), you might get the cable modem free!	...chains that offer this option), you might get the cable modem free **after rebate**.

139	Last two paragraphs on page ~~However, APIPA is a Windows-only technology. Other operating systems, such as Linux or MacOS, don't support APIPA. If you want to put computers using these operating systems on your home network, use a router even if you don't have a broadband Internet connection yet. Use the router's DHCP server to provide IP addresses to all devices configured to obtain an IP address automatically.~~ ~~Similarly, APIPA isn't suitable for use with non-PC devices such as print servers. It can't generate its own IP addresses, and also depends on a DHCP server to obtain an IP address.~~	**However, APIPA is not supported by all operating systems. Linux doesn't support APIPA, nor do versions of MacOS prior to version 8.5. If you want to put computers using these operating systems on your home network, use a router even if you don't have a broadband Internet connection yet. Use the router's DHCP server to provide IP addresses to all devices configured to obtain an IP address automatically.** **Similarly, some non-PC devices (print servers, media adapters, and so on) might not support APIPA either. If the device doesn't support APIPA, it can't generate its own IP addresses and must depend on a DHCP server to obtain an IP address. See the documentation for the device to determine whether APIPA is listed as a supported TCP/IP protocol.**

145	Paragraph under "Intel Centrino Family" Originally, notebook computers with Intel's Centrino technology incorporated an 802.11b-compatible Wi-Fi network adapter made by Intel, the Intel PRO/Wireless ~~2100 network adapter. However~~, recent Centrino notebooks now include one of two other adapters: • ~~Intel PRO/Wireless 2100A (supports 802.11a/b natively; interoperates with 802.11g networks)~~ • Intel PRO/Wireless 2200BG (supports 802.11g natively; interoperates with 802.11b networks)	Originally, notebook computers with Intel's Centrino technology incorporated an 802.11b-compatible Wi-Fi network adapter made by Intel, the Intel PRO/Wireless 2100 **network adapter or the dual-mode (802.11a/b) 2100A. However**, recent Centrino notebooks now include one of two other adapters: • Intel PRO/Wireless 2200BG (supports 802.11g natively; interoperates with 802.11b networks) • Intel PRO/Wireless 2915ABG (supports 802.11a/b/g natively)

154	Tip, last paragraph ~~You can buy 802.11b/a or 802.11g/a dual-mode WAPs for your home network, but unless you must connect to network clients that use 802.11a network adapters, there's no need to spend the additional money they require. Almost all 802.11a network adapters are used in large corporate networks. Even if you move a notebook computer which uses 802.11a between an 802.11a corporate network and an 802.11g home network, you might find it makes more sense to plug in an 802.11g CardBus or USB adapter when you get home than to support 802.11a with your home network's WAP or WAP/router.~~	**You can buy 802.11b/a or 802.11g/a dual-mode WAPs for your home network. Choose dual-mode g/a WAPs if you need to support 802.11a network clients. As an alternative, you could connect a CardBus or USB adapter supporting your home network type (Wireless-B or Wireless-G) to those computers.** **Dual-band A+G routers and network adapters from Linksys (www.linksys.com) enable high-bandwidth multimedia content to travel over the 5GHz 802.11a frequency at the same time the 802.11g/b 2.4GHz frequency handles normal web-surfing and network traffic.**
196	Tip To stay on top of the latest test results for Xbox Live-compatible routers, go to http://www.xbox.com/en-US/live/connect/~~routercompatibility.htm~~.	To stay on top of the latest test results for Xbox Live-compatible routers, go to http://www.xbox.com/en-US/live/connect/**routerlanding.htm**.

