

Index

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

A

- Accelerated Graphics Port (AGP), 160, 781
- access control entries (ACEs), 479, 479, 780
- access control lists (ACLs), 479, 479, 780
- Access Control Settings dialog box, 577, 578
- Access This Computer from the Network right, 279
- access tokens
 - creating, 478
 - defined, 780
 - for logon authentication, 243
- Accessed property, 715
- accessibility features, 132, 780
 - setting, 223–225, 225
 - using, 226–229, 227–229
- Accessibility Wizard, 226–227, 780
- Accessories settings, 339
- Account is disabled option, 254
- account lockout policy, 780
- Account Lockout Duration policy, 273
- Account Lockout Policy folder, 268
- Account Lockout Threshold policy, 273
- account policies. *See* policies
- Account Policies folder, 268, 268
- ACEs (access control entries), 479, 479, 780
- ACLs (access control lists), 479, 479, 780
- ACPI (Advanced Configuration and Power Interface), 3, 109, 163–164, 164, 781
- Act as Part of the Operating System right, 279
- action logs, 29
- Action tab, 668, 669
- Active Desktop
 - defined, 780
 - for display, 217
 - options for, 436
 - support for, 4
- Active Directory
 - defined, 780
 - for policies, 320–324
 - for RIS servers, 67
 - for user accounts, 241
- Active Directory user account, 780
- Active Directory Users and Computers window, 71, 72, 75
- active partitions, 721–722
- Adapter tab, 157
- adapters
 - defined, 780
 - network. *See* network adapters
 - video
 - configuring, 156–159, 157–158
 - defined, 807
- Adapters and Binding tab, 530, 531
- Add a Fax Printer option, 183, 186
- Add a New Device option, 502
- Add Counters dialog box, 655–656, 656
- Add Network Place Wizard, 474, 474, 476
- Add New Programs option, 91
- Add Port option, 566
- Add Printer Driver Wizard, 568
- Add Printer option, 551
- Add Printer Wizard, 550–556, 632
- Add/Remove Hardware utility, 132, 146
- Add/Remove Hardware Wizard dialog box, 501
- Add/Remove Program utility, 91, 132
- Add/Remove Snap-in dialog box, 141, 248
- Add Scheduled Task option, 688
- Add Standalone Snap-in dialog box, 141, 248
- Add/Troubleshoot a Device option, 501

812 Add Workstations to the Domain right – answer files

- Add Workstations to the Domain right, 279
- Additional Drivers dialog box, 562–563, 563
- Additional Restrictions for Anonymous Users option, 284
- Additional Settings dialog box, 54, 54
- addresses, IP
 - defined, 793
 - DHCP for, 516–517, 517
 - in TCP/IP, 513–514, 514
- ADMIN\$ share, 469
- Administrative Tools option, 132
- Administrator accounts, 21, 241, 781
- Administrator Password dialog box, 52, 52
- Administrators group, 308–309, 781
- AdminPassword key, 60
- Advanced Attributes dialog box
 - for compression, 397
 - for encryption, 407
 - for indexing folders, 462
- Advanced Configuration and Power Interface (ACPI), 3, 109, 163–164, 164, 781
- Advanced Graphics Port (AGP), 160, 781
- Advanced Options dialog box, 560, 561
- Advanced Options menu
 - for boot logging, 736, 738
 - for Safe Mode, 744–745
- Advanced Options tab, 183–184, 184
- Advanced Power Management (APM), 109, 171, 781
- Advanced Security Settings dialog box, 614–615, 614
- Advanced Settings dialog box, 530, 531, 603, 603
- Advanced tab
 - for encrypted files, 410
 - for modem preferences, 605
 - for modem setup, 601–603, 602
 - for network adapters, 505–506, 506
 - for power options, 168, 169
 - for printing, 566–571, 566
 - for Taskbar and Start Menu, 212–214, 213
 - for trace logs, 667, 667
 - for USB controllers, 176
- Advanced TCP/IP Setting dialog box, 520–524, 520–521, 523
- AGP (Accelerated Graphics Port), 160, 781
- alarms for power management, 166–167, 167
- Alarms tab, 166–167, 167
- alerts, 651
 - creating, 667–669, 668–669
 - defined, 781
- All Counters option, 656
- All Instances option, 657
- Allow caching of files in this shared folder option, 446
- Allow Inheritable Permissions from Parent to Propagate to this Object option, 456
- Allow Server Operators to Schedule Tasks policy, 284
- Allow System to Be Shut Down Without Having to Log On policy, 285
- Allow Unsecured Password option, 614
- Allowed to Eject Removable NTFS Media policy, 285
- Always Available option, 567
- Always move new import media to the backup media pool option, 755
- Always On power scheme, 166
- Always on Top property, 211
- Always Replace the File on My Computer option, 756
- Amount of Time Idle Before Disconnecting Session policy, 285
- analyzing disks, 412–413, 412
- Anonymous Logon group, 311, 781
- Answer File Name dialog box, 56
- answer files, 47–48
 - creating, 49–56, 50–55
 - defined, 781
 - options in, 56–57
 - for display, 61
 - for hardware, 57–59

- for installing applications, 62
 - for NTFS, 62
 - for passwords, 59–60
 - for regional settings, 60–61
- Windows 2000 Deployment Tools for, 48–49
- anti-virus software, 108
- APM (Advanced Power Management), 109, 171, 781
- Appearance tab, 217
- Append parent suffixes of the primary DNS suffix option, 522
- Append primary and connection specific DNS suffixes option, 521
- Append these DNS suffixes (in order) option, 522
- Append to Existing Log File option, 744
- Application layer in OSI model, 497, 781
- Application logs, 135, 710, 781
- applications
 - deploying
 - Group Policy Objects for, 321
 - Windows Installer packages for, 84–92, 87–90
 - installing, answer files for, 62
 - Task Manager for
 - performance, 686–687, 686
 - tasks, 681–682, 682
 - in upgrading, 116–117
- Applications tab, 681–682, 682
- Apply Changes to This Folder, Subfolders, and Files option, 398
- Apply Setting As System Default option, 152
- ARC naming conventions, 727–728
- Assign a Drive Letter option, 392
- Assign Drive Letter or Path dialog box, 386, 387, 389
- assigned applications, 85, 781
- associations
 - for events, 179
 - for extensions, 439
 - for processors, 180
- attaching to shares, 442
- ATTRIB command, 731–732
- attributes
 - for BOOT.INI access, 729–732, 730
 - for compression, 398
 - editing, 731–732
 - for encryption, 407
 - file, 720, 789
- Audit Account Logon Events policy, 277
- Audit Account Management policy, 277
- Audit Directory Service Access policy, 277
- Audit Logon Events policy, 277
- Audit Object Access policy, 277
- Audit Policy Change policy, 277
- Audit Privilege Use policy, 277
- Audit Process Tracking policy, 277
- Audit System Events policy, 277
- Audit the Access of Global System Objects policy, 285
- Audit Use of All User Rights including Backup and Restore Privilege policy, 285
- auditing
 - policies for, 275–278, 276, 781
 - printer activities, 577
- Auditing tab, 577
- Authenticated Users group, 312, 781
- authentication
 - defined, 782
 - logon, 243–244, 243
 - troubleshooting, 290–293
- Author mode in MMC, 141
- authorizing RIS servers, 70–71, 71
- Auto Detect option, 528
- Auto Hide property, 212
- automated installation. *See* installation automation
- Automatic Discovery of Proxy Server option, 628
- Automatically detect and install my Plug and Play printer option, 552
- Automatically Log Off Users When Logon Time Expires policy, 285
- Automatically Reboot option, 741

814 Automatically Synchronize Offline Files When I Log On/Off My Computer option – boot process

Automatically Synchronize the Offline Files When I Log On and Log Off My Computer option, 443
automation for RIS clients, 64
availability
 of folders and files, 443–445, 444–445
 of printers, 567
Available Hardware Profiles option, 350
Available MBytes counter, 670–671
Average field, 653

B

Back Up Files and Directories right, 279
Back up the contents of mounted drives option, 755
background applications, 686
Background tab, 216
Backup Log tab, 758, 759
Backup Now option, 380
Backup Operators group, 309, 782
Backup Progress dialog box, 753
Backup Type tab, 756, 757
Backup utility, 309, 747–748, 748
 backup types in, 756–758, 757, 782
 Backup Wizard in, 751–753, 782
 for ERDs, 748–751
 options in
 backup, 754–755, 754
 excluded files, 758, 759
 log, 758, 759
 restore, 756, 756
 Restore Wizard in, 760–762
backups. *See also* Backup utility
 defined, 782
 for encrypted files, 410
 group for, 309
 for Registry, 749
 for upgrading, 110, 390
bad sectors, 416
baselines
 defined, 782
 Performance Logs and Alerts for, 679–681, 679
 for system performance, 650
/basevideo switch, 729
Basic Input/Output System (BIOS), 782
basic storage, 371–372
 defined, 782
 managing, 393
 upgrading to dynamic, 390–393, 391–392
Batch group, 312, 782
batch jobs for RIS, 74, 75
bindings
 defined, 782
 for network protocols, 530, 531
BINL (Boot Information Negotiation Layer)
 protocol
 defined, 783
 in RIS process, 63, 68
BIOS (Basic Input/Output System), 782
BitsPerPixel option, 61
Block option for driver signing, 151
Block Inheritance option, 323
block size, 387
boot disks
 creating, 732–733
 setup, 745–747
Boot Information Negotiation Layer (BINL)
 protocol
 defined, 783
 in RIS process, 63, 68
BOOT.INI file, 726–727, 727
 access to, 729–732, 730–731
 ARC naming conventions for, 727–728
 in boot sequence, 722–724
 defined, 783
 switches for, 729
Boot Normally option, 739, 783
boot partitions, 13, 720, 783
boot process, 719
 boot disks for, 732–733
 BOOT.INI file in, 726–732, 727, 730–731
 boot sequence in, 722–724

- from CD, 16
- defined, 782
- kernel initialization sequence in, 725–726
- kernel load sequence in, 725
- logging, 736–738, 737
- logon sequence in, 726
- preboot sequence, 719–722
- boot ROMs, PXE-based, 77
- BOOTSECT.DOS file
 - in boot sequence, 723
 - defined, 783
- bootstrap images
 - defined, 783
 - in RIS process, 63
- bottlenecks
 - defined, 783
 - in system performance, 650–651, 671
- Browse for Folder dialog box, 49
- buffers, modem, 603
- built-in groups, 307
 - local, 307–310
 - special, 310–312
- built-in user accounts, 241
- Buttons tab, 174
- Bypass Traverse Checking right, 280
- Bytes Total/Sec counter, 677

C

- caching and cache files
 - cleaning up, 414
 - defined, 783
 - for disks, 19
 - with offline files and folders, 445–446, 446
 - for shared folders, 464
 - in standby power states, 163
- Caching option, 464
- Caching Settings dialog box, 445–446, 446
- Cancel option
 - for printers, 583
 - for Windows Security, 246
- Cancel All Documents option, 581
- card services, 171
- categories for events, 713, 717
- Category property, 717
- CD-based images
 - defined, 783
 - for RIS servers, 65, 68–70
- CD key problems, 28
- CD-ROM devices
 - installation from, 16–17
 - managing, 152–155, 153–154
- CDFS (Compact Disc File System), 784
- central processing units (CPUs). *See also* processors
 - defined, 783
 - speed of, 10
- Challenge Handshake Authentication Protocol (CHAP), 615
- Change Default Preferences option, 603
- Change Drive Letter and Path for dialog box, 392
- Change Password option, 245
- Change share permission, 466
- Change the System Time right, 280
- changing
 - drive letters and paths, 391–393, 392
 - passwords, 259–260
- CHAP (Challenge Handshake Authentication Protocol), 615
- character-code translation, 497
- Chart view, 653, 654
- Check Disk utility, 416–417, 783
- Check Now button, 380
- checkupgradeonly option, 108
- Choose a Hardware Task dialog box, 501–502
- Choose Target Machine dialog box, 248
- cipher text, 406, 783
- CIPHER utility, 408–410, 783
- CIW (Client Installation Wizard), 62, 64
- classes of IP addresses, 513–514, 514
- clean installs
 - defined, 784
 - vs. upgrades, 11, 105
- cleaning up disks, 414–415

