

Index

Symbols

32-bit Windows RDP clients, accessing with Terminal Services, 714

64-bit architecture, 179-180

A

access

clients, 84-85

integrating, 104-105

Internet, Outlook 2003, 312

non-Windows clients, 1010-1012

OWA, optimizing slow access, 989

POP, Outlook Express (Mac), 999-1000

securing to ActiveSync with SSL, 766-767

Terminal Services, Remote Desktop, 715

access (users), tracking, audit logging, 656

event auditing, 657

viewing security logs, 658-660

access rules, SMTP, ISA (Internet Security and Acceleration) Server, 416-417

accessing

Exchange with OWA, 85

Terminal Services, 714-715

account provisioning, MIIS 2003, 110

ACL (access control lists), administrator role memberships, 598

action pane (EMC), 603

Action tab

Content Filtering Agent, 245

ISA Server, 409

active calls, Unified Messaging monitoring/troubleshooting, 827

Active Directory, 75, 78-79

adding NIS users to, 129

CAS (Client Access Server), 565

design, 93-95

design concepts, 78-81

disaster recovery, 1148

authoritative restores, 1149-1150

global catalog servers, 1152

non-authoritative restores, 1148-1149

partial authoritative restores, 1150-1152

SYSVOL folder restores, 1152-1153

DNS, configuring, 95

- domain controllers, 157-158
 - domain structures, 80, 94-95
 - domains, Exchange Server migrations, 541
 - DSAccess, 166
 - DSProxy, 168
 - Exchange Security Groups, 598
 - Exchange View-Only Administrators Role, 600
 - extending schemas, Exchange Server migrations, 519, 540
 - forests, 94-95
 - combining (Windows Server 2003 migrations), 476-481
 - Exchange Server migrations, 540-541
 - migrating, 540-541
 - upgrading (Windows Server 2003 migrations), 465-470, 472-475
 - functionality, 169-172
 - Global Catalog
 - demoting, 163
 - deploying domain controllers, 163-164
 - server relationships, 159
 - structure, 160
 - universal group caching, 164-165
 - verifying, 162
 - implementing from scratch, 190
 - configuring Active Directory sites and services, 197-199
 - configuring global catalog servers, 200
 - installing first domain controller for a new domain, 194-197
 - installing Windows Server 2003, 190-192
 - installing Windows Server 2003 Service Pack 1, 192-194
 - updating and patching operating systems, 194
 - importance of, 29-30
 - infrastructure components, 81-82
 - integrated replication, 138
 - integrated zones, 136
 - MMS, 82
 - ntdsutil (defragmentation utility), 653-654
 - Office Communications Server installations, 875-878
 - optimizing, 1169
 - passwords, changing via OWA, 978
 - planning infrastructure, 184-188
 - populating, 508-510
 - replication topology layout, 95
 - requirements, 76
 - requirements for Exchange Server 2007, 180-181
 - AD sites and services, 181
 - domain and forest functional levels, 181-182
 - flexible single master operations roles, 182-183
 - global catalog servers, 181
 - permissions, 183-184
 - schema upgrades (Windows Server 2003 migrations), 467-468
 - schemas, extending, 540
 - SMTP Categorizer, 169
 - structure, 155-156
 - synchronizing
 - information to Edge Transport servers with EdgeSync, 257
 - user information with UNIX, 128-129
 - Unified Messaging server objects, 805
- Active Directory Application Mode, 99, 258, 272**
- Active Directory Connectors (ADC), 541**
- deleting Exchange Server migrations, 509
 - installing, 541-547
- Active Directory domains, 155**
- Active Directory forests, domain controller placement, 155-156**
- Active Directory functionality modes, relationship to Exchange groups, 169**
- distribution groups, 170
 - functional levels in Windows Server 2003 AD, 171-173
 - group scope, 170-171
 - mail-enabled groups, 170
 - security groups, 169
 - Windows Group types, 169
- Active Directory-integrated zones, 136**
- Active Directory Migration Tool, 481-489, 493-495**
- Active Directory namespace, Exchange Server 2007, 185**
- Active Directory Restore mode password (Windows Server 2003), backups, 1106**

Active Directory sites

- Active Directory requirements for Exchange Server 2007, 181
- configuring, 197-199
- planning Active Directory infrastructure, 186
- universal group caching, 164-165

Active Directory structure, 154-155**Active Directory trees, domain controller placement, 155****Active Remote Delivery Queue Length performance counter, 700-701****Active/Active clustering, 1046****Active/Passive clustering, 1046****ActiveSync, 105, 762-763**

- CAS, 567-570
 - Remote Wipe function, 570
- configuring per-user settings, 765-766
- enabling, 763
- policies, 783
 - mailbox policies, 783-784
- securing access with SSL, 766-767
 - forcing SSL encryption for ActiveSync traffic, 774
 - installing root certificates on Windows Mobile devices, 774, 776-777
 - installing third-party CA on CAS, 767-770
 - internal CA for OWA certificates, 770-774
- securing with ISA Server 2006, 778-783
- settings (EMC), 763-764
- wiping and resetting devices, 785-786

ActiveSync Connectivity rules (Management Pack), 699**ActiveSync External Service Availability reports (Management Pack), Service Availability Summary reports, 708****ActiveSync External Service Availability Summary reports, 708****ActiveSync Internal Service Availability Summary reports, 708****ActiveSync rules (Client Access rules), 698****AD. See Active Directory****AD-integrated replication, zone transfers, 138****ADAM (Active Directory Application Mode), 99, 258, 272****ADC (Active Directory Connectors)**

- deleting, 509
- Exchange Server migrations, 541
 - CA, 543, 545-547
 - installing, 542
 - installing, 541-547

ADClean, 510**add-ins, Outlook (effects on Cached Exchange mode), 934****Add/Remove cmdlets (Unified Messaging shell commands), 840-841****adding**

- attachments to email, 958
 - deleting, 961
 - forwarding, 960-961
 - reading, 959-960
 - replying, 960-961
- blocked recipients with Exchange Management Shell, 233
- blocked senders with Exchange Management Shell, 231
- Certificate Services to servers, 380-382
- folders to Outlook, 953
- NIS users to Active Directory, 129
- SRSs, 550-551
- templates to certificate servers, 384
- users to Office Communications Server, 889

Address and Phone tab (EMC mail contact properties), 625**address books**

- Entourage, 1005
- OAB (Offline Address Book), generation checks (weekly database maintenance), 676
- OAB (Outlook Address Book), Cached Exchange mode (Outlook), 934
- Outlook, effects on Cached Exchange mode (Outlook), 935
- Outlook Express, 998
 - backing up contacts, 1001
 - migrating, 1001
- OWA, 943, 964-965
 - creating contacts, 986
 - deleting contacts, 987
 - editing contacts, 986

address rewriting, 254, 428

- configuring, 255-257

address rewriting policies, 447**address spoofing, assessing risks, 330****addresses**

- contact addresses, mapping from OWA, 986

- Exchange 5.5, limitations of, 534

- OAB, 676

- OAL, 676

- personal address books, migrating, 1001

addressing email, 956**administering Exchange Server 2007, 32****administration**

- backup, 652

- eseutil utility, 655

- knowledge, 735

- LDAP, 120-122

- maintenance, 679

- MOM, 680

- ntdsutil utility, 653

- Office Communications Server, 889

- Queue Viewer, 652

administration and maintenance documents, 750-752**administration manual, 750-751****Administration Tools Pack, 729****administrative functions, EMS, 274****administrative groups, Exchange Server migrations, 503****administrative installation points, Outlook deployments, 1024-1025****administrative policies, 342-343**

- email disclaimers, 344-346

- securing groups, 343-344

- standardizing server builds, 346

administrative privileges, delegating in Office Communications Server, 878-880**administrative roles, 330-331****administrative server tasks, EMS, 284-286****Administrative templates (Outlook), 1031, 1033****administrative tools**

- EMC. See EMC

- EMS, 604

- cmd.exe command, 606

- command-line interface, 605

- email contacts, creating, 624

- EMC, versus, 610

- interface customization, 606

- journaling, creating rules, 637

- mailboxes, creating, 613

- object-oriented data handling, 606

- piping data between commands, 605

- scripting, 606

- Tip of the Day feature, 607

- trusted scripts, 606

- XML support, 606

- MOM, 680

- Office Communications Server, 888-891

- Remote Desktop for Administration, 607

Administrator Console (MOM), 688

- computer attributes, 689

- computer groups, 689-690

- notification groups, 692

- rules, 690

- scripts, 691

administrator permissions, Edge Transport servers, 370-371**administrator roles**

- Exchange Server installations, 600

- memberships, ACL, 598

administrator tools

- EMC, 649

- disaster recovery tools, 651-652

- ExBPA, 651, 677

- mail flow tools, 652

- performance tools, 652

- Queue Viewer, 652

- EMS, 650

ADMT (Active Directory Migration Tool), consolidating/migrating domains (Windows Server migrations), 481-489, 493-495**adprep utility, AD schema upgrades (Windows Server 2003 migrations), 467-468****AD RMS Prelicensing agent (Hub Transport servers), 587-588****Advanced mode (Ntbackup.exe), 1100-1102****agents**

- account provisioning, 110

- event triggering, 1208

- MA, role of, 111-112

- Agents rules, 700-701
- agreeing on design, Design document (Planning phase), 55
- AKM files, Management Pack, 688
- alert notifications, Management Pack, 686
- alerts, 864
- Alerts tab (ISA Server), 422, 424
- All Server Roles rules (Common Components rules), 693
- analysis
 - MBSA, 336-337
 - Security Configuration and Analysis tool, 301
- analysis phase (SAN/NAS implementation), 1192
- announcements, SharePoint list of, 856
- Anti-Spam tab, Exchange Management Console, 223
- antispam
 - considerations for, 103
 - design, 103
 - Edge Transport servers, 148
 - server-level security, 347-349
- antispam application, 349
- antispam features, Exchange 2007, 315-316
- antispam reports, viewing with PowerShell scripts, 266-267
- antispam tools, 315
- antivirus
 - considerations for, 103
 - design, 103
 - DNS, 147-148
 - Edge Transport servers, 148
- antivirus applications, Exchange 2003 Servers, 351
- antivirus outsourcing, 352
- antivirus stamping, 350
- Anywhere (Outlook), CAS, 571-572
- AOL (America Online), OCS connectivity, 873
- Application Settings tab (ISA Server), 411
- application-layer filtering, 398-399
- applications
 - antispam, 349
 - antivirus, servers, 351
 - components, selecting, 96
 - gateways, 147
 - multiple forests, 79
- Apply PRF setting (OCT), 919
- applying
 - MSDSS, 115-120
 - multiple forests, 79
- appointments
 - calendars, 980-981
 - categorizing via color (Outlook), 904
 - OWA calendars
 - creating in, 980-981
 - recurring appointments, 982
- approval
 - for Migration document, 63
 - for Statement of Work (Initiation phase), 49
- architecture, Active Directory
 - authentication, 157
 - domains, 155
 - DSAccess, 166
 - DSPProxy, 168
 - forests, 155
 - functionality, 169-172
 - Global Catalog, 159-160, 162-164
 - replication, 156
 - SMTP Categorizer, 169
 - trees, 155
 - universal group caching, 164-165
- archiving, 633
- arrays, RAID array failures (disaster recovery), 1127
- as-built documentation, 748
- ASR (Automated System Recovery), 1102-1104
 - complete server failures, restoring (disaster recovery), 1134-1135
- assessing risks, 329-330
- Assistants rules (Mailbox rules), 702
- assumptions
 - Migration document, 58
 - upgrades, 48
- asymmetrical encryption, 376
- Attached File Filter reports (Message Hygiene Analysis reports), 706
- attachment filtering, 350
 - configuring with Exchange Management Shell, 251-252

attachment filtering processing, 249-250

- planning, 250-251

attachments

- blocking in Outlook, 314-315

- email

- adding, 958

- deleting, 961

- forwarding, 960-961

- OWA, 958-960

- reading, 959-960

- replying, 960-961

- Outlook 2003, blocking, 314

- OWA, blocking in, 988

- reading pane (OWA), viewing in, 953

attributes, MIIIS, 109**audio codecs, Unified Messaging, 807****audit logging, 656**

- event auditing, 657

- security logs, viewing, 658-660

auditing, 656

- audit logging, 656

- event auditing, 657

- viewing security logs, 658-660

- logging, 658

- message tracking, 664

- changing log location, 665

- enabling/disabling, 664

- sizing message logs, 666-667

- policies, 334-335

- security events, 333

- SMTP logging

- EMC, 661

- EMS, 661-664

audits, 333-334**authentication**

- Active Directory, domain controllers, 157

- domain controllers, 511

- Internet, Outlook 2003, 313

- OWA, 322-323

Authentication Delegation tab (ISA Server), 411**authentication users, Outlook, 313****authoritative domains, configuring in Edge Transport server, 365-366**

- authority over DNS zones, 135

- auto account setup (Outlook), 1015-1016

- Auto Attendant (Unified Messaging), 798, 803-804

- auto attendants, creating in Unified Messaging, 819-820

- Auto Discovery rules (Client Access rules), 698

- Autodiscover service, 99

- CAS, 573-575

- Autodiscover service (Outlook), 1015-1016

- Autoenrollment, configuring Exchange user certificates, 382-384

- Automated System Recovery. See ASR (Automated System Recovery)

