

# Index

**Note to the reader:** Throughout this index **boldfaced** page numbers indicate primary discussions of a topic. *Italicized* page numbers indicate illustrations.

## Symbols and Numbers

\$ (dollar sign)  
     for hidden shares, 370  
     for hidden volumes, 293  
 %Disk Time counter, 578, 579  
 %Free Space counter, 578  
 %Processor Time counter,  
     576, 578  
 %Usage counter, for paging file,  
     573, 574  
 %Usage Peak counter, for  
     paging file, 574  
 64-bit version of Windows XP, 3  
 802.11 wireless LAN, 484, 680

## A

Accelerated Graphics Port  
 (AGP), 137, 681  
 access control entry (ACE), 376,  
     378, 378, 680  
 Access Control Lists (ACLs), 51  
 access permissions, for web site  
     users, 535  
 access token, 198, 199, 680  
     creating, 377  
 accessibility, 183–187  
 Accessibility Options, 680  
     dialog box, 184  
 Accessibility Wizard, 185, 680  
 account lockout policy,  
     246–248, 680  
 account policies, 238,  
     244–248, 680  
     in security templates, 266  
 Acoustic Echo Cancellation  
 (AEC), 121  
 ACPI (Advanced Configuration  
 and Power Interface), 139,  
     140, 681  
     laptop support for, 143

action log, for Windows XP  
     install, 26  
 Active Directory, 197, 680  
     and Group Policy Objects  
     (GPOs), 239–242  
     for RIS server, 52  
 Active Directory user  
     account, 680  
 Active Directory Users and  
     Computers window, 58  
 .acw file extension, 185  
 adapter, 680  
 Add Counters dialog box,  
     559–560, 560  
 Add Printer Wizard, 444–447  
     Install Printer Software page,  
     445, 445  
     Local or Network Printer  
     page, 444, 444  
     for Internet printer, 529  
     Location and Comment  
     page, 447, 447  
     Name Your Printer page,  
     446, 446  
     Printer Sharing page, 446, 446  
     Select a Printer Port page, 445  
     Specify a Printer page, 529  
 Add Recovery Agent Wizard  
     dialog box, 319  
 Add/Remove Programs utility,  
     published applications in, 81  
 Add/Remove Snap-In dialog  
     box, 269  
 ADMIN\$ share, 370  
 Administrator account, 13, 197,  
     208, 681  
 Administrator group, 220–221  
     group creation by  
     members, 225  
 administrator password,  
     configuring with Setup  
     Manager, 66  
 Administrator Password dialog  
     box, 71  
 Administrators group, 681  
     Log On as Batch Job right  
     for, 58

Advanced Attributes dialog box,  
     306, 306, 316  
 Advanced Configuration and  
 Power Interface (ACPI),  
     139, 140, 681  
     laptop support for, 143  
 Advanced Security Settings  
 dialog box, 465–466, 466  
 Effective Permissions tab,  
     364, 364–365  
 Owner tab, 360, 360  
 Permissions tab, 359, 359  
 Advanced Settings dialog box, 71  
 Adapters and Bindings tab,  
     398, 398  
     for COM port, 493  
     for connections, 505  
     for Internet Connection  
     Sharing, 514, 514  
 Advanced TCP/IP Settings dialog  
 box, 414–419, 415  
 DNS tab, 416, 417  
 IP Settings tab, 416  
 Options tab, 419, 419  
 WINS tab, 417–418, 418  
 AGP. *See* Accelerated Graphics  
 Port (AGP)  
 alarms, for mobile computer  
     power, 141  
 alert file Properties dialog  
     box, 570  
     Action tab, 571  
     General tab, 570  
     Schedule tab, 571  
 alerts, 554, 570, 681  
     sending at startup, 640  
 Alternate IP Configuration, 406,  
     420–421, 681  
 anonymous access to website, 538  
 Anonymous Logon group,  
     224, 681  
 answer files, 38, 47, 681  
     manually editing, 72–78  
     application installation, 77  
     display settings, 76–77  
     driver signing, 78

- Dynamic Update
    - Packages, 78
  - Hardware Abstraction Layer (HAL), 75
  - language and regional settings, 76
  - mass storage devices, 73–74
  - NTFS conversion, 77
  - passwords, 75
  - Plug and Play devices, 74
  - Windows Product Activation, 77
  - Setup Manager for, 66–78
    - file creation process, 67–72
    - options configurable, 66–67
  - Apcompat.exe, 97
  - APIPA (Automatic Private IP Addressing), 406, 413–414, 682
  - Application log, 609, 681
  - applications
    - compatibility for upgrade, 97
    - troubleshooting, 107
    - Dr. Watson to diagnose errors, 642
    - installation, answer file settings, 77
    - for Internet, 527
    - preparation for installation
      - copying MSI application to share, 79
      - Group Policy Object (GPO), 79
      - Group Policy Object (GPO) filtering, 80
      - installing published application, 83–84
      - shortcuts for, 178
      - Task Manager for currently running, 586
  - ARC naming conventions, 624–625
  - archive, for faxes, 154
  - ASR (Automated System Recovery), 682
  - wizard, 651–652
  - assigned applications, 79, 681
  - Asynchronous Transfer Mode (ATM), 681
  - ATTRIB command, 657
  - audio, support for digital, 121
  - audit policy, 250, 681
    - options, 250–251
  - auditing printer use, 466
  - Authenticated Users group, 223, 682
  - authentication, 682
    - for network access, 396
    - for remote access connections, 487–489
  - Authentication Methods dialog box, 538, 538
  - Author mode for MMC, 123
  - authorization of RIS server through DHCP Manager, 55
  - auto-hiding Taskbar, 173
  - AutoComplete, 526
  - AUTOEXEC.BAT file, in Upgrade Report, 98
  - automated installation, 682
    - exam essentials, 85
    - extracting deployment tools, 46
    - manually editing answer files, 72–78
      - application installation, 77
      - display settings, 76–77
      - driver signing, 78
      - Dynamic Update Packages, 78
      - Hardware Abstraction Layer (HAL), 75
      - language and regional settings, 76
      - mass storage devices, 73–74
      - NTFS conversion, 77
      - passwords, 75
      - Plug and Play devices, 74
      - Windows Product Activation, 77
    - options, 38–45
    - remote installation, 49–61, 707
      - client options, 50–51
      - client preparation, 59–60
      - installation process, 60–61
      - overview, 40–42, 41
      - server preparation, 51–59
    - Setup Manager for answer files, 66–78
      - file creation process, 67–72
      - options configurable, 66–67
    - summary, 44–45
  - System Preparation Tool (Sysprep), 61–65, 712
    - command-line switches, 62
    - copying and installing disk image, 64
    - dialog box, 63, 63
    - disk image creation, 63
    - overview, 42–45
    - preparation for duplication, 61
    - tools assessment, 45–46
    - unattended installation, 47–49
      - command-line switches, 48–49
      - overview, 39, 39–40
    - Windows Installer packages, 78–84
      - adding package to GPO, 81–82
      - copying MSI application to share, 79
      - Group Policy Object (GPO), 79
      - Group Policy Object (GPO) filtering, 80
      - installing published application, 83–84
  - Automated System Recovery (ASR), 682
  - Automated System Recovery (ASR) Wizard, 651–652
  - Automatic Private IP Addressing (APIPA), 406, 413–414, 682
  - Automatic Recovery utility, 629
  - Automatic Updates, 17
  - Available MBytes counter, for memory, 573
- 
- ## B
- Backup Operators group, 221, 682
  - Backup or Restore Wizard, 291
  - Backup utility, 608, 643–652, 682
    - configuring options
      - Backup Log tab, 649, 649
      - Backup Type tab, 647–648, 648
      - Exclude Files tab, 649, 650
      - General tab, 645–646, 647
      - Restore tab, 646, 647

## 720 Backup Wizard – clients

- Backup Wizard, 644–645, 683
  - backups, 682
    - before partitioning, 15
    - types, 648
    - before upgrading, 100
  - backward compatibility,
    - multi-boot system for, 27
  - baseline, 583, 683
    - creating, 552–553
    - reports, 581–582
  - Basic Authentication, 538
  - Basic Input/Output System (BIOS), 683
  - basic storage, 285, 683
    - management, 302
    - upgrading to dynamic, 299–300
  - BATCH command, 657
  - Batch group, 224, 683
  - batch job, user rights to log on as, 58
  - battery for mobile computer,
    - alarms for low, 141
  - bidirectional support by port, 455
  - bindings, 398, 683
  - BINL (Boot Information Negotiation Layer) protocol, 53, 683
    - and RIS, 50
  - BIOS (Basic Input/Output System)
    - and ACPI support, 144–145
    - compatibility for
      - Windows XP, 6
    - and Windows XP upgrade, 100
  - Block Inheritance option, for GPOs, 240–241
  - Bluetooth, 148
  - boot disk, for RIS, 60
  - Boot Information Negotiation Layer (BINL) protocol, 53, 683
    - and RIS, 50
  - boot loader configuration
    - options, 624
  - Boot Normally option, 683
  - boot partition, 8, 683
  - boot process, 683
    - for Itanium processor, 629–631
    - initial startup and boot manager phase, 630
    - power-on self-test phase, 630
    - logging, 635–636
  - x86-based, 618–633
    - boot sequence, 620–621
    - kernel initialization sequence, 622
    - kernel load sequence, 621–622
    - logon sequence, 622
    - Plug and Play devices
      - detection, 623
    - pre-boot sequence, 618–619
  - boot ROM, 59
  - boot sector, 8
  - BOOTCFG command, 657
  - BOOTCFG.EXE, to edit
    - Boot.ini file, 627
  - Boot.ini file, 620, 683
    - configuration, 623–629
      - ARC naming conventions, 624–625
      - boot loader configuration options, 624
      - editing file, 627–628
      - operating system parameters, 625–626
      - replacing damaged file, 629
    - for troubleshooting
      - Windows XP install, 25
  - BOOTSECT.DOS file, 620, 683
  - bootstrap image, 683
    - and RIS, 50
  - bottleneck, 683
    - identifying, 553
    - with System Monitor, 575
    - from insufficient memory, 572
  - buffer, settings for trace log, 569
  - built-in accounts, for users, 197
  - built-in groups, 219
  - Bytes Total/Sec counter, for network interface, 580, 581
- 
- C**
- cable modem, 486, 684
  - cables
    - direct connection, 486–487
    - for network connection, 399
    - for USB, 150
  - Cachemov utility, 351
  - caching, 684
    - logon credentials, 218
    - for offline files and folders, 348
    - web pages, expiration of content, 539
  - Caching Settings dialog box, 349
  - CACLS utility, 365
  - cameras, digital, 150
  - canceling, printing, 469
  - case sensitivity
    - of passwords, 202, 218
    - of usernames, 202
  - CD-based image, 684
    - RIS configuration and start with, 53–54
  - CD-ROM devices, managing, 133
  - central processing unit (CPU), 684. *See also* processor
  - .cer file extension, 318
  - certificates, 526
    - authentication, 489, 684
  - Challenge Handshake Authentication Protocol (CHAP), 488, 684
  - Change share permission, 368
  - Chart view in System Monitor, 557, 558
  - CHDIR command, 657
  - Check Disk (Chkdsk) utility, 291, 325, 684
    - in Recovery Console, 657
  - Chkntfs utility, 325
  - CIPHER, 684
  - cipher text, 314, 684
  - Cipher utility, 318, 319–320
  - CIW (Client Installation Wizard), 49–61, 716
  - Classic theme for Desktop, 170
  - clean install of Windows XP, 684
    - or upgrade, 6–7
  - ClickLock, 147
  - Client Installation Wizard (CIW), 49–61, 716
  - Client Side Cache (CSC), for offline files and folders, 351
  - clients, 684
    - for automated deployment
      - RIS options, 50–51
      - RIS preparation, 59–60
      - server configuration to respond to requests, 58
      - summary requirements, 44
    - installing Remote Desktop software, 662
    - for VPN, configuring, 511