213	Last paragraph on page ~~Microsoft is planning a series of Media Center devices that will connect home theater and other types of entertainment systems to a Media Center PC through a home network. To learn more about Media Center PCs and Windows XP Media Center Edition, see http://www.microsoft.com/windowsxp/mediacenter/default.mspx~~.	**Media Center Extenders devices and software, which enable home network clients, TVs, and Xbox consoles to access TV, photo, video, and music content from PCs running Windows XP Media Center Edition 2005, are now available from Hewlett-Packard, Linksys, and Microsoft. To learn more about Media Center PCs and Windows XP Media Center Edition, see http://www.microsoft.com/windowsxp/mediacenter/default.mspx. To learn more about Media Center Extenders in general, see http://www.microsoft.com/windowsxp/mediacenter/evaluation/devices/default.mspx.** **To learn more about HP's Media Center Extender X5400, see www.hp.com. To learn more about the Linksys Media Center Extender, see www.linksys.com/extend. To learn more about the Microsoft Media Center Extender for Xbox, see http://www.microsoft.com/windowsxp/mediacenter/evaluation/devices/xboxextenderkit.mspx.**

240	Table 8.2	

Vendor/Website	**Product**	**Onboard Storage Capacities**	**External Drive Interfaces**	**Network Support**	**Other Features**
Buffalo Technology www.buffalotech.com	LinkStation Network Storage Center	120GB 160GB 250GB	USB 2.0 (1)	10/100 ethernet	USB print server; ~~supports~~ Windows, MacOS, Linux
D-Link www.dlink.com	Central Home Drive	20GB 40GB	—	10/100 ethernet	~~Supports~~ Windows, MacOS, Linux~~;~~ ~~minimal configuration~~
Iomega www.iomega.com	Network Hard Drive	~~120GB~~ 250GB	—	10/100 ethernet*	~~Drivers for Windows 2000/XP~~
Linksys www.linksys.com	Network Storage Link	—	USB 2.0 (2)+	10/100 ethernet	Drivers for Windows

Ximeta www.ximeta.com	NetDisk	80GB 120GB 160GB 250GB	—	10/100 ethernet*	Drivers for Windows, MacOS X, Linux^
	NetDisk Mini	40GB	—	10/100 ethernet*	Drivers for Windows, MacOS X, Linux^
	NetDisk Office	~~250GB~~		10/100 ethernet; 8-port ethernet switch*	Drivers for Windows, MacOS X, Linux^

Updated Table 8.2

Vendor/Website	**Product**	**Onboard Storage Capacities**	**External Drive Interfaces**	**Network Support**	**Other Features**

Buffalo Technology www.buffalotech.com	LinkStation Network Storage Center	120GB 160GB 250GB **300GB**	USB 2.0 (1)	10/100 ethernet	USB print server; Windows, MacOS, Linux
D-Link www.dlink.com	**Media Lounge** Central Home Drive	20GB 40GB	—	10/100 ethernet	Windows, MacOS, Linux
	Network Storage Adapter	**—**	**USB 2.0 (2)**	**10/100 ethernet**	**Windows, MacOS, Linux**
	Media Lounge Wireless Central Home Drive	**20GB 40GB**	**USB 1.1 (1)**	**10/100 ethernet; 802.11g**	**Windows, MacOS**
Iomega www.iomega.com	Network Hard Drive **High-Speed Ethernet**	**160GB** 250GB	—	10/100 ethernet*	**Windows, MacOS, Linux**
Linksys www.linksys.com	Network Storage Link	—	USB 2.0 (2)+	10/100 ethernet	Drivers for Windows

Ximeta www.ximeta.com	NetDisk	80GB 120GB 160GB 250GB	—	10/100 ethernet*	Drivers for Windows, MacOS X, Linux^
	NetDisk Mini	40GB	—	10/100 ethernet*	Drivers for Windows, MacOS X, Linux^
	NetDisk Office	**120GB**		10/100 ethernet; 8-port ethernet switch*	Drivers for Windows, MacOS X, Linux^
	NetDisk Wireless	**160GB**	**—**	**802.11g router; 3-port 10/100 ethernet switch**	**Drivers for Windows 2000/XP^**