816 Clear option for Start menu – computers

- Clear option for Start menu, 213
- Clear All Events option, 713
- Clear Log option, 715
- Clear Virtual Memory Pagefile When System Shuts Down policy, 285
- clearing log file events, 713
- Client Installation Wizard (CIW), 62, 64
- clients
 - defined, 784
 - RIS server configuration for, 75–76, 76
 - in upgrading, 106–107
- Clone Control sets, 725
- clusters in FAT32, 14, 369
- CMDCONS folder, 764, 766
- color depth, 156
- Color Management tab
 - for scanners and cameras, 179
 - for video adapters, 158
- Color option for printing, 560
- color schemes for Desktop, 217
- color selection for video adapters, 159
- Color tab, 661
- Colors option
 - for display, 53
 - for video adapters, 156
- COM ports
 - defined, 784
 - for modems, 603
- Command Prompt dialog box, 732
- Comment option, 464
- comments
 - for shared folders, 464
 - for task scheduling, 691
- Compact Disc File System (CDFS), 784
- compatibility
 - in installation, 10–11, 28
 - in upgrading, 108, 116–117
- Compatws.inf template, 111
- Completing the Add Printer Wizard dialog box, 555
- Completing the Add/Remove Hardware Wizard dialog box, 504
- Completing the Backup Wizard dialog box, 752
- Completing the Create Volume Wizard dialog box, 388, 388
- Completing the Delegation of Control dialog box, 73
- Completing the Extend Volume Wizard dialog box, 395
- Completing the Internet Connection Wizard dialog box, 630
- Completing the Network Connection Wizard dialog box, 609, 622
- Completing the Restore Wizard dialog box, 761
- Completing the Upgrade Device Driver Wizard dialog box, 149
- Completing the Windows 2000 Setup Manager dialog box, 56
- Completing the Windows 2000 Setup Wizard dialog box, 22
- Completing the Windows Components Wizard dialog box, 68
- Components category, 135
- Compress Contents to Save Disk Space option, 398
- compression, 396–398
 - defined, 784
 - in NTFS, 14
 - in Presentation layer, 497
 - in upgrading, 109
- Compute selection information before backup and restore operations option, 755
- Computer management, 134, 134, 146
 - Services and Applications utility, 138–139
 - storage utilities, 137–138
 - System Tools, 135–137, 136
- Computer Management utility, 315, 784
- Computer Name and Administrator Password dialog box, 21
- Computer property, 717
- computers
 - configuring, 442, 443, 447–448, 447
 - for events, 713
 - names for, 21, 784

- configuration inventory, 110
- configuration problems in installation, 28
- configuring
 - computers, 442, 443, 447–448, 447
 - disk quotas, 400–401, 400
 - multiple-language support, 222, 223
 - network adapters, 504–510, 505–509
 - NWLink IPX/SPX/NetBIOS Compatible Transport, 528–529
 - RIS servers, 68–70, 75–76, 76
 - share permissions, 465–467, 466
 - TCP/IP
 - advanced, 520–524, 520–521, 523
 - dynamic, 524
 - manual, 518–519
 - testing, 525–526
 - user profiles, 338–339
- Windows 2000 environment, 130
 - device drivers, 146–152, 150–151
 - device troubleshooting in, 187–190, 187
 - disk devices, 152–155, 153–155
 - display devices, 156–162, 157–158
 - exam essentials for, 196
 - faxes, 182–187, 183–185
 - hardware installation, 144–146, 145
 - I/O device management, 171–177, 173–174, 176
 - imaging devices, 177–180, 178
 - key terms for, 197
 - management utilities for. *See* management utilities
 - mobile computer hardware, 162–171, 167–170
 - processors, 180–182
 - services, 190–194, 191–195
 - summary, 195–196
- Confirm Attribute Changes dialog box, 398, 407
- Confirm Offline Subfolders dialog box, 445, 445
- Confirm password option, 253
- conflicts, resource, 509
- Connect As dialog box, 476, 476
- Connect Dial-up Connection dialog box, 609, 610, 622
- Connect to a Printer on the Internet or on Your Intranet option, 633
- Connect to a Private Network through the Internet option, 621
- Connect to the Internet item, 210
- Connect Using option, 611
- Connect Using a Different User Name option, 476
- Connection Availability dialog box, 608, 609, 622
- Connection Complete dialog box, 609, 622
- connection-oriented services, 498, 784
- connectionless services, 498, 784
- connections
 - to printers, 584
 - for RAS servers
 - creating, 607–610, 608–610
 - properties for, 610–616, 611–614, 616
 - security for, 613–615, 613–614, 616
 - in Session layer, 497–498
- Connections tab, 627, 628
- contingency plans for upgrading, 111
- Control Panel, 131–134, 131
 - defined, 784
 - user profile settings for, 339
- CONVERT command, 370–371, 784
- converting
 - file systems, 370–371
 - to NTFS, 62
- copied files, NTFS permissions for, 460
- Copy backup type, 757, 784
- Copy option, 351
- Copy Here option, 435
- Copy To button, 344, 347
- copying
 - disk images, 82–84
 - folders and files, 435, 435
 - hardware profiles, 351
 - MSI applications to shares, 86
 - system files and folders, 763
 - user profiles, 343–344, 347–349

corrupt boot files, 724
corrupt file systems, 416
cost of ownership as design goal, 5
counters
 defined, 784
 logs for, 136, 662–664, 663–664
 in System Monitor, 655–657, 656, 659
Country/Region Code field, 608
Cover Pages tab, 183
CPUs (central processing units). *See also* processors
 defined, 783
 speed of, 10
Crash Dump option, 743
Create a New Answer File option, 50
Create a Pagefile right, 280
Create a Shortcut to a Web Folder or FTP Site
 option, 476
Create a Token Object right, 280
Create Crash Dump File option, 744
Create Logical Drive option, 389
Create New Folder option, 56
Create Partition option, 389
Create Partition Wizard, 389
Create Permanent Shared Objects right, 280
Create Shared Folder dialog box, 470–471, 471
Create Shared Folder Wizard, 470–471, 470
Create Shortcut dialog box, 215–216
Create Volume option, 394
Create Volume Wizard dialog box, 385–388,
 385–388
Created property, 715
Creator group, 311, 784
Creator Owner group, 311, 784
critical battery alarms, 166
currencies, locale settings for, 15, 223–224
%Current Disk Queue Length counter, 675
cursor blink rate setting, 173
Custom option for displays, 53
Custom Settings option, 22, 53

D

Daily backups, 758, 785
data compression, 396–398
 defined, 784
 in NTFS, 14
 in Presentation layer, 497
 in upgrading, 109
data encryption, 406–407
 CIPHER utility for, 408–410
 with compression, 397
 defined, 785, 787
 for folders and files, 407–408
 in NTFS, 15
 in Presentation layer, 497
 recovering encrypted files, 410
data flow, network, 495–496, 496
data for events, 713
Data Link layer in OSI model, 498–499, 785
Data tab, 659, 660
database services in Application layer, 497
Date and Time Settings dialog box, 22
Date/Time option, 132
dates
 Control Panel for, 132
 for events, 712
 locale settings for, 15, 223–224
daylight savings time settings, 22
Debug Programs right, 280
Debugging Mode, 739, 785
default gateways
 defined, 785
 in TCP/IP, 515, 516
Default Operating System option, 740
Default Preferences dialog box, 603
DefaultPassword key, 60
defaults
 disk quotas, 401–403
 local groups, 307–310

- modem, 603, 604
- printing, 570
- Defragment Now button, 380
- defragmentation
 - for upgrading, 109–110
 - utility for, 137, 410–414, 411–412
- Delegate Control option, 71
- Delegation of Control Wizard, 72, 72
- Delete option
 - for files and folders, 434
 - for printers, 581
 - for profiles, 351
- Delete Partition option, 393
- Delete Volume option, 393
- deleted accounts in authentication, 291–292
- deleting
 - files, 434
 - folders, 434
 - groups, 319–320
 - groups from permissions lists, 576
 - hardware profiles, 351
 - members from groups, 318
 - NTFS permissions, 456
 - partitions and volumes, 393
 - printers, 581
 - Start menu items, 213
 - for upgrading, 110
 - user accounts, 257–258, 257
- Deny Access to This Computer from the Network right, 280
- Deny disk space to users exceeding the quota limit option, 401
- Deny Logon as a Batch File right, 280
- Deny Logon as a Service right, 280
- Deny Logon Locally right, 280
- dependencies for services, 194, 195
- Dependencies tab, 194, 195
- Deploy.cab file, 48, 80–81
- Deploy Software dialog box, 89, 90
- deployment
 - Group Policy Objects for, 321
 - Windows Installer packages for, 84–92, 87–90
- Deployment Tools, 48–49
- Description option, 253
- descriptions
 - for events, 713
 - for new users, 253
- design goals
 - cost of ownership, 5
 - ease-of-use, 5
 - hardware support, 5
 - Windows 98 features, 3–4
 - Windows NT Workstation 4 features, 4
- Desktop
 - Active Desktop
 - defined, 780
 - for display, 217
 - options for, 436
 - support for, 4
 - defined, 785
 - managing
 - accessibility features, 224–229, 225, 227–229
 - display properties, 216–218, 217
 - exam essentials for, 230
 - key terms for, 231
 - locale settings, 223–224
 - multiple-language support, 219–222
 - personal preferences, 218
 - settings, 208–210, 209
 - shortcuts, 215–216
 - summary, 230
 - Taskbar and Start menu, 210–215, 211, 213
 - in standby power states, 163
- Destination Address dialog box, 622
- Detailed option, 758
- device drivers
 - defined, 785
 - driver signing management, 150–152, 150–151
 - in installation, 28
 - for modems, 605, 606
 - for network adapters, 500, 506–508, 507–508
 - for printers, 547, 549, 568, 800
 - in Safe Mode, 735
 - updating, 146–149

820 Device Manager utility – Disk Management utility

- Device Manager utility, 137
 - defined, 785
 - in hardware installation, 145, 145
 - for modems, 599
- Device Settings tab, 578, 579
- devices
 - disk, 152–155, 153–155
 - display, 156–162, 157–158
 - imaging, 177–180, 178
 - printer, 547, 550, 578, 579, 800
 - troubleshooting, 187–190, 187
- DHCP (Dynamic Host Configuration Protocol), 524
 - defined, 787
 - for RIS servers, 67, 70–71, 71
 - in TCP/IP, 516–517, 517
- DHCP discovery packets, 63
- DHCPACK message, 517
- DHCPDISCOVER message, 516
- DHCPOFFER message, 516
- DHCPREQUEST message, 517
- Diagnostics tab, 601, 602
- Dial-up Connections Properties dialog box, 610, 611
- dial-up networking, 598
 - defined, 785
 - exam essentials for, 634
 - with Internet, 617–620
 - with Internet connection sharing, 623–631, 623, 626–630
 - key terms for, 635
 - modem setup for, 598–605, 600–606
 - with RAS server connections
 - creating, 607–610, 608–610
 - properties for, 610–616, 611–614, 616
 - security for, 613–615, 613–614, 616
 - summary, 634
 - with virtual private network connections, 620
- Dial-up to the Internet option, 617
- Dialup group, 312, 785
- differential backup type, 758, 785
- digital cameras, 177–180, 178
- Digital Versatile Disc (DVD) devices
 - defined, 785
 - managing, 152–155, 153–154
- Digitally Sign Client Communication policy, 285–286
- Digitally Sign Server Communication policy, 286
- direct hardware calls, 116
- Direct Memory Access (DMA) settings, 145
- directory replication
 - defined, 785
 - group for, 310
- Disable NetBIOS over TCP/IP option, 524
- Disable policy, 286
- disabled accounts in authentication, 291–292
- disabling user accounts, 254–256
- disk-caching programs, 19
- Disk Cleanup task properties, 690–691, 691
- Disk Cleanup utility, 414–415, 786
- disk defragmenters
 - defined, 786
 - Disk Defragmenter utility, 137, 410–414, 411–412
 - for upgrading, 109–110
- disk duplicators, 46
- disk images, 46, 46, 79
 - copying and installing from, 82–84
 - creating, 81–82, 81
 - defined, 786
 - preparing for, 80
 - System Preparation Tool for, 80–84, 81
- Disk Management utility, 13, 137, 375–376, 376
 - for basic storage, 393
 - defined, 786
 - for disk properties, 377, 378
 - for drive letters and paths, 391–393, 392
 - for dynamic storage, 393–396, 395
 - for new disks, 384–385
 - for partitions, 389–390, 393
 - upgrading basic disks to dynamic disks, 390–393, 391–392