- clock on Taskbar, 174
- Clone Control set, 622
- closing applications, with Task Manager, 586
- closing portable computer lid, 143
- CLS command, 657
- Cmdlines.txt file, 77
  - configuring with Setup Manager, 67
- color profile, for scanner or camera, 151
- color quality, 134, 137
- color settings, 69
- COM port, 685
- common system dialog devices, 120
- Compact command-line utility, 307–308
- Compact Disk File System (CDFS), 282
- Compatible security template, 265
- Compatws.inf template, 101, 265, 267
- compressed (zipped) folders, 308
- compression, 685
- computer accounts, granting right to create, 56–57
- Computer Management tool, 125, 126, 685
- computer name, 685
  - configuring with Setup Manager, 66
  - for RIS clients, 51
- Computer Name and Administrator Password dialog box, 13
- Computer Name dialog box, 70, 70
- computer Properties dialog box, Remote Install tab, 58, 59
- CONFIG.SYS file, in Upgrade Report, 98
- Configure Your Server dialog box (Windows 2000), 53
- Confirm Attribute Changes dialog box, 307, 307
- Connect Connection dialog box, 500
- Connection Properties dialog box, 500–507
  - Advanced tab, 507, 507
  - General tab, 500–501, 501
  - Networking tab, 506, 506
  - Options tab, 502–503, 503
  - Security tab, 503–505, 504
- connections. *See also* network connections
  - exam essentials, 542
  - to Internet, 508, 509–510
    - configuring, 526–527
  - Internet Connection Sharing (ICS), 512, 512–517
    - configuring on host computer, 513–514
    - configuring on network computers, 515–516
    - troubleshooting, 516–517
  - to printers, 470–471
  - for Remote Assistance, 665
  - virtual private network (VPN), 508–511
- Content Advisor dialog box, 525, 525
- contingency plan for upgrade, 101
- Control Panel, 685
  - Add/Remove Programs, 83
  - Add/Remove Windows Components, 530
  - Uninstall Windows XP, 99
  - Appearance and Themes
    - Display, 134, 176
    - Folder Options, 340
  - Date, Time, Language and Regional Options, ➤
    - Regional Options, 181
  - Network and Internet Connections, 391, 412, 415, 420, 498
    - Network Connections, 496, 517
    - Set Up or Change Your Internet Connection, 509
  - Performance and Maintenance
    - Free Up Space on Your Hard Disk, 323
    - Power Options, 140
    - System, 159, 584, 628, 638, 661
  - Performance and Maintenance ➤
    - Administrative Tools
    - Computer Management, 140, 288, 321
    - Event Viewer, 609, 616
  - Printers and Other Hardware
    - Fax, 153
    - Keyboard, 146
    - Mouse, 147
    - Scanners and Cameras, 150
  - User Accounts, 218
- Accessibility Options, 183–184
  - to edit Boot.ini file, 628
  - in Start menu, 171
  - Windows Security Center, 270
- Convert utility, 280, 284, 685
- cookies, 523
  - privacy settings and, 524
- copy backup, 648, 685
- COPY command, 657
- copying
  - files and folders, 339
  - NTFS permissions, 365
  - Recovery Console restrictions, 656
  - user profiles, 214
- counter log file Properties dialog box, 565
  - General tab, 566, 582
  - Log Files tab, 566
  - Schedule Properties tab, 567
- counters in System Monitor, 685
  - adding, 559–561
    - alerts based on, 570
    - information about, 559
    - logs, 565
    - for tracking disk access, 578
    - for tracking memory management, 573
    - for tracking network traffic, 580–581
    - for tracking processor, 576–577
- CPU. *See* processor
- Create Shared Folder Wizard dialog box, 371, 372
- Create Shortcut Wizard, 338
- Creator group, 223, 685
- Creator Owner group, 223, 685
- critical battery alarm, 141
- CSC (Client Side Cache), for offline files and folders, 351
- csrss.exe, 588
- Ctrl+Alt+Del logon sequence, 198
- currency format, 179

## 722 Current Disk Queue Length counter – directory structure

Current Disk Queue Length counter, 578, 579  
 custom installations, unattended, 39  
 Customize Start Menu dialog box, 174, 175

**D**

- DACL (discretionary access control list), 376, 377, 377–378, 687  
 daily backup, 648, 685  
 data compression, 305–307, 685  
 data encryption. *See* encryption  
 data recovery agent (DRA), 314, 317–319  
 database  
   for offline files and folders, 351  
   security, 264–265  
 Date and Time Settings dialog box, 13  
 date format, 179  
 DCC. *See* Direct Cable Connection (DCC)  
 debugging files, Winnt32 switch to create, 48  
 debugging information, writing to file, 640  
 Debugging mode, 637, 686  
 default document, for web site, 536–537  
 default gateway, 410, 410, 686  
 default local groups, 219–222  
 default operating system, 640  
 default print permissions, 463  
 default printer, 467  
 default quotas, 310–311  
 Default Security template, 265  
 default settings, for modem, 493  
 default username, configuring, 66  
 Default Website Properties dialog box  
   Custom Errors tab, 540, 540  
   Directory Security tab, 537, 537–538  
   Documents tab, 536–537, 537  
   Home Directory tab, 535, 535–536  
   HTTP Headers tab, 539, 539  
   ISAPI Filters tab, 534, 534  
   Server Extensions tab, 540–541, 541  
   Web Site tab, 532, 533–534  
 Defrag utility, 321  
 Delegation of Control Wizard, 56  
 DELETE command, 657  
 deleted accounts, vs. disabled, 205  
 deleting  
   files and folders, 339  
   groups, 228–229  
   partitions and volumes, 301–302  
   printers, 468  
   user accounts, 206–207, 207  
 Deny print permission, 463  
 Deploy Software dialog box, 82, 82  
 Deploy.cab file, 62  
 Desktop, 170, 170–178, 686.  
   *See also* Start button and Start menu  
   display properties, 176–178  
   exam essentials, 188  
   shortcuts, 176  
   Taskbar, configuring properties, 172–174  
 Destination Host Unreachable message, 424  
 device drivers, 686, 688  
   compatibility for upgrade, 96–97  
   managing, 129–132  
   updating, 129–130  
   for modem, 495  
   rollback, 608, 638, 688  
   signed, 688  
   answer file settings, 78  
   managing, 130–132  
   troubleshooting, for network adapter, 398  
   and Windows XP install problems, 24  
   Windows XP requirements, 6  
 Device Manager, 125–127, 126, 127, 686  
   for disk device management, 132–134  
   Driver tab, 639  
   for rollback, 638  
   for modem, 490  
   for removable media management, 134  
   for viewing resource allocation, 128  
   for Windows Image Acquisition, 120  
 device objects, 120  
 device Properties dialog box, 133  
 DHCP (Dynamic Host Configuration Protocol), 406, 410–411, 411, 412–413, 688  
   for deploying configurations, 412–413  
   for RIS clients, 41  
   for RIS server, 52  
 DHCP Manager, RIS server authorization through, 55  
 DHCP server, 686  
 dial-up modem, 686. *See also* modem  
 dial-up networking, 686  
   creating Internet connection, 509–510  
   overview, 482–483  
 Dial-Up Properties dialog box, Advanced tab, 516, 518  
 dialing rules, 501  
 Dialup group, 224, 686  
 difference file, 77  
 differential backup, 648, 686  
 Digest Authentication for Windows Domain Servers, 538  
 digital cameras, 150  
 digital signatures, for device drivers, 74  
 digital signatures for device drivers, 688  
   answer file settings, 78  
   managing, 130–132  
 Digital Subscriber Line (DSL), 486, 686  
 Digital Video Disc (DVD), 686  
   device management, 133  
 DIR command, 657  
 Direct Cable Connection (DCC), 486–487, 687  
 Direct Memory Access (DMA), 128  
 direct parallel cable, 487, 687  
 Directory Browsing web service  
   access permission, 536  
   directory replication, 687  
   directory structure, 336, 337

- DISABLE command, 657
- disabling user accounts, 203, 205–206
- disaster recovery, 606, 607–608
- discretionary access control list (DACL), 376, 377, 377–378, 687
- Disk Cleanup utility, 291, 323–324, 324, 687
- disk defragmentation, 687
- Disk Defragmenter utility, 291, 321, 321–323, 322, 687
- disk devices, managing, 132–134
- disk duplicator, 687
- disk-duplicator hardware, for disk imaging, 43
- disk image, 687
- disk imaging. *See* System Preparation Tool (Sysprep)
- Disk Management utility, 288–305, 289, 687
  - viewing disk properties, 289–290
  - viewing volume and local disk properties, 290–295
- disk partitioning, 687
- disk Properties dialog box, 294
  - General tab, 290, 294
- disk quotas, 283, 308–320, 687
  - configuring, 309–313
    - defaults, 310–311
    - individual quota, 311–313
    - monitoring, 313
  - disk signatures, 305
- disk storage, 285–288. *See also* file systems
  - adding new disk, 295
  - basic storage, 285
    - management, 302
  - changing drive letter and path, 300–301
  - dynamic storage, 285–288
    - management, 302–303
    - simple volume, 285, 286, 286
    - spanned volumes, 286, 287
    - striped volumes, 287, 287
  - monitoring and optimizing, 578–579
  - partitions
    - creating, 298–299
    - deleting, 301–302
  - running out of space, real world scenario, 304
  - troubleshooting, 303–305, 324–325
    - failure to initialize, 305
    - with status codes, 304–305
  - upgrading basic disk to dynamic, 299–300
- volumes
  - creating, 296–298
  - deleting, 301–302
- DISKPART command, 657
- display devices. *See also* Desktop answer file settings, 76–77
  - configuring with Setup Manager, 66
  - managing, 134–138
  - minimum and recommended requirement, 3
- Display Properties dialog box, 176–178
  - Settings tab, 134, 135
  - Themes tab, 177, 177
- Display Settings dialog box, 14, 69, 70
- distribution folder, Setup Manager to create, 67
- distribution server, 11, 39, 687
- DLLs (Dynamic Link Libraries), and Windows XP upgrade, 97
- DNS. *See* Domain Name Service (DNS)
- documents, including recent in Start menu, 175
- dollar sign (\$)
  - for hidden shares, 370
  - for hidden volumes, 293
- domain, 240, 687
  - membership, 10
  - name, 688
- domain controller, failure to connect, 25
- Domain Name Service (DNS), 421, 688
  - for RIS server, 52
  - servers, 411–412, 688
- domain policies, in GPO inheritance, 240
- domain Properties dialog box, Group Policy tab, 80, 80
- domain user accounts, 197–198, 688
  - troubleshooting authentication, 217–218
- DOS (Disk Operating System), 282
- dots per inch (dpi), 137
- DoubleSpace, 100
- Dr. Watson, 608, 641–642, 643, 688
- DRA (data recovery agent), 314
- drive letter, 688
  - changing, 300–301
- Driver File Details dialog box, for network adapter, 394
- driver rollback, 608, 638, 688
- driver signing, 688
  - answer file settings, 78
  - managing, 130–132
- Driver Signing Options dialog box, 130–132, 131
- drivers, 688. *See also* device drivers
- DriveSpace, 100
- DRWTSN32 command, 688
- DSL (digital subscriber line), 486, 686
- dual-booting (multi-boot), 27, 688, 700
- Dualview multi-monitor support, 121
- DVD (Digital Video Disc), 686
  - managing devices, 133
- dynamic disk, 688
- Dynamic Host Configuration Protocol (DHCP), 406, 410–411, 411, 412–413, 688
  - for RIS clients, 41
  - for RIS server, 52
- Dynamic Link Libraries (DLLs), and Windows XP upgrade, 97
- dynamic storage, 285–288, 688
  - management, 302–303
  - simple volume, 285, 286, 286
  - spanned volumes, 286, 287
  - striped volumes, 287, 287
  - upgrading basic to, 299–300
- Dynamic Update Packages, answer file settings, 78