Pg	Error	Correction
299/ 300	Text under "Windows XP Internet Connection Firewall" ~~Windows XP features an Internet Connection Firewall. To enable it, click the Advanced tab on the properties sheet for Network Connections and click the check box (Figure 10.16).~~ ~~**Figure 10.16**~~ ~~*Enabling the Windows XP Internet Connection Firewall.*~~ ~~The Windows XP Internet Firewall blocks access to your computer when enabled, but it has two major limitations compared to third-party firewalls:~~ ~~• It does not distinguish between Internet access and local network access. As a result, when you enable it on a system with shared folders or printers, the rest of the network can't use the shared resources!~~ ~~• It does not check outgoing traffic. As a result, it will permit spyware or Trojan horse programs installed on yoru system to send data to remote~~	Windows XP features an Internet Connection Firewall. To enable it **in the original version and in Service Pack 1**, click the Advanced tab on the properties sheet for Network Connections, and click the **Protect My Computer and Network...** check box. **In Service Pack 2, Windows XP is equipped with a more powerful and more configurable firewall. To verify whether firewall, antivirus, and automatic updates through Windows Update are enabled, open the Security Center icon in Control Panel. To configure the Windows XP SP2 Firewall (Figure 10.16), open the Windows Firewall icon in Control Panel.**

~~computers.~~

~~This version of the Internet Connection Firewall will be replaced by an enhanced version when you install Windows XP Service Pack 2, which will be available by the time you read this. The firewall is enabled by default in SP2. Although SP2's firewall is said to be more configurable, test results indicate it might create new problems for users. I recommend using a third-party firewall instead~~.

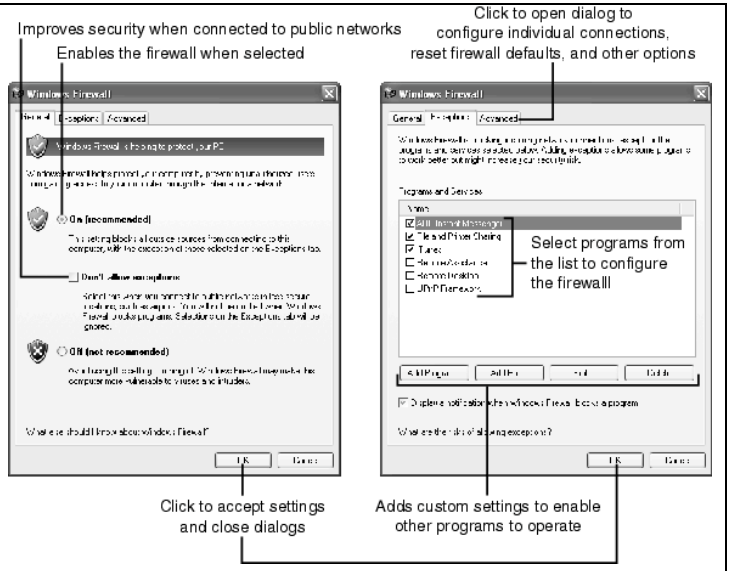

Figure 10.16

*Enabling **and configuring** the Windows XP Internet Connection Firewall.*

Compared to the original Windows XP Firewall, SP2's Firewall is much improved:

- **Configuring the firewall for network and Internet-compatible programs is much easier**
- **The firewall works with home and small-business networks**

		• **The firewall can log activity** **However, neither the original Windows XP firewall nor the SP2 version checks outgoing traffic. As a result, they permit spyware or Trojan horse programs installed on your computer to send data to remote computers. For full protection, I recommend using a third-party firewall instead.**
338	Table 11.3 Cells should be shaded as shown below	

Signal Light	**Color**	**Off**	**Blinking**	**On**	**Items to Check**
Power	Green	No power	N/A	Power on	AC adapter, AC cord plugged into unit
Cable	Green	No cable signal from CATV network if power on	Synchronizing and registering with network	Cable modem ready	Coaxial cable to cable modem; coaxial cable into splitter

PC	Green	No Ethernet or USB connection to computer if power on	N/A	Ethernet or USB connection to computer is present	Verify USB or Ethernet cable properly plugged into cable modem and PC; correct type of Ethernet cable used; check USB or Ethernet port on PC for proper operation
Data	Green	No data transfer in progress if power on	Data transfer in progress	N/A	No problem apparent unless light stays off during 2eb page opening, email sending/receiving, or file downloads/uploads
Test	Amber	Self-test OK if power on	Self-test in progress	Self-test failed	Reset cable modem

This errata sheet is intended to provide updated technical information. Spelling and grammar misprints are updated during the reprint process, but are not listed on this errata sheet.