- for volume and local disk properties, 378–384, 379–384
- for volumes, 385–388, 385–388, 393
- disk path option, 728
- Disk Properties dialog box, 377, 378
- Disk Properties tab, 155, 155
- disk quotas, 399
 - configuring, 400–401, 400
 - default, 401–403
 - defined, 786
 - individual, 403–405, 404
 - monitoring, 405–406
 - in NTFS, 15
 - in upgrading, 108
- disk scans, 110
- disk utilities in upgrading, 109
- disks, 152, 366
 - analyzing, 412–413, 412
 - basic storage on, 371–372
 - cleaning up, 414–415
 - compression on, 396–398
 - defined, 790
 - defragmenting, 410–414, 411–412
 - DVD and CD-ROM, 152–155, 153–154
 - dynamic storage on, 372–375, 373–374
 - encryption for, 406–410
 - exam essentials for, 418–419
 - file systems on, 367–371
 - in installation, 8, 28
 - key terms for, 419
 - managing. *See* Disk Management utility
 - measurement units for, 10
 - monitoring and optimizing, 674–677
 - partitioning, 12–13, 786
 - quotas for. *See* disk quotas
 - removable media, 155, 155
 - summary, 417–418
 - troubleshooting, 416–417
 - for upgrading, 107
- Disks to Upgrade dialog box, 391, 391
- %DiskTime counter, 675
- Display Administrative Tools settings, 213
- Display compressed files and folders with an alternate color option, 437
- display devices, 156
 - answer files for, 61
 - multiple-display support, 160–162
 - requirements for, 8
 - video adapter configuration, 156–159, 157–158
- Display Favorites setting, 214
- Display List of Operating Systems for x Seconds option, 741
- Display Logoff setting, 214
- Display Name property, 715
- Display option, 132
- Display Progress while Connecting option, 611
- Display Properties dialog box
 - for multiple-display support, 161
 - options in, 216–218, 217
 - for video adapters, 156–158, 157
- [Display] section, 61
- Display Settings dialog box, 53, 53
- Display tab, 225
- Display the full path in the address bar option, 438
- Display the full path in the title bar option, 438
- distribution files, 84
- distribution servers, 17
 - defined, 786
 - in unattended installation, 47, 47
- DMA (Direct Memory Access) settings, 145
- DNS (Domain Name Service), 786
- DNS (Domain Name System) servers
 - defined, 786
 - for RIS servers, 67
 - in TCP/IP, 517–518, 520–522, 521
- DNS server addresses, in order of use option, 521
- DNS suffix for this connection option, 522
- DNS tab, 520, 521
- Do Not Display Last User Name in Logon Screen policy, 286
- Do Not Limit Disk Space To option, 405

822 Do Not Replace the File on My Computer (Recommended) option – effective NTFS permissions

- Do Not Replace the File on My Computer (Recommended) option, 756
 - Do Not Share This Folder option, 464
 - Documents and Settings folder, 340–341
 - dollar signs (\$) for share names, 382, 468
 - domain controllers
 - in authentication, 292
 - in installation, 28
 - Domain Name Service (DNS), 786
 - Domain Name System (DNS) servers
 - defined, 786
 - for RIS servers, 67
 - in TCP/IP, 517–518, 520–522, 521
 - domain names, 786
 - domain user accounts, 241–242
 - authenticating, 291–293
 - defined, 786
 - domains
 - in Active Directory, 322
 - in authentication, 292
 - defined, 786
 - membership in, 15
 - Dr. Watson utility, 742–745, 743, 787
 - drive letters
 - changing, 391–393, 392
 - defined, 786
 - Driver Details option, 605
 - Driver File Details dialog box, 507–508, 508
 - Driver Files Search Results dialog box, 149
 - driver signing, 150–152, 150–151, 787
 - Driver Signing Options dialog box, 150–151, 151
 - Driver tab, 147
 - for CD-ROMs, 152, 154
 - for modems, 605, 606
 - for network adapters, 506–507, 507
 - for USB controllers, 177
 - drivers
 - defined, 785
 - driver signing management, 150–152, 150–151
 - in installation, 28
 - for modems, 605, 606
 - for network adapters, 500, 506–508, 507–508
 - for printers, 547, 549, 568, 800
 - in Safe Mode, 735
 - updating, 146–149
 - drives. *See* disks
 - DRWTSN32 command, 742, 787
 - dual-booting, 30–31, 787
 - Dump All Thread Contexts option, 744
 - dump files, 742–743
 - Dump Symbol Table option, 744
 - Duration field, 653
 - DVD (Digital Versatile Disc) devices
 - defined, 787
 - managing, 152–155, 153–154
 - dynamic disks, 31
 - defined, 787
 - upgrading basic disks to, 390–393, 391–392
 - Dynamic Host Configuration Protocol (DHCP), 524
 - defined, 787
 - for RIS servers, 67, 70–71, 71
 - in TCP/IP, 516–517, 517
 - dynamic IP configuration, 524
 - dynamic storage, 372, 393
 - creating volumes, 394–396
 - defined, 787
 - simple volumes, 373, 373
 - spanned volumes, 373, 374
 - striped volumes, 374–375, 374
-
- ## **E**
- EAP (Extensible Authentication Protocol), 615
 - ease-of-use as design goal, 5
 - EB (exabytes), 10, 787
 - Edit Drive Letter or Path dialog box, 392, 392
 - editing
 - attributes, 731–732
 - BOOT.INI file, 726–732, 727, 730–731
 - multilingual, 220
 - effective NTFS permissions, 457–460

- effective rights, 787
 - Effects tab, 217
 - EFS (Encrypting File System), 406–410, 787
 - Emergency Repair Disk (ERD), 747–748
 - creating, 748–749
 - defined, 787
 - preparing, 749–750
 - using, 750–751
 - Emergency Repair Disk dialog box, 749
 - Enable Advanced Printing Features option, 570
 - Enable Bidirectional Support option, 564
 - Enable Boot Logging option, 736, 787
 - Enable Computer and User Accounts to Be Trusted
 - by Delegation right, 280
 - Enable Hibernate Support option, 169
 - Enable Internet Connection Sharing for This
 - Connection option, 625
 - Enable LMHOSTS lookup option, 524
 - Enable NetBIOS over TCP/IP option, 524
 - Enable Offline Files option, 442
 - Enable Printer Pooling option, 565
 - Enable Quota Management option, 401–402
 - Enable VGA Mode option, 738, 787
 - Encrypt Contents to Secure Data option, 407, 410
 - Encrypting File System (EFS), 406–410, 787
 - encryption, 406–407
 - CIPHER utility for, 408–410
 - with compression, 397
 - defined, 785, 787
 - for folders and files, 407–408
 - in NTFS, 15
 - in Presentation layer, 497
 - recovering encrypted files, 410
 - End Task option, 682
 - Enforce Password History policy, 269–270
 - Enter Backup File Name dialog box, 761
 - ERDs (Emergency Repair Disks), 747–748
 - creating, 748–749
 - defined, 787
 - preparing, 749–750
 - using, 750–751
 - Error events, 711, 788
 - errors
 - file system, 416
 - logs for, 29
 - media, 28
 - Ethernet standard, 788
 - Event ID property, 717
 - Event Properties dialog box, 712–713, 712
 - Event Source property, 717
 - Event Type property, 716
 - Event Viewer utility, 135, 709–711, 710
 - for auditing, 276
 - defined, 788
 - event details in, 712–713, 712
 - event types in, 711
 - log files in, 713–719, 714, 716
 - using, 717–719
 - Events tab, 179
 - Everyone group, 311, 788
 - exabytes (EB), 10, 788
 - Exclude Files tab, 758, 759
 - excluded files in backups, 758, 759
 - Expand Control Panel setting, 214
 - Expand My Documents setting, 214
 - Expand Network and Dial-Up Connections
 - setting, 214
 - Expand Printers setting, 214
 - explicitly assigned permissions, 456
 - Extend My Windows Desktop onto This Monitor
 - option, 161–162
 - Extend Volume option, 394
 - extended partitions, 371–372, 788
 - extended volumes, 394–396, 395
 - Extensible Authentication Protocol (EAP), 615
 - extensions, associations for, 439
-
- F**
- Failure Audit events, 711, 788
 - Fast Repair option, 750

824 /fastdetect switch – Force Shutdown from a Remote System right

- /fastdetect switch, 729
- FAT (File Allocation Table), 788
- FAT16 file system, 14, 368–369, 788
- FAT32 file system, 14, 369, 788
- fault tolerance, 788
- fault-tolerant dynamic disk configurations, 375
- fax modems, 788
- Fax Properties dialog box, 183, 183
- Fax Queue option, 186
- Fax Service Management utility, 184–186, 185
- FAX\$ share, 469
- faxes, 182–183
 - properties for, 183–186, 183–185
 - setting up, 186
 - starting services for, 186–187
- FDISK program, 13
- File Allocation Table (FAT)
 - defined, 788
 - FAT16 file system, 14, 368–369, 788
 - FAT32 file system, 14, 369, 788
- file services in Application layer, 497
- file system boot sector, repairing, 763
- file-system filters, 108
- file systems, 367
 - converting, 370–371
 - defined, 789
 - errors in, 416
 - FAT16, 368–369
 - FAT32, 369
 - NTFS, 369–370
 - selecting, 13–15, 367–368
- File Transfer Protocol (FTP), 789
- File Types tab, 439, 440
- files, 430
 - attributes for, 720, 789
 - availability of, 443–445, 444–445
 - copying and moving, 435, 435
 - creating, 432–434, 432
 - deleting, 434
 - encrypting and decrypting, 407–408
 - exam essentials for, 481
 - key terms for, 482
 - organizing, 431, 431
 - renaming, 434
 - searching for, 448–450, 449–450
 - summary, 481
- FileSystem option, 62
- Filter tab, 716–717, 716
- FilterKeys option, 225
- filters
 - for Group Policy Objects, 87–88, 88
 - for log files, 716–717, 716
 - in upgrading, 108
- Find New Hardware dialog box, 502
- Folder Options dialog box, 435
 - File Types tab, 439, 440
 - General tab, 436, 436
 - Offline Files tab, 440–442, 441, 447–448
 - View tab, 437–439, 437, 730, 730
- Folder Options option, 132, 730
- folders, 430
 - availability of, 443–445, 444–445
 - copying and moving, 435, 435
 - creating, 432–434
 - deleting, 434
 - encrypting and decrypting, 407–408
 - exam essentials for, 481
 - file types options for, 439, 440
 - general options for, 436, 436
 - key terms for, 482
 - offline file options for, 440–448, 441, 443–447
 - organizing, 431, 431
 - renaming, 434
 - searching for, 448–450, 449–450
 - shared, 463–465, 463, 467–473, 468
 - summary, 481
 - view options for, 437–439, 437
- Font tab, 661
- Fonts option, 132
- For fast searching, allow Indexing Service to index this folder option, 462
- Force Shutdown from a Remote System right, 281

ForcePassword key, 60
 foreground applications, 686
 Format Partition dialog box, 389
 Format Volume dialog box, 387, 388
 frame types, 528, 789
 frames, 498, 789
 %Free Space counter, 677
 Friendly Description and Help Text dialog box, 70
 From-To property, 717
 FTP (File Transfer Protocol), 789
 Full Control permission, 451–452, 466
 Full name option, 253
 Fully Automated option, 51

G

Game Controllers option, 132
 gateways in TCP/IP, 515, 516
 GB (gigabytes), 10, 789
 GDI (Graphics Device Interface), 549, 789
 General tab

- for accessibility, 225
- for alerts, 668, 668
- for backups, 754–755, 754
- for CD-ROMs, 152, 153
- for compression, 397
- for counter logs, 662, 663
- for encryption, 407, 410
- for folders, 436, 436
- for indexing, 462
- for locale settings, 223–224, 223
- for log properties, 714–715, 714
- for modems, 599–600, 600, 603, 604
- for network adapters, 505, 505
- for printers, 557–561, 558
- for RAS connections, 611, 611
- for removable media, 155
- for scanners and cameras, 178, 179
- for services, 192, 192
- in System Monitor, 658, 658
- for Taskbar and Start Menu, 211–212, 211
- for trace logs, 665, 665
- for USB controllers, 176, 176
- for user properties, 260–261
- for video adapters, 157
- for volume properties, 378–379, 379

 Generate Security Audits right, 281
 gigabytes (GB), 10, 789
 Globally Unique Identifiers (GUIDs), 63
 GPOs (Group Policy Objects), 321–324

- adding packages to, 88–91, 89–90
- creating, 86–87, 87
- defined, 789
- filtering, 87–88, 88

 gpt.ini file, 322
 Graph tab, 660, 661
 Graphical User Interface (GUI), 789
 Graphics Device Interface (GDI), 549, 789
 Group Policy Objects (GPOs), 321–324

- adding packages to, 88–91, 89–90
- creating, 86–87, 87
- defined, 789
- filtering, 87–88, 88