## 724 E-mail icon in Start menu – filtering

**E**

- E-mail icon in Start menu, 171
- EAP (Extensible Authentication Protocol), 488, 689
- East Asian languages, support for, 182
- Edit Location dialog box, 501, 502
- effective rights, 361–364, 689
- Enable Boot Logging option, 689
- ENABLE command, 657
- Enable VGA Mode option, 689
- Encrypting File System (EFS), 314, 689
  - managing file sharing, 315–317
  - new features in Windows XP and Windows Server 2003, 314
- encryption, 314–320, 686, 689
  - and compression, 306
  - data recovery agent (DRA), 317–319
  - on stand-alone Windows XP computer, 318–319
  - in NTFS, 283
  - offline files and folders, 351
  - Properties dialog box, 316
  - for remote access connections, 489
- Error event, 610, 689
- error log, for Windows XP install, 26
- error messages
  - customizing for website browsing, 540
  - from PING request, 424
  - "STOP: 0x000000079HAL\_MISMATCH," 145
- errors during pre-boot sequence, 619
- Ethernet, 484, 689
  - card configuration, 399
- event log, settings in security templates, 266
- Event Properties dialog box, 611, 611–612
- Event Viewer, 608, 609–617, 610, 689
  - event details, 611–612
  - log events, 610–611
  - log file management, 612–613
  - log file properties, 613–617
- events, tracking with audit policies, 248–252
- Everyone group, 223, 689
- .evt file extension, 612
- exabyte, 689
- exclamation point icon, in Device Manager, 127, 155
- exercises, computer requirements for, 14
- EXIT command, 657
- EXPAND command, 657
- expiration of web page content, 539
- explicitly assigned permission, 359
- Explorer. *See* Windows Explorer explorer.exe, 588
- Extend Volume Wizard, 303, 303
- extended partition, 285, 689
- extended volumes, creating, 302–303
- Extensible Authentication Protocol (EAP), 488, 689
- external tape drives, 643

**F**

- Failed disk status, 305
- Failure Audit event, 611, 690
- FAST (File and Settings Transfer) Wizard, 102
- FAT16 file system, 9, 282, 690
  - capabilities, 280
  - converting to NTFS, 77, 283–284
- FAT32 file system, 9, 280, 282, 690
  - capabilities, 280
  - converting to NTFS, 77, 283–284
- fault tolerance, 690
  - in disk storage, 288
- fax device, 153–154
- fax modem, 153, 690
- Fax Properties dialog box, 153–154
  - General tab, 153
- Fax Service, starting, 154
- FAX\$ share, 370
- FDISK utility, 8
  - and no active partition, 619
- Fiber Distributed Data Interface (FDDI), 484, 690
- File Allocation Table (FAT), 690. *See also* FAT16 file system; FAT32 file system
- File and Settings Transfer (FAST) Wizard, 102, 690
  - icon in Start menu, 171
- file attributes, 690
- File menu (MMC) > Add/Remove Snap-In, 123, 269
- File menu (Windows Explorer), 337
  - > New > Text Document, 337
- file Properties dialog box, for encrypted file, 316
- file systems, 8–9, 280–284, 690
  - conversion, 283–284
  - exam essentials, 326–327
  - filters, and Windows XP upgrade, 98
  - selecting, 281–283
  - settings in security templates, 266
- File Transfer Protocol (FTP), 522, 691
- files and folders. *See also* backups; encryption; Folder Options dialog box; offline files and folders encryption, 314–315 Properties dialog box, 316 exam essentials, 380 excluding from backup, 649 local access management, 354–365. *See also* NTFS permissions design goals, 354 migrating after upgrade, 102–103 organizing, 336–339 copying and moving, 339 creating, 337–339 renaming and deleting, 339 planning directory structure, 336, 337 searches, 352–353
- filtering
  - event log, 614–616, 615
  - Group Policy Object (GPO), 80

FilterKeys, 184  
 firewalls, 517, 691  
   Internet Connection  
     Firewall (ICF), 482,  
     517–518, 695  
     Windows Firewall, 396,  
     518–520, 716  
       dialog box, 519–520  
 FireWire (IEEE 1394), 487, 694  
 FIXBOOT command, 657  
 FIXMBR command, 657, 659  
 flickering, 137  
 floppy disks, NTFS and, 283  
 Folder Options dialog box,  
   340–352  
   File Types tab, 344, 344  
   General tab, 340, 341  
   Offline Files tab, 344–352, 345  
   View tab, 341, 341–343  
 folder Properties dialog box  
   for applying permissions, 356  
   Security tab, 356, 357  
   Sharing tab, 365–366, 366  
 folders. *See* files and folders  
 Foreign disk status, 305  
 FORMAT command, 657  
 fragmentation, 321, 691  
 frame, 691  
 Frame Relay, 486, 691  
 frame type, 691  
   for NWLink, 428  
 FrontPage, 540  
 FTP (File Transfer Protocol),  
   522, 691  
 Full Control NTFS per  
   mission, 355  
 Full Control share  
   permission, 368

## G

GDI (Graphics Device Interface),  
   442, 691  
 gigabyte, 691  
 Global Effects (GFX), 121  
 Global Unique Identifier  
   (GUID), and RIS, 50  
 GPO. *See* Group Policy  
   Objects (GPOs)  
 GPO Properties dialog box,  
   Security tab, 80, 81  
 GPRresult.exe utility, 241

Graphical User Interface  
   (GUI), 691  
 Graphics Device Interface (GDI),  
   442, 691  
 group accounts, 196  
 Group Policy Objects (GPOs),  
   219, 238, 692  
   and Active Directory,  
     239–242  
   adding package to, 81–82  
   applying, 242  
   creating, 79  
   exam essentials, 271  
   filtering, 80  
   inheritance, 240–241  
 Group Policy Result tool, 241,  
   241–242, 692  
 Group Policy window, 81, 82  
 group Properties dialog box,  
   226, 226–227  
 groups, 219–229, 692  
   built-in, 219, 219  
   creating, 225–226  
   default local, 219–222  
     adding users to, 227  
   deleting, 228–229  
   exam essentials, 230  
   membership management,  
     226–227  
   names for, 225  
     changing, 228  
   NTFS permissions, 358  
   print permissions, 464–465  
   special, 223–224  
   user account membership in,  
     209–210  
   working with, 224–229  
 Guest account, 197, 208, 692  
 Guests group, 221, 692  
 GUI (Graphical User  
   Interface), 691

## H

hackers, 248  
 HAL. *See* Hardware Abstraction  
   Layer (HAL)  
 handedness of mouse, 147  
 hard disk drives, 692. *See also*  
   disk storage  
   capacity measurement, 5

insufficient space, and  
   Windows XP install  
   problems, 24  
 minimum and recommended  
   requirement, 3  
   for upgrading to  
     Windows XP Pro, 96  
 partitioning, 7–8  
 preparation for upgrade, 100  
 troubleshooting  
   non-supported, 26  
 hardware. *See also* input/output  
   (I/O) devices; mobile  
   computer hardware  
   checking for upgrade  
     compatibility, 47  
   configuring, exam essentials,  
     160–161  
   display device management,  
     134–138. *See also*  
     display devices  
   fax device, 153–154  
   installing, 127–129  
   processor, 152. *See*  
     also processor  
   troubleshooting, 155  
     incompatible after  
       Windows XP  
       upgrade, 106  
 Hardware Abstraction Layer  
   (HAL), 144, 692  
   answer file settings, 75  
   and disk images, 61  
   for imaged and target  
     computers, 54–55  
   System Preparation Tool  
     and, 43  
 Hardware Compatibility List  
   (HCL), 5–6, 129, 692  
 hardware profiles, 692  
   associating service with, 157  
   customizing for laptop power  
     management, 145  
   multiple, 159–160  
 Hardware Profiles dialog box,  
   159, 159  
 hardware requirements  
   for disk image use, 61  
   for hands-on exercises, 14  
   for RIS server, 52  
   for upgrading to  
     Windows XP Pro, 96  
   for Windows XP, 3–5  
   real world scenario, 4

## 726 Hardware Update Wizard – installing Windows XP Professional

- Hardware Update Wizard, 130
  - HCL. *See* Hardware Compatibility List (HCL)
  - Healthy (At Risk) disk status, 304
  - Healthy disk status, 304
  - Help and Support
    - icon in Start menu, 171
    - window, 667
    - for remote assistance, 667
  - HELP command, 658
  - HelpAssistant account, 197, 693
  - HelpServices group, 693
  - HelpServicesGroup group, 222
  - hibernation, 139, 143, 693
  - hidden shares, dollar sign (\$)
    - for, 370
  - hidden volumes, \$ (dollar sign)
    - for, 293
  - high-contrast settings, 184
  - High Secure template, 266
  - Hisec\*.inf file, 266
  - Histogram view in System Monitor, 557, 558
  - history
    - for passwords, 245
    - for web browsing, 523
  - HKEY\_CLASSES\_ROOT, 125
  - HKEY\_CURRENT\_CONFIG, 125
  - HKEY\_CURRENT\_USER, 125
  - HKEY\_LOCAL\_MACHINE, 125, 621
  - \HARDWARE, 622
  - \SYSTEM\CurrentControlSet
    - \ControlSafeBoot\
      - Minimal, 635
    - \ControlSafeBoot\
      - Network, 635
    - \ControlSession
      - Manager, 284
    - \Services, 622
  - HKEY\_USERS, 125
  - home folder, 693
    - real world scenario, 216
    - for user accounts, 215
    - for web site, 535
  - home page for Internet Explorer, 523
  - Home Phoneline Network Adapter (HPNA), 484, 693
  - horizontal page orientation, 450
  - host, 693
  - host computer, Internet
    - Connection Sharing (ICS)
      - configuration, 512, 513–514
  - HOSTS file, 412, 421
  - hot swapping, 146, 295, 693
  - HTML (Hypertext Markup Language), 522, 693
  - HTTP (Hypertext Transfer Protocol), 522, 693
  - hub for USB, 150
  - hyperlink, 693
- 
- I**
- I-link, 694
  - I/O port address, 128
  - IA64ldr.efi file, 630
  - ICF (Internet Connection Firewall), 482, 695
    - without service pack or only Service Pack 1, 517–518
  - ICMP (Internet Control Message Protocol), 423
  - icons
    - in Device Manager, 127
    - for offline folders, 348
  - ICS. *See* Internet Connection Sharing (ICS)
  - IE. *See* Internet Explorer (IE)
  - IEEE (Institute of Electrical and Electronic Engineers), 694
    - 802.11 standard, 148
    - 802.3 specification, 484
    - 802.5 specification, 484
    - 1394 (FireWire), 487, 694
  - IIS. *See* Internet Information Services (IIS)
  - Imaging Class Installer, 120
  - imaging devices, 150–152
  - Import Template dialog box, 265
  - importing security template, 265–267
  - inactive icons on Taskbar, hiding, 174
  - incoming connection, 487, 694
  - Incomplete disk status, 305
  - incremental backup, 648, 694
  - Index This Resource web service
    - access permission, 536
  - Indexing Service, 694
  - individual quota, 311–313, 312
  - .inf file extension, 267
  - Information event, 610, 694
  - Infrared Data Association (IrDA), 148, 484, 694
  - inheritance
    - for GPOs, 240–241
    - NTFS permissions, 359–360
  - inherited permissions, 359, 694
  - initial user account, 197, 220, 694
  - input/output (I/O) devices, 146–152
    - imaging devices, 150–152
    - keyboard, configuring, 146, 146–147
    - mouse, configuring, 147–148
    - USB (Universal Serial Bus)
      - devices, 149–150
      - troubleshooting, 150
      - wireless devices, 148
  - installation folder, Setup Manager to create, 67
  - installing
    - Internet Information Services (IIS), 530–531
    - Remote Desktop client software, 662
  - installing hardware, 127–129
    - non-Plug and Play devices, 128
    - Plug and Play devices, 128
  - installing Windows XP Professional. *See also* automated installation
    - Automatic Updates, 17
    - choosing method, 10–11
    - exam essentials, 28
    - multi-boot options, 27
    - preparation, 2–10
      - BIOS compatibility, 6
      - clean install or upgrade, 6–7
      - driver requirements, 6
      - Hardware Compatibility List (HCL), 5–6
      - hardware requirements, 3–5
      - installation options, 7–9
      - Product Activation, 17
      - running process, 11–17
        - collecting information, 12
        - exercise, 15–17
        - finalizing, 14

