

# Index

## 3Com

- drivers, 109
- website, 81

## 802.11a devices

- as corporate tool, 64–65
- band, 20
- compatibility, 7, 8, 9
- features, 38t
- hardware, 65
- mixing with b, g, 57–58
- standards, 66
- vs. b, g, 38–39

## 802.11b devices, 7–9

- band, 20
- expense, 55
- features, 38t
- mixing with a, g, 57–58
- PDA add-in cards, 62
- speed, 35
- standards, 61, 66
- vs. a, g, 38–39
- vs. HomeRF, 63

## 802.11g devices

- band, 20
- compatibility, 7, 8, 9
- features, 38t
- mixing with a, b, 57–58
- standards, 66
- upgrading to, 65–66
- vs. a, b, 38–39

## A

About.com, 71

### access points

- as bridge between wireless network and wired network, 48
- built-in hubs, 49

built-in routers, 22, 48, 49, 50–52

communication between, 49

configuring, 50–51

definition, 16

importance of, 4

installing, 42–43

ad-hoc configuration, 30–31

benefits, 30–31

choosing, in software set-up, 45–46

hardware set-up, 47

address spoofing, 179

antenna, ceiling, 36–37

antivirus software, 23–24. See also specific software

AOL Instant Messenger, 14. See also instant messaging, 147

attachments, 178

## B

Best Buy, 78

binding protocols, 92

Bluetooth, 20–21, 83

Boingo, 7

### broadband

definition, 10, 18

importance to home network market, 9–11

on, ability to be 24/7, 11

phone line freedom, 10

simultaneous multiple computer use, 11

speed, 10

## C

cable modems, 10. See also broadband

CD-ROM sharing, via network, 12

ceiling antenna, 36–37

- Circuit City, 78
- CNET, 75
- CNET hardware, 77
- comp.std.wireless newsgroup, 84–85
- Compaq
  - drivers, 109
  - Ipaq Music Center, 56. (see also MP3s)
  - website, 81
- compatibility, wireless, 7–9
- computer naming, for networking, 95, 97
- Computers.com, 77
- cost, wireless networking, 79–80
  
- D**
- D-Link, 63
  - drivers, 109
  - website, 81
- data transfer, confirming, 152–154
- definition list, 179
- Device Manager, 89
- Digital Subscriber Lines. See also broadband
  - importance to home market, 9–11
  - speed, 10
- DNS. See Domain Name Server
- Domain Name Server, 129
- drivers
  - troubleshooting problems with, 159–160
  - updating, on Windows XP, 108–109
- DSL. See Digital Subscriber Lines
  
- E**
- e-mail
  - encryption, 177
  - instant messaging, adding, 145, 147, 149
  - Internet service provider vs. SMTP servers, 144
  - setting up on network, 139, 142, 144
  - Web browser, 144–145
- encryption. See WEP
- Ethernet
  - definition, 18
  - Fast, 7
  - universality, 80–81
  
- F**
- Fast Ethernet, 7
- file sharing
  - on Macintoshes, 191
  - overview, 21–22
  - starting, on your computer, 97, 99–100, 183–184, 186, 188, 191
- filters, 23. See also MAC address
- firewalls. See also hackers; security, network
  - definition, 23, 172
  - hangup problems, 164–165, 167
  - hardware, 172, 173
  - software, 173, 175
  - spyware. (see spyware)
  
- G**
- gateway, 18
- Google Groups, 84
  
- H**
- hackers, 24–25, 175, 176. See also security, network
- hard drive
  - as part of wireless network, 3
  - sharing via network, 12
- hardware, wireless. See also software, wireless
  - ad-hoc set-up, 47
  - installation, 44
  - recognition, ensuring, 89, 90