 Group Policy tab, 86–87, 87, 89
 groups, 306

- built-in, 307
 - local, 307–310
 - special, 310–312
- creating, 314–316, 315
- defined, 789
- deleting, 319–320
- exam essentials for, 325
- key terms for, 325–326
- managing, 261–262, 261
- membership in, 316–318, 317
- policies for, 320–324. *See also* Group Policy Objects (GPOs); policies
- renaming, 318–319
- summary, 324–325
- user profiles for, 340
- working with, 313–316

Groups folder, 315–316
Guest account, 241, 790
Guests group, 309, 790
GUI (Graphical User Interface), 789
GUI Attended option, 51
GUIDs (Globally Unique Identifiers), 63
[GuiRunOnce] section, 62
[GuiUnattended] section, 60–61

H

HAL (Hardware Abstraction Layer)
 in boot sequence, 725
 defined, 790
 in disk duplication, 80
hard drives. *See* disks
hardware
 answer files options for, 57–59
 in boot sequence, 724
 for installation, 7–10
 installing, 144–146, 145
 in preboot sequence, 720–721
 for RIS servers, 67
 for upgrading, 107
Hardware Abstraction Layer (HAL)
 in boot sequence, 725
 defined, 790
 in disk duplication, 80
Hardware Compatibility List (HCL), 10–11, 790
hardware compatibility problems, 28
hardware profiles, 349–353, 350, 790
Hardware Profiles dialog box, 349–351, 350
Hardware Profiles Selection option, 351
Hardware Resources category, 135
hardware support as design goal, 5
Hardware tab
 for driver signing, 150, 150
 for hardware profiles, 349, 350
 for keyboard, 173
 for mouse, 174
 for volume properties, 381, 381
Hardware Type dialog box, 503
HCL (Hardware Compatibility List), 10–11, 790
Hibernate tab, 169, 170
hibernation, 163
 defined, 790
 power options for, 169, 170
Hidden attribute, 720
hidden files, displaying, 438, 720
Hidden files and folders option, 438
Hide file extensions for known file types option,
 438, 720, 730
Hide Pages option, 51
Hide protected operating system files option, 438,
 720, 730
Histogram view, 653, 654
HKEY_ registry keys, 143–144
Hold Mismatched Documents option, 569
home folders
 defined, 790
 setting up, 264–266
Home/Office Desk power scheme, 166
hosts, 790
hot swap support
 for adding disks, 384–385
 defined, 790
HTML (Hypertext Markup Language), 791
HTTP (Hypertext Transfer Protocol), 791
hyperlinks, 791
Hypertext Markup Language (HTML), 791
Hypertext Transfer Protocol (HTTP), 791

I

I/O device management, 171–172
 keyboard configuration, 172–173, 173
 mouse configuration, 173–175, 174
 USB devices, 175–177, 176
 wireless devices, 175

- I/O (Input/Output) settings, 508–509
- I/O memory for modems, 605
- I/O port address settings, 145
- I Want to Connect Through a Local Area Network (LAN) option, 618, 628
- I Want to Select the Hardware from a List option, 502
- I Want to Set Up My Internet Account Manually option, 618
- I Want to Set Up My Internet Connection Manually option, 628
- I Want to Sign Up for a New Internet Account option, 617
- I Want to Transfer My Existing Account to This Computer option, 618
- Idle Time in Task Scheduler, 692
- IDs
 - event, 713
 - process, 683
 - security, 251, 478, 803
- IEEE (Institute of Electrical and Electronic Engineers), 791
- IEEE (Institute of Electrical and Electronic Engineers) 1394 standard, 4, 791
- Ignore option, 151
- IIS (Internet Information Services), 792
- imaging devices, 177–180, 178
- inactive accounts, 254
- Include Windows Logon Domain option, 612
- Increase Quotas right, 281
- Increase Scheduling Priority right, 281
- Incremental backup type, 758, 791
- Indexing Service, 138–139, 461–462, 791
- individual disk quotas, 403–405, 404
- Industry Standard Architecture (ISA), 791
- Information events, 711, 791
- Infrared Data Association (IrDA), 175
- inheritance with Group Policy Objects, 322–323
- inherited permissions, 456, 791
- Initial Connection dialog box, 622
- Initial Settings dialog box, 69
- initial user accounts, 241, 791
- input locales, 173, 223
- Input Locales tab, 173
- Input/Output (I/O) settings, 508–509
- InputLocale option, 61
- Insert ActiveX Control dialog box, 648
- Insert Disk dialog box, 68
- Install Hardware Device Drivers dialog box, 148
- installation automation, 44
 - answer files for, 47–48
 - creating, 49–56, 50–55
 - defined, 781
 - format of, 56–62
 - Windows 2000 Deployment Tools for, 48–49
 - defined, 782
 - deployment options, 44–47, 45–47
 - disk images, 46, 46, 79–84, 81
 - exam essentials for, 93–94
 - key terms for, 94
 - remote installation. *See* RIS (Remote Installation Services)
 - summary, 93
 - unattended installation, 47, 47
 - Windows Installer packages for, 84–92, 87–90
- installation preparation, 7
 - clean installs vs. upgrades, 11
 - Hardware Compatibility List, 10–11
 - hardware requirements, 7–10
 - options, 11–12
 - domain and workgroup membership, 15
 - file system selection, 13–15
 - language and locale settings, 15
 - partitioning, 12–13
- Installation Source Files Location dialog box, 70
- installing
 - applications, answer files for, 62
 - hardware, 144–146, 145
 - network adapters, 500–504
 - NWLink IPX/SPX/NetBIOS Compatible Transport, 527
 - published applications, 91–92

- RIS servers, 67–68
- Windows 2000, 18–19
 - automating. *See* installation automation
 - from CD, 16–17
 - exam essentials for, 32–33
 - for hands-on exercises, 23–27
 - key terms for, 33
 - for networking, 22–23
 - over networks, 17–18
 - preparing for. *See* installation preparation
 - Setup program, 19–20
 - summary, 31–32
 - troubleshooting, 27–30
 - Windows 2000 Setup Wizard, 20–22
- Institute of Electrical and Electronic Engineers (IEEE), 791
- Institute of Electrical and Electronic Engineers (IEEE) 1394 standard, 4, 791
- Integrated Services Digital Network (ISDN), 792
- Intel architecture, 792
- Interactive group, 311, 792
- interactive logons
 - defined, 792
 - for RAS servers, 615
- interactive users, 792
- interfaces, multilingual, 220
- internal network numbers, 528, 792
- Internet, dial-up networking with, 617–620
- Internet cache files, cleaning up, 414
- Internet connection sharing
 - defined, 792
 - dial-up networking with, 623–631, 623, 626–630
- Internet Connection Wizard, 628
- Internet Explorer, 135, 210, 792
- Internet Information Services (IIS), 792
- Internet Options option, 132
- Internet Print Protocol (IPP), 631, 792
- Internet printers, 631–632
 - adding, 632–633, 632–633
 - connecting to, 633
- Internet Properties dialog box, 627, 628
- Internet Protocol (TCP/IP) Properties dialog box, 519–520, 524
- Internet Service Providers (ISPs)
 - defined, 792
 - for Internet connections, 617–620
- Internet Services Manager, 793
- internetworks, 498, 793
- InterNIC agency, 514, 793
- interprocess communications (IPC), 793
- Interrupt requests (IRQs)
 - defined, 793
 - in hardware installation, 145
 - for modems, 605
 - for network adapters, 508–509
- Interrupts/Sec counter, 673
- intranets, 793
- IP addresses
 - defined, 793
 - DHCP for, 516–517, 517
 - in TCP/IP, 513–514, 514
- IPC (interprocess communications), 793
- IPC\$ share, 469
- IPCONFIG command, 525, 793
- IPP (Internet Print Protocol), 631, 792
- IrDA (Infrared Data Association), 175
- IRQs (Interrupt requests)
 - defined, 793
 - in hardware installation, 145
 - for modems, 605
 - for network adapters, 508–509
- ISA (Industry Standard Architecture), 791
- ISDN (Integrated Services Digital Network), 792
- ISPs (Internet Service Providers)
 - defined, 792
 - for Internet connections, 617–620
- Items to Back Up dialog box, 752

J

Join a Computer to the Domain option, 73

K

KB (kilobytes), 10

Keep Printed Documents option, 570

kernel

defined, 793

initialization sequence, 725–726

load sequence, 725

Kernel Debugger, 739

Keyboard Properties dialog box, 172, 173, 175

Keyboard tab, 225, 225

keyboards

accessibility options for, 225, 225

configuring, 21, 133, 172–173, 173

On-Screen Keyboard, 228, 228, 798

keys

in encryption, 407

Registry, 143–144

kilobytes (KB), 10

L

labels

for disks, 379

entering, 387

LAN Manager Authentication Level policy, 286

landscape orientation for printing, 559

language groups, 221

Language option, 61

language settings, 15, 60–61

LanguageGroup option, 61

Last field, 653

Last Known Good Configuration, 708, 739, 793

Launch folder windows in a separate process
option, 438

Layout tab, 559, 559

leases in DHCP, 516–517, 517

left-handed mouse setting, 174

License Agreement

in installation, 20

in upgrading, 113

License Agreement dialog box, 113

Limit Disk Space To option, 402

List Folder Contents permission, 452

LLC (Logical Link Control) sublayer, 499, 794

Load and Unload Device Drivers right, 281

local access, 450–451

and network access, 480, 480

NTFS permissions for, 451–454, 453–454

adding and removing, 454–456, 455

for copied and moved files, 460

defined, 797

effective, 457–460

inheritance of, 456

optimizing, 461–462

Local Area Connection Properties dialog box, 519,

524, 527–528, 530

Local Area Network Internet Configuration dialog

box, 628, 629

Local Computer Policy snap-in

adding, 274

defined, 794

loading, 267–268, 268

Local Group Policy snap-in, 321, 794

local groups, 307–310

defined, 794

policies for. *See* policies

local logons, 292, 794

Local or Network Printer dialog box, 552, 632, 632

Local Path option, 264

Local Policies folders, 274–275, 275

local ports, 564

local printers, 548, 794

local security, 794

830 Local Security Policy Setting dialog box – management utilities

- Local Security Policy Setting dialog box, 74, 75
- local user accounts, 241–242
 - authenticating, 290–291
 - defined, 794
- local user profiles, 340–342, 794
- Local Users and Groups utility, 137
 - defined, 794
 - for groups, 314–316
 - for roaming profiles, 344
 - for users, 247–249, 257, 257
- locale settings, 15, 21, 223–224, 794
- localized versions, 220–221
- Locate Driver Files dialog box, 148
- Locate Your Printer dialog box, 633, 633
- Location and Comment dialog box, 554
- Lock Computer option, 245
- Lock Pages in Memory right, 281
- locking partitions, 370
- lockout policies, 271–274, 272
- Log File Path option, 743
- log files
 - in Backup, 758, 759
 - in booting, 736–738, 737
 - in Dr. Watson, 742
 - in Event Viewer, 135, 710, 713
 - filter properties for, 716–717, 716
 - general properties for, 714–715, 714
 - in Performance Logs and Alerts, 136, 661, 662
 - counter, 662–664, 663–664
 - trace, 664–667, 665–666
 - in setup, 29–30
- Log Files tab
 - for counter logs, 663, 663
 - for trace logs, 665, 666
- Log Name property, 715
- Log Off option, 245
- Log On as a Batch Job right, 74, 281
- Log On as a Service right, 281
- Log On Locally right, 281
- Log On tab, 193, 193
- Log On to Windows dialog box, 726

- logical drives, 12
 - defined, 794
 - listing, 138
- Logical Drives utility, 138, 794
- Logical Link Control (LLC) sublayer, 499, 794
- logical ports
 - defined, 794
 - for printing, 564
- logical printers, 547, 550, 794
- LogicalDisk objects, 675
- logoffs
 - defined, 795
 - user accounts for, 244–246, 245
- logon rights for RIS, 74, 75
- logons
 - in boot process, 726
 - defined, 795
 - for RAS servers, 615
 - scripts for, 244, 264, 795
 - for services, 193, 193
 - user accounts for, 242–246, 243
- logs. *See* log files
- low battery alarms, 166

M

- MAC (media access control) address, 499, 795
- MAC (Media Access Control) sublayer, 499, 795
- Magnifier utility, 227, 227, 795
- Make Available Offline option, 443, 448
- Make New Connection icon, 607, 621
- MAKEBOOT.EXE program, 17, 746
- MAKEBT32.EXE program, 17, 746, 795
- Manage Auditing and Security Log right, 281
- Manage Documents permission, 575
- Manage Printers permission, 575
- management utilities, 130–131
 - Computer management, 134, 134, 146
 - Services and Applications utility, 138–139