- preparation phase, 12
  - Service Packs, 23
  - troubleshooting, 23–26
    - Boot.ini file, 25
    - with log files, 26
    - non-supported hard drives, 26
  - Windows Update, 18–23
    - accessing, 18–19
    - other options, 19–23
  - Windows XP Professional CD as, 10
  - instance, 561
  - Institute of Electrical and Electronic Engineers (IEEE), 694. *See also* IEEE ...
  - Integrated Services Digital Network (ISDN), 485, 694
  - Integrated Windows Authentication, 538
  - Intel architecture, 694
    - x86-based processor, 3
  - Interactive group, 223, 694
  - interactive logon, 694
  - interactive user, 695
  - internal network number, 695
    - for NWLink, 428
  - Internet Connection Firewall (ICF), 482, 695
    - without service pack or only Service Pack 1, 517–518
  - Internet Connection Sharing (ICS), 396, 482, 512, 512–517, 695
    - configuring on host computer, 513–514
    - configuring on network computers, 515–516
    - troubleshooting, 516–517
  - Internet connections, 509–510
  - Internet Control Message Protocol (ICMP), 423
  - Internet Explorer (IE), 695
    - configuring, 521–530
    - resource access, 521–522
    - with Setup Manager, 67
  - Internet icon in Start menu, 171
  - Internet Information Services (IIS), 528, 530–541, 532, 695
    - installing, 530–531
    - troubleshooting web site access, 541
    - web site management, 531–541
  - Internet Options dialog box
    - Advanced tab, 528, 528
    - Connections tab, 526, 526–527
    - Content tab, 525, 525–526
    - General tab, 523, 523
    - Privacy tab, 524, 524
    - Programs tab, 527, 527
    - Security tab, 523–524, 524
  - Internet printer, 528–530, 695
    - adding, 529
    - web browser for connection, 530
  - Internet Printing Protocol (IPP), 528, 695
  - Internet Properties dialog box, Connections tab, 515, 515
  - Internet Protocol Security (IPSec), 489, 695
  - Internet Protocol (TCP/IP) Properties dialog box, 413, 415
    - Alternate Configuration tab, 420, 420–421
  - Internet Server Application Programming Interface (ISAPI) filters, 534
  - Internet service provider (ISP), 508, 695
  - Internet Services Manager, 695
  - internetwork, 696
  - InterNIC, 408, 696
  - interprocess communications (IPC), 696
  - interrupt request (IRQ), 128, 696
  - Interrupts/Sec counter, 576, 578
  - intranet, 696
  - IP addressing, 407–412, 696
    - class network and host addresses, 408
    - default gateway, 410, 410
    - DHCP (Dynamic Host Configuration Protocol), 410–411
    - for deploying configurations, 412–413
    - DNS server, 411–412
    - multiple addresses, 422
    - options for deploying configurations, 412–421
    - static, 414–419
    - subnet mask, 409
    - for web site, 533
  - WINS server, 412
  - IP over ATM, 484, 696
  - IP version 4 (IPv4), 409
  - IP version 6 (IPv6), 409
  - IPC (interprocess communications), 696
  - IPC\$ share, 370
  - Ipconfig /all command, 414
  - IPCONFIG command, 422–423, 696
  - IPP (Internet Printing Protocol), 528, 695
  - IPSec (Internet Protocol Security), 489, 695
  - IPX/SPX (Internetwork Packet Exchange/Sequenced Packet Exchange), 427
  - IrDA (Infrared Data Association), 148, 484, 694
  - IRQ (interrupt request), 128, 696
  - ISDN (Integrated Services Digital Network), 485, 694
  - Itanium boot process, 629–631
    - initial startup and boot manager phase, 630
    - power-on self-test phase, 630
  - IUSR\_*computername* user account, 538
- 
- ## K
- kernel, 696
  - Kernel Debugger, 637
  - kernel initialization sequence, in x86-based boot process, 622
  - kernel load sequence, in x86-based boot process, 621–622
  - keyboard
    - accessibility options, 184
    - settings, 13
  - Keyboard Properties dialog box, Speed tab, 146, 147
- 
- ## L
- L2TP (Layer Two Tunneling Protocol), 486, 508, 697
  - label, for volume or local disk, 291
  - LAN. *See* local area network (LAN)

## 728 LAN Emulation – memory

- LAN Emulation (LANE), 484, 697
  - landscape orientation, 450
  - language and regional settings, 179–183
    - answer file settings, 76
    - multi-language support, 180–181
    - multilingual support, 181–183
    - multilingual technology, 179
  - language, selecting during install, 10
  - laptop computers. *See* mobile computer hardware
  - Last Known Good Configuration, 607, 608, 637, 697
  - Layer Two Tunneling Protocol (L2TP), 486, 508, 697
  - lease in DHCP, 411
  - left-handed mouse, 147
  - length of passwords, 245
  - license agreement, 12
  - List Folder Contents NTFS permission, 356
  - LISTSVC command, 658
  - LMHOSTS file, 421
  - LoadState.exe, 103, 105–106
  - Local Area Connection
    - Properties dialog box, 391
      - Advanced tab, 396, 397
      - Authentication tab, 396, 397
      - General tab, 391
  - Local Area Connection Status dialog box, 425, 426
  - local area network (LAN), 484, 697
    - connection status, 425
  - Local Area Network (LAN) Settings dialog box, 515
  - Local Computer Policy snap-in (MMC), 242–243, 243, 246, 697
  - local folder, as home folder, 215
  - local group, 697
  - local group policies, 219, 697
  - Local Group Policy Objects (LGPOs), 238, 697
    - applying, 242–263
  - Local Group Policy snap-in, 697
  - local groups
    - adding users to, 227
    - default, 219–222
  - local logon, 697
  - local policies, 238, 248–263, 697
    - audit policy, 248–252, 250
      - options, 250–251
    - in GPO inheritance, 240
    - security option policies, 256, 256–263
    - in security templates, 266
    - user rights, 252, 252–256
      - options, 253–255
  - local port, 454
  - local printer, 441, 453, 698
  - local security, 698
  - Local Security Policy Setting dialog box, 58
  - Local Security Settings dialog box, 318
  - local user accounts, 197–198, 698
    - troubleshooting authentication, 216–217
  - local user profile, 211–213, 698
  - Local Users and Groups, 698
  - Local Users and Groups utility, 200–201, 204
    - to create groups, 225–226
    - for group management, 219
  - locale settings, 179, 698
    - selecting during install, 10, 13
  - localized Windows XP, 180
  - locked accounts, after invalid logon attempts, 246–248
  - locking Taskbar, 173
  - log files
    - sigverif.txt, 132
    - for troubleshooting Windows XP install, 26
  - Log Off icon in Start menu, 172
  - log on as batch job, user rights to, 58
  - Log Visits web service access permission, 536
  - logical drive, 7, 280, 285, 698
  - logical memory, 572
  - logical port, 441, 454, 698
  - logical printer, 698
  - logoff, 199, 698
  - logon, 698
    - auditing events, 250
    - authentication, 198–199, 199
    - caching credentials, 218
    - invalid attempts tolerated, 246–248
  - logon account, for services, 157
  - LOGON command, 658
  - logon script, 214, 698
  - logon sequence, in x86-based boot process, 622
  - logs
    - for auditing, 252
    - for backup, 649
    - for boot process, 635–636
    - from Event Viewer, 609
      - events, 610–611
      - file management, 612–613
      - properties, 613–617
    - for Internet Connection Firewall, 517
    - of modem commands, 491
    - for web site, 534
  - low battery alarm, 141
  - Lynx, 694
- 
- ## M
- Magnifier utility, 185, 185, 698
  - Manage Documents permission, 463
  - Manage Printers permission, 463
  - mandatory profile, 213–214, 698
  - manual synchronization, of offline files and folders, 346
  - MAP command, 658
  - Map Network Drive dialog box, 374–375, 375
  - mapped drive, 699
  - mass storage devices. *See also* hard disk drives
    - answer file settings, 73–74
  - Master Boot Record (MBR), 8, 619, 699
    - disk signatures, 305
    - FXMBR command to rewrite, 659
  - maximum password age, 245
  - measurement units, 5
  - media errors, and Windows XP install problems, 24
  - megabyte, 699
  - megahertz, 699
  - member server, 699
  - membership, in domain or workgroup, 10
  - memory, 699
    - insufficient amount, and Windows XP install problems, 24