- automatic creation of Send Connectors on Edge Transport server, 362

- automatic database maintenance, 668

- scheduling, 668-669

- Automatic Explicit ADAM connector, 358

- Automatic Implicit ADAM connector, 358

- Automatic Signature, 974

- automatic updates, 90, 305-306

- automating Outlook profile settings, Outlook deployments, 1025

- Availability service, 99

- CAS, 572

- avoiding virtual memory fragmentation issues, 86

B**background sections**

- Design documents, 54

- Migration document, 58

backing up

- MSDSS, 119-120

- personal address books, 1001

- backplanes, redundancy (SAN/NAS fault tolerance), 1201

- backup and recovery development, 754

- Backup Domain Controllers (BDCs), 156

- backup utility (ntbackup.exe), 652

backups

- ASR, 1102-1104

- boot volumes, 1105

- CAS, 1095

- CCR, 1099

- Certificate Services, 1108-1109
- clusters, 1072
- common settings/configuration data, 1097
- data, 1208
- data restoration, 1117
- Directory servers, 1097
- disk configuration, 1108
- documentation, 754
 - disaster recovery, 1122
 - firewall configuration, 1086
 - hardware inventories, 1085
 - network configuration, 1086
 - policies/procedures, 1084
 - router configuration, 1086
 - server builds, 1085
 - server configuration, 1085
 - switch configuration, 1086
 - updates, 1086
 - WAN connections, 1086
- Edge Transport servers, 1095
- escalation paths, 1088
- Exchange Server migrations, 518
- failure notifications, 1088
- full server recovery process (disaster recovery), 1119-1120
- Hub Transport servers, 1094-1095
- IIS, 1110-1111
- importance of, 1081
- information store, validating, 678
- LCR, 1098
- logging/tracking, 1087
- mailbox servers, 1092-1094
- managing, 652
- media, 1111-1112
- MSDSS, 119-120
- Ntbackup.exe (Windows backup utility), 1100-1102
- roles/responsibilities, 1087-1088
- separation of duties, 1087
- SLA (Service Level Agreements), 1082-1084
- software, RAID sets, 1108
- strategy development
 - assigning tasks/designating team members, 1090-1091
 - database corruption, 1090
 - determining importance of, 1088
 - network device selection, 1091
 - restoring messages/folders/mailboxes, 1090
 - system failures, 1089-1090
 - testing strategies, 1092
 - validating strategies, 1092
- system volumes, 1105
- Unified Messaging servers, 1096
- validating, 1087
 - full server recovery process (disaster recovery), 1120
- verifying daily database maintenance, 673-674
- Windows Server 2003
 - Active Directory Restore mode password, 1106
 - System State, 1105
 - VSS, 1106-1107
- Windows Server migrations, single member server migrations, 463
- balancing loads, 149**
- bandwidth, Outlook deployment considerations, 1020**
- baselining records, 736**
- basic mode, OWA user mode, 947**
- BCC (blind carbon copy), 956. See also email**
- BCC fields (email), removing users from OWA, 957**
- BDCs (Backup Domain Controllers), 156**
- beaconing, Web, 316-317, 914**
- benefits of documentation, 734-736**
- Best Practice Analyzer rules (Common Components rules), 693-694**
- best practices**
 - database maintenance, 667, 670-671
 - automatic maintenance, 668-669
 - daily maintenance, 673-674
 - mailbox moves, 672
 - monthly maintenance, 677-678
 - offline maintenance, 669-671

- quarterly maintenance, 678
- scheduling, 673-677
- weekly maintenance, 675-676
- ExBPA, 639-640, 651, 677
- Outlook deployments, 1021
- between sites, failing over (disaster recovery), 1125**
- Big Bang strategy (Windows Server migration), 461-462**
- blacklists, antispam measures, 349. See also spam**
- blind carbon copy (BCC), 956. See also email**
- block lists, 319**
 - OWA, 324
- blocked recipients, adding with Exchange Management Shell, 233**
- blocked senders**
 - adding with Exchange Management Shell, 231
 - filtering, 319-320
- Blocked Senders List (Outlook), 913**
- blocking**
 - attachments, Outlook, 314-315
 - read receipts, 320
 - spam, Entourage, 1004
- boot failures (disaster recovery), 1128-1129**
- boot loader files, complete server failures, restoring (disaster recovery), 1135**
- boot volume failures (disaster recovery), 1127**
- boot volumes, backups, 1105**
- Bridging tab (ISA Server), 411**
- budgets**
 - Migration document, 60
 - summarizing in Statement of Work (Initiation phase), 48
 - upgrades, 48
- built-in Transport agents, outlining, 440**
- busy/free time, Outlook collaboration**
 - configuring for Internet display, 923, 925
 - viewing via Internet, 925-926

C

- CA (certificate authority), 374**
 - Certificate Services backups, 1108-1109
 - enterprise root CA, 374, 771
 - enterprise subordinate CA, 375, 771
 - internal CA for OWA certificates, 770-774
 - PKI, 374-375
 - stand-alone root CA, 375, 771
 - stand-alone subordinate CA, 375, 771
- Cached Exchange mode (Outlook), 930-935**
- caches, universal group caching, 164-165**
- caching GC, Active Directory, 82**
- CAL, Enterprise CAL versus Standard CAL, 12**
- Calendar, OWA, 979, 981-982**
- calendars**
 - customizing, 977
 - effects on Cached Exchange mode (Outlook), 934
 - OWA. See OWA
 - shared calendars, 920-921
- call answering, Unified Messaging, 795**
- CALs (client access licenses), 713**
- canonical name (CNAME), 141**
- canonical name (CNAME) record, 141**
- capacity analysis, 1161**
 - baselines, establishing, 1161-1162
 - ExBPA, 1162-1163
 - LoadSim tool, 1163
 - disk subsystems, 1175-1176
 - memory subsystems, 1172-1173
 - network subsystems, 1176
 - planning for growth, 1164
 - processor usage, 1175
 - virtual memory, 1174
- carbon copy (CC), 956. See also email**
- CAs (connection agreements), configuring, 543-547, 550**
- CAS (Client Access Server), 83**
 - ActiveSync, 567-570
 - Remote Wipe function, 570
 - Active Directory, 565
 - Autodiscover service, 573-575
 - Availability service, 572
 - backups, 1095
 - client types, 565
 - IMAP, 575

- installing, 576
 - third-party CA, 767-770
- MAPI, 564
- NLB configurations, 1074-1075
- optimizing, 1167
- Outlook Anywhere, 571-572
- OWA, 566, 570
- POP, 575
- sizing, 1182
- Categorizer, 169**
 - Hub Transport servers, 578
 - submission queues, 590
- categorizing**
 - appointments via color (Outlook), 904
 - email, OWA, 970
- CC (carbon copy), 956. See also email**
- CC fields (email), removing users from (OWA), 957**
- CCA (Configuration Connection Agreements), Exchange Server 5.5 migrations, 550**
- CCR (Cluster Continuous Replication), 28, 88, 96, 1099**
 - heartbeats, 1056
 - mailbox clusters, 1048-1055
 - SCC versus, 1067
 - transport dump feature (Hub Transport servers), 1056
- CD (connected directory), 109**
- centralized IT environments, 51**
- certificate authority. See CA**
- Certificate Practice Statement (CPS), 375**
- certificate servers, adding templates to, 384**
- Certificate Services**
 - backups, 1108-1109
 - installing, 380-382
 - Windows Server 2003, 374-375
- certificate templates, 377-378**
- certificate-based encrypted messaging, 373**
- certificates, 377**
 - acquiring, 378
 - Exchange user certificates, configuring with Autoenrollment, 382-384
 - Office Communications Server, configuring for, 885-887
 - Outlook, acknowledging, 389
 - validating that they are working properly, autoenrollment, 385-387
 - Windows certificate of authority, installing, 380
- change control, security documentation, 756-757. See also documentation**
- changes in Exchange Server 2007, 74-75**
- charts, Gantt Chart, 55-56**
- Checkpoint-Meta IP, 134**
- circuits, 810**
- CIW (Custom Installation Wizard), creating transforms (Outlook deployments), 1026-1027**
- classifying messages, Hub Transport servers, 586-587**
- client access licenses (CALs), 713**
- client access points, identifying, 84-85**
- Client Access rules (Management Pack), 698-699**
- Client Access server roles, 27-28, 98-99, 649**
 - installing, 215
- client access server. See CAS (Client Access Server)**
- client authentication, certificate templates, 377**
- client DNS, examining use for Exchange, 144**
- Client Performance reports (Metric reports), 707**
- client-based virus protection, 307**
- client-level security, 308-309**
- clients**
 - 32-bit RDP clients, accessing with Terminal Services, 714
 - access, 84-85
 - integrating, 104-105
 - MAPI compression, 84
 - OWA, 85
 - SMTP, 85
 - DNS
 - need for, 133
 - SMTP, 144
 - troubleshooting, 150
 - integrating client access into Exchange Server 2007, 104-105
 - Macintosh
 - Entourage X, 1004-1007
 - Terminal Services Client, 1007-1010
 - non-Windows access methods, 1010-1012

Outlook Express, Macintosh, configuring, 999-1001
 OWA. *See* OWA
 security
 lockdown guidelines, 307
 new features, 308-309
 optimizing Windows Server 2003, 299
 patches/updates, 304
 templates, 301-303
 web-based clients, accessing Terminal Services, 714-715
 Windows-based mail, 994-997

Cluster Continuous Replication. *See* CCR (Cluster Continuous Replication)

cluster resources, dependencies, 1047

Cluster rules (Mailbox rules), 702

Cluster Service, disaster recovery, 1147

clustering, 88-89

 Active/Active, 1046
 Active/Passive, 1046
 backups, 1072
 CCR
 heartbeats, 1056
 mailbox clusters, 1048-1055, 1057
 SCC versus, 1067
 transport dump feature (Hub Transport servers), 1056
 cluster resources, 1047
 dependencies, 1047
 designing for, 97
 Exchange virtual server, 1046
 Exres.dll (Resource DLL), 1046
 failbacks, 1047
 failovers, 1046
 heartbeats, 1046
 CCR, 1056
 mailbox clusters, CCR, 1048-1055, 1057
 majority node clusters, 1047
 managing
 via command line, 1068-1069
 via GUI, 1069, 1072
 NLB (Network Load Balancing), 1073-1075

 Quorum resources, 1047
 quorum-device clusters, 1047
 resource groups, 1047
 SAN/NAS fault tolerance, 1201
 SCC, 1057
 adding second nodes, 1061
 advantages of, 1066-1067
 CCR versus, 1067
 configuring shared storage, 1059
 creating, 1059, 1061
 DTC, creating, 1062
 installing Exchange Server on active node, 1062, 1065-1066
 operating system preparation, 1058-1059
 requirements for, 1057
 storage configurations, 1066

clusters

 CCR, 1099
 mailbox clusters, optimizing, 1166

cmd.exe command, EMS, 606

cmdlets, EMS, 273-274

 combining functions to create a library, 280-281
 creating your own, 279-280
 distributing, 282
 managing, 281
 modifying, 281
 naming, 282
 syntax, 276

CNAME (canonical name), 141

code signing, certificate templates, 378

codecs, audio codecs (Unified Messaging), 807

coexistence, 77

collaboration

 MOSS, enabling via, 851
 Outlook. *See* Outlook, collaboration
 SharePoint, 851
 upgrading, 52

collaboration sessions, Design document, 52

color

 categorizing appointments by (Outlook), 904
 email text, customizing in OWA, 964
 OWA, 977

- color OWA (Outlook Web Access) color schemes, customizing, 977
- command-line interfaces, EMS, 605
- command-line options, Remote Desktop client, 718-719
- commands, piping data between (EMS), 605
- Common Components rules (Management Pack)
 - All Server Roles rules, 693
 - Best Practice Analyzer rules, 693-694
 - Directory Service Access rules, 694-695
 - Extensible Storage Engine rules, 695
 - Hub Transport and Edge Transport rules, 696
 - Server rules, 696-697
 - Service Monitoring rules, 698
- communication plan document, 739
- Communications Server
 - adding users to, 889
 - administration, 889
 - configuring, 883, 885
 - certificates, 885-887
 - server settings, 891
 - user settings, 889
 - deploying, 881, 883
 - installing, 875
 - configuring IIS, 880-881
 - delegating setup/administrative privileges, 878, 880
 - extending AD schema, 875-876
 - prepping AD domains, 878
 - prepping AD forests, 876
 - installing admin tools, 888
 - instant messenger filter, 891
 - starting, 887
 - validating functionality, 887
- Communicator client, 874
 - installing, 892
- compact database utility (esentutl.exe), 654
- compacting Exchange 5.5 organizations, 537
- compatibility
 - clients, 996-997
 - Outlook Express, 999-1001
 - Terminal Services Client, 1008-1010
- complete server failures (disaster recovery), 1129
 - ASR restores, 1134-1135
 - boot loader file restores, 1135
 - manual recovery, 1130-1131
 - restoring versus rebuilding, 1130
 - System State restores, 1131-1133
- components
 - Active Directory, 75. *See also* Active Directory Applications, selecting, 96
 - design, 73
 - coexistence, 77
 - functionality, 73-76
 - scaling, 77
 - third-party functionality, 78
 - DNS, 135
 - multihomed DNS servers, 142-143
 - need for, 133
 - queries, 137-138
 - replication, 138
 - resource records, 138-143
 - servers, 134
 - zone transfers, 138
 - zones, 135-137
 - Entourage X, 1004
 - hardware, selecting, 96
- compression, MAPI, 84
- computer accounts, migrating (Windows Server migrations), 493-494
- computer groups, Management Pack, 689-690
- configuration
 - Active Directory. *See* Active Directory
 - components, 73
 - coexistence, 77
 - functionality, 73-76
 - scaling, 77
 - third-party functionality, 78
 - connection agreements, 543-547, 550
 - Date & Time formats, 977
 - DNS servers, 150-153
 - documents, validating migration, 513