- storage utilities, 137–138
- System Tools, 135–137, 136
- Control Panel, 131–134, 131
- Microsoft Management Console, 139–142, 140
- Registry Editor, 142–144, 143
- mandatory user profiles, 346–348, 795
- Manual Frame Type option, 528
- Manual Proxy Server option, 628
- Manual Repair option, 750
- Map Network Drive dialog box, 475–476, 475
- mapped drives, 475–476, 475–476, 795
- mass storage devices
 - answer files options for, 58
 - controllers for, 80
- [MassStorageDrivers] section, 58
- Master Boot Record (MBR)
 - in boot process, 721
 - defined, 795
 - repairing, 763
- Max. Battery power scheme, 166
- Maximum field, 653
- Maximum Log Size property, 715
- Maximum Password Age policy, 269–270
- /maxmem switch, 729
- MB (megabytes), 10, 795
- MBR (Master Boot Record)
 - in boot process, 721
 - defined, 795
 - repairing, 763
- measurement units, 10
- media access control (MAC) address, 499, 795
- Media Access Control (MAC) sublayer, 499, 795
- media errors in installation, 28
- Media option for printing, 560
- megabytes (MB), 10, 795
- megahertz (MHz), 10
- Member Of tab, 261, 261
- member servers, 795
- membership in groups, 261–262, 261, 316–318, 317
- memory
 - defined, 795
 - for devices, 508–509
 - for installation, 8, 28
 - for modems, 605
 - monitoring and optimizing, 670–672
 - for RIS servers, 67
 - in standby power states, 163
 - for upgrading, 107
- memory address settings in hardware
 - installation, 145
- memory dump files, 742–743
- message services in Application layer, 497
- Message Text for Users Attempting to Log On
 - policy, 286
- Message Title for Users Attempting to Log On
 - policy, 286
- MHz (megahertz), 10
- Microsoft CHAP (MS-CHAP), 615
- Microsoft Disk Operating System (MS-DOS), 796
- Microsoft Installer (MSI) format files, 85
 - copying to shares, 86
 - defined, 796
- Microsoft Management Console (MMC), 139–140, 140
 - defined, 796
 - modes in, 141
 - snap-ins for, 141–142
- Mini-Setup Wizard, 82–83
- Minimal Power Management power scheme, 166
- Minimum field, 653
- Minimum Password Age policy, 270
- Minimum Password Length policy, 270–271
- Mirrored volumes, 375
- MMC (Microsoft Management Console), 139–140, 140
 - defined, 796
 - modes in, 141
 - snap-ins for, 141–142
- mobile computer hardware, 162–164
 - card services for, 171
 - power options for, 164–171, 167–170
- Modem Dialing Information dialog box, 21

832 Modem tab – names

- Modem tab, 600, 601
 - modems, 598–599
 - advanced properties for, 601–603, 602–603
 - default preferences for, 603, 604
 - defined, 796
 - diagnostics for, 601, 602
 - drivers for, 605, 606
 - general properties for, 599–600, 600
 - port settings for, 603, 603
 - resources for, 605, 606
 - modes in Microsoft Management Console, 141
 - Modified property, 715
 - Modify Firmware Environment Variables right, 281
 - Modify permission, 452
 - Monitor tab, 157
 - monitoring
 - disk quotas, 405–406
 - disk subsystem, 674–677
 - exam essentials for, 695
 - key terms for, 696
 - memory, 670–672
 - network subsystem, 677–679
 - processors, 673–674
 - summary, 694–695
 - system performance. *See* System Monitor
 - monitors
 - configuring, 157–159, 158
 - multiple-display support for, 160–162
 - for upgrading, 107
 - Motion tab, 174
 - mouse
 - accessibility options for, 225
 - configuring, 173–175, 174
 - Mouse option, 133
 - Mouse Properties dialog box, 173, 174
 - Mouse tab, 225
 - MouseKeys option, 225
 - Move Here option, 435
 - moved files, NTFS permissions for, 460
 - moving folders and files, 435, 435
 - MS-CHAP (Microsoft CHAP), 615
 - MS-DOS (Microsoft Disk Operating System), 796
 - MSI (Microsoft Installer) format files, 85
 - copying to shares, 86
 - defined, 796
 - .mst files, 85
 - Muisetup.exe file, 221
 - multi path option, 727
 - Multilanguage Versions, 221–222
 - Multilingual API, 219–220
 - Multilingual developer support, 219–220
 - multiple-boot process, 30–31, 796
 - multiple-display support, 160
 - configuring, 160–161
 - troubleshooting, 162
 - multiple-language support, 219–220
 - enabling and configuring, 222, 223
 - selecting, 220–222
 - My Computer item, 210, 796
 - My Documents item, 209, 796
 - My Faxes option, 186
 - My Network Places item, 210
 - defined, 796
 - shared resource access through, 474–475, 474
-

N

- Name Your Printer dialog box, 553
- names
 - Administrator account, 241
 - alerts, 668
 - answer files, 55–56
 - computers, 21, 784
 - counter logs, 662
 - files, 432, 434
 - folders, 433–434
 - groups, 314–315, 318–319
 - hardware profiles, 351
 - printers, 582
 - RIS folders, 70
 - shares, 382, 468

- trace logs, 665
- user accounts, 250–251
- users, 258–259
- naming conventions, ARC, 727–728
- Narrator utility, 227, 228, 796
- National Language Support API, 219–220
- Net PC standard, 77, 796
- NET USE utility, 476–477, 796
- NetBEUI (NetBios Extended User Interface) protocol, 529–530, 796
- NetBIOS (Network Basic Input/Output System), 797
- NetWare operating system, 797
- network access, 462–463
 - and local access, 480, 480
 - share management in, 467–473, 468, 472–474
 - share permissions for, 465–467, 466
 - shared folders for, 463–465, 463
 - to shared resources, 473–477, 475–476
- network adapters, 499–500, 500
 - defined, 797
 - installing, 500–504
 - properties for
 - advanced, 505–506, 506
 - driver, 506–508, 507–508
 - general, 505, 505
 - resource, 508–509, 509
 - viewing, 509–510
 - for PXE, 77
 - for RIS servers, 67
 - troubleshooting, 510–512
- Network and Dial-up Connections option, 133
- Network and Dial-up Connections window, 607, 608, 610, 617, 621
- Network Basic Input/Output System (NetBIOS), 797
- Network Connection Type dialog box, 608, 609, 617, 621
- Network Connection Wizard, 608, 609, 617, 621
- Network group, 311, 797
- Network Identification Wizard, 22–23, 27
- Network layer in OSI model, 498, 797
- Network Printer option, 632
- network protocols, 494–495
 - bindings for, 530, 531
 - data flow, 495–496, 496
 - exam essentials for, 532
 - key terms for, 532–533
 - NetBEUI, 529–530
 - NWLink IPX/SPX/NetBIOS, 526–529
 - OSI model layers in, 496–499
 - summary, 531
 - TCP/IP. *See* TCP/IP (Transmission Control Protocol/Internet Protocol)
- Network Settings dialog box, 22, 53–54, 54
- Networking tab, 615, 616
- networks
 - connections for, 494
 - installation over, 8, 17–18
 - installing, 22–23
 - mapping drives for, 475–476, 475–476
 - monitoring and optimizing, 677–679
 - printers for, 548, 632, 797
 - for RAS connections, 615–616, 616
 - for RIS servers, 67
- Never Allow My Computer to Go Offline option, 447
- New Alert Settings dialog box, 668
- New Driver option, 568
- new features, 6
- New File Share option, 470
- New Group dialog box, 315–316, 315
- New Log Settings dialog box, 662, 665
- New or Existing Answer File dialog box, 50, 50
- New Task option, 682
- New Technology File System. *See* NTFS (New Technology File System)
- New User dialog box, 251, 253
- No, Do Not Edit the Additional Settings option, 54
- No Override option, 323
- /noguiboot switch, 729
- non-Plug-and-Play hardware installation, 145–146, 145
- Normal backup type, 757, 797

-nosidgen switch, 80
Notepad, 432, 432
Notify Me and Begin Working Offline option, 447
NT EMF print processor, 571
NTBOOTDD.SYS file
 in boot sequence, 723
 defined, 797
ntbtlog.txt file, 736
NTDETECT.COM file
 in boot sequence, 723–724
 defined, 797
NTFS (New Technology File System), 14–15,
 369–370
 answer files for, 62
 defined, 797
 permissions in, 451–454, 453–454
 adding and removing, 454–456, 455
 for copied and moved files, 460
 defined, 797
 effective, 457–460
 inheritance of, 456
NTLDR file
 in boot process, 720, 722, 724
 defined, 797
NTOSKRNL.EXE file
 in boot process, 720, 723–725
 defined, 797
NTUSER.DAT file, 341, 344, 798
NTUSER.MAN file, 346, 798
Number of Errors to Save option, 744
Number of Instructions option, 744
Number of Previous Logon Attempts to Cache
 policy, 287
numbers, locale settings for, 15, 223–224
NWLink IPX/SPX/NetBIOS Compatible
 Transport, 526
 configuring, 528–529
 defined, 798
 installing, 527

O

Obtain an IP Address Automatically option, 524
\$OEM\$ folder, 58–59
[OEMBootFiles] section, 58
Offline Files - Advanced Settings dialog box,
 447, 447
offline files and folders
 defined, 798
 options for, 440–442, 441
 for access, 445–446, 446
 for attaching to shares, 442
 for availability, 443–445, 444–445
 for configuring computers, 442, 443, 447–
 448, 447
 for troubleshooting, 448
Offline Files tab, 440–442, 441, 447–448
On-Screen Keyboard, 228, 228, 798
Online Help bookmarks, 339
Open dialog box, 752
Open Fax Service Management Console option, 184
open files in shared folders, 472–473, 473
Open Files option, 472
Open Log File option, 713
Open Systems Interconnection (OSI) model, 494,
 496, 798
 Application layer, 497
 Data Link layer, 498–499
 Network layer, 498
 Physical layer, 499
 Presentation layer, 497
 Session layer, 497–498
 Transport layer, 498
opening log files, 713
optimizing. *See also* performance; System Monitor
 defined, 798
 disk subsystem, 674–677
 memory, 670–672
 network subsystem, 677–679
 processor, 673–674

Optional Components option, 67
 Options dialog box for backups, 754–755, 754, 757–758, 757
 Options tab, 612–613, 613
 Organizational Units (OUs)
 in Active Directory, 322
 defined, 798
 orientation in printing, 559
 OSI (Open Systems Interconnection) model, 494, 496, 798
 Application layer, 497
 Data Link layer, 498–499
 Network layer, 498
 Physical layer, 499
 Presentation layer, 497
 Session layer, 497–498
 Transport layer, 498
 OUs (Organizational Units)
 in Active Directory, 322
 defined, 798
 Overwrite Any Existing File option, 741
 Owner tab, 577–578
 owners
 defined, 798
 of printers, 577–578

P

packages, Windows Installer, 84–86
 for copying MSI applications to shares, 86
 defined, 809
 for Group Policy Objects, 86–90, 87–90
 for published applications, 91–92
 page files, 670, 798
 Page Order setting, 559
 Pages Per Sheet setting, 559
 Pages/Sec counter, 670–671
 PAP protocol, 615
 Paper/Quality tab, 560, 560
 Paper Source option, 560
 Partition Magic program, 13
 partition path option, 728
 partitions
 active, 721–722
 creating, 12–13, 389–390, 763
 defined, 798
 deleting, 393
 formatting, 763
 primary and extended, 371–372
 for RIS servers, 67
 Password option, 254
 Password never expires option, 254
 Password Policy folder, 268
 passwords
 for Administrators, 21, 52
 answer files for, 59–60
 in authentication, 291
 changing, 259–260
 in encryption, 406
 policies for, 268–271, 269, 798
 for RAS connections, 614
 requiring, 23
 for RIS clients, 78
 for scheduled tasks, 690–691
 for screen savers, 216
 Passwords Must Meet the Complexity Requirements
 of the Installed Password Filters policy, 270–271
 paths, 391–393, 392
 Pause option, 582
 Pause Printing option, 581
 PB (petabytes), 10, 799
 PC Cards, 171, 798
 PCI (Peripheral Connection Interface), 160, 799
 pcl.sep separator page file, 572
 PCMCIA (Personal Computer Memory Card International Association) cards, 171, 799
 Peer Web Services (PWS), 799
 performance
 monitoring. *See* System Monitor