- minimum and
    - recommended, 3
    - monitoring and optimizing, 572–576
  - memory address, 128
  - memory dump, 640
  - memory leak, monitoring for, 573
  - Microsoft Baseline Security Analyzer, 22
  - Microsoft Challenge Handshake Authentication Protocol (MS-CHAP), 488, 699
  - Microsoft Challenge Handshake Authentication Protocol version 2 (MS-CHAPv2), 488, 699
  - Microsoft Disk Operating System (MS-DOS), 699
  - Microsoft Ethernet PVC, 485, 700
  - Microsoft Installer (MSI), 700
    - file types, 78
  - Microsoft Management Console (MMC), 121–123, 122, 700
    - for Account Policies folder, 244
    - ActiveX control for System Monitor, 564
    - adding snap-ins, 123
    - Disk Defragmenter, 323
    - Event Viewer, 609
    - Group Policy snap-in, 238
    - Local Computer Policy snap-in, 242–243, 243, 248–263, 249
    - Local Users and Groups snap-in, 200–201, 204
    - mode configuration, 123
    - Security Configuration and Analysis Tool, 264
    - Services snap-in, 155, 156
  - Microsoft Point-to-Point Encryption (MPPE), 489, 700
  - Miggapp.inf file, 104
  - migrating
    - files and settings, 102–103
    - user data, 103–106
      - overview, 103–104
      - requirements, 104–105
    - User State Migration Tool (USMT), 105–106
  - Migsys.inf file, 104
  - Miguser.inf file, 104
  - MIME (Multipurpose Internet Mail Extension) maps, 539
  - Mini-Setup Wizard, 42, 62, 63
    - prompts, 64
  - minimum password age, 245
  - mirrored volumes, 288
  - MKDIR command, 658
  - MMC. *See* Microsoft Management Console (MMC)
  - mmc.exe, 588
  - mobile computer hardware, 138–146
    - Alternate IP Configuration, 420–421
    - card services, 145–146
    - disk storage, 285
    - power management for, 138–145
      - alarms, 141
      - hibernation, 143
      - improvements, 139
      - power meter, 141
      - power schemes, 141
      - power states, 139–140
      - real world scenario, 145
      - troubleshooting, 144–145
  - mobile computers. *See also* offline files and folders
  - modem, 700
    - Default Preferences dialog box, 493, 494
    - Properties dialog box, 489–496
      - Advanced tab, 491–494, 493
      - Diagnostics tab, 491, 492
      - Driver tab, 495, 495
      - General tab, 490, 490–491
      - Modem tab, 491, 492
      - Resources tab, 496, 496
    - for remote access
      - connections, 485
      - troubleshooting, 507
  - Modem Configuration dialog box, 501
  - Modem Dialing Information dialog box, 13
  - Modify NTFS permission, 355
  - monitor Properties dialog box, 135–136
    - General tab, 135
  - Monitor Settings dialog box, 14
  - monitors. *See* display devices
  - MORE command, 658
  - Mouse Properties dialog box, Buttons tab, 147
  - MouseKeys, 184
  - moving files and folders, 339, 340
    - NTFS permissions, 365
  - MPPE (Microsoft Point-to-Point Encryption), 489, 700
  - MS-CHAP (Microsoft Challenge Handshake Authentication Protocol), 488, 699
  - .msc file extension, 123
  - Msconfig command, 627
  - MSI applications, copying to share, 79
  - MSN Explorer icon in Start menu, 171
  - Muisetup.exe program, 181
  - multi-boot options, 27
  - multi-boot system, 700
  - multi-language support, 180–181
  - multi-monitor support, 137–138
    - Dualview, 121
    - troubleshooting, 138
  - multihoming, 422
  - Multilanguage version of Windows XP, 180–181
    - real world scenario, 183
  - Multilingual API, 179
  - multilingual technology, 179
  - multiple processors, 152
  - My Computer, 700
  - My Computer icon, in Start menu, 171
  - My Documents folder, 700
    - icon in Start menu, 171
    - Shared Documents folder, 369
  - My Music folder, icon in Start menu, 171
  - My Network Places, 407, 700
    - to access shared resources, 373–374
  - My Pictures folder, icon in Start menu, 171
  - My Recent Documents folder, icon in Start menu, 171
- 
- N**
- name changes
    - for files and folders, 339
    - for groups, 228

**730** name resolution in TCP/IP – NT EMF print processor

- for printers, 468
- for user accounts, 208
- name resolution in TCP/IP, 421
- naming conventions
  - ARC, 624–625
  - for groups, 225
  - for user accounts, 202
- Narrator utility, 186, 701
  - dialog box, 186
- National Language Support
  - API, 179
- NBTSTAT command, 424–425
- NCP (NetWare Core Protocol), 345
- NET command, 658
- Net PC/PC98 standard, 60
- NET USE command, 371, 375–376, 701
- NetBIOS Extended User Interface (NetBEUI), 405, 701
- NetBIOS over TCP/IP (NetBT), 406
- NetPC/PC 98, 701
- NetWare, 345, 701
- NetWare Core Protocol (NCP), 345
- network adapters, 701
  - binding, 398
  - configuring, 391–396
  - exam essentials, 429
  - installing, 390–391
  - Properties dialog box, 391
    - Advanced tab, 392, 393
    - Driver tab, 393–395, 394
    - General tab, 392, 392
    - Resources tab, 395, 395
  - troubleshooting, 398–399
- Network and Internet Connection dialog box, 391
- Network Basic Input/Output System (NetBIOS), 701
- network computers, Internet Connection Sharing (ICS)
  - configuration, 515–516
- Network Configuration Operators Group, 221, 701
- Network Connection Details dialog box, 426
- Network Connection Type dialog box, 496, 497
- network connections, 483–487
  - direct cable connections, 486–487
  - exam essentials, 542
  - incoming connection, 487
  - Internet Connection Sharing (ICS), 512, 512–517
  - local area network (LAN), 484
  - remote access
    - connections, 485
  - to Remote Access Server, 497–508, 498
    - creating, 498–500
    - properties, 500–507
    - troubleshooting, 507–508
  - virtual private network (VPN), 485–486
  - wide area network (WAN), 486
- Network Connections window, 400, 400, 499
  - for Windows Firewall, 519, 519
- network folder, as home folder, 215
- Network group, 223, 701
- network printer, 441, 701
  - connecting to, 470–471
  - sharing, 453–454
- network protocols, 405–429, 705
  - exam essentials, 429
  - NetBEUI, 405, 701
  - NWLink IPX/SPX/NetBIOS, 427–428, 702
  - TCP/IP (Transmission Control Protocol/Internet Protocol), 406–412
    - Alternate IP Configuration, 420–421
    - benefits, 406
    - features, 407
    - IP addressing and configuration, 407–412
    - multiple IP addresses, 422
    - name resolution, 421
    - options for deploying configurations, 412–421
    - static IP addressing, 414–419
    - testing IP configuration, 422–425
- network settings, configuring with Setup Manager, 66
- Network Settings dialog box, 13, 71
- network share, Winnt32 switch
  - to create, 48
- networks, 400–405
  - access management, 365–376
  - minimum and recommended requirement, 3
  - monitoring and optimizing subsystem, 580–581
  - settings for RIS server, 52
  - wireless connection
    - configuration, 400–402
    - security for small network, 403–405
- New Alert Settings dialog box, 570
- New Connection Wizard, 496–497, 497
  - Network Connection, 498
  - Network Connection Type, 509
  - Phone Number to Dial, 499
  - Public Network, 511
  - for VPN client, 511
  - VPN Server Selection, 511
- New Group dialog box, 225, 225–226
- New Log Settings dialog box, 565
- New or Existing Answer File dialog box, 67, 68
- New Partition Wizard, 298–299
- New Technology File System (NTFS), 701. *See also* NTFS
- New User dialog box, 203–204, 204
- New Volume Wizard, 296
  - Assign Drive Letter or Path page, 297, 297
  - Format Volume page, 298, 298
  - Select Disks page, 296, 297
  - Select Volume Type page, 296, 296
- No Override option, for GPOs, 240
- non-Plug and Play devices, installing, 128
- normal backup, 648, 701
- Not Initialized disk status, 305
- notebook computers. *See* mobile computer hardware
- Notepad, creating file in, 337
- NT domains, vs. Windows 2000/2003 domains, 240
- NT EMF print processor, 460

NTBOOTDD.SYS file, 620, 702  
 Nbtlog.txt file, 635  
 NTDETECT.COM file, 620, 621, 702  
 NTFS, 9, 280, 282–283, 701  
   capabilities, 280  
   conversion, answer file settings, 77  
   converting FAT16 and FAT32 to, 77, 283–284  
   data compression, 305–307  
   ownership and security descriptors, 360  
   permissions for volume, 293  
 NTFS permissions, 354–360, 702  
   adding and removing user and group, 358  
   for copied or moved files, 365  
   effective rights, 361–364  
   inheritance, 359–360  
   levels, 355–356  
   viewing effective, 364–365  
 NTLDR file, 618, 620, 702  
 NTOSKRNL file, 618  
 NTOSKRNL.EXE file, 620, 702  
 NTOSKRNL.EXT file, 621  
 NTUSER.DAT file, 212, 702  
 NTUSER.MAN file, 702  
 Ntvdm.exe, 588  
 null modem cable, 487  
 NVRAM startup settings, 630  
 NWLink IPX/SPX/NetBIOS, 427–428, 702

## O

objects, 377  
 Offline Files -- Advanced Settings dialog box, 350, 350  
 offline files and folders, 344–352, 702  
   attaching to share, 346  
   configuring behavior after losing network connection, 350–351  
   configuring computer for, 346  
   database, 351  
   encryption, 351  
   icon for offline folders, 348  
   making files and folders available, 347

  manual synchronization, 346  
   preventing offline access of folder, 348–349  
   troubleshooting, 352  
 Offline or Missing disk status, 304  
 on-demand dialing, for Internet Connection Sharing, 513  
 On-Screen Keyboard, 186, 186, 702  
 Online disk status, 304  
 Online (Errors) disk status, 304  
 operating system, Boot.ini parameters, 625–626  
 optimization, 702  
 Organizational Units (OUs), 239, 702  
   policies in GPO inheritance, 240  
 orientation of page for printing, 450  
 OSI model, 405  
 "out of disk space" error message, 313  
 "Out of Memory" error messages, for PostScript printers, 472  
 owner, 702  
 ownership of objects, 360  
   printers, 466

## P

page file, 572, 703  
   managing, 574  
 Pages/Sec counter, for memory, 573  
 PAP (Password Authentication Protocol), 488, 703  
 Partition Magic (PowerQuest), 8  
 partitions, 280, 285, 703  
   converting to NTFS, 284  
   creating, 298–299  
   deleting, 301–302  
   for hard disk drives, 7–8  
   for multi-boot systems, 27  
 Password Authentication Protocol (PAP), 488, 703  
 password policies, 244, 244–246, 703  
 passwords  
   and access to encrypted files, 319  
   for activating idle computer, 177  
   answer file settings, 75  
   in New User dialog box, 203  
   for RAS connections, 504  
   for user accounts, changing, 208–209  
   path of drive, changing, 300–301  
   pausing printing, 468, 469  
 PC Card, 703  
 PCI (Peripheral Component Interconnect), 137, 703  
 pcl.sep separator page file, 461  
 PCMCIA (Personal Computer Memory Card International Association) cards, 145, 703  
 performance  
   auditing and, 249  
   monitoring. *See* system monitoring tools  
 Performance Logs and Alerts, 564–570, 565, 703  
   alerts, 570  
   counter log, 565  
   trace log, 567–569  
 Performance Options dialog box, 584–585  
   Advanced tab, 585, 585  
   Visual Effects tab, 584  
 Peripheral Component Interconnect (PCI), 137, 703  
 peripheral devices, minimum and recommended requirement, 3  
 permissions, 199, 703. *See also* NTFS permissions  
   for changes to user profiles, 213  
   print, 463  
 Personal Computer Memory Card International Association (PCMCIA) cards, 145, 703  
 Personalized Your Software dialog box, 13  
 petabyte, 703  
 .pfx file extension, 318  
 physical memory, 572  
 physical port, 441, 454, 703  
 PING command, 423–424, 703