- email, options, 962
- environment documentation, 747-749
- Exchange 5.5, limitations of, 535
- folders, OWA, 953
- items per page, 973
- messages, delivery limitations, 364
- MIIS, 112
- optimizing, 85
 - avoiding VM fragmentation, 86
 - clustering, 88-89
 - disk options, 86
 - MOM, 89
 - multiple databases, 87-88
 - operating systems, 86
- Out of Office Assistant, 972
- Outlook Express, Macintosh, 999-1001
- placement, 82
 - client access points, 84-85
 - environment sizing, 84
- quick flags, 970
- reading pane (OWA), 953
- Security Configuration and Analysis tool, 301
- signatures, 974
- SMTP, 364
- SRSs, 550-551
- configuration connection agreements, Exchange Server migrations, 545**
- configuration document, environment documentation, 748-749**
- Configuration Management Tools (EMC Toolbox), ExBPA, 639-640**
- Configure Cached Exchange mode (OCT), 919**
- configuring**
 - Active Directory sites and services, 197-199
 - ActiveSync, per-user settings, 765-766
 - address rewriting, 255-257
 - allowed keywords or phrases list, Edge Transport servers, 242-243
 - allowed keywords or phrases list to block messages, Edge Transport servers, 243-244
 - attachment filtering with Exchange Management Shell, 251-252
 - authoritative domains, Edge Transport server, 365-366
 - certificates, Office Communications Server, 885-887
 - Content Filter Agent to allow specific recipients, senders, and sending domains, 248-249
 - content filtering actions, 245-246
 - content filtering with Exchange Management Shell, 246-247
 - content filtering policies, 447
 - DNS, Active Directory, 95
 - DNS to support Exchange Servers, 150
 - Edge Transport server DNS settings, 145
 - EdgeSync on Edge Transport servers, 259-260
 - exceptions list, Edge Transport servers, 244
 - Exchange Server 2007, 86-88
 - Exchange user certificates, with Autoenrollment, 382-384
 - global catalog servers, 200
 - Hub Transport servers, 215
 - IIS 6.0, 207-208
 - IP Allow List
 - with Exchange Management Console, 225-228
 - with Exchange Management Shell, 229-230
 - IP Block List
 - with Exchange Management Console, 228
 - with Exchange Management Shell, 229-230
 - IP Block List Providers with Exchange Management Console, 228-229
 - Office Communications Server, 883-885
 - puzzle validation, content filtering, 247
 - quarantine mailbox for captured messages, 241-242
 - Receive Connectors on Edge Transport server, 362
 - recipient filtering, 231-233
 - RMS, 442
 - Safelist Aggregation for Outlook 2003/2007, 261-263
 - Send Connectors on Edge Transport server, 362
 - sender filtering, 230-231
 - Sender Reputation with Exchange Management Shell, 254

- Sender Reputation Agent with Exchange Management Console, 253-254
- Sender/IP Reputation, 252-253
- SenderID
 - Edge Transport servers, 234-236
 - with Exchange Management Shell, 239
 - SenderID Agent on Edge Transport servers, 238-239
 - server settings, Office Communications Server, 891
 - SMTP Rejection Response, 249
 - spam quarantine, 242
 - user settings, Office Communications Server, 889
- Confirm, EMS syntax, 278**
- connected directory (CD), 109**
- connecting to terminal server consoles, remotely, 715-716**
- connection agreements (CAs), 543-547, 550**
- Connection Filter reports (Message Hygiene Analysis reports), 706**
- connection filtering, 224-225**
 - IP Allow List
 - configuring with Exchange Management Console, 225-228
 - configuring with Exchange Management Shell, 229-230
 - IP Block List
 - configuring with Exchange Management Console, 228
 - configuring with Exchange Management Shell, 229-230
 - IP Block List Providers, configuring with Exchange Management Console, 228-229
 - sender filtering, 230-231
- Connection Filtering Agent, 224**
- connections**
 - ADC, installing, 541-547
 - environment documentation, 747-749
- connections, non-windows client-based, 994**
 - Linux/UNIX support
 - IMAP, 1011
 - Outlook Express, 997-1001
 - OWA, 996, 1012
 - Mac support, 994
 - client functionality/compatibility table, 996-997
 - Entourage, 1004-1007
 - IMAP, 1011
 - Mac OS X Mail, 1001-1003
 - Outlook Express, 997-1001
 - OWA, 996, 1012
 - POP3 functionality, 1011
 - Remote Desktop for Mac, 995-996
 - Terminal Server Client for Mac, 1007-1010
 - Virtual PC, 995-996, 1010
 - mobile computing support, 1011-1012
- connectivity, Unified Messaging monitoring/troubleshooting, 827**
- connectivity verifiers**
 - ISA Server, 424-426
- connector namespace (CS), 109**
- connector topology, SMTP connectors, 355**
- connectors**
 - ADC, installing, 541-547
 - deleting, 508
 - managing with EMS, 286
 - migrating, 557-559
 - Exchange Server 2003, 557-559
 - PROFS/SNADS, 538
- console tree (EMC), 602-603**
- consolidating**
 - domains (Windows Server 2003 migrations), 481-489, 493-495
 - exchange servers, NAS/SAN, 1202-1203
- Contact Information tab (EMC mail contact properties), 625**
- contacts**
 - address lists, Outlook Express, 998
 - customizing, 978
 - mail contacts, creating, 623-624
 - mail contacts, managing, 624
 - managing, OCS, 873
 - Outlook, sending information on, 926-927
 - Outlook Express, 1001
 - OWA, 986-988

Contacts, SharePoint list of, 856

Contacts option, OWA, 986-988

content conversion, 1207

Content Filter Agent, configuring to allow specific recipients, senders, and sending domains, 248-249

Content Filter reports (Message Hygiene Analysis reports), 706

content filtering, 239-241

allowed keywords or phrases, 242-244

configuring, 245-247

configuring policies, 447

domain-level content, 248-249

exceptions list, configuring, 244

fine-tuning, 245

quarantine mailbox for captured message, configuring, 241-242

spam quarantine, 242

SMTP Rejection Response, 249

Content Filtering Agent, 240

Action tab, 245

content indexing, 1206-1207

context menus, 970

Continuous Replications rules (Mailbox rules), 702

conversion, Native Mode, 508-510

converting

content conversions, 1207

email, MAPI format, 1208

cookie authentication timeouts, OWA security, 989

Copy cmdlets (Unified Messaging shell commands), 843

copying

flat-file copying, database corruption (disaster recovery), 1139

public folders

Exchange Server 2003 migrations, 529-530

weekly database maintenance, 675

corporate email policies, establishing, 341-342

corruption

data, mailboxes, 1117-1118

databases (disaster recovery), 1138

backup strategy development, 1090

Database Recovery Management tool, 1139

ESEUTIL utility, 1142-1143

flat-file copying, 1139

ISINTEG utility, 1142-1143

moving mailboxes to other onsite servers, 1141

CPS (Certificate Practice Statement), 375

CS (connector namespace), 109

Custom Installation Wizard, 1026-1027

customization

calendars, 977

contacts, 978

disaster recovery, 52

disk options, 86

email, OWA, 964-965, 967-968, 970-971

migration

deploying prototype labs, 510-512

move mailbox upgrade method, 529, 533

restoring prototype labs, 513

validating documents, 513

OWA, options, 972-978

Reading Panes, 975

recovery, 103

redundancy, 97

reminders, 977

Spell Check feature, 976

Windows

lockdown guidelines, 307

optimizing Windows Server 2003, 299

patches/updates, 304

security templates, 301-303

Windows-based mail clients, 994

Macintosh support, 994-995

OWA functionality, 996-997

customizing

Dashboard (ISA Server), 421

email, configuring, 962

ISA Server, alerts, 422-424

ISA Server log filters, 420

MOM, 687

MOSS, 851

- MOSS integration, 862
- security templates, 303-304
- SharePoint, 851
 - sites, 865
- SharePoint Server (MOSS), Web Part tool pane, 865
- SharePoint Server (MOSS) sites, 865-867
- SMTP filters, ISA Server, 417
- customizing interfaces, EMS, 606

D

daily database maintenance, 673-674. See also maintenance

Dashboard (ISA Server), customizing, 421

data backups, 1208

data corruption, mailboxes, 1117-1118

data recovery, Windows Server migrations, 463

data restoration

- backup strategy development, 1090
- backups, 1117

data restores, 1208

data storage. See also NAS, SAN

- SAN/NAS, NAS network connectivity, selecting, 1194
- Unified Messaging, 825

data volume failures (disaster recovery), 1128

database corruption (disaster recovery), 1138

- Database Recovery Management tool, 1139
- ESEUTIL utility, 1142-1143
- flat-file copying, 1139
- ISINTEG utility, 1142-1143
- moving mailboxes to other onsite servers, 1141

database maintenance, 1207

- best practices, 667
 - automatic maintenance, 668-669
 - daily maintenance, 673-674
 - mailbox moves, 672
 - monthly maintenance, 677-678
 - offline maintenance, 669-671
 - quarterly maintenance, 678
 - weekly maintenance, 675-676

- offline maintenance, quarterly database maintenance, 678

database maintenance utility (eseutil), 655-656

Database Recovery Management tool, 640

- database corruption (disaster recovery), 1139

Database Recovery Management utility, 652

Database Recovery Tools (EMC Toolbox), 640

Database Troubleshooter, 640, 651

databases

- corruption, backup strategy development, 1090

- creating EMC, 631

- deletion settings (EMC), 633

- design, 102

- document file sizes, weekly database maintenance, 675

- ESE, 535

- free space analysis, monthly database maintenance, 677

- Global Catalog

- demoting, 163

- deploying domain controllers, 163-164

- server relationships, 159

- structure, 160

- universal group caching, 164-165

- verifying, 162

- integrity, 655. *See also* maintenance

- Issue Warning At (KB) option (EMC), 632

- maintenance

- best practices, 670-671

- postmaintenance procedures, 679

- scheduling best practices, 673-677

- multiple, 87-88

- optimizing, 1179-1180

- Prohibit Post At (KB) option (EMC), 632

- Prohibit Send and Receive At (KB) option (EMC), 632

- sizing, 1179-1180

- storage limits, 632

- testing, 655

- warning message intervals, 632

Date & Time Formats, configuring, 977

date/time formats, OWA, 977

decommissioning versions, 66**default signatures, configuring, 974****defense in depth, 332****defragmentation utility (ntdsutil), 653-654****delegate access, effects on Cached Exchange mode (Outlook), 934****deleting**

Active Directory Connectors, Exchange Server migrations, 509

ADC, 509

Directory Replication Connectors, 508

Native Mode (Exchange Server migrations), 508-509

email, 961

mailbox contents, disaster recovery, 1116-1117

servers, 508

Site Replication Services, Exchange Server migrations, 509

SRSs, 509

deleting email, OWA, 961**deletion settings (EMC), databases, 633****delivery, limiting messages, 364****Delivery Options tab (mail flow settings properties), 614****delivery services (Hub Transport servers), 579****demotion, Global Catalog, 163****Department of Health and Human Services (DHHS), 433****dependencies (cluster resources), 1047****deploying**

Cached Exchange mode (Outlook), 931-932

domain controllers, using Install from Media Option, 163-164

Exchange Server, Finalize Deployment page, 603

Office Communications Server, 881, 883

Outlook. See Outlook, deploying

prototype labs, Exchange Server migrations, 510-513

services to limited number of users (Pilot phase), 63-65

deployment, 329

domain controllers, Media option, 163-164

Entourage X, 1005-1007

migration

move mailbox upgrade method, 529, 533

prototype labs, 510-512

restoring prototype labs, 513

validating documents, 513

MIS, Novell eDirectory, 114-115

placement, 82-85

Terminal Services Client, 1009-1010

deployment phase (SAN/NAS implementation), 1192**design**

Active Directory, 93-95

components, 73

coexistence, 77

functionality, 73-76

scaling, 77

third-party functionality, 78

DNS, Active Directory, 81

Documents, validating migration, 513

Exchange 5.5, limitations of, 535

infrastructure, 102-104

MOM, 89

placement, 82-85

design and planning document, 737-738**design concepts for Active Directory, 78-81****Design document, 37**