- home networks
    - broadband, 9–10
    - importance of new technology, 9–10
    - mobility, 5
    - peripheral sharing, 12–12
    - phone line freedom, 11
    - range. (see range, wireless)
  - HomeNetHelp, 72–73
  - homePCnetwork.com, 74
  - HomeRF networking
    - band, 20
    - initial promise, 63
    - speed, 63–64
    - standards, 66t
    - version, first, 63–64
    - vs. 802.11b, 63
  - hub, 18–19
  - hybrid networks
    - difficulty in set-up, 55
    - expense, 55
    - scenarios in which useful, 55
    - setting up, 55
- I**
- ICQ, 147
  - ICS. See Internet Connection Sharing software
  - Infrared Data Association. See IrDA
  - infrared technology. See also IrDA
    - files, sending via, 67–69
    - printing via, 69–70
  - infrastructure configuration, 30–31
    - benefits, 31–32
    - choosing, in software set-up, 45–46
    - drawbacks, 32–33
    - scenarios in which useful, 54
    - set-up time, 55
  - instant messaging, 145
    - adding as feature, 145, 147, 149
    - clients, 147t
    - sample message, 145
  - Intel
    - drivers, 109
    - website, 82
  - Internet Connection Sharing
    - client computers, setting up on, 136
    - software, 47
    - Windows version, on host computer, 130–131, 134
  - Internet Connection Sharing software, 47
  - Internet Explorer, 144
  - Internet Service Provider
    - address. (see IP address)
    - DNS data, handling of, 129
    - SMTP mail servers, communicating with, 144
  - Internet sharing
    - connection software, 42
    - in Windows XP. (see Windows XP)
    - overview, 22
    - router for, 104
    - with infrastructure configurations, 32
  - intrusion detection, 175
  - IP address, 22
    - dynamic, 129
    - locating, 149–150
    - sharing, 50–52
    - static, 129
  - IrDA, 20. See also infrared technology
- K**
- klex worm, 180
- L**
- LANs. See also PANs; WANs
    - definition, 16
    - vs. WANs, 3

laptops  
batteries, usage by wireless networking cards, 47

Linksys  
drivers, 109  
website, 82  
wireless router, 127f

## M

MAC address  
as network security measure, 23  
location, 19  
Macintoshes, 191  
mailing lists on networking, 85–86  
McAfee, 175, 178, 180  
media access control address. *See* MAC address  
mobility  
as benefit, 5–6  
public, 7  
Mode, 45  
MP3s, 13  
as part of wireless network, 3  
connecting, 56–57

## N

naming computer, for networking, 95, 97  
NAT, 50–52  
Netgear, 63  
drivers, 109  
MR314, 156  
Platinum line, 127f  
website, 82  
NetNearU, 7  
network adapter, definition, 16  
Network Address Translation. *See* NAT  
Network Neighborhood, 95, 97, 102–103  
network security. *See* security, network

networking, wireless. *See* wireless networking  
newsgroups on networking, 83–85

## O

OfficeMax, 78

## P

Palm Pilot, 62. *See also* PDAs  
PANs, 21  
pass key, 175  
PC cards  
slots, 41  
wireless adapters, 41, 43  
PC Magazine, 76  
PC World, 76  
PCI cards, 43  
PCMCIA. *See* Personal Computer Memory Card International Association  
PDAs  
Bluetooth, use of, 20–21  
wireless capabilities, 61–63  
peer-to-peer network  
advantages, 53  
disadvantages, 53–54  
expense, 53  
Peripheral Component Interconnect.  
*See* PCI cards  
peripherals  
money-saving, from home networking, 13  
sharing, 12–13  
personal area network. *See* PANs  
Personal Computer Memory Card International Association, 41  
Personal Digital Assistants.  
*See* PDAs  
PGP, 177  
PocketPC, 62. *See also* PDAs

Point-to-Point Protocol over Ethernet.  
See PPPoE

PPPoE

- menu screen, 156
- overview, 155–156
- router support for, 156
- setting up, 155–156

Practically Networked, 74

Pretty Good Privacy, 177

PriceWatch, 77–78

printer sharing

- adding a wireless printer server, 192–193
- starting, on your computer, 97, 99–100, 183–184, 186, 188, 191
- troubleshooting, 168–169

printers

- sharing via network, 12
- troubleshooting, 168–169

protocol, definition, 18

Proxim, 8

- access point, 9
- drivers, 109
- website, 82

publicly accessible mailing lists, 85

## Q

Qcheck, 152, 153, 154

## R

range, wireless

- definition, 4
- equipment placement, importance of to, 53
- overview, 28, 29–30