## 732 Ping Request Could Not Find Host message – Public Switched Telephone Network

- Ping Request Could Not Find Host message, 424
- pixels, 137
- plain text, 314
- Plug and Play devices, 704
  - answer file settings, 74
  - detection in x86-based boot process, 623
  - installing, 128
  - network adapters, 390
  - printers, troubleshooting, 471
  - System Preparation Tool and, 43
- Point-to-Point Protocol over Ethernet (PPPoE), 485, 704
- Point-to-Point Protocol (PPP), 506, 704
- Point-to-Point Tunneling Protocol (PPTP), 486, 508, 704
- pointers for mouse, 147, 148
- policies, 704
- portable computers. *See* mobile computer hardware
- portrait orientation, 450
- ports, 454–456
- POST (Power-On Self-Test), 618, 704
  - in Itanium boot process, 630
- power management
  - custom solutions and Windows XP upgrade, 98
  - for mobile computers, 138–145
    - improvements, 139
    - power states, 139–140
    - troubleshooting, 144–145
- Power-On Self-Test (POST), 618, 704
  - in Itanium boot process, 630
- Power Options Properties dialog box, 140–144
  - Advanced tab, 142–143, 143
  - Alarms tab, 141, 142
  - Hibernate tab, 143, 144
  - Power Meter tab, 141, 142
  - Power Schemes tab, 140, 141
- Power Users group, 221–222
  - group creation by members, 225
- PowerQuest, Partition Magic, 8
- PPP (Point-to-Point Protocol), 506, 704
- Pre-boot eXecution Environment (PXE), 59, 704
  - network adapter, 40
- pre-boot sequence, in x86-based boot process, 618–619
- primary partition, 285, 704
- print device, 440, 704
  - role of, 443
- print documents, managing, 468–470, 469
- print driver, 441, 442, 458, 704
- print jobs
  - priority of, 457–458
  - redirecting, 456
  - spooler, 458–459
- print permissions, 463
  - assignment, 464–465
  - default, 463
- print processor, 441, 442, 460, 705
- Print Processor dialog box, 461
- print queue, 705
- print server, 441, 442, 705
- PRINT\$ share, 370
- print spooler, 441, 442, 705
- printer, 705
- printer pool, 441, 443, 455, 456, 705
- printers
  - connecting to, 470–471
  - definition, 440
  - exam essentials, 472–473
  - fax, 154
  - managing, 467–468, 469
  - printing directly to, 458
  - Properties dialog box, 449–460
    - Advanced tab, 456–460, 457
    - Device Settings tab, 466, 467
    - General tab, 449–452, 450
    - Ports tab, 454–456, 455
    - Security tab, 463, 464
    - Sharing tab, 453, 453–454
  - role of, 443
  - scheduling for, 457
  - security for, 462–466
  - setup, 443–449
  - Setup Manager to install, 67
- Printers and Faxes folder, 448
- icon in Start menu, 171
- printing
  - basics, 440–443
    - Windows XP printing process, 441–442
  - exam essentials, 472–473
  - separator page, 461–462
  - troubleshooting, 471–472
  - Printing Preferences dialog box, 450–451, 460
    - Layout tab, 450
    - Paper/Quality tab, 451, 452
  - priority, 705
    - of print jobs, 457–458
    - for processes, 589–590
  - proactive system management, 553
  - processes, 705
    - priority, 589–590
    - stopping, 588
    - Task Manager for currently running, 587
  - processor, 152, 705
    - insufficient power, and Windows XP install problems, 24
    - minimum and recommended, 3
    - monitoring and optimizing, 576–578
    - speed measurement, 5
    - for upgrading to Windows XP Pro, 96
  - processor affinity, 152, 705
  - Processor Queue Length counter, 577
  - Product Activation, 17
  - Product Key dialog box, 13
  - Product to Install dialog box, 68, 68
  - Profile Assistant, 526
  - Program Compatibility Wizard, 107
  - Protected mode for CPU boot sequence, 620
  - protocols, 705. *See also* network protocols
  - Providing the Product Key dialog box, 70
  - pscript.sep separator page file, 461
  - Public Switched Telephone Network (PSTN), 485, 705

published applications, 79, 705  
 installing, 83–84  
 real world scenario, 84  
 PXE (Pre-boot eXecution Environment), 59, 704  
 network adapter, 40

## Q

quick format, 298  
 Quick Launch on Taskbar, 173  
 Quota Entries dialog box, 312, 313

## R

Radio Frequency (RF), 148  
 RAID-5 volumes, 288  
 random access memory (RAM), 706  
 for upgrading to Windows XP Pro, 96  
 RAS. *See* Remote Access Service (RAS)  
 RAW print processors, 460  
 RBF (Remote Boot Floppy Generator), 40, 706  
 Rbfg.exe utility, 45, 60  
 location, 46  
 .rdp file extension, 663  
 Read & Execute NTFS permission, 355  
 Read NTFS permission, 356  
 Read share permission, 368  
 Read web service access permission, 536  
 real-time application, 706  
 Receive Fax support, 154  
 recent documents, in Start menu, 175  
 recovery after service failure, 157  
 Recovery Console, 608, 654–659, 706  
 commands available, 657–658  
 to create Boot.ini file, 629  
 starting, 654–656  
 Winnt32 switch for supporting, 48  
 Recycle Bin, 172, 339, 706  
 redirecting print jobs, 456  
 reference computer, creating for disk imaging, 42  
 refresh frequency, 69  
 refresh rate, 137  
 in answer file, 76  
 REGEDIT, 124, 284, 706. *See also* Registry Editor  
 Regional and Language Options dialog box, 181, 181–183  
 Advanced tab, 182–183  
 Languages tab, 182  
 Regional Options utility, 706  
 regional settings, 179–183  
 in answer file, 76  
 configuring with Setup Manager, 67  
 Regional Settings dialog box, 13  
 registration of IP addresses, 408  
 Registry, 124, 706  
 settings in security templates, 266  
 Registry Editor, 124, 124–125, 706  
 Reminist share, 54  
 remote access connections, 485, 706  
 security, 487–489  
 troubleshooting, 507–508  
 Remote Access Service (RAS), 706  
 network connections to server, 497–508, 498  
 creating, 498–500  
 properties, 500–507  
 troubleshooting, 507–508  
 Remote Assistance, 664–669, 706  
 enabling, 665–666  
 initiating session, 669  
 invitation re-use, 669  
 options, 665  
 vs. Remote Desktop, 665  
 requesting, 666–667  
 responding to requests, 668  
 security and, 669  
 Remote Assistance Settings dialog box, 666  
 Remote Boot Floppy Generator (RBF), 40, 706  
 Remote Desktop, 659–664, 707  
 configuring computer for remote access, 661  
 customizing, 663  
 ending session, 664  
 installing client software, 662  
 vs. Remote Assistance, 665  
 requirements, 660–661  
 restrictions, 660  
 starting session, 662–663  
 Remote Desktop Users dialog box, 662  
 Remote Desktop Users group, 222, 707  
 Remote Installation Preparation (RIPrep) image, 51, 707  
 Remote Installation Preparation (RIPrep) tool, 54–55, 707  
 Remote Installation Services (RIS), 49–61, 707  
 basic steps, 50  
 client options, 50–51  
 client preparation, 59–60  
 installation process, 60–61  
 installing Windows XP Pro through, 60–61  
 overview, 40–42, 41  
 server preparation, 51–59  
 authorizing through DHCP Manager, 55  
 configuring and starting with CD-based image, 53–54  
 configuring and starting with RIPrep image, 54–55  
 configuring to respond to client requests, 58  
 granting user right to create computer accounts, 56–57  
 granting user right to log on as batch job, 58  
 hardware requirements, 52  
 installing components, 53  
 network services, 52  
 template files, 59  
 Remote Installation Services Setup Wizard, 54  
 removable storage, 707  
 Device Manager for managing, 134  
 minimum and recommended requirement, 3  
 RENAME command, 658  
 renaming. *See* name changes  
 rendering, 707  
 repackaged applications, file types, 78

## 734 Replicator group – serial cable

Replicator group, 222, 707  
 Report view in System Monitor, 557, 559  
 Request Timed Out message, 424  
 requesting Remote Assistance, 666–667  
 Requests for Comments (RFCs), 707  
 resolution, in answer file, 77  
 resource files, for  
   language-specific information, 179  
 resource-flow access, 376–379  
   access token creation, 377  
   DACLS and ACEs, 377–378  
   local and network resource access, 378–379  
 resources, 707  
   flow of access, 376–379  
   for hardware, 128  
   network adapters, 395  
   for modem, 496  
   and performance, 572  
 restore points, 652  
   creating, 653–654  
 Restore Wizard, 650–651, 707  
 restricted groups, settings in security templates, 266  
 reversing upgrade process, 108  
 RF (Radio Frequency), 148  
 RFCs (Requests for Comments), 707  
 right-to-left languages, 182  
 RIPrep images, 51, 707  
 Riprep.exe, 45  
   location, 46  
 RIS. *See* Remote Installation Services (RIS)  
 Risetup.exe, 45  
   location, 46  
 Ristndrd.sif template, 59  
 Rivest-Shamir-Adleman (RSA) RC4 encryption, 489  
 RMDIR command, 658  
 roaming profile, 213, 708  
 Roll Back Driver, 130, 394  
 rollback to Windows 98/M3, 99  
 Rootsec.inf file, 266  
 router, 410, 708  
 Run dialog box, for Microsoft Management Console, 122  
 Run icon in Start menu, 172

**S**

Safe mode for startup, 607, 608, 633–635, 634, 708  
 Safe mode with Networking, 637, 708  
 Save Mode with Command Prompt, 637, 708  
 Scanner and Camera Wizard, 119  
 scanners, 150  
 Scanners and Cameras dialog box, 150–152, 151  
 ScanState.exe, 103, 105–106  
 Scheduled Task Wizard dialog box, 592, 592–593, 593  
 scheduled tasks  
   properties, 593–595, 594  
   Schedule tab, 594, 595  
   Settings tab, 595, 596  
   Task tab, 594, 594  
   troubleshooting, 596  
 scheduling  
   for printers, 457  
   trace log, 569, 569  
 SCP (Service Control Point), 54, 709  
 screen display. *See* display devices  
 screen resolution, 134, 137  
 screensavers, 177  
   and processor performance, 577  
 Script Source Access web service access permission, 536  
 scripting interface, for Windows Image Acquisition, 120  
 SCSI (Small Computer Systems Interface), 710  
 .sdb file extension, 265  
 Search dialog box, 352–353, 353  
 Search icon in Start menu, 172  
 searches for files and folders, 352–353  
 Secedit.exe, 264  
 secure communications for website, 539  
 Secure Sockets Layer (SSL), 526  
 Secure template, 266  
 Secure\*.inf file, 266  
 securews templates, 267  
 security, 708  
 Administrator account and, 197  
 analyzing system, 264–269  
   importing security template, 265–267  
   resolving discrepancies, 267–269  
   Results dialog box, 268  
   specifying security database, 264–265  
 configuration management options, 238–239  
 exam essentials, 271  
 firewalls, 517  
 for Internet Explorer, 523–524  
 with NTFS, 282–283  
 for printers, 462–466  
 remote access connections, 487–489  
 Remote Assistance and, 669  
 resource-flow access, 378–379  
 for small wireless network, 403–405  
 user accounts and, 205  
 Windows Security Center, 270, 270  
 Security Configuration and Analysis Tool, 264, 708  
 security descriptors, 360  
 security identifier (SID), 708  
 System Preparation Tool and, 42  
 usernames and, 202–205  
 Security log, 609, 708  
 security option policies, 256, 256–263, 708  
 security template, importing, 265–267  
 Security Templates utility, and application failure after upgrade, 101  
 Segments/Sec counter for TCP, 580, 581  
 Select Users, Computers, or Groups dialog box, 56, 57  
 Select Users dialog box, 227, 227  
 Select Users or Groups dialog box, 58, 358, 358  
 Send Fax support, 154  
 separator page, when printing, 442, 461–462, 708  
 serial, 709  
 serial cable, 487, 709