Planning phase, 51-55

Design phase (Windows Server migration), 460**designing server number and placement, 96****development phase (SAN/NAS implementation), 1192-1193****DHHS (Department of Health and Human Services), 433****diagnostic tasks, 272****diagrams, topologies, 749****dial plan objects, Unified Messaging, 800-801****dial plans, Unified Messaging**

associating auto attendants with, 819-820

associating servers with, 819

associating subscriber access numbers to, 816

creating in, 816

- linking IP gateways to, 817-818
- removing servers from, 840
- digital signatures, 388**
 - Cached Exchange mode (Outlook), effects on, 934
 - Outlook security, 909
 - S/MIME, 388-389
 - sending, digitally signed email, 389-390, 392
 - signing process, 388
- directories**
 - Active Directory. See Active Directory
 - integrating with MSDSS, 115-116
 - MIIS, 108-110
 - account provisioning, 110
 - group management, 112
 - installing, 112
 - role of MAs, 111-112
 - Novell eDirectory, 113-114
 - applying MSDSS, 115-120
 - deploying MIIS, 114-115
 - site directories, SharePoint Server (MOSS), 864
- directory information, synchronizing with MIIS 2003, 108**
- Directory Replication Connectors, deleting, 508-509**
- Directory servers, backups, 1097**
- Directory Service Access rules (Common Components rules), 694-695**
- directory synchronization, limitations on with MSDSS, 118-119**
- disable mappings, Remote Desktop for Administration, 722**
- disabling**
 - mailboxes with EMS, 284
 - message tracking, 664
 - web beacons, OWA, 323-324
- disaster recovery**
 - Active Directory. See Active Directory
 - backup process documentation, 1122
 - boot failures, 1128-1129
 - Cluster Service, 1147
 - complete server failures, 1129
 - ASR (Automated System Recovery) restores, 1134-1135
 - boot loader file restores, 1135
 - manual recovery, 1130-1131
 - restoring versus rebuilding, 1130
 - System State restores, 1131-1133
 - data corruption, 1117-1118
 - database corruption, 1138
 - Database Recovery Management tool, 1139
 - ESEUTIL utility, 1142-1143
 - flat-file copying, 1139
 - ISINTEG utility, 1142-1143
 - moving mailboxes to other onsite servers, 1141
 - Database Recovery Management utility, 652
 - Database Troubleshooter, 651
 - deleted mailbox content, 1116-1117
 - determining extent of problem, 1115-1116
 - disk failures, 1127-1128
 - documentation, 754-755
 - benefits of, 734-736
 - domain controllers (Windows 2003), 1147
 - Edge Transport server, 1119
 - Exchange database file restores, 1136-1138
 - Exchange environment documentation, 1121
 - Exchange Server, 1118
 - Ntbackup.exe (Windows backup utility), 1135-1136
 - full server recovery process, backups, 1119-1120
 - Hub Transport server, 1118
 - IIS (Internet Information Services), 1146-1147
 - lost data, restoring from backup, 1117
 - Recovery Console, 1129
 - recovery process documentation, 1122
 - recovery storage groups, 1144-1146
 - server failures, 1117
 - site failures, 1123-1126
 - testing, 62, 1123
 - upgrading, 52
- disaster recovery documentation, 752-755**
- disaster recovery options, Design document (Planning phase), 52-53**
- disaster recovery plans, 754**
- disaster recovery testing, Prototype phase, 62**

disclaimers, 428

- email disclaimers, 445-446
 - administrative policies, 344-346
 - Hub Transport servers, 582-584

disconnected mailboxes, EMC, 625-626**Discovery phase (Windows Server migration), 460****discovery, planning phase of upgrades, 49-51****discussions, SharePoint, 857-858****disk configuration, backups, 1108****disk failures (disaster recovery), 1127-1128****disk mirroring, optimizing disk subsystems, 1178****disk options, configuring for performance, 86-87****disk space, free disk space, checking, 674****disk striping, optimizing disk subsystems, 1178****disk subsystems**

- optimizing, 1177-1179
- performance monitoring, 1175-1176

disks, options, 86**distributed server strategies (Exchange Server migrations), 501****Distributed Transaction Coordinators, 1062****distributing**

- cmdlets, 282
- group policies, with user certificates, 384-385
- groups, 170

distribution groups, 170

- creating, 617-619
- delegating management of, 621
- distribution list mail flow settings, 622-623
- dynamic distribution groups, creating, 620-621

distribution lists, OWA contacts, creating in, 988**DNS (Domain Name Service)**

- Active Directory, infrastructure components, 81
- components, 135
 - multihomed DNS servers, 142-143
 - queries, 137-138
 - replication, 138
 - resource records, 138-143
 - zone transfers, 138
 - zones, 135-137

configuring, 95

- configuring to support Exchange Servers, 150

defined, 132**design, Active Directory, 81****namespaces, 81****need for, 133****requirements for Exchange Server 2007, 144-149****role for internal and external message routing, 30****role in Exchange Server 2007, 131-132****security, 147-148****servers, 134**

- configuring, 150-153

- types of, 134

SMTP and, RFC standards, 145**SMTP mail routing, 143-144****troubleshooting, 150**

- dnscmd, 154

- DNSLINT, 153

- Event Viewer, 151

- ipconfig utility, 151-152

- nslookup, 152-153

- Performance Monitor, 152

using, 132-133**who needs to use DNS, 133-134****DNS namespace, role in Exchange Server design, 185****dnscmd, troubleshooting DNS, 154****DNSLINT, 153****DNS zones, moving to application partitions, 475****Do not configure Cached Exchange mode (OCT), 919****Do Not Permanently Delete Mailboxes... option (EMC), databases, 633****document databases, file sizes, 675****document libraries, 853-855****document workspaces, MOSS, 853****documentation, 37, 733. See also project documentation**

- administration and maintenance documents, 750-752

- backups, 1084-1086

- baselining records for documentation comparisons, 736

- benefits of, 734-736

- disaster recovery, 754-755
 - disaster recovery documentation, 752-755
 - environment documentation. *See* environment documentation
 - environments, 747-749
 - performance, 755-756
 - placement of, 735
 - project documentation. *See* project documentation
 - Prototype phase, 62-63
 - security, 756-757
 - training, 757-758
 - end users, 758
 - for troubleshooting purposes, 736
 - upgrades, 37
 - migration, 55-60, 63
 - pilot phase, 63-65
 - planning phase, 49-54
 - prototype phase, 61-63
 - statement of work, 44-49
- documents**
- backup process documentation (disaster recovery), 1122
 - Exchange environment documentation (disaster recovery), 1121
 - management, MOSS, 859-860
 - managing SharePoint, 860
 - migration, validating, 513
 - recovery process documentation (disaster recovery), 1122
- domain controller placement, 154-158**
- domain controllers**
- Active Directory, 157-158
 - authentication, 157
 - design, 95
 - determining placement, 158
 - authentication, 511
 - deploying, 163-164
 - installing first domain controllers for a new domain, 194-197
 - migrating, AD forest upgrades (Windows Server 2003 migrations), 466
 - placement of, 95
 - promoting, to global catalog, 161-162
 - prototype lab deployments (Exchange Server migrations), 511
 - replacing, AD forest upgrades (Windows Server 2003 migrations), 469-470
 - retiring, AD forest upgrades (Windows Server 2003 migrations), 472
 - upgrades, AD forest upgrades (Windows Server 2003 migrations), 469
 - Windows 2003, disaster recovery, 1147
- domain functional levels, AD forest upgrades (Windows Server 2003 migrations), 472-475**
- domain local groups, 170**
- Domain Name System. *See* DNS**
- domain structure**
- Active Directory, 94-95
 - Active Directory design concepts, 80-81
- domain-level content, 248-249**
- domains**
- Active Directory, 80, 155
 - design, 94
 - Exchange Server migrations, 541
 - Active Directory requirements for Exchange Server 2007, 181-182
 - consolidating (Windows Server migrations), 481-489, 493-495
 - local groups, 170
 - migrating, 540-541
 - Windows Server migrations, 481-489, 493-495
 - role in Exchange Server design, Active Directory, 184-185
- DSAccess, 166-168**
- DSProxy, 168**
- DTC (Distributed Transaction Coordinators), creating for SCC, 1062**
- dynamic distribution groups, creating, 620-621**
- ## E
- E-mail Address Policies tab (EMC results pane), 616
 - EAS (Exchange ActiveSync), 85
 - EDB databases, Exchange Server migrations, 502
 - Edge Rule Agents, 447

Edge server role, establishing perimeter security, 215

Edge Transport role, 99-100

Edge Transport rules (Management Pack), 700

Edge Transport server, 83

configuring DNS settings, 145

disaster recovery, 1119

Edge Transport server connectors, 361

authoritative domains, configuring, 365-366

message delivery limits, 364-365

Receive Connectors, configuring, 362

Send Connectors, 362-363

Edge Transport server roles, 18, 26, 648

securing Windows, 366-367

administrator permissions, 370-371

creating new security policies, 368-370

implementing network security, 367

SCW template, 367-368

Transport agents, 446-448

Edge Transport server settings, exporting and importing, 263-266

Edge Transport servers

allow keyword or phrases list, configuring, 242-244

backups, 1095

EdgeSync, configuring, 259-260

exceptions list, configuring, 244

Exchange Management Console, 222-224

Exchange Server 2003 migrations, 529

optimizing, 1168

planning for message processing order, 218-219

planning implementation of, 218

security, 148

Sender Policy Framework record, creating, 236-238

SenderID, 233-236

SenderID Agent, configuring, 238-239

sizing, 1183

SLA (Service Level Agreements), 1083

using EdgeSync to synchronize Active Directory info to Edge Transport servers, 257

viewing antis spam reports, with PowerShell scripts, 266-267

Edge Transport Services, installing, 219-221

EdgeSync

configuring on Edge Transport servers, 259-260

creating new subscription files, 260

maintaining schedule of replication, 258

starting synchronization, 261

subscribing to Exchange Server 2007 organization, 258

subscriptions, removing, 261

synchronizing Active Directory information to Edge Transport servers, 257

EdgeSync service, 446

eDirectory, synchronizing with Active Directory using services for NetWare, 116-118

editing

email, Spell Check feature, 968

SharePoint lists, 863

Spell Check, customizing, 976

EFS (Encrypting File System), 377

email

addressing, 956

attachments, 958-960

categorizing, OWA, 970

contacts

creating, 623-624

managing, EMC, 624

context menus, OWA, 970

deleting, 961

distribution list mail flow settings, 622-623

encrypting, transport-level security, 352-353

Entourage, 1004

establishing corporate email policy, 341-342

folders

adding, 953

moving messages to, 964

forwarding, 960-961

implementing secured email communications, 382

junk mail, filtering, 318-319

OWA, 976

Mac OS X Mail, 1001-1003

- mail flow tools, 652
- mail notification pop-up (OWA), 949
- mailboxes, migrating, 552, 554-556
- MAPI conversions, 1208
- Message Tracking tool, 641
- name resolution, OWA, 978
- options, configuring, 962
- outbound routing, 150
- Outlook
 - multiple account management, 906
 - sending and receiving digitally signed and encrypted emails, 387-388
- Outlook 2003, 312-314
- Outlook Email Postmark, 320
- Outlook Express, 997
- Outlook security
 - Blocked Senders List, 913
 - encryption, 909
 - International List, 913
 - junk email filters, 911-914
 - Safe Recipients List, 913
 - Safe Senders List, 913
 - security labels, 911
 - targeting specific messages, 909
 - web beaconing, 914
- OWA. See OWA
- passwords, modifying, 978
- privacy, 976
- Queue Viewer, 642
- read receipts, blocking, 320
- reading, 959
 - marking read/unread, 965
- replying, 960-961
- restoring, backup strategy development, 1090
- routing, 143
- searching, 971
- security, 147-148
- sending, 958
 - Edge Transport server failures, 1119
 - Hub Transport server failures, 1118
- sending "on behalf of" other users (Outlook collaboration), 922-923
- sending digitally signed email, 389-390, 392
- sending encrypted email messages, 392-393
- signatures, setting default signatures in OWA, 974-975
- spam
 - filtering junk mail, 318-319
 - tools, 315
 - Web beaconing, 316-317
- spell checking, OWA, 968-969, 976
- text
 - modifying, 964
 - Spell Check feature, 968
- tracking, 963
- unified messaging, 614
- Unified Messaging Server Role, 649
- email addresses, managing, 616**
- email disclaimers, 445-446**
 - administrative policies, 344-346
- Email Postmark validation, 247**
- Email Postmarks, 373**
- EMC (Exchange Management Console), 15-16, 601, 649-650**
 - action pane, 603
 - Anti-Spam tab, 223
 - components of, 601
 - console tree, 602-603
 - databases, 632-633
 - databases, creating, 631
 - disaster recovery tools, 651-652
 - disconnected mailboxes, 625-626
 - distribution groups
 - creating, 617-619
 - delegating management of, 621
 - distribution list mail flow settings, 622-623
 - dynamic distribution groups, 620-621
 - email addresses, managing, 616
 - email contacts, 623-624
 - EMS (Exchange Management Shell) versus, 610
 - ExBPA (Exchange Best Practices Analyzer), 651, 677
 - Finalize Deployment page, 603