836 Performance Logs and Alerts utility – power management

- striped volumes for, 374
- Task Manager for, 684–685, 685
- Performance Logs and Alerts utility, 136, 661
 - alerts in, 667–669, 668–669
 - baseline reports in, 679–681, 679
 - defined, 799
 - logs in, 662–667, 663–667
- Performance Options dialog box, 686, 686
- Performance tab, 684, 685
- Peripheral Connection Interface (PCI), 160, 799
- permissions, 244, 383
 - defined, 799
 - NTFS, 451–454, 453–454
 - adding and removing, 454–456, 455
 - for copied and moved files, 460
 - defined, 799
 - effective, 457–460
 - inheritance of, 456
 - print, 574–578
 - for RIS servers, 65
 - share, 465–467, 466
- Permissions option, 464
- Permissions tab, 577, 578
- persistent connections, 244
- Personal Computer Memory Card International Association (PCMCIA) cards, 171, 799
- Personal Web Manager, 799
- Personalize Your Software dialog box, 21
- petabytes (PB), 10, 799
- Phone and Modem Options option, 133
- Phone Number to Dial dialog box, 608
- Physical layer in OSI model, 499, 799
- physical memory, 670
- physical ports
 - defined, 799
 - for printing, 564
- physical printers, 547
- PhysicalDisk objects, 675
- PIDs (process IDs), 683
- PING command, 525–526, 799
- Plug-and-Play hardware, 3
 - answer files for, 59
 - defined, 799
 - in disk duplication, 80
 - installing, 144
 - in upgrading, 109
- pnp switch, 80
- Point-to-Point Protocol (PPP), 616
- Pointers tab, 174
- policies
 - in Active Directory, 321–324
 - defined, 781, 799
 - Group Policy Objects
 - adding packages to, 88–91, 89–90
 - creating, 86–87, 87
 - filtering, 87–88, 88
 - local group, 320–321
 - logon, 244
 - user account, 266–267
 - audit, 275–278, 276
 - local, 274–275, 275
 - for lockouts, 271–274, 272
 - for passwords, 268–271, 269
 - for security, 283–290, 284
 - snap-in for, 267–268, 268
 - for user rights, 278–283
- pools, printer, 547, 565, 565, 800
- Port Name dialog box, 566
- Portable/Laptop power scheme, 166
- portrait orientation for printing, 559
- ports
 - modem, 600, 603, 603
 - printing, 548, 564–566, 564–565
- Ports tab, 564
- POST (Power On Self Test) routine, 720, 799
- power management, 162–165, 165
 - advanced, 168, 169
 - alarms for, 166–167, 167
 - configuring, 170–171
 - for hibernation, 169, 170
 - power meter for, 167, 168
 - schemes for, 166

- in Task Scheduler, 693
 - in upgrading, 109
- Power Meter tab, 167, 168
- Power On Self Test (POST) routine, 720, 799
- Power Options option, 133
- Power Options Properties dialog box, 165–171, 165, 167–170
- Power Schemes tab, 165, 166
- Power Users group, 309–310, 800
- PPP (Point-to-Point Protocol), 616
- Pre-Boot Execution Environment (PXE), 45
 - defined, 800
 - in RIS process, 63
- preboot sequence, 719–722
- Preparing to Upgrade to Windows 2000 dialog box, 113
- Presentation layer in OSI model, 497, 800
- Presentation power scheme, 166
- Prevent System Maintenance of Computer Account Password policy, 287
- Prevent Users from Installing Print Drivers policy, 287
- primary partitions, 371–372, 800
- Print Directly to the Printer option, 570
- Print permission, 575
- Print Processor dialog box, 571, 571
- PRINT\$ share, 469
- Print Spooled Documents First option, 570
- Print Test Page dialog box, 556
- Print Test Page option, 561
- Printer Sharing dialog box, 554
- printers, 547–548, 550
 - availability of, 567
 - connecting to, 584
 - defined, 800
 - device drivers for, 568
 - general properties for, 557–561
 - Internet, 631–633, 632–633
 - managing, 579–580, 580
 - pooling, 547, 565, 565, 800
 - priority of, 567–568
 - setting up, 550–556
 - spooling, 568–569
 - user profile settings for, 339
- Printers folder, 551, 580, 580
- Printers option, 133
- printing, 546
 - advanced properties for, 566–571, 566
 - in Application layer, 497
 - exam essentials for, 585
 - key terms for, 586
 - managing, 580–583, 582
 - port properties for, 564–566, 564–565
 - process, 548–549, 548
 - redirecting, 565–566
 - security properties for, 574–578, 574, 578–579
 - separator pages for, 572–573, 572
 - sharing properties for, 561–563, 562–563
 - summary, 585
 - terminology for, 546–548
 - test pages, 556, 561
- Printing Preferences dialog box, 558–560, 559–560
- Printing Preferences option, 581
- priority
 - of applications, 686
 - defined, 800
 - of printers, 567–568
- Process Creations/Deletions option, 665
- process IDs (PIDs), 683
- processes, 180–181
 - defined, 800
 - Task Manager for, 682–684, 683–684
- Processes tab, 181, 683, 683
- processor affinity, 180–182, 801
- Processor Affinity dialog box, 182
- %Processor Time counter, 673
- processors
 - for installation, 8, 28
 - managing, 180–182
 - monitoring and optimizing, 673–674
 - print, 547, 549, 571, 800
 - for RIS servers, 67

838 Product Key dialog box – quotas, disk

- in standby power states, 163
- for upgrading, 107
- Product Key dialog box, 21, 113
- Product to Install dialog box, 50, 51
- Profile 1 profile, 351
- Profile Path option, 263–264
- Profile Single Process right, 282
- Profile System Performance right, 282
- Profile tab, 262–265, 263, 345
- profiles, 262, 263
 - configuring, 338–339
 - copying, 347–349
 - defined, 807
 - exam essentials for, 354
 - hardware, 349–353, 350
 - key terms for, 354
 - local, 340–342
 - in logons, 244
 - mandatory, 346–348
 - path setup for, 263–264
 - roaming, 342–345
 - summary, 354
- Prompt for Name and Password, Certificate, etc. option, 612
- Prompt for Phone Number option, 612
- Prompt User to Change Password Before Expiration policy, 287
- Properties dialog box for monitors, 157–158, 158
- Properties option
 - for hardware profiles, 351
 - for printers, 583
- Properties tab
 - for CD-ROMs, 152, 153
 - for removable media, 155
- protocols, 494–495
 - bindings for, 530, 531
 - data flow, 495–496, 496
 - defined, 801
 - exam essentials for, 532
 - key terms for, 532–533
 - NetBEUI, 529–530

- NWLink IPX/SPX/NetBIOS, 526–529
- OSI model layers in, 496–499
- summary, 531
- TCP/IP. *See* TCP/IP (Transmission Control Protocol/Internet Protocol)
- Provide Defaults option, 51
- Provide Upgrade Packs dialog box, 113, 117, 117
- pscript.sep separator page file, 572
- Public Network dialog box, 621
- published applications, 85
 - defined, 801
 - installing, 91–92
- PWS (Peer Web Services), 799
- PXE (Pre-Boot Execution Environment), 45
 - defined, 800
 - in RIS process, 63
- PXE-based boot ROMs, 77

Q

- Quality Settings, 560
- Query Modem option, 601
- queues, 547, 800
- quick formats, 387
- quiet switch, 80
- Quota Entries for volume dialog box, 403–404, 404
- Quota Settings for user dialog box, 403, 404
- Quota tab, 384, 400–402, 400
- quotas, disk, 399
 - configuring, 400–401, 400
 - default, 401–403
 - defined, 786
 - individual, 403–405, 404
 - monitoring, 405–406
 - in NTFS, 15
 - in upgrading, 108

R

-
- Radio Frequency (RF) devices, 175
 - RAID 5 volumes, 375
 - random-access memory (RAM), 801. *See also* memory
 - RAS (Remote Access Service) servers, 606–607, 607
 - connections for
 - creating, 607–610, 608–610
 - properties for, 610–616, 611–614, 616
 - security for, 613–615, 613–614, 616
 - defined, 801
 - RAW print processors, 571
 - rdisk path option, 728
 - Re-sort button, 213
 - Read & Execute permission, 452
 - Read-only attribute (R), 720
 - Read Only option, 51
 - Read permission, 452
 - Read share permission, 466
 - Readiness Analyzer, 108
 - Ready to Install Windows 2000 dialog box, 115
 - real-time applications, 801
 - reboot switch, 80
 - Receive properties for faxes, 184
 - Received Faxes tab, 184
 - recovering encrypted files, 410
 - Recovery Console, 762–763
 - defined, 801
 - starting, 763–766, 765
 - using, 766–768
 - Recovery Console: Allow Automatic Administrative Logon policy, 287
 - Recovery Console: Allow Floppy Copy and Access to All Drives and Folders policy, 287
 - recovery functions, 706–707
 - Advanced Options menu, 734–739, 735, 737
 - Backup utility. *See* Backup utility
 - boot process. *See* boot process
 - Dr. Watson utility, 742–745, 743
 - Event Viewer for, 709–711, 710
 - event details in, 712–713, 712
 - event types in, 711
 - log files in, 713–719, 714, 716
 - exam essentials for, 769
 - key terms for, 769–770
 - Recovery Console, 762–768, 765
 - for services, 193, 194
 - setup boot disks for, 745–747
 - startup and recovery options, 739–742, 740
 - summary, 768–769
 - techniques in, 707–709
 - Recovery tab, 193, 194
 - Recycle Bin, 210, 434, 801
 - Redial If Line Is Dropped option, 613
 - redirecting print jobs, 565–566
 - refresh frequency for video adapters, 53, 157, 159
 - Refresh Frequency option, 53
 - REGEDIT program, 142, 801
 - REGEDT32 program, 142, 801
 - Regional Options option, 133
 - Regional Options utility, 221–224, 223, 801
 - regional settings, answer files for, 60–61
 - Regional Settings dialog box, 21
 - [RegionalSettings] section, 60–61
 - Register this connection's address in DNS option, 521
 - Registry
 - backing up, 749
 - defined, 801
 - in kernel initialization sequence, 725
 - in logons, 244
 - in upgrading, 116
 - Registry Editor, 142–144, 143, 801
 - Remember each folder's view settings option, 438
 - Remote Access Service (RAS) servers, 606–607, 607
 - connections for
 - creating, 607–610, 608–610
 - properties for, 610–616, 611–614, 616
 - security for, 613–615, 613–614, 616
 - defined, 801

840 Remote Install tab – RIS (Remote Installation Services)

- Remote Install tab, 75, 76
- remote installation, 45, 45, 802. *See also* RIS (Remote Installation Services)
- Remote Installation Folder Location dialog box, 69
- Remote Installation Preparation (RIPrep) images, 45
 - defined, 802
 - for RIS servers, 65
- Remote Installation Services. *See* RIS (Remote Installation Services)
- Remote Installation Services Setup Wizard, 69
- remote users. *See* dial-up networking
- removable media, 155, 155
- Removable Storage utility, 138, 802
- Remove Computer from Docking Station right, 282
- Rename Administrator Account policy, 287
- Rename Guest Account policy, 287
- renaming
 - files, 434
 - folders, 434
 - groups, 318–319
 - hardware profiles, 351
 - printers, 582
 - system files and folders, 763
 - users, 258–259
- rendering, 547, 802
- repackaged applications, 85
- repeated characters setting, 173
- Replace a Process Level Token right, 282
- Replace the File on Disk Only If the File On Disk Is Older option, 756
- replacing system files and folders, 763
- Replicator group, 310, 802
- report-only upgrading mode, 108
- Report view, 653–654, 655
- reports
 - for disk analysis, 413
 - for restoring files, 762
- Requests for Comments (RFCs), 802
- Require Secured Password option, 614
- requirements
 - for installation, 7–10
 - for RIS servers, 66–67
 - for upgrading, 106–107
- Reset Account Lockout Counter After policy, 273
- resolution for video adapters, 156, 159
- Resource Files for multilingual support, 219–220
- resource-flow process, 478
 - access token creation, 478
 - ACLs and ACEs, 479, 479
 - local and network resource access, 480, 480
- resources, 802
- Resources tab
 - for modem setup, 605, 606
 - for network adapters, 508–509, 509
 - for USB controllers, 177
- Respond to Client Computers Requesting Service option, 76
- Restart option, 582
- restarting RIS client setups, 64
- Restore Files and Directories right, 282
- Restore Progress dialog box, 762
- Restore tab, 756
- Restore Wizard, 760–762, 802
- restoring files
 - group for, 309
 - options for, 756, 756
 - Restore Wizard for, 760–762
- Restrict CD-ROM Access to Locally Logged-On Users Only policy, 288
- Restrict Floppy Access to Locally Logged-On Users Only policy, 288
- Resume option, 582
- Review Settings dialog box, 70
- RF (Radio Frequency) devices, 175
- RFCs (Requests for Comments), 802
- RIPrep (Remote Installation Preparation) images, 45
 - defined, 802
 - for RIS servers, 65
- RIS (Remote Installation Services), 5, 62–64
 - clients, 45, 45
 - options for, 64–65
 - preparing, 77–78, 78