- Serial Line Internet Protocol (SLIP), 506, 709
- Server Extensions for website, 540–541
- Server Message Blocks (SMB), 345
- servers
  - for automated deployment, summary requirements, 44
  - Domain Name Service (DNS), 411–412
  - RIS preparation, 51–59
    - authorizing through DHCP Manager, 55
    - configuring and starting with CD-based image, 53–54
    - configuring and starting with RIPrep image, 54–55
    - configuring to respond to client requests, 58
    - granting user right to create computer accounts, 56–57
    - granting user right to log on as batch job, 58
    - hardware requirements, 52
    - installing components, 53
    - network services, 52
    - template files, 59
  - Service Control Point (SCP), 54, 709
  - Service group, 224, 709
  - Service Packs for Windows XP, 23, 709
    - pack 2, wireless device support, 148
  - service Properties dialog box
    - Dependencies tab, 158, 158
    - General tab, 156, 156–157
    - Log On tab, 157, 157
    - Recovery tab, 157, 158
  - services, 155, 709
  - Services utility, 709
  - Setup Information File Text dialog box, 71, 71
  - Setup Manager (SETUPMGR), 709
    - for answer files, 66–78
    - file creation process, 67–72
    - options configurable, 66–67
    - location, 46
  - Setup security.inf file, 265
  - setupact.log file, 26
  - setuperr.log file, 26
  - share permissions, 366, 709
    - configuring, 367–369
  - Share Permissions dialog box, 367–369, 368
  - Shared Documents folder, 369
  - shared folder, 709
    - creating, 365–367
  - Shared Folders utility, 369–371, 709
    - Open Files, 373, 374
    - Sessions, 372, 373
  - shared resources, accessing, 373–376
    - mapping network drive with Windows Explorer, 374–375
    - with My Network Places, 373–374
    - with NET USE command, 375–376
  - shares, 709
    - creating, 371–373
    - viewing, 369–370, 370
  - shares Properties dialog box, 349
    - Sharing tab, 349
  - sharing, 365
    - fax device, 153
    - network printer, 453–454
  - Shiva Password Authentication Protocol (SPAP), 488, 709
  - shortcuts, 176, 710
    - for applications, 178
    - for printers, 468
  - shutting down, 139
  - .sif filename extension, 59
  - SigVerif utility, 132
  - sigverif.txt file, 132
  - Simple File Sharing, disabling, 291
  - Simple Mail Transfer Protocol (SMTP), 710
  - Simple Network Management Protocol (SNMP), 407
  - simple volume, 285, 286, 286, 710
    - creating, 302
  - Single Instance Store (SIS), 41, 53, 710
  - SIS Groveler service, 53, 710
  - site policies, in GPO inheritance, 240
  - size of text, accessibility and, 185
  - SLIP (Serial Line Internet Protocol), 506, 709
  - slipstream technology, 710
  - Small Computer Systems Interface (SCSI), 710
  - smart card, 489, 710
  - SMB (Server Message Blocks), 345
  - smss.exe, 588
  - SMTP (Simple Mail Transfer Protocol), 710
  - snap-ins, 121, 710
    - adding to MMC, 123
  - SNMP (Simple Network Management Protocol), 407
  - Software Update Services (SUS), 22
  - SoundSentry, 184
  - spanned volumes, 286, 287, 710
    - creating, 302
  - SPAP authentication, 245
  - SPAP (Shiva Password Authentication Protocol), 488, 709
  - special groups, 223–224, 711
  - Special Permissions print permission, 463
  - spooler, 458–459, 711
    - size limitations, 459
  - standby, 139, 711
  - Start button and Start menu, 711
    - All Programs ➤ Accessories
    - Command Prompt, 284
    - Communications ➤ Remote Desktop Connection, 662
    - System Tools ➤ Backup, 643
    - All Programs ➤ Administrative Tools
    - Internet Information Services, 531
    - Performance, 555
    - Help and Support, 18
    - Logoff, 199
    - Programs ➤ Administrative Tools
    - Active Directory Users and Computers, 56, 58

## 736 start command-line utility – Event Viewer

- Configure Your Server, 53
  - DHCP, 55
  - Shutdown, 139
- common options, 171–172
- configuring, 174, 174–176
- start command-line utility, 589
- startup
  - adding Recovery Console, 655–656
  - advanced options, 633–638
    - boot logging, 635–636
    - other menu options, 637–638
    - safe mode, 633–635, 634
  - Startup and Recovery dialog box, 628, 628, 639, 639–641
  - static IP addressing, 414–419
    - Internet Connection Sharing (ICS) and, 516
  - status codes for Disk Management, 304–305
  - StickyKeys, 184
  - "STOP: 0x000000079HAL\_MISMATCH" error message, 145
  - stopping processes, 588
  - stripe set, 711
  - striped volumes, 287, 287, 711
    - creating, 302
  - subfolders, Winnt32 switch to create, 48
  - subnet mask, 409, 711
  - Success Audit event, 611, 711
  - Support\_xxxxxxx account, 197, 711
  - SVGA (super video graphics adapter), 137
  - synchronization of offline files and folders, 346
  - Sysdiff tool, 77
  - Sysfiles.inf file, 104
  - Sysprep.exe, 45. *See also* System Preparation Tool (Sysprep) location, 46
  - sysprintj.sep separator page file, 461
  - sysprint.sep separator page file, 461
  - System Configuration utility, 711
    - to edit Boot.ini file, 627, 627–628
  - system events, auditing, 251
  - System group, 224, 711
  - System Idle Process, 588
  - System Information utility, 711
  - System log, 609, 711
    - writing event to, 640
  - System Monitor Properties dialog box, 561–564
    - Appearance tab, 564
    - Data tab, 562, 563
    - General tab, 561, 562
    - Graph tab, 563, 563
    - Source tab, 561, 562
  - system monitoring tools
    - exam essentials, 597
    - minimizing performance effects, 583–584
    - overview, 552–554
      - alerts for problem notification, 554
      - baseline creation, 552–553
      - bottleneck identification, 553
      - testing configuration changes, 554
      - trends, 553
  - Performance Logs and Alerts, 564–570, 565
    - alerts, 570
    - counter log, 565
    - trace log, 567–569
  - System Monitor, 554–564, 555, 711
    - chart view, 558
    - counters, 559–561
    - histogram view, 558
    - properties, 561–564
    - report view, 559
    - selecting view, 557–559
    - toolbar functions, 556–557
  - system performance management, 572–582
    - baseline reports, 581–582
    - disk subsystem, 578–579
    - memory, 572–576
    - network subsystem, 580–581
    - processor, 576–578
  - System Tools utility, 584–585, 712
  - Task Manager, 586–591
    - Applications tab, 586, 586
    - Networking tab, 591, 591
    - Performance tab, 590, 590–591
    - Processes tab, 587, 587–590
      - Task Scheduler, 591–596
  - system partition, 8, 712
  - System Preparation Tool (Sysprep), 61–65, 712
    - command-line switches, 62
    - copying and installing disk image, 64
    - dialog box, 63, 63
    - disk image creation, 63
    - overview, 42–45
    - preparation for duplication, 61
  - System Properties dialog box
    - Automatic Updates tab, 18
    - Hardware tab, 130, 131
    - Remote tab, 661, 666
  - system recovery, 606. *See also*
    - Backup utility advanced startup options, 633–638
    - boot logging, 635–636
    - other menu options, 637–638
    - safe mode, 633–635, 634
  - Automated System Recovery (ASR) Wizard, 651–652
  - BOOT.INI file
    - configuration, 623–629
    - ARC naming conventions, 624–625
    - boot loader configuration options, 624
    - editing file, 627–628
    - operating system parameters, 625–626
    - replacing damaged file, 629
  - disaster recovery, 607–608
  - Dr. Watson, 641–642, 643
  - driver rollback, 608, 638, 688
  - Event Viewer, 609–617, 610
    - event details, 611–612
    - log events, 610–611
    - log file management, 612–613

- log file properties, 613–617
  - exam essentials, 670–671
  - Itanium boot process, 629–631
    - initial startup and boot manager phase, 630
    - power-on self-test phase, 630
  - Recovery Console, 654–659
    - commands available, 657–658
    - starting, 654–656
  - Remote Assistance, 664–669
    - enabling, 665–666
    - initiating session, 669
    - invitation re-use, 669
    - options, 665
    - vs. Remote Desktop, 665
    - requesting, 666–667
    - responding to requests, 668
    - security and, 669
  - Remote Desktop, 659–664
    - configuring computer for remote access, 661
    - customizing, 663
    - ending session, 664
    - installing client software, 662
    - requirements, 660–661
    - restrictions, 660
    - starting session, 662–663
  - Restore Wizard, 650–651
  - Startup and Recovery options, 639–641
  - System Restore, 652–654, 653
  - Windows XP boot disk, 631–633
  - x86-based boot process, 618–633
    - boot sequence, 620–621
    - kernel initialization sequence, 622
    - kernel load sequence, 621–622
    - logon sequence, 622
    - Plug and Play devices detection, 623
    - pre-boot sequence, 618–619
  - System Restore, 608, 652–654, 653
  - system Root Security template, 266
  - system, settings in security templates, 266
  - System State data, 643, 645, 712
  - System Tools utility, 584–585, 712
  - SYSTEMROOT command, 658
  - Systems Management Server (SMS), 39
- 
- T**
- T1 carried leased lines, 486, 712
  - tape drives
    - external, 643
    - managing, 134
  - Task Manager, 586–591, 712
    - Applications tab, 586, 586
    - Networking tab, 591, 591
    - Performance tab, 590, 590–591
    - Processes tab, 587, 587–590
  - Task Scheduler, 591–596, 712
  - Taskbar, 712
    - icon for multilanguage support, 182
  - Taskbar and Start Menu Properties dialog box
    - Start Menu tab, 174–176
    - Taskbar tab, 172–174, 173
  - TCP/IP Filtering dialog box, 419
  - TCP/IP port, 454, 712
  - TCP/IP (Transmission Control Protocol/Internet Protocol), 406–412
    - Alternate IP Configuration, 420–421
      - benefits, 406
      - failure to access resources, 25
      - features, 407
      - IP addressing and configuration, 407–412
      - multiple IP addresses, 422
      - name resolution, 421
      - options for deploying configurations, 412–421
      - static IP addressing, 414–419
      - testing IP configuration, 422–425
    - TCP port, for web site, 533–534
  - TCP (Transmission Control Protocol), 713
    - port for websites, 533–534
    - telephony, configuring with Setup Manager, 67
  - template files, for RIS, 59
  - Temporary Internet Files, 523
  - temporary subfolders, Winnt32 switch to create, 48
  - terabyte (TB), 712
  - Terminal Server User group, 224, 712
  - test page, printing, 451–452
  - testing
    - configuration changes, 554
    - IP configuration, 422–425
  - text editor
    - for answer file editing, 72–78
    - for Boot.ini file editing, 628–629
  - TEXT print processor, 460
  - text size, accessibility and, 185
  - TFTP (Trivial File Transfer Protocol), 53, 713 and RIS, 50
  - themes for Desktop, 170
  - thread, 713
  - threshold for account lockout, 247, 248
  - time format, 179
  - time zone, configuring with Setup Manager, 67
  - ToggleKeys, 184
  - Token Ring, 484, 713
  - Tools menu (Windows Explorer)
    - Map Network Drive, 374–375
  - Tour Windows XP icon in Start menu, 171
  - trace log, 567–569
    - Properties dialog box
      - Advanced tab, 569
      - General tab, 567–568, 568
      - Log Files tab, 568
      - Schedule tab, 569
  - traffic light icon, for disk quotas, 309
  - Transmission Control Protocol/Internet Protocol (TCP/IP), 713. *See also* TCP/IP (Transmission Control Protocol/Internet Protocol)