rebooting, 169

roaming ability, 32

routers

- adding to existing network, 128–129
- built-in, 22, 48, 49, 50–52

choosing, 126–128

cost, 126

definition, 17

filters, 176–177

wireless vs. wired, 126–128

## S

scanners

- as part of wireless network, 3
- sharing via network, 13

security, network

- e-mail encryption. (see under e-mail)
- firewalls. (see firewalls)
- intrusion detection, 175
- NATs. (see NAT)
- overview, 23–25
- risk, 24–25
- router filters, 176–177
- Trojan horse, 175
- viruses. (see viruses)
- vs. hackers, 24–25
- WEP. (see WEP)

servers, adding, 183

Service Set Identifier. See SSID

Shopper.com, 77

signal

- concrete, effect of, 34
- design considerations, 33–35
- glass, effect of, 34
- maximizing, 36–37
- solid objects, effect of, 34

SMC, 63

drivers, 109

software, wireless, 45–46

sharing, connection, 47

speed, wireless

802.11b devices, 7–9

Fast Ethernet. (see Fast Ethernet)

manufacturers' compatibility, 7–9

overview, 7, 15

theoretical vs. real-world, 15

spoofing, address, 179  
 Sputnik, 7  
 spyware, 173, 175  
 SSID, 23, 45  
   same, choosing, on all equipment, 46, 164  
 standards, Wi-Fi. (see Wi-Fi)  
 Staples, 78  
 Symantec, 175, 178, 180

**T**

TCP/IP  
   installation, 91–93, 95  
 TechWeb, 77  
 throughput, confirming, 152–154  
 topologies. See ad-hoc configuration;  
   infrastructure configuration  
 Transmission Control Protocol/Internet  
   Protocol. See TCP/IP  
 trends, wireless, 86–87  
 Trojan horse, 175  
 troubleshooting  
   configuration utility errors,  
     162–164  
   drivers, 159–160  
   firewall hangup, 164–165, 167  
   miscellaneous tips, 169  
   network adapters, 52–53, 160  
   printer problems, 168–169  
   Windows versions, mixed, 160–162

**U**

UMAX, 13  
 Universal Service Bus. See USB net-  
   work adapters  
 USB network adapters, 43

**V**

viruses, 178–180

**W**

WANs. See also LANs; PANs  
   vs. LANs, 3  
 Web browser, 144–145  
 WECA. See Wireless Ethernet  
   Compatibility Alliance  
 WEP, 45, 175–175  
   enabling/disabling, 46  
   vs. PGP, 177  
 Wi-Fi  
   inexpensiveness, 4  
   version 5, 8  
   WECA logo, 82–83  
 Wi-Fi5, 8  
 Windows 2000, mixed network, 160–162  
 Windows 98, mixed network, 160–162  
 Windows Direct Cable Connection,  
   67–69  
 Windows Me, Home Networking  
   Wizard, 130, 131  
 Windows Messenger, 145, 147t  
 Windows XP  
   driver updating, 108–109, 159, 160  
   file sharing service, 112–114  
   firewall, turning off, 165, 167  
   hardware recognition, 106, 108  
   IM client, 145  
   Internet access sharing, 114–115, 117  
   Network Setup Wizard, 117, 119–120,  
     123  
   printer sharing service, 112–114  
   printer/file sharing, 183–184, 186, 188,  
     191  
   settings, changing manually, 110–112  
   wired equivalency privacy. See WEP  
   wireless encryption, 23  
 Wireless Ethernet Compatibility, 8  
 Wireless Ethernet Compatibility  
   Alliance, 82–83  
 Wireless LAN Mailing List, 86

- wireless networking
    - compatibility issues. (see compatibility, wireless)
    - connection options, 41, 43. (see also specific connection options)
    - convenience, 6
    - cost. (see cost, wireless networking)
    - definition, 2
    - equipment placement, 53
    - equipment, buying online, 77–80
    - flexibility, 2
    - growth, 2
    - hardware. (see hardware, wireless)
    - Internet help, 81
    - maximizing, 36–37
    - mobility. (see mobility)
    - operability, ensuring, 80–81
    - overview of “how it works,” 19–21
    - portability, 2
    - range. (see range, wireless)
    - researching, 72–74
    - reviews on, 75–77
    - software. (see software, wireless)
    - speed. (see speed, wireless)
    - workgroup naming, for networking, 97
- Y**
- Yahoo! Messenger, 147
- Z**
- Zone Labs, 165
  - ZoneAlarm, 165