- improvements to, 601
- IP Allow List, configuring, 225-228
- IP Block List, configuring, 228
- IP Block List Providers, configuring, 228-229
- journaling, rules, 636-637
- mail contact properties, 624-625
- mail flow settings properties, 614
- mail flow tools, 652
- mailbox features properties, 614
- mailbox settings properties, 613
- mailboxes, creating, 610-612
- moving mailboxes, 626-629
- New Database Wizard, 631
- New Distribution Group Wizard, 619
- New Dynamic Distribution Group Wizard, 620-621
- New Mail Contact Wizard, 623-624
- New Mailbox Wizard, 611-612
- New Storage Group Wizard, 630
- Outlook Anywhere, enabling, 311-312
- performance tools, 652
- Receive Connectors tab, 223
- results pane, 603
 - E-mail Address Policies tab, 616
 - filtering data, 604
- security, 598
- Send Connectors tab, 223
- Sender Reputation Agent, configuring, 253-254
- settings for ActiveSync, 763-764
- storage groups, creating, 629-630
- Toolbox, 602, 638
 - Database Recovery tools, 640
 - disaster recovery tools, 651-652
 - ExBPA (Exchange Best Practices Analyzer), 639-640, 651, 677
 - Mail Flow tools, 640-642, 652
 - Performance tools, 642-643, 652
 - Queue Viewer, 652
- Transport Rules tab, 224
- EMS (Exchange Management Shell), 23-25, 178, 273, 604, 650**
 - adding
 - blocked recipients, 233
 - blocked senders, 231
 - administrative functions, 274
 - administrative server tasks, 284-286
 - attachment filtering, 251-252
 - cmd.exe command, 606
 - cmdlets, 273-274
 - combining functions to create a library, 280-281
 - creating your own, 279-280
 - distributing, 282
 - managing, 281
 - modifying, 281
 - naming, 282
 - command-line interface, 605
 - content filtering, 246-247
 - email contacts, creating, 624
 - EMC versus, 610
 - enabling logging, 282
 - help, 277
 - installing, 207
 - Exchange Server migrations, 521
 - interface customization, 606
 - IP Allow List Providers, 229-230
 - IP Block List Providers, 229-230
 - journaling, rules, 637
 - mailboxes, 282-284
 - creating, 613
 - object-oriented data handling, 606
 - Outlook Anywhere, enabling, 312
 - piping data between commands, 605
 - versus PowerShell, 275-276
 - reporting, 275, 287
 - event logs, 292
 - generating largest mail user reports, 287-288
 - generating user distribution reports, 288-289
 - rebalancing mailbox distribution, 289-292
 - resources on the Web, 292
 - scripting, 606
 - security, 598
 - Sender Reputation, 254
 - SenderID, configuring, 239
 - syntax
 - cmdlets, 276
 - pipelining, 277-278

- verb-noun constructs, 276
 - WhatIf and Confirm parameters, 278
 - Tip of the Day feature, 607
 - XML support, 606
- Enable/Disable cmdlets (Unified Messaging shell commands), 842**
- encrypted email messages, sending, 392-393**
- encrypting**
 - communications, between Outlook and Exchange, 313
 - email communications, transport-level security, 352-353
- Encrypting File System (EFS), certificate templates, 377**
- encryption**
 - asymmetrical encryption, 376
 - basic encrypted communications, using Outlook, 378-380
 - fundamentals of, 388-389
 - HTTP, 400
 - Internet, Outlook 2003, 313
 - Outlook security, 909
 - S/MIME, 388-389
 - symmetrical encryption, 376
- encryption layer, Remote Desktop for Administration, 722**
- encryption level, Remote Desktop for Administration, 721**
- end users, training documentation, 758**
- end-user training documentation, 758**
- enterprise root CA, 771**
- Enterprise Edition, Exchange Server 2007, 12**
- Enterprise Edition, Exchange 2003 Server, 12, 515**
- Enterprise policies, Exchange Server 2003 migrations, 529**
- Enterprise Policy Management, 428**
- enterprise root CA, 374**
- Enterprise Server 2003, 76**
- enterprise subordinate CA, 375, 771**
- Entourage, 1004-106**
- Entourage X, Macintosh, 1004**
 - deploying, 1005-1007
 - functionality, 1004
- environment documentation, 747**
 - configuration document, 748-749
 - network diagrams, 747
 - server build procedures, 747-748
 - server builds, 747
 - topology diagrams, 749
- environments**
 - auditing, 658
 - documentation, 747-749
 - sizing, 84
- equipment, upgrade prototype phase, 61**
- error codes, Kerberos failure codes, 659**
- escalation paths, backups, 1088**
- ESE (Extensible Storage Environment), 535**
- ESE Log Generation Checkpoint Depth performance counter, Hub Transport rules, 701**
- esentutl.exe (compact database utility), 654**
- esentutil (database maintenance utility), 655-656**
- ESEUTIL utility, database corruption (disaster recovery), 1142-1143**
- ESM (Exchange System Manager), 723**
 - SMTP, 364
- event auditing, 657**
- event codes, security, 658**
- event logs**
 - EMS, 292
 - reviewing, 212
 - Unified Messaging monitoring/troubleshooting, 836-840
- event monitoring, Management Pack, 684**
- Event rules (Management Pack), 706**
- event triggering, agents, 1208**
- Event Viewer**
 - DNS, troubleshooting, 151
 - logs, checking, 674
 - security logs, viewing, 658-660
 - troubleshooting, DNS, 151
- events**
 - security, auditing, 333
 - SharePoint list of, 856

ExBPA (Exchange Best Practices Analyzer), 639-640, 651, 677

- monthly database maintenance, 677
- performance analysis, 1162-1163

exceptions list, configuring, 244**Exchange 200 Server, retiring, 533****Exchange 2007 Management Pack. See Management Pack****Exchange 5.5**

- Exchange Server 2003, installing, 547-551
- migrating, 535
 - Active Directory forests/domains, 540-541
 - ADC, 541-547
 - optimizing, 538-540
 - preparing, 536-538

Exchange ActiveSync tab (mailbox features properties), 614**Exchange ActiveSync, 85****Exchange Best Practices Analyzer. See ExBPA (Exchange Best Practices Analyzer)****Exchange databases, determining layout, 102****Exchange environment documentation (disaster recovery), 1121****Exchange groups, AD functionality modes, 169**

- distribution groups, 170
- functional levels in Windows Server 2003 AD, 171-173
- group scope, 170-171
- mail-enabled groups, 170
- security groups, 169
- Windows Group types, 169

Exchange logs, optimizing, 1180**Exchange Management Console. See EMC (Exchange Management Console)****Exchange Management Shell. See EMS (Exchange Management Shell)****Exchange Organization Administrators Role, granting permissions, 599****Exchange Recipient Administrators Role, granting permissions, 599****Exchange Schema Administrators group, required administrator roles for Exchange Server installation, 600****Exchange Search rules (Mailbox rules), 703****Exchange Security Groups, 598**

- Exchange View-Only Administrators Role, 600

Exchange Server

- deploying Finalize Deployment page, 603
- disaster recovery, 1118
 - database file restores, 1136-1138
 - Ntbackup.exe (Windows backup utility), 1135-1136
- installing on SCC active node, 1062, 1065-1066
- migrating. See migration
- non-Windows client access, 994
 - client functionality/compatibility table, 996-997
- Entourage, 1004-1007
- IMAP, 1011
- Mac OS X Mail, 1001-1003
- Mac support, 994
- mobile computing support, 1011-1012
- Outlook Express, 997, 999-1001
- OWA, 996, 1012
- POP3 functionality, 1011
- Remote Desktop for Mac, 995-996
- Terminal Server Client for Mac, 1007-1010
- Virtual PC, 995-996, 1010
- optimizing, via ongoing maintenance, 1185-1186
- performance monitoring, MOM, 1186
- security. See ISA (Internet Security and Acceleration) Server
- sizing, 1177
 - database sizing/optimization, 1179-1180
 - memory requirements, 1180-1181
 - optimizing disk subsystems, 1177-1179
 - optimizing Exchange logs, 1180
 - serve role-based sizing, 1181-1184

Exchange Server 2000, 10

- Exchange Server 2007 migrations, 514
 - backups, 518
- Edge Transport Servers, 529
- Enterprise policies, 529
- extending AD (Active Directory) schemas, 519
- installation prerequisites, 519-521
- moving mailboxes, 525-527

- permissions, 518-519
 - planning, 514-516
 - postmigration cleanup, 531-534
 - replicating public folders, 529-530
 - server system installations, 521-525
 - testing, 517-518
 - Unified Messaging Servers, 529
 - unsupported components, 505-506
 - Windows Server 2003 preparations, 518
- Exchange Server 2003, 10**
- connectors, migrating, 557-559
 - deleting, 508
 - Exchange Server 2007 migrations, 514
 - backups, 518
 - Edge Transport Servers, 529
 - Enterprise policies, 529
 - Exchange Server 5.5 connectors/services migration, 557
 - Exchange Server 5.5 foreign mail connector migration, 558-559
 - Exchange Server 5.5 IMS migration, 558
 - Exchange Server 5.5 public folder migration, 556
 - Exchange Server 5.5 site connector migration, 558
 - Exchange Server 5.5 unsupported connector migration, 559
 - Exchange Server 5.5 versus, 535
 - extending AD (Active Directory) schemas, 519
 - installation prerequisites, 519-521
 - leapfrogging server migrations, 554
 - moving mailboxes, 525-527, 552-555
 - Native mode, 559
 - permissions, 518-519
 - planning, 514, 516
 - postmigration cleanup, 531-534
 - replicating public folders, 529-530
 - server system installations, 521, 523, 525
 - testing, 517-518
 - Unified Messaging Servers, 529
 - unsupported components, 506-507
 - Windows Server 2003 preparations, 518
 - installing, 547-551
 - Exchange Server 5.5 migrations, 548-550
 - mailboxes, migrating, 552, 554-556
 - migration
 - deploying prototype labs, 510-512
 - finalizing, 508-510
 - move mailbox upgrade method, 529, 533
 - restoring prototype labs, 513
 - validating documents, 513
 - public folders, migrating, 556-557
 - services, migrating, 557-559
 - transport-level security. *See* transport-level security
 - versions
 - Enterprise Edition, 12, 515
 - Standard Edition, 11, 515
- Exchange Server 2003 Service Pack 2, 11**
- Exchange Server 2007, 7-8**
- Enterprise CAL versus Standard CAL, 12
 - Enterprise Edition, 12
 - evolution of, 8-11
 - features that have been removed, 14-15
 - installing, 208-212
 - new features, 13-14
 - Standard Edition, 11
 - versions and licensing, 11
- Exchange Server 4.0, 8-9**
- Exchange Server 5.0, 9**
- Exchange Server 5.5, 9**
- Exchange Server 2003 migration, 556-559
 - Exchange Server 2007 migrations, 500, 534, 548-549
 - CCA, 550
 - Exchange Server 2003 versus, 535
 - GUI, 550
 - multiorganization migrations, 539
 - multiserver migrations, 539
 - Native mode, 508
 - preparing for, 536-538
 - prerequisites, 535
 - RUS, 551

- service accounts, 551
- single server migrations, 539
- SRS, 550-551

Exchange Server Administrators Role, granting permissions, 600

Exchange Server Performance Monitor, 642, 652

Exchange system failover documentation, 755

Exchange System Manager. See EMC (Exchange Management Console)

Exchange Task Model, 271-272

Exchange version requirements, 76-77

Exchange versions, determining, 102

Exchange View-Only Administrators Role, 600

Exchange virtual server, 1046

Exchange-specific functionality, 80. See also functionality

Execute Diagnostic Cmdlet script (Management Pack), 691

Execute test-System Health diagnostic cmdlet rule (Best Practice Analyzer rules), 694

Executive Summary

- design documents, 54
- Migration document, 58

existing environments, discovery phase of upgrades, 49

ExMerge, 554-556

- moving mailboxes, Exchange Server migrations, 554-555

Explicit Active Directory Connector, 357

Explicit ADAM Connector, 357

exporting

- address books, Outlook Express, 1001
- Edge Transport server settings, 263-265

Exres.dll (Resource DLL), 1046

Extensible Storage Engine rules (Common Components rules), 695

Extensible Storage Environment (ESE), 535

external DNS servers, Internet, 150

F

failbacks, clustering, 1047

failing over between sites (disaster recovery), 1125

failover sites, creating (disaster recovery), 1124-1125

failovers

- clustering, 1046
- documentation, 755. See also documentation

failure notifications (backups), 1088

failures

- boot failures (disaster recovery), 1128-1129
- complete server failures (disaster recovery), 1129
 - ASR restores, 1134-1135
 - boot loader file restores, 1135
 - manual recovery, 1130-1131
 - restoring versus rebuilding, 1130
 - System State restores, 1131-1133
- disk failures (disaster recovery), 1127-1128
- site failures (disaster recovery), 1123
 - alternate client connectivity methods, 1126
 - failing back after site recovery, 1125
 - failing over between sites, 1125
 - redundant/failover sites, creating, 1124-1125
- system failures, backup strategy development, 1089-1090

fault tolerance, SAN/NAS, 1200-1201

faxes, Unified Messaging, 796

Federal Information Processing Standards (FIPS), 721

Fibre Channel disks, 1198

file recovery, certificate templates, 378

file witness shares, CCR (mailbox clusters), 1049

files

- locking down, 336
- uploading, SharePoint, 864

filtering

- application-layer filtering, 398-399
- block/safe lists, 319
- content filtering. See content filtering
- content in message attachments, 249-252
- email
 - junk email filters (Outlook), 911-914
 - web beaconing, 914
- ISA Server logs, customizing filtering of, 420