- computer accounts rights for, 71–73, 72–73
- defined, 802
- installation through, 78–79
- logon rights for, 74, 75
- servers, 45, 45
 - authorizing, 70–71, 71
 - for client requests, 75–76, 76
 - configuring and starting, 68–70
 - installing, 67–68
 - preparing, 65–67
 - template files for, 76
- RISEUP utility, 76
- Ristndrd.sif template, 76
- roaming user profiles, 342–345, 802
- routers, 802

S

- Safe Mode
 - defined, 802
 - starting in, 734–736, 735
- Safe Mode with Command Prompt option, 738, 803
- Safe Mode with Networking option, 738, 803
- Save As dialog box, 56
- Save in Administrative Tools option, 649
- Save Log File As option, 713
- scanners, 177–180, 178
- Scanners and Cameras option, 133
- Scanners and Cameras Properties dialog box, 177–180, 178
- Schedule tab
 - for alerts, 668, 669
 - for counter logs, 665, 665
 - for tasks, 692, 692
 - for trace logs, 666, 666
- Scheduled Task Completed section, 692
- Scheduled Task Wizard, 688–690
- Scheduled Tasks option, 133
- Scheduled Tasks window, 688, 691
- scheduling
 - alerts, 668, 669
 - log files, 665–666
 - printers, 567
 - tasks, 687–694, 691–694
- schemes for power options, 166
- Screen Area option, 53, 156
- Screen Saver tab, 216
- scripts
 - Group Policy Objects for, 321
 - for logons, 244, 264
 - for RAS servers, 615
- Scroll the Programs Menu setting, 214
- SCSI (Small Computer Systems Interface),
 - defined, 804
- scsi path option, 727
- Search dialog box, 449, 449
- Search for New Hardware option, 502
- Search Results dialog box, 450, 450
- searching for files and folders, 448–450, 449–450
- Secure Channel: Digitally Encrypt or Sign Secure Channel Data policy, 288
- Secure Channel: Digitally Sign Secure Channel Data policy, 288
- Secure Channel: Require Strong Session Key policy, 288
- security
 - defined, 803
 - and Group Policy Objects, 87–88, 88, 321
 - for NTFS, 369–370, 454–456, 454
 - for printing, 574–578, 574, 578–579
 - for RAS connections, 613–615, 613–614, 616
 - security option policies for, 283–290, 284, 803
 - for Task Scheduler, 693–694, 694
 - for volume properties, 383, 384
- security identifiers (SIDs)
 - in access tokens, 478
 - defined, 803
 - and usernames, 251
- Security log, 135, 710, 803

842 Security tab – setup logs

- Security tab
 - for Group Policy Objects, 88, 88
 - for NTFS permissions, 454–456, 454
 - for printing, 574–575, 574
 - for RAS connections, 613–614, 613
 - for Task Scheduler, 693–694, 694
 - for volume properties, 383, 384
- Security Templates utility, 111
- Segments/Sec counter, 677
- Select a Title for the Program dialog box, 215
- Select Columns dialog box, 684, 684
- Select Counters from Computer option, 656
- Select Counters from List option, 656
- Select Disks dialog box, 386, 386, 394, 395
- Select Drive dialog box, 415
- Select Groups dialog box, 262
- Select Instances from List option, 657
- Select Network Adapter dialog box, 503
- Select Network Component Type dialog box, 527, 530
- Select Network Protocol dialog box, 527, 530
- Select Partition Type dialog box, 389
- Select Printer Port dialog box, 552
- Select Program Folder dialog box, 215
- Select the default quota limit for new users on this volume option, 401
- Select the quota logging options for this volume option, 401
- Select Users, Computers, or Groups dialog box, 73, 73, 455, 455, 576
- Select Users or Groups dialog box, 74, 316
- Select Volume Type dialog box, 385, 385, 394
- Selecting an Internet Service Provider dialog box, 618
- Send an Administrative Alert option, 741
- Send Cover Page Fax option, 186
- Send properties for faxes, 184
- Send Unencrypted Passwords to Connect to Third-Party SMB Servers policy, 288
- Separator Page dialog box, 572, 572
- separator pages, 549, 572–573, 572, 803
- serial communications, 803
- Serial Line Internet Protocol (SLIP), 616
- SerialKey devices, 225
- servers
 - DNS, 67, 517–518, 520–522, 521
 - print, 547, 549, 800
 - RAS. *See* RAS (Remote Access Service) servers
 - RIS. *See* RIS (Remote Installation Services)
 - WINS, 518, 523–524
- Service group, 312, 803
- service packs, 645–647, 646–647, 803
- services, 190–191, 191
 - defined, 803
 - dependencies for, 194, 195
 - general properties for, 192, 192
 - loading, 763
 - log on properties for, 193, 193
 - recovery properties for, 193, 194
- Services and Applications utility
 - for Indexing Service, 138–139
 - for Services, 138
 - for WMI Control, 138
- Services utility, 138, 190–191, 191
- Session layer in OSI model, 497–498, 803
- Set as Default Printer option, 581
- Set Password dialog box, 260
- Set Up Your Internet Mail Account dialog box, 630, 630
- Setting Up Your Internet Connection dialog box, 628, 629
- Settings tab
 - for display, 217
 - for multiple-display support, 161
 - for tasks, 692–693, 693
 - for video adapters, 156, 157
- setup boot disks
 - creating, 745–747
 - installing from, 17
 - for Recovery Console, 764
- Setup Information File Text dialog box, 55, 55
- setup logs, 29–30

- Setup Manager utility
 - for answer files, 47–48
 - creating, 49–56, 50–55
 - Windows 2000 Deployment Tools for, 48–49
 - defined, 803
 - Setup program, 19–20, 24–25
 - setupact.log file, 29
 - setuperr.log file, 29
 - Share Name option, 464
 - Share Permissions dialog box, 465–467, 466
 - share sessions, viewing, 471–472, 471
 - Share This Folder option, 464
 - Shared Folders utility, 136, 467–473, 468, 803
 - shares and shared resources
 - access to
 - mapping network drives for, 475–476, 475–476
 - My Network Places for, 474–475, 474
 - NET USE for, 476–477
 - attaching to, 442
 - copying MSI applications to, 86
 - creating, 470–471, 472–474
 - defined, 803
 - folders
 - creating, 463–465, 463
 - viewing open files in, 472–473, 473
 - Internet connections, 616, 625, 626
 - offline files and folders, 445–446, 446
 - permissions for, 465–467, 466
 - printers, 561–563, 562–563
 - for user profiles, 343
 - viewing, 468–469, 468
 - volumes, 382, 383
 - Sharing option, 581
 - Sharing tab
 - for folders, 463–465, 463
 - for Internet connections, 616, 625, 626
 - for printing, 561–563, 562
 - for volumes, 382, 383
 - Shiva Password Authentication Password (SPAP), 615
 - short date locale settings, 15
 - shortcuts, 215–216, 804
 - Show alert message when I start Backup and removable storage is not running option, 755
 - Show alert message when I start Backup and there is compatible import media available option, 755
 - Show alert message when new media is inserted into Removable Storage option, 755
 - Show Clock property, 212
 - Show Hidden Files and Folders option, 720, 730
 - Show my documents on the Desktop option, 439
 - Show pop-up description for folder and Desktop options option, 439
 - Show Small Icons in Start Menu property, 212
 - ShowSounds option, 225
 - Shut Down option, 246
 - Shut Down System Immediately If Unable to Log Security Audit policy, 289
 - Shut Down the System right, 282
 - SIDs (security identifiers)
 - in access tokens, 478
 - defined, 803
 - and usernames, 251
 - Signing Up with an Internet Service Provider dialog box, 619–620
 - Simple Mail Transfer Protocol (SMTP), 804
 - simple volumes, 373, 373
 - creating, 394
 - defined, 804
 - Single Instance Store (SIS) service, 68
 - SIS Groveler service, 68, 804
 - size
 - block, 387
 - log file, 715
 - partition, 12, 389
 - Size property, 715
 - SLIP (Serial Line Internet Protocol), 616
 - slipstream service packs, 645, 804
 - Small Computer Systems Interface (SCSI), 804
 - Smart Card Removal Behavior policy, 289
 - smart cards, 614, 804

844 SMARTDRV program – system files and folders

- SMARTDRV program, 19
- SMTP (Simple Mail Transfer Protocol), 804
- snap-ins
 - defined, 804
 - for Microsoft Management Console, 141–142
 - for user account policies, 267–268, 268
- software, Group Policy Objects for, 321
- Software Environment category, 135
- sound cards, 188–190
- Sound Notification option, 744
- Sound tab, 225
- Sounds and Multimedia option, 133
- SoundSentry option, 225
- Source tab, 659, 659
- sources
 - for events, 713
 - for System Monitor, 659, 659
- spanned volumes, 373, 374
 - creating, 394
 - defined, 804
- SPAP (Shiva Password Authentication Password), 615
- speaker volume in modems, 600
- special groups, 310–312, 805
- Specify Partition Size dialog box, 389
- speed
 - of CPUs, 10
 - of keyboard repeat, 173
- Speed tab, 173
- spoolers and spooling, 547, 549, 568–569, 800, 805
- standby power states, 163–164
- Start Hardware Installation dialog box, 504
- Start menu, 210–211, 211
 - advanced properties for, 212–215
 - defined, 805
 - general properties for, 211–212
- Start Printing After Last Page Is Spooled option, 569
- Start Printing Immediately option, 569
- Start the Windows Components Wizard option, 67
- Startup and Recovery dialog box, 740, 741
- startup and recovery options, 739–742, 740
 - startup options, 734, 738–739
 - boot logging, 736–738, 737
 - for Recovery Console, 763–766, 765
 - Safe Mode, 734–736, 735
 - Status Monitor tab, 183
 - StickyKeys option, 225
 - Stop Sharing option, 471
 - storage utilities
 - Disk Defragmenter, 137
 - Disk Management, 137
 - Logical Drives, 138
 - Removable Storage, 138
 - Store Password Using Reversible Encryption for All Users in the Domain policy, 270–271
 - Strengthen Default Permissions of Global System Objects policy, 289
 - stripe sets, 805
 - striped volumes, 374–375, 374
 - creating, 394
 - defined, 805
 - subkeys, Registry, 143
 - subnet masks, 515, 805
 - Success Audit events, 711, 805
 - Summary option, 758
 - Switch To option, 682
 - Synchronize option, 442
 - Synchronize All Offline Files before Logging Off option, 442
 - Synchronize Directory Service Data right, 282
 - synchronizing offline folders, 442–443, 443–444
 - Sysdiff tool, 62
 - Sysprep (System Preparation Tool) utility, 46, 80–81
 - for copying and installing from disk images, 82–84
 - for creating disk images, 81–82, 81
 - defined, 805
 - sysprint.sep separator page file, 573
 - sysprintj.sep separator page file, 573
 - System attribute, 720
 - system files and folders
 - displaying, 720
 - managing, 763

System group, 312, 805
 System Information utility, 135, 136, 805
 System log, 135, 709, 710, 805
 System Monitor, 651–653, 652
 counters in, 655–657, 656
 defined, 805
 for disk subsystem, 674–677
 for memory, 670–672
 for network subsystem, 677–679
 for processors, 673–674
 properties in, 657–661, 658–661
 views in, 653–654, 654–655
 System Monitor Properties dialog box, 657–661, 658–661
 system monitoring tools, 647–648. *See also* Performance Logs and Alerts utility; System Monitor adding, 648–649
 baselines for, 650
 for bottleneck identification, 650–651
 for trends, 651
 System option, 133
 system partitions, 12, 720, 805
 system performance
 monitoring. *See* System Monitor
 striped volumes for, 374
 Task Manager for, 684–685, 685
 System Preparation Tool (Sysprep) utility, 46, 80–81
 for copying and installing from disk images, 82–84
 for creating disk images, 81–82, 81
 defined, 805
 System Properties dialog box, 150, 150, 344
 system recovery. *See* recovery functions
 System Settings Change dialog box, 68
 system state data, backing up, 752
 System Summary category, 135
 System Tools, 135
 defined, 805
 Device Manager, 137
 Event Viewer, 135
 Local Users and Groups, 137