## 738 Transmission Control Protocol – user accounts

- Transmission Control Protocol (TCP), 713
  - trends, 553
  - Trivial File Transfer Protocol (TFTP), 53, 713
    - and RIS, 50
  - Troubleshooter Wizard, for DVD & CD-ROM devices, 133
  - troubleshooting
    - disk storage, 303–305
      - failure to initialize, 305
      - with status codes, 304–305
    - hardware, 155
    - installing Windows XP Professional, 23–26
      - Boot.ini file, 25
      - with log files, 26
      - non-supported hard drives, 26
    - Internet Connection Sharing (ICS), 516–517
    - multi-monitor support, 138
    - network adapters, 398–399
    - network connections to RAS server, 507–508
    - offline files and folders, 352
    - power management for
      - mobile computers, 144–145
    - printing, 471–472
    - remote access connections, 507–508
    - scheduled tasks, 596
    - upgrade to Windows XP Pro, 106–108
      - incompatible hardware drivers, 106
      - incompatible software, 107
      - lost user settings, 108
    - USB devices, 150
    - user accounts, 215–218
      - domain account authentication, 217–218
      - local account authentication, 216–217
      - user accounts authentication, 215–218
      - website access, 541
  - TTL Expired in Transit message, 424
  - Turn Off Computer icon in Start menu, 172
  - TYPE command, 658
- 
- U**
- unattended installation, 47–49, 713
    - command-line switches, 48–49
    - overview, 39, 39–40
  - Unattend.txt file, 39, 45, 713.
    - See also* answer files sample, 72–73
  - UNC (Universal Naming Convention), 215, 714
  - Unicode standard, 179
  - Uniform Resource Locator (URL), 521–522, 713
  - uninterruptible power supply (UPS), 713
  - Uniqueness Database file (UDB), 66
    - Winnt32 switch to specify, 49
  - Universal Naming Convention (UNC), 215, 714
  - Universal Serial Bus (USB), 714.
    - See also* USB (Universal Serial Bus)
  - Unknown disk status, 305
  - Unreadable disk status, 305
  - updating, device drivers, 129–130
  - upgrade, 714
    - upgrade pack, 98, 714
  - Upgrade Report, 714
  - upgrading basic to dynamic storage, 299–300
  - upgrading to Windows XP Professional
    - vs. clean install, 6–7, 94
    - decision factors, 94–95
    - exam essentials, 109
    - handling application failure, real world scenario, 101
    - migrating files and settings, 102–103
    - migrating user data, 103–106
    - overview, 103–104
    - requirements, 104–105
    - User State Migration Tool (USMT), 105–106
  - preparation, 95–100
    - client paths and requirements, 95–96
    - issues for Windows 98/Me, 96–99
    - issues for Windows NT 4 Workstation and 2000 Professional, 96
    - upgrade checklist, 99–100
  - process, 100–102
  - reversing process, 108
  - troubleshooting, 106–108
    - incompatible hardware drivers, 106
    - incompatible software, 107
    - lost user settings, 108
  - UPS (uninterruptible power supply ), 713
  - URL. *See* Uniform Resource Locator (URL)
  - USB controller Properties dialog box, 149
    - General tab, 149
  - USB (Universal Serial Bus), 714
    - devices, 149–150, 487
    - printers, 443
    - troubleshooting, 150
  - user accounts, 200–209. *See also* disk quotas; groups
    - adding to local group, 227
    - auditing management, 250
    - caching credentials, 218
    - changing passwords, 208–209
    - creating, 201–205
      - security identifier (SID), 202–205
      - usernames and conventions, 202
    - deleting, 206–207, 207
    - disabling, 205–206
    - effective rights, 361–364, 689
    - exam essentials, 230
    - Local Users and Groups utility to setup, 200–201
    - logging on and off, 198–199

- logon authentication, 198–199, 199
- lost settings after upgrade, 108
- NTFS permissions, 358
- overview, 196–198
  - built-in accounts, 197
  - local and domain accounts, 197–198
- properties, 209–215
  - group membership, 209–210
  - logon script, 214
  - profiles, 211–214
- renaming, 208
- troubleshooting, 215–218
  - domain account
    - authentication, 217–218
  - local account
    - authentication, 216–217
- User Accounts dialog box, 218
- User Interaction Level dialog box, 68–69, 69
- user interaction level during setup, 66
- User modes for MMC, 123
- user profiles, 211–214, 714
  - copying, 214
  - local, 211–213
  - mandatory, 213–214
  - roaming, 213
- User Properties dialog box, 209–215
  - General tab, 206, 209
  - Member Of tab, 209–210, 210
  - Profile tab, 211, 211–215
    - home folder, 215
    - logon script, 214
- user right policies, 252–256, 714
- user rights, 252, 252–256
  - to create computer accounts, 56–57
  - to log on as batch job, 58
  - options, 253–255
- User State Migration Tool (USMT), 105–106, 714
  - overview, 103–104
  - requirements, 104–105
- username, 714
- in New User dialog box, 203
- Users group, 222, 714

- Users or Groups dialog box, 56, 57
- USMT (User State Migration Tool ), 105–106, 714
  - overview, 103–104
  - requirements, 104–105
- Utility Manager, 186, 187, 714

## V

- verbose mode, for Convert utility, 284
- vertical page orientation, 450
- VGA mode, 637
- video adapter, 134, 715
  - configuring, 134–137
- video drivers, upgrading, 106
- video, support for digital, 121
- View menu (Device Manager)
  - Resources by
    - Connection, 128
    - Resources by Type, 129
- virtual device drivers (VxDs), 6
- virtual memory, 715
- virtual private network (VPN), 485–486, 510, 715
  - client configuration, 511
  - connections, 508–511
- viruses, MBR corruption, 619
- volume Properties dialog box, 291
  - General tab, 291, 292
  - Hardware tab, 292–293, 293
  - Quota tab, 295, 309–313, 310
  - Security tab, 291, 293, 295
  - Sharing tab, 291, 293, 294
  - Tools tab, 291, 292
  - Volumes tab, 290
- volume (sound level) for modem speaker, 491
- volumes, 715
  - creating, 296–298
  - default quotas, 310–311
  - deleting, 301–302
  - evaluating for
    - defragmentation, 322
  - extended, 302–303
  - troubleshooting, 324–325
- VPN. *See* virtual private network (VPN)

## W

- wallpaper, 177
- WAN. *See* wide area network (WAN)
- Warning event, 610, 715
- web browser, 715. *See also* Internet Explorer (IE)
  - for Internet printer connection, 530
- web resources, Microsoft on
  - hardware requirements, 5
- website management. *See* Internet Information Services (IIS)
- Welcome to Setup dialog box, 12
- wide area network (WAN), 486, 715
  - protocols for, 506
- Win16, 715
- Win32, 715
- Window NT Workstation, and NTFS, 283
- Windows 9x, 715
- Windows 98/ME
  - device drivers, 6
  - upgrading to Windows XP Pro, 96–99
- Windows 2000/2003 domains, vs. NT domains, 240
- Windows 2000 Professional, upgrading to Windows XP Pro, 96
- Windows 2000 Server, publishing application on, 81–82
- Windows Backup, 715
- Windows Component Wizard, 531
- Windows Explorer
  - creating shortcuts, 338
  - for data compression, 306
  - for file encryption, 314–315
  - to map network drive, 374–375
  - user interface extensions, 120
- Windows Firewall, 396, 518–520, 716
  - dialog box, 519–520
    - Advanced tab, 521
    - Exceptions tab, 520
    - General tab, 520

**740** Windows Image Acquisition Architecture – zipped (compressed) folders

- Windows Image Acquisition Architecture, 118–120
    - components, 119–120
    - connecting devices, 119
  - Windows Installer packages, 78–84, 716
    - adding package to GPO, 81–82
    - copying MSI application to share, 79
    - Group Policy Object (GPO), 79
    - Group Policy Object (GPO) filtering, 80
    - installing published application, 83–84
  - Windows Internet Name Service (WINS), 421, 716
  - Windows Media Player, icon in Start menu, 171
  - Windows Movie Maker, icon in Start menu, 171
  - Windows NT, 716
  - Windows NT Workstation, upgrading to Windows XP Pro, 96
  - Windows Product Activation, answer file settings, 77
  - Windows Security Center, 270, 270, 716
  - Windows Security dialog box, 199
  - Windows Update, 18–23, 22, 716
    - accessing, 18–19
    - other options, 19–23
  - Windows Update dialog box, 18–23, 19
    - Administrator Options, 22, 22
    - Restore Hidden Updates, 22
    - Settings, 20, 21
  - View Installation History, 20, 21
  - Windows XP boot disk, 631–633, 716
  - Windows XP Client Installation Wizard (CIW), 49–61, 716
  - Windows XP compatibility report, 97–98
  - Windows XP Deployment Tools, 716
  - Windows XP Multilanguage version, 716
  - Windows XP Professional, 716
  - Windows XP Services, 155–158, 156
  - Windows XP startup, adding Recovery Console, 655–656
  - Winnt utility, 10, 39, 45
    - location, 46
  - Winnt32 utility, 10, 39, 45
    - command-line switches, 47–49
    - location, 46
  - WINNT32.EXE, 717
  - WINNT.EXE, 717
  - winnt.sif answer file, 72
  - WINS (Windows Internet Name Service), 421, 716
  - WINS server, 412, 717
  - wireless devices, 148
  - wireless network connections, 400–405
    - configuring, 400–402
    - security for small network, 403–405
  - Wireless Network Connections Properties dialog box
    - Choose a wireless network window, 402
    - General tab, 401
    - Wireless Networks tab, 401
  - Wireless Network Setup Wizard, 403, 403–405, 404
  - WMI Control, 717
  - workgroup, 717
    - membership, 10
  - Workgroup or Computer Domain dialog box, 14
  - write-back caching, 717
  - Write NTFS permission, 356
  - write-through caching, 717
  - Write web service access permission, 536
- 
- X**
- X.25, 485, 717
  - x86-based boot process, 618–633
    - boot sequence, 620–621
    - kernel initialization sequence, 622
    - kernel load sequence, 621–622
    - logon sequence, 622
    - Plug and Play devices detection, 623
    - pre-boot sequence, 618–619
- 
- Z**
- ZAP files, 78, 717
  - Zip drives, Device Manager for managing, 134
  - zipped (compressed) folders, 308