- junk email, 318-319
 - Entourage, 1004
 - Outlook security, 914
 - OWA, 976
- MAPI filtering, 412-413
- recipient filtering, configuring, 231-233
- with Save Senders and Blocked Senders, 319-320
- sender filtering. *See* sender filtering
- Sender/IP Reputation. *See* Sender/IP Reputation
- SMTP filters, ISA Server, 417
- filtering data, results pane (EMC), 604**
- filters, connection filtering. *See* connection filtering**
- Finalize Deployment page, 603**
- finalizing migration, 508-510**
- financial benefits of documentation, 735**
- Find Names dialog box, 957**
- FIPS (Federal Information Processing), 721**
- firewalls**
 - configuration documents (backups), 1086
 - importance of, 397-398
 - Windows, 300
- flags, email, 970**
- flat-file copying, database corruption (disaster recovery), 1139**
- flexible single master operations roles, Active Directory requirements for Exchange Server 2007, 182-183**
- Flexible Single Master Operations. *See* FSMO (Flexible Single Master Operations)**
- Folder list (OWA), 949**
- folders**
 - custom managed folders, creating in MRM, 448
 - email
 - modifying viewing order, 952
 - moving messages to, 964
 - OWA, creating, 953
 - public
 - connection agreements, 545
 - migrating, 556-557
 - replicating, 529
 - verifying replication, 675
- fonts, email, 964**
- ForeFront security, 351**
- foreign mail connectors, migrating, 558-559**
- forest functional level requirements, Exchange Server migrations, 459**
- forest functional levels, upgrades (Windows Server 2003 migrations), 472-475**
- forests, 76**
 - Active Directory, 94-95, 155
 - design, 78-80, 94
 - domain controller placement, 155-156
 - domain structures, 80
 - impact on Exchange Server design, 184
 - migrating, 540-541
 - requirements for Exchange Server 2007, 181-182
 - Windows Server 2003 functionality, 465-466
 - MMS, 82
 - multiple, 79
- formatting**
 - Active Directory, 78-79
 - domain structures, 80
 - infrastructure components, 81-82
 - MMS, 82
 - components, 73
 - coexistence, 77
 - functionality, 73-76
 - scaling, 77
 - third-party functionality, 78
 - email text, customizing in OWA, 964
 - folders, OWA, 953
 - Migration documents, 56-60
 - reading pane (OWA), 953
- forward lookup zones, 135**
- forwarding**
 - email
 - attachments, 960-961
 - OWA, 960-961
 - meeting requests, OWA (calendars), 984
- fragmentation, 86**
- free disk space, checking, 674**

free space, analyzing databases, 677

free/busy time (Outlook collaboration)

configuring for Internet display, 923-925

viewing via Internet, 925-926

From tab (ISA Server), 410

FrontPage 2003, SharePoint integration, 867-868

FSMO (Flexible Single Master Operations), Windows Server 2003, 458

FSMO (Flexible Single Master Operations) roles, prototype lab deployments, 511-512

functional levels in Windows Server 2003 AD, 171-173

functionality, 73, 75-76

Active Directory, 169-172

email, 955-956, 960-964

Entourage X, 1004

Macintosh, 995

multiple forests, 79

OWA, 996-997

Terminal Services Client, 1008-1010

third-party, 78

G

Gantt chart, Migration document, 55-56

gateway scanning, 351

gateways, applications, 147

gauging success of Pilot phase, 65

GC

caching, Active Directory, 82

placement, 95

General tab

EMC mail contact properties, 624

ISA Server, 409

generating

largest mail user reports, 287-288

user distribution reports, 288-289

geographic distribution of resources, 50

Planning phase, 50-51

geographic mirroring, SAN/NAS fault tolerance, 1200

Get Mailbox Count script (Management Pack), 691

Get Site Name script (Management Pack), 691

Get-UActiveCalls cmdlets, United Messaging, 827

Get/Set cmdlets (Unified Messaging shell commands), 841

"ghost" domain controllers, retiring, 472

GLBA (Gramm-Leach-Bliley Act), 436-438

global catalog, 154, 159

Active Directory

demoting, 163

deploying domain controllers, 163-164

infrastructure components, 82

server relationships, 159

structure, 160

universal group caching, 164-165

verifying, 162

best practices for placement, 160

demotion, 163

deploying domain controllers, using Install from Media Option, 163-164

placement strategy, planning Active Directory infrastructure, 188

promoting domain controllers to, 161-162

relationship between Exchange Server 2007 and Active Directory global catalog, 159

structure of, 160

universal group caching for AD sites, 164-165

verifying creation of, 162

global catalog servers

Active Directory

disaster recovery, 1152

requirements for Exchange Server 2007, 181

configuring, 200

global data, managing in Exchange Security Groups, 598

global groups, 171

goals

business unit or departmental messaging goals, 42-44

Design documents, 54

high-level business goals, 41

high-level messaging goals, 41-42

identifying, in Initiation phase, 40-44

Migration document, 58

- Summarizing, in Statement of Work (Initiation phase), 45-46
 - upgrading, 38-44. *See also* upgrading
 - government regulations, security standards, 429**
 - GLBA, 436-438
 - HIPAA, 431-436
 - ISO/IEC 17799, 429-430
 - Sarbanes-Oxley, 438
 - GPOs (Group Policy Objects), 335**
 - creating, 1034
 - Gramm-Leach-Bliley Act (GLBA), 436-438**
 - group accounts, migrating (Windows Server migrations), 486-488**
 - group management, MIIS 2003, 112**
 - group policies, 335, 1034**
 - creating to distribute user certificates, 384-385
 - Outlook client configuration, 1019
 - Outlook deployments, managing, 1022
 - Windows Server, Outlook deployments (update/patch management), 1035-1038
 - Windows 2003, deploying Outlook, 1017
 - group schedules (Outlook), 928-929**
 - group scope, 170-171**
 - groups**
 - Active Directory, functionality, 169-172
 - distribution, 170
 - domain local, 170
 - global, 171
 - machine local, 170
 - mail-enabled, 170
 - MIIS, 112
 - scope, 170
 - securing, administrative policies, 343-344
 - security, 169, 343-344
 - storage, 87-88
 - design, 102
 - universal, 171
 - universal group caching, 164-165
 - upgrade pilot phase, 64-65
 - Windows, 169
 - GroupWise (Novell), Exchange Server 2007 migrations, 500**
 - growth, planning for (performance analysis), 1164**
 - GUI (graphical user interface), cluster management, 1069, 1072**
- ## H
- handheld devices, Entourage support, 1005**
 - hard disks, checking free disk space, 674**
 - hard/soft zoning, 1196**
 - hardening Windows Server 2003, 334-337, 343-344**
 - hardware**
 - components, selecting, 96
 - Entourage X, 1006
 - requirements, 75
 - Terminal Services Client, 1008
 - hardware inventory documents (backups), 1085**
 - hardware requirements, 75**
 - for Exchange Server 2007, 179
 - Health Insurance Portability and Accountability Act (HIPAA), 431-436, 634**
 - heartbeats**
 - CCR, 1056
 - clusters, 1046
 - help**
 - EMS, 277
 - OWA, 954
 - highlighting in Outlook**
 - appointments, categorizing via color, 904
 - quick flags, 902-903
 - HIPAA (Health Insurance Portability and Accountability Act), 431-436, 634**
 - HIPAA Privacy Rule, 433**
 - history of Exchange Server 2007, 8-11**
 - honeypots, 220**
 - host records, 139**
 - hot standby drives, SAN/NAS fault tolerance, 1201**
 - hotfixes**
 - MBSA, 336-337
 - servers, 340
 - HTML (Hypertext Markup Language)**
 - access, 1012
 - mobile computing support, 1012

Remote Administration. See Remote Administration (HTML)

HTTP (Hypertext Transfer Protocol), security concerns, 399-400

Hub Transport and Edge Transport rules (Common Components rules), 696

Hub Transport role, 100

Transport agents, 440

email disclaimers, 445-446

journaling and mail retention policies, 442-445

RMS, 442

Transport rules agents, 441-442

Hub Transport rules (Management Pack), 701

Hub Transport server, 18, 83

disaster recovery, 1118

email, MAPI conversions, 1208

Hub Transport server connectors, 358-360

Hub Transport server role, 27, 648-649

Hub Transport servers, 577

ADRMS Prelicensing agent, 587-588

agent prioritization, 588

backups, 1094-1095

categorizer, 578

submission queues, 590

configuring, 215

delivery services, 579

disclaimers, 582-584

installing, 591-592

journaling agent, 584-586

mail flow services, 578

message classification, 586-587

optimizing, 1167

policy compliance, 579-580

rights management, 587-588

routing services, 578-579

sizing, 1182-1183

SLA, 1084

SMTP Receive Connector, 590-591

SMTP send connector configuration, 592-593

transport dump feature, CCR, 1056

transport pipelines, 589

transport rules agent, 580

rules, creating, 580-581

hunt group objects, Unified Messaging, 802

hunt groups

telephony, 814

Unified Messaging, creating in, 820-822

hyperspace, 1172

I

identifying

client access points, 84-85

goals, Initiation phase, 40-44

limitations on directory synchronization with MSDSS, 118-119

server roles, 25-28

third-party product functionality, 78

identities

MIIS, 108-110

account provisioning, 110

group management, 112

installing, 112

role of MAs, 111-112

identity information, managing between LDAP directories and Exchange Server 2007, 120

identity management, deploying MIIS 2003 with eDirectory, 114-115

IDMU, synchronizing passwords, 128

IIS (Internet Information Services) 6.0

configuring, 207-208

prerequisites for Exchange Server 2007, 178

IIS (Internet Information Services)

backups, 1110-1111

disaster recovery, 1146-1147

Office Communications Server, configuring in, 880-881

RPC over HTTPS in Outlook, 915

IM (instant messaging)

Communicator client, 874

installing, 892

OCS, IM federation, 873

- Office Communications Server, instant messenger filter, 891
- imaging technologies, deploying Outlook, 1017**
- IMAP (Internet Message Access Protocol), 105**
 - CAS, 575
 - ISA Server, configuring publishing rules, 414-415
 - Linux support, 1011
 - Mac support, 1011
 - non-Windows client access, 1011
- IMAP4 rules (Client Access rules), 698**
- IMF (Intelligent Message Filter), 447**
- implementation, 36**
 - DNS
 - components, 135-138
 - configuring servers, 150-153
 - need for, 133
 - requirements, 144, 147-149
 - resource records, 138-143
 - servers, 134
 - SMTP, 143-144
 - troubleshooting, 150
 - maintenance, 89-90
 - security, 89-90
- Implementation phase, 37**
- implementing**
 - Active Directory from scratch, 190
 - configuring Active Directory sites and services, 197-199
 - configuring global catalog servers, 200
 - installing first domain controller for a new domain, 194-197
 - installing Windows Server 2003, 190-192
 - installing Windows Server 2003 Service Pack 1, 192-194
 - updating and patching operating systems, 194
 - industry standards and guidelines, 336-337
 - maintenance schedules, 90
 - MSDSS, 118
 - secured email communications, 382
- Implicit connectors, 357**
- implementation, LDAP, 121-122**
- importance options (email), OWA, 962**
- importing**
 - Edge Transport server settings, 263-266
 - Management Pack, MOM, 688
- improvements to Exchange Server 2007, relative to security and compliance, 17-18**
- IMS (Internet Mail Service), migrating (Exchange Server 2003), 558**
- in-place upgrades versus new hardware migrations (Windows Server migrations), 461**
- Inbox**
 - Unified Messaging, 795
 - viewing, modifying viewing order, 952
- indexing, content indexing, 1206-1207**
- Infobar (OWA), 950**
 - Log Off button, 955
- Information Rights Management (IRM), 321, 374**
- information store, validating backups, 678**
- Information Store Integrity Checker (isinteg.exe), 654-655**
- Information Store rules (Mailbox rules), 703**
- Information Worker rules**
 - Client Access rules, 698
 - Mailbox rules, 703
- infrastructure**
 - Active Directory, components, 81-82
 - antispam, 103
 - antivirus, 103
 - coexistence, 77
 - databases, 102
 - design, 102
 - environment documentation, 747-749
 - monitoring, 104
 - recovery, 103
- initiation, 36**
 - upgrade phase, 38
 - goals, 39-44
 - statement of work, 44-49
- Initiation phase, 37-38**
 - creating Statement of Work, 44-49
 - identifying goals, 40-44
 - scope of project, 38-40

Install (Media Option), deploying domain controllers, 163-164

installation

- ADC, 541-547
- Entourage X, 1005-1007
- Exchange Server 2003, 547-548, 550-551
- Outlook Express, 999-1001
- Terminal Services Client, 1009-1010 versions, 102

installation logs, reviewing, 212

installation points, creating for Outlook deployments, 1024-1025

installing

- ADC, Exchange Server migrations, 542
- admin tools, Office Communications Server, 888
- CAS (Client Access Server), 576
- Certificate Services, 380-382
- Client Access server roles, 215
- Communicator client, 892
- Edge Transport Services, 219-221
- EMS, 207
 - Exchange Server migrations, 521
- Entourage support, requirements, 1005-1006
- Exchange Server
 - on mailbox cluster CCR active nodes, 1053-1054
 - on mailbox cluster CCR passive nodes, 1054-1055
 - on SCC active node, 1062, 1065-1066
- Exchange Server 2003
 - Exchange Server 5.5 migrations, 548-550
 - migration prerequisites, 519-521
 - server system installations, 521-525
- Exchange Server 2007, 31, 208-211
 - completing installation, 211-212
 - performing scripted installations, 213-214
 - preinstallation checks, 203-205
 - preparations for, 200-201
 - Exchange Server: required administrator roles, 600
- first domain controller for a new domain, 194, 196-197