Performance Logs and Alerts, 136
 Shared Folders, 136
 System Information, 135, 136
 SystemLocale option, 61
 Sysvol folder, 322

T

Take Ownership of Files or Other Object right, 282
 target computers in unattended installation, 47, 47
 Task Manager, 681
 for application performance, 686–687, 686
 for application tasks, 681–682, 682
 defined, 805
 for performance tasks, 684–685, 685
 for process tasks, 682–684, 683–684
 for processors, 180–182
 Task Manager option, 245
 Task Scheduler utility, 687
 for creating tasks, 687–690
 defined, 806
 task properties in, 690–694, 691–694
 Task tab, 691, 691
 Taskbar, 210–211, 211
 advanced properties for, 212–215
 defined, 806
 general properties for, 211–212
 user profile settings for, 339
 Taskbar and Start Menu Properties dialog box, 210–215, 211, 213
 Tasks to Delegate dialog box, 73
 TB (terabytes), 10, 806
 TCP (Transmission Control Protocol), 806
 TCP/IP (Transmission Control Protocol/Internet Protocol), 512–513
 configuring
 advanced, 520–524, 520–521, 523
 dynamic, 524
 manual, 518–519
 testing, 525–526

846 TCP/IP ports – Unsigned Non-Driver Installation Behavior policy

- default gateways in, 515, 516
- defined, 806
- DHCP in, 516–517, 517
- DNS servers in, 517–518
- in installation, 28
- IP addresses in, 513–514, 514
- subnet masks in, 515
- WINS servers in, 518
- TCP/IP ports
 - defined, 806
 - for printing, 564
- template files, 76
- temporary files, cleaning up, 414
- terabytes (TB), 10, 806
- Terminal Server User group, 312, 806
- test pages, printing, 556, 561
- Text mode file, 58
- TEXT print processor, 571
- TFTP (Trivial File Transfer Protocol)
 - defined, 806
 - in RIS process, 63, 68
- Thread Creations/Deletions option, 665
- threads, 806
- 386 drivers, 109
- time
 - for events, 712
 - locale settings for, 15, 223–224
- Time Zone dialog box, 54
- time zone settings, 22, 54, 60–61
- ToggleKeys option, 225
- Tools tab, 380, 380
- trace logs, 136, 664–667, 665–666
- Transmission Control Protocol (TCP), 806
- Transmission Control Protocol/Internet Protocol (TCP/IP). *See* TCP/IP (Transmission Control Protocol/Internet Protocol)
- Transport layer in OSI model, 498, 806
- transport protocols, 806
- trends in system performance, 651
- Trivial File Transfer Protocol (TFTP)
 - defined, 806
 - in RIS process, 63, 68

- Troubleshooter Wizard, 188–190
- troubleshooting
 - authentication, 290–293
 - devices, 187–190, 187
 - disks and volumes, 416–417
 - Event Viewer for, 718–719
 - graphics hardware, 157
 - installation process, 27–30
 - multiple-display support, 162
 - network adapters, 510–512
 - offline files, 448
 - RIS client setups, 64
- Troubleshooting tab, 157
- Type I cards, 171
- Type II cards, 171
- Type III cards, 171
- types
 - event, 712
 - file, 439, 440
 - frame, 528
- Typical Settings option, 22, 53

U

- unattended installation, 47, 47, 806
- [Unattended section, 59
- UNC (Universal Naming Convention), 807
- uncompression for upgrading, 110
- Unicode support, 219–220
- Uniform Resource Locators (URLs), 807
- Uninstall folder, 647
- uninterruptible power supplies (UPSs), 807
- Universal Naming Convention (UNC), 807
- Universal Serial Bus (USB), 4
 - configuring devices for, 175–177, 176
 - defined, 807
- Unsigned Driver Installation Behavior policy, 289
- unsigned drivers, 59
- Unsigned Non-Driver Installation Behavior policy, 289

- unsupported options in upgrading, 108–109
- update packs, 116–117
- updating
 - device drivers, 146–149
 - modem drivers, 605, 606
- Upgrade Device Driver Wizard, 147, 508
- upgrade packs, 807
- Upgrade Reports, 114, 807
- Upgrade to Dynamic Disk dialog box, 391
- Upgrade to Windows 2000 (Recommended) option, 112
- upgrading, 104–105
 - basic disks to dynamic disks, 390–393, 391–392
 - vs. clean installs, 11, 105
 - defined, 807
 - exam essentials for, 118
 - key terms for, 119
 - preparing for, 106
 - checklist for, 109–111
 - client upgrade paths and requirements in, 106–107
 - contingency plans for, 111
 - real world scenario for, 111
 - Windows 9x considerations, 107–109
 - process of, 112–115
 - summary, 118
 - update packs in, 116–117
- Upgrading to the Windows 2000 NTFS File System dialog box, 114
- UPSs (uninterruptible power supplies), 807
- URLs (Uniform Resource Locators), 807
- %Usage counter, 670–671
- USB (Universal Serial Bus), 4
 - configuring devices for, 175–177, 176
 - defined, 807
- USB Controller Properties dialog box, 176
- Use Dialing Rules option, 608
- Use Local Computer Counters option, 656
- Use NetBIOS settings from the DHCP server option, 524
- Use Personalized Menus property, 212
- Use Printer Offline option, 581
- Use Smart Card option, 614
- Use the catalogs on the media to speed up building restore catalogs on disk option, 755
- Use the Following IP Address option, 519
- Use this connection's DNS suffix in DNS registration option, 521
- user accounts. *See* users and user accounts
- User cannot change password option, 254
- User Information tab, 183, 183
- User Interaction Level dialog box, 51, 52
- user interfaces, multilingual, 220
- User Limit option, 464
- User mode--full access, multiple window, 141
- User mode--limited access, multiple window, 141
- User mode--limited access, single window, 141
- User must change password at next logon option, 254
- User name option, 253
- user profiles, 262, 263
 - configuration options for, 338–339
 - copying, 347–349
 - defined, 807
 - local, 340–342
 - in logons, 244
 - mandatory, 346–348
 - path setup for, 263–264
 - roaming, 342–345
- User Profiles tab, 343
- user properties, 260–261
 - group membership, 261–262, 261
 - home folders, 264–266
 - logon scripts, 264
 - profile paths, 263–264
- User property, 717
- user rights policies, 278–283, 291–292, 807
- UserLocale option, 61
- usernames
 - in authentication, 290–291
 - defined, 807
 - requiring, 23

- for RIS clients, 78
- in task scheduling, 690–691
- for user accounts, 250–251
- UserPassword key, 60
- Users and Passwords option, 133
- users and user accounts, 240
 - authenticating, 290–293
 - built-in, 241
 - creating, 251–254
 - deleting, 257–258, 257
 - disabling, 254–256
 - for events, 713
 - exam essentials for, 294
 - key terms for, 295
 - local and domain, 241–242
 - for logging off, 244–246, 245
 - for logging on, 242–246, 243
 - managing, 247–249
 - names for. *See* usernames
 - passwords for, 259–260
 - policies for, 266–267
 - audit, 275–278, 276
 - local, 274–275, 275
 - for lockouts, 271–274, 272
 - for passwords, 268–271, 269
 - for security, 283–290, 284
 - snap-in for, 267–268, 268
 - for user rights, 278–283
 - profiles for. *See* user profiles
 - properties for. *See* user properties
 - renaming, 258–259
 - summary, 293–294
- Users folder, 315
- Users group, 310, 807
- Users Must Enter a User Name and Password to Use
 - This Computer option, 23
- Users or Groups dialog box, 72, 72
- Using a Low-Speed Connection property, 715
- Utility Manager utility, 228–229, 229, 807

V

- valid usernames, 250
- Verify data after the backup completes option, 755
- VERITAS Software Console, 86
- video adapters
 - configuring, 156–159, 157–158
 - defined, 807
- View Report button, 413
- View tab
 - for display options, 720
 - for folders, 437–439, 437, 730, 730
- viewing
 - multilingual, 220
 - network adapter properties, 509–510
 - open files in shared folders, 472–473, 473
 - share sessions, 471–472, 471
 - shares, 468–469, 468
- views in System Monitor, 653–654, 654–655
- virtual device drivers (VxDs), 109
- virtual memory, 808
- Virtual Private Connections Properties dialog box,
 - 625–626, 626
- virtual private networks (VPNs)
 - defined, 808
 - for dial-up networking, 620–623, 620
- virus scans for upgrading, 110
- Visual Notification option, 744
- volume labels, 387
- volume properties, 378
 - General tab, 378–379, 379
 - Hardware tab, 381, 381
 - Quota tab, 384
 - Security tab, 383, 384
 - Sharing tab, 382, 383
 - Tools tab, 380, 380
- volumes
 - creating, 385–388, 385–388
 - defined, 808
 - deleting, 393

extended, 394–396, 395
 simple, 373, 373
 spanned, 373, 374
 striped, 374–375, 374
 troubleshooting, 416–417
 VPNs (virtual private networks)
 defined, 808
 for dial-up networking, 620–623, 620
 Vrefresh option, 61
 VxDs (virtual device drivers), 109

W

wallpaper, 218
 Warn option for driver signing, 151
 Warning events, 711, 808
 Wave File option, 744
 Web browsers, 808
 Web tab, 217
 Welcome to Setup dialog box, 750
 Welcome to the Internet Connection Wizard dialog box, 617
 Welcome to the Offline Files Wizard, 443
 Welcome to the Restore Wizard dialog box, 760
 Welcome to the Windows 2000 Backup and Recovery Tools dialog box, 752
 Welcome to the Windows 2000 Setup Wizard dialog box, 112
 What to Back Up dialog box, 752
 What to Restore dialog box, 760
 When Maximum Log Size is Reached property, 715
 Where to Store the Backup dialog box, 752
 wildcard characters, 449
 Win16 services, 808
 Win32 services, 808
 [Win9xUpgl] section, 60
 Windows 9x operating systems
 defined, 808
 features from, 3–4
 in upgrading, 107–109
 Windows 2000 Backup utility, 808
 Windows 2000-based applications, profile settings for, 339
 Windows 2000 boot disks, 808
 Windows 2000 Client Installation Wizard (CIW), 62, 64
 Windows 2000 Configure Your Server dialog box, 67
 Windows 2000 Deployment Tools, 48–49, 808
 Windows 2000 Help window, 188
 Windows 2000 License Agreement dialog box, 20
 Windows 2000 Logon dialog box, 78
 Windows 2000 Multilanguage Version, defined, 809
 Windows 2000 Professional Setup Boot Disks, 17, 745–747, 809
 Windows 2000 Professional version, 809
 Windows 2000 Remote Boot Disk Generator dialog box, 77, 78
 Windows 2000 Setup dialog box, 19, 764, 765
 Windows 2000 Setup Wizard, 20–22, 26–27
 Windows 2000 System Preparation Tool dialog box, 81, 81
 Windows Always Assumes the Following User Has Logged On option, 23
 Windows Components Wizard, 68
 Windows Explorer
 for BOOT.INI file access, 729–731, 730
 for compression, 397
 for mapping network drives, 475–476, 475
 user profile settings for, 339
 Windows Installation Image Folder Name dialog box, 70
 Windows Installer packages, 84–86
 for copying MSI applications to shares, 86
 defined, 809
 for Group Policy Objects, 86–90, 87–90
 for published applications, 91–92
 Windows Internet Name Service (WINS), 809
 Windows Management Instrumentation (WMI) Control, 138, 809
 Windows NT operating system, 809

Windows NT Workstation
 features from, 4
 in upgrading, 107
Windows Security dialog box, 242, 244–246, 245
Windows Update utility, 644–645, 809
WinINSTALL Discover software, 86
WINMSD utility, 646–647, 647
WINNT.EXE program, 16
WINNT32.EXE program, 16, 108
WINS (Windows Internet Name Service), 809
WINS addresses, in order of use option, 523
WINS servers
 defined, 809
 in TCP/IP, 518, 523–524
WINS tab, 523, 523
WINVER command, 646, 646
wireless devices, 175
WMI (Windows Management Instrumentation)
 Control, 138, 809
Workgroup or Computer Domain dialog box, 22
workgroups
 defined, 809
 membership in, 15
Write an Event to the System Log option, 741
write-back caching, 809
Write Debugging Information option, 741
Write permission, 453
write-through caching, 810

Z

ZAP files, 85, 810

X

Xresolution option, 61

Y

Yresolution option, 61