- Hub Transport servers, 591-592
- Mailbox server role, 216
- Management Pack, MOM, 687
- MISS, 112
- MIIS 2003, with SQL 2000/2005, 112
- MMC 3.0, Exchange Server migrations, 520
- MSDSS, 116-118
- .NET Framework 2.0, 206
- .NET Framework 2.0, Exchange Server migrations, 520
- Office Communications Server, 875
 - configuring IIS, 880-881
 - delegating setup/administrative privileges, 878-880
 - extending AD (Active Directory) schema, 875-876
 - prepping AD (Active Directory) domains, 878
 - prepping AD (Active Directory) forests, 876
- Outlook clients, Outlook deployments, 1028-1030
- Outlook Express, 999
- Remote Administration (HTML), 725-727
- root certificates, on Windows Mobile devices, 774-777
- RPC over HTTPS in Outlook, 9115-917
- Security Configuration Wizard, 338
- services, for UNIX R2, 125-128
- Terminal Server Client for Mac, 1009-1010
- Terminal Services, for remote administration, 713-714
- third-party CA on CAS, 767-770
- Unified Messaging server roles, 215
- Unified Messaging, 813-815
- Windows certificate of authority server, 380
- Windows Mobile 5.0 Device Emulator, 789-790
- Windows Server 2003, 190-192
- Windows Server 2003 Service Pack 1, 192-194
- instant messaging (IM). See IM (instant messaging)**
- instant messenger filter, Office Communications Server, 891**
- integrating**
 - client access into Exchange Server 2007, 104-105
 - directories, with MSDSS, 115-116

- UNIX systems, with Active Directory/Exchange Server 2007, 122-123
- integration**
 - client access, 104-105
 - LDAP, 120-122
 - MIIS, 108-110
 - account provisioning, 110
 - group management, 112
 - installing, 112
 - MAAs, 111-112
 - Novell eDirectory, 113-114
 - applying MSDSS, 115-120
 - deploying MIIS, 114-115
 - zones, Active Directory, 136
- integrity checks, isinteg.exe (Information Store Integrity Checker), 654-655**
- Intelligent Message Filter (IMF), 447**
- interface customization, EMS, 606**
- interfaces**
 - OWA clients, navigating, 948-953
 - SharePoint, 859
- internal CA for OWA certificates, 770-774**
- internal DNS servers for outbound mail routing, 150**
- International List (Outlook), 913**
- Internet**
 - connectivity, 996
 - external DNS servers, 150
 - free/busy time, Outlook collaboration
 - configuring for display on, 923-925
 - viewing via, 925-926
 - how messages get to Exchange, 28-29
 - Outlook 2003, 312-314
- Internet Information Services. See IIS (Internet Information Services)**
- Internet Information Services (IIS) 6.0, prerequisites for Exchange Server 2007, 178**
- Internet Mail Service, migrating, 558**
- Internet Message Access Protocol. See IMAP**
- Internet Security and Acceleration Server 2006. See ISA (Internet Security and Acceleration) Server**
- interoperability, with older versions of Exchange (DNS), 146**
- interprocess communications (IPC), 313**
- inventory documents (backups), hardware, 1085**
- invitations, launching in separate windows (OWA), 984**
- IP Allow List, 224**
 - configuring
 - with Exchange Management Console, 225-228
 - with Exchange Management Shell, 229-230
- IP Block List, configuring**
 - with Exchange Management Console, 228
 - with Exchange Management Shell, 229-230
- IP Block List Providers, configuring with Exchange Management Console, 228-229**
- IP Reputation Service, 348**
- IP/PBX (Internet Protocol/Private Branch Exchange), telephony, 810**
- IP/VoIP gateways**
 - telephony, 810, 814
 - Unified Messaging, 809
- IPC (interprocess communications), 313**
- ipconfig utility, troubleshooting DNS, 151-152**
- IPgateways, Unified Messaging, 817-818**
- IRM (Information Rights Management), 321**
- ISA (Internet Security and Acceleration) Server, 395-396**
 - Action tab, 409
 - Alerts tab, 422-424
 - Application Settings tab, 411
 - Authentication Delegation tab, 411
 - connectivity verifiers, 424-426
 - Dashboard, customizing, 421
 - From tab, 410
 - General tab, 409
 - HTTP traffic, security concerns, 399-400
 - IMAP, configuring publishing rules, 414-415
 - Link Translation tab, 411
 - Listener tab, 410
 - logs, 418-419
 - customizing filters, 420
 - MAPI (Messaging Application Programming Interface), 411
 - configuring RPCFiltering rules, 412
 - deploying filtering across segments, 413

- messaging security, 401
- need for, outlining, 396-399
- OWA, 401
 - Bridging tab, 411
 - importing/exporting certificates, 402-405
 - publishing rules, creating, 405-411
 - Schedule tab, 411
- Paths tab, 411
- POP3, configuring publishing rules, 413-414
- Public Name tab, 411
- securing ActiveSync, 778-783
- Services tab, 424
- Sessions tab, 424
- SMTP (Simple Mail Transfer Protocol), 416-417
 - To tab, 410
 - Traffic tab, 410
 - Users tab, 411
- isinteg.exe (Information Store Integrity Checker), 654-655**
- ISINTEG utility, database corruption (disaster recovery), 1142-1143**
- ISO/IEC 17799, 429-430**
- Issue Warning AT(KB) option (EMC), databases, 632**
- issues lists (SharePoint), 856**
- items per page, configuring, 973**
- iterative queries, 138**

J

- JET database, storing NAS/SAN, 1205**
- journaling, 428**
 - defining, 633
 - mailboxes, 636
 - policies, 442-445
 - rules, 444, 635-637
 - U.S. regulations, 634
- journaling agent (Hub Transport servers), 584-586**
- junk email filtering, 318-319**
 - Entourage, 1004
 - Outlook, 911-914
- junk email prevention, 976. See also email**

K

- Karl Prosser's PowerShell Analyzer, 293**
- Keep Deleted Items For (Days) option (EMC), databases, 633**
- Keep Deleted Mailboxes For (Days) option (EMC), databases, 633**
- Kerberos, failure codes, 659**
- keyboard shortcuts**
 - OWA, 971
 - Remote Desktop for Administration, 720
- keywords, configuring allowed keywords (Edge Transport servers), 242-244**
- knowledge management, 735**
- knowledge sharing, 735**

L

- labels (security), Outlook, 911**
- languages, OWA (Outlook Web Access) regional settings, 944**
- layers, security, 334**
- LCR (Local Continuous Replication), 22, 1076-1077, 1098**
- LDAP (Lightweight Directory Access Protocol), 120-121, 132**
 - differences between LDAP2 and LDAP3, 122
 - Entourage, 1005
 - managing identity information between LDAP directories and Exchange Server 2007, 120
 - Outlook Express, 998
- leapfrogging migrations, 554**
- legacy Exchange 2000 Server, retiring, 533**
- levels, upgrading service packs, 538**
- libraries**
 - cmdlets, combining functions to create, 280-281
 - document libraries, 853-855
 - picture libraries
 - MOSS, 855, 863
 - SharePoint, 855
- licenses, Terminal Services, 713**
- licensing Exchange Server 2007, 11**
- Light Client mode (OWA), 947**

Lightweight Directory Access Protocol. See LDAP

limitations

- of Exchange 5.5, 535
- on directory synchronization, with MSDSS, 118-119
- of message delivery, 364

link state updates, Exchange Server migrations, 503

Link Translation tab (ISA Server), 411

links, SharePoint list of, 856

Linux desktops, Exchange Server support for

- Outlook Express, 997-1001
- OWA, 996, 1012

Listener tab (ISA Server), 410

lists

- block/safe/filtering, 319
- MOSS integration, 863
- SharePoint
 - advantages, 863
 - editing, 863
 - listing of, 856
 - viewing, 863
- SharePoint lists, MOSS, 856-857

Live Meeting, 871, 874

- development of, 872
- installing, 893
- web conferencing, 894

load balancing, 149. See also NLB (Network Load Balancing)

- SMTP, 149-150

LoadSim tool, performance analysis, 1163

Local Continuous Replication (LCR), 22, 1076, 1098

local scans, MBSA, 336-337

lockboxes, 389

lockdown guidelines, 307

- Windows, 308

locking down

- files, 336
- mobile devices, Terminal Services, 727-729
- SMTP, 364

log shipping, SAN/NAS fault tolerance, 1200

logging

- audits, 658
- enabling in EMS, 282
- Event Viewer, 674
- protocols, 658

logging off OWA, 955

logins

- NT Status codes, 660
- OWA, 945
 - clearing user credentials at logoff, 989
 - Light Client mode, 947
 - Private mode, 948
 - Public mode, 948
 - Standard Authentication mode, 946-947
 - timed logoffs, 989

Log Off button (OWA Infobar), 955

logon access, restricting, 333

logs

- backups, 1087
- Exchange logs, optimizing, 1180
- ISA Server, 418-420
- message tracking, 1208
- protocol logging, 1208

Lotus Notes, Exchange Server 2007 migrations, 500

Lucent Vital QIP, 134

LUN

- mount points, mounting as, 1199
- performance, 1198-1200

LUN masking, 1196

M

MA (management agent), 109

- MIIS 2003, 111-112

Mac desktops, Exchange Server support for, 994

- client functionality/compatibility table, 996-997
- Entourage, 1004-1007
- IMAP, 1011
- Mac OS X Mail, 1001-1003
- Outlook Express, 997, 999-1001
- OWA, 996, 1012

- POP3 functionality, 1011
- Remote Desktop for Mac, 995-996
- Terminal Server Client for Mac, 1007-1010
- Virtual PC, 995-996, 1010
- Mac OS X Mail, 1001-1003**
- machine local groups, 170**
- Macintosh**
 - client support, 994-995
 - compatibility, 996-997
 - Entourage X, 1004
 - deploying, 1005-1007
 - functionality, 1004
 - Outlook Express, configuring, 999-1001
 - Terminal Services Client, 1007-1008
 - functionality, 1008-1010
- mail**
 - outbound routing, 150
 - security, 147-148
- mail contact properties (EMC), 624-625**
- mail contacts, 623-624**
- mail exchange (MX) record, 139-141**
- mail flow services (Hub Transport servers), 578**
- mail flow settings properties (EMC), 614**
- Mail Flow Settings tab (EMC mail contact properties), 625**
- mail flow tools, 652**
- Mail Flow Tools (EMC Toolbox)**
 - Mail Flow Troubleshooter, 640
 - Message Tracking tool, 641
 - Queue Viewer, 642
- Mail Flow Troubleshooter, 640, 652**
- mail notification pop-up (OWA), 949**
- mail retention, policies, 442-445**
- mail-enabled groups, 170**
- mailbox clusters**
 - CCR, 1048
 - adding second nodes to, 1051
 - advantages of, 1057
 - configuring MNS quorums, 1052-1053
 - creating, 1050-1051
 - Exchange Server installation on active node, 1053-1054
 - Exchange Server installation on passive node, 1054-1055
 - file witness shares, creating, 1049
 - operating system preparations, 1048-1049
 - requirements for, 1048
 - optimizing, 1166
- Mailbox Count reports (Metric reports), 707**
- mailbox delivery queues (SMTP Receive Connector), 591**
- mailbox features properties (EMC), 614**
- Mailbox Information page (New Mailbox Wizard), 611-612**
- mailbox journaling, enabling, 443**
- mailbox policies for ActiveSync, 783-784**
- mailbox policy objects, Unified Messaging, 803**
- Mailbox rules (Management Pack), 702-703**
- mailbox scanning, 351-352**
- Mailbox server, 83**
- Mailbox server role, 28, 98, 649**
 - installing, 216
- mailbox servers**
 - backups, 1092-1094
 - optimizing, 1165-1166
 - sizing, 1181-1182
 - SLA (Service Level Agreements), 1083
- Mailbox Service Availability Summary reports, 708**
- Mailbox Settings page (New Mailbox Wizard), 612**
- mailbox settings properties (EMC), 613**
- mailbox stores, managing with EMS, 285-286**
- mailboxes**
 - associating subscriber access numbers to dial plans (Unified Messaging), 816
 - creating, with EMS, 282-283
 - database maintenance, 672
 - database restoration, 615
 - decreasing user interruptions, 615
 - deleted contents, disaster recovery, 1116-1117
 - delivery options, 614
 - disabling, with EMS, 284
 - disaster recovery, 1117-1118

- disconnected mailboxes, 625-626
- distribution groups
 - creating, 617-619
 - distribution list mail flow settings, 622-623
 - dynamic distribution groups, creating, 620-621
- Do Not Permanently Delete Mailboxes... option (EMC), 633
- email contacts, 623-624
- EMC, creating via, 610-612
- EMS, creating via, 613
- Exchange ActiveSync, 614
- folders, creating in OWA, 953
- Get Mailbox Count script (Management Pack), 691
- integrity checks, isinteg.exe (Information Store Integrity Checker), 654-655
- journaling, 636
- Keep Deleted Mailboxes For (Days) option (EMC), 633
- Mailbox Server Role, 649
- managing locations of, 615
- MAPI, 614
- message size restrictions, 614
- messaging records management, 613
- migration, 537. *See also* migration
- modifying, with EMS, 283
- moving
 - EMC, 626-629
 - with EMS, 283-284
 - Exchange Server 2003 migrations, 525-527
 - Exchange Server migrations, 552-555
- moving to other onsite servers, database corruption (disaster recovery), 1141
- multiple account management (Outlook), 906
- opening another user's mailbox, OWA, 944
- Outlook security, encryption, 909-910
- OWA, 614
- restoring, backup strategy development, 1090
- storage groups, 615
- storage quotas, 613
- unified messaging, 614
 - enabling in, 822
 - Unified Messaging Server Role, 649
- mailed-enabled groups, 170**
- maintaining**
 - Exchange Server 2007 implementation, 89-90
 - schedule of replication, EdgeSync, 258
- maintenance**
 - best practices, 670-671
 - scheduling, 673-677
 - database, 1207
 - documentation, benefits of, 734-736
 - Exchange Server optimization, 1185-1186
 - implementing, 89-90
 - managing, 679-680
 - postmaintenance procedures, 679
 - tasks, verifying, 675
 - tools
 - backup, 652
 - eseutil utility, 655
 - ntdsutil utility, 653
 - Queue Viewer, 652
- maintenance (database), best practices, 667**
 - automatic maintenance, 668-669
 - daily maintenance, 673-674
 - mailbox moves, 672
 - monthly maintenance, 677-678
 - offline maintenance, 669-671
 - quarterly maintenance, 678
 - weekly maintenance, 675-676
- maintenance plan, 751-752**
- maintenance schedules, implementing, 90**
- maintenance tools**
 - EMC, 649-650
 - disaster recovery tools, 651-652
 - ExBPA, 651, 677
 - mail flow tools, 652
 - performance tools, 652
 - Queue Viewer, 652
 - EMS, 650
 - esentutil.exe (compact database utility), 654

eseutil (database maintenance utility), 655-656
 isinteg.exe (Information Store Integrity Checker),
 654-655
 MOM, 680
 ntbakup.exe (backup utility), 652
 ntdsutil (defragmentation utility), 653-654

majority node clusters, 1047

Managed Folder Assistant, scheduling, 452

management

agents, account provisioning, 110
 backup, 652
 eseutil utility, 655
 knowledge, 735
 LDAP 120-122
 maintenance, 679
 MOM, 680
 ntdsutil utility, 653
 Queue Viewer, 652
 security, Active Directory, 157

management agents (MAs), 109

role of, 111-112

Management Pack

AKM files, 688
 alert notifications, 686
 computer groups, 689-690
 event monitoring, 684
 importing, MOM, 688
 installing, 687
 notification groups, 692
 online catalog website, 687
 performance monitoring, 684
 reports
 Message Hygiene Analysis, 706
 Metrics, 707
 Service Availability reports, 708-709
 rules, 690, 693
 ActiveSync Connectivity rules, 699
 Client Access rules, 698-699
 Common Components rules, 693-698
 Edge Transport rules, 700
 Event rules, 706

Hub Transport rules, 701
 Mailbox rules, 702-703
 Performance Collection rules, 705-706
 scenarios, 706
 Unified Messaging rules, 704

scripts, 691

state monitoring, 685

trend analysis, 686

XML files, 688

management-level reporting, 755-756. See also documentation

managing

clusters

via command line, 1068-1069
 via GUI, 1069, 1072

cmdlets, 281

coexisting Exchange Server environments,
 504-505

connectors, with EMS, 286

contacts, OCS, 873

documents, SharePoint, 860

Exchange Server 2007, 32

 MOM, 32

identity information between LDAP directories and
 Exchange Server 2007, 120

mailbox stores, with EMS, 285-286

mobile devices, OWA, 940-941

via server roles, 648-649

SharePoint discussions, 857

managing tools

EMC, 649-650

 disaster recovery tools, 651-652

 ExBPA, 651, 677

 mail flow tools, 652

 performance tools, 652

 Queue Viewer, 652

EMS, 650

esentutil.exe (compact database utility), 654

eseutil (database maintenance utility), 655-656
 isinteg.exe (Information Store Integrity Checker),
 654-655

MOM, 680

- ntbackup.exe (backup utility), 652
- ntdsutil (defragmentation utility), 653-654
- manual creation of Send Connectors on Edge Transport server, 363**
- MAPI (Messaging Application Programming Interface), 77, 564**
 - compression, 84
 - email conversions, 1208
 - ISA Server, 411
 - configuring RPC Filtering rules, 412
 - deploying filtering across segments, 413
- MAPI tab (mailbox features properties), 614**
- MAPI Connectivity rules (Mailbox rules), 703**
- mapping contact addresses, OWA, 986**
- marking email messages read/unread, 965**
- MAAs (management agents), 109**
 - role of, 111-112
- master-slave replication, 138**
- MBSA (Microsoft Baseline Security Analyzer), 336-337**
- MDSNSS (Microsoft Directory Synchronization Services), integrating directories, 115-116**
- media, backups, 1111-1112**
- Media option, deploying domain controllers, 163-164**
- media pools, 1111-1112**
- meeting invitations, OWA, 984-985**
- meeting workspaces, 860-861**
- meetings**
 - OWA calendars, 981-984
 - scheduling, Scheduling Assistant (OWA), 939
 - time zones, creating by (Outlook), 904
- memory**
 - Exchange Server sizing, requirements for, 1180-1181
 - servers, 97
 - subsystems, optimizing, 1172-1173
 - virtual memory, 1172
 - optimizing, 1174
 - VM, avoiding fragmentation, 86
- menus**
 - context, viewing, 970
 - pull-down menus, OWA, 950
- merging, ExMerge, 554-556**
- message classification**
 - Hub Transport servers, 586-587
 - OWA (Outlook Web Access) security, 988
- message delivery limits, Edge Transport server, 364-365**
- Message Delivery Restrictions tab (mail flow settings properties), 614**
- Message Hygiene Analysis reports (Management Pack), 706-707**
- message list (OWA), 949**
- message logs**
 - changing location of, 665
 - sizing, 666-667
- message queues, daily database maintenance, 674**
- Message Size Restrictions tab (mail flow settings properties), 614**
- message tracking, 664**
 - changing log location, 665
 - enabling/disabling, 664
 - sizing message logs, 666-667
- message tracking logs, 1208**
- Message Tracking tool, 641**
- Message Tracking utility, 652**
- messages**
 - delivery limitations, 364
 - folders
 - adding, 953
 - moving to, 964
 - how they get to Exchange from the Internet, 28-29
 - how they route within an internal Exchange environment, 29
 - options, configuring, 962
 - OWA, 955, 960-964. *See also* email
 - customizing, 964-971
 - modifying viewing order, 952
 - navigating, 951
 - queues, reviewing, 674
 - reading, marking read/unread, 965
 - role of DNS for internal and external message routing, 30

- searching, 971
- text
 - modifying, 964
 - Spell Check feature, 968
- Messaging Application Programming Interface. See MAPI (Messaging Application Programming Interface)**
- messaging records management tab (mailbox settings properties), 613**
- Messaging Records Management. See MRM (Messaging Records Management)**
- metadirectories, 109**
- metaverse namespace (MV), 109**
- Metric reports (Management Pack), 707**
- Microsoft Baseline Security Analyzer (MBSA), 336**
- Microsoft Directory Synchronization Services, 115-116**
- Microsoft Exchange ActiveSync. See ActiveSync**
- Microsoft Exchange Server TechCenter, 219**
- Microsoft Exchange Team Blog, 219**
- Microsoft Identity Integration Services (MIIS) 2003, 108-110**
 - account provisioning, 110
 - deploying, 114-115
 - group management, 112
 - installing, 112
 - role of MAs, 111-112
- Microsoft Management Console. See MMC (Microsoft Management Console)**
- Microsoft Office 2003, 861-862**
- Microsoft Operations Manager. See MOM (Microsoft Operations Manager)**
- Microsoft Sender ID Framework SPF Record Wizard, 236**
- Microsoft Update, 305**
- middle pane (OWA), 949**
- migration. See also updates**
 - ADC, installing, 541-547
 - address books, Outlook Express, 1001
 - computer accounts (Windows Server 2003 migrations), 493-494
 - connectors, 557-559
 - Exchange Server 2003, 557-559
 - decommissioning the old Exchange environment, 66
 - documents, planning phase of upgrades, 55-60
 - domain controllers, AD forest upgrades (Windows Server 2003 migrations), 466
 - domains (Windows Server 2003 migrations), 481-489, 493-495
 - Exchange Server, 514, 534
 - AD forests, 540-541
 - ADC, 541-547
 - administrative groups, 503
 - backups, 518
 - deploying prototype labs, 510-513
 - distributed server strategies, 501
 - domains, 541
 - EDB databases, 502
 - Edge Transport Servers, 529
 - Enterprise policies, 529
 - Exchange Server 2003 installations, 548-559
 - Exchange Server 2003 versus Exchange Server 5.5, 535
 - Exchange Server 5.5, 500
 - extending AD (Active Directory) schemas, 519
 - forest functional level requirements, 459
 - FSMO roles, 458
 - installation prerequisites, 519-521
 - limited number of servers, 501
 - link state updates, 503
 - Lotus Notes, 500
 - managing coexisting environments, 504-505
 - moving mailboxes, 525-527
 - multiorganization migrations, 539
 - multiserver migrations, 539
 - Native mode, 507-510
 - new Exchange Server 2007 environments, 513
 - new Exchange Server organizations, 499-500
 - Novell GroupWise, 500
 - OS requirements, 458-459
 - permissions, 518-519
 - planning, 514-516

- postmigration cleanup, 531-534
- preparing for, 536-538
- prerequisites, 535
- replicating public folders, 529-530
- restructuring Exchange Server, 498-499
- routing groups, 502
- RUS (Recipient Update Services), 504
- Sendmail, 500
- server system installations, 521-525
- simple migrations, 498
- single server migrations, 539
- testing, 517-518
- Unified Messaging Servers, 529
- unsupported Exchange Server 2000 components, 505-506
- unsupported Exchange Server 2003 components, 506-507
- Windows Server 2000 native functional level domains, 458
- Windows Server 2003 preparations, 518
 - x64-bit hardware, 501
- Exchange 5.5, 535
 - Active Directory forests/domains, 540-541
 - optimizing, 538-540
 - preparing, 536-538
- Exchange Server 2003,
 - IMS, 558
 - installing, 547-548, 550-551
 - public folders, 556
- finalizing, 508-510
- group accounts (Windows Server 2003 migrations), 486-488
- leapfrogging, 554
- mailboxes, 552, 554-556
- personal address books, 1001
- planning
 - deploying prototype labs, 510-512
 - move mailbox upgrade method, 529, 533
 - restoring prototype labs, 513
 - validating documents, 513
- postmigration cleanup, 510
 - production migration/upgrade, 65-66
 - public folders, 556-557
 - services, 557-559
 - Exchange Server 2003, 557
 - simulating, 511
 - SRS, 550-551
 - supporting new environment, 66
 - upgrades, validating documents, 63
 - user accounts (Windows Server 2003 migrations), 489, 493
 - Windows Server 2000 to Windows Server 2003
 - AD forest upgrades, 465-470, 472-475
 - “Big Bang” versus Slow Transition strategies, 461-462
 - combining AD forests, 476-481
 - consolidating/migrating domains, 481-489, 493-495
 - in-place upgrades versus new hardware migrations, 461
 - migration options, 462
 - migration requirements, 457-459
 - phases of, 460
 - single member servers, 462-465
- Migration document**
 - Planning phase, 55
 - project schedule, 55-60
 - validation for, 63
- migration plan document, 739-742**
- migration process, Migration document, 59-60**
- MIIS (Microsoft Identity Integration Server) 2003, 108-110**
 - account provisioning, 108-110
 - deploying for identity management with eDirectory, 114-115
 - group management, 112
 - installing, 112
 - MAs, 111-112
 - Novell eDirectory, deploying, 114-115
 - role of MAs, 111-112
 - synchronizing directory information, 108

milestones

- Migration document, 59
- summarizing, in Statement of Work (Initiation phase), 46
- upgrades, 46

mirroring, 1200**MIS (Mobile Information Server), 762****misconfiguration, MBSA, 336-337****Mixed-Mode Domain Redirect, combining AD forests (Windows Server 2003 migrations), 476-481****MMC (Microsoft Management Console), 178, 607**

- installing Exchange Server migrations, 520
- verifying, 206

MMS (Microsoft Metadirectory Services), 82**MNS quorums, mailbox cluster CCR, 1052-1053****mobile access, 19-20****mobile computing**

- Exchange Server support for
 - HTML (Hypertext Markup Language), 1012
 - Pocket PC, 1011
 - Windows Mobile, 1011
- Outlook deployment considerations, 1021

mobile devices

- managing, OWA, 940-941
- Terminal Services, 727
 - securing, 727-729

Mobile Information Server, 762**mobility enhancements, 762****modes, users, 947****modification, replication, 156. See also replication****Modify profile setting (OCT), 919****modifying**

- cmdlets, 281
- email viewing order (OWA), 952
- mailboxes, with EMS, 283
- passwords, email, 978
- reading pane (OWA), 953
- text, email, 964

MOM (Microsoft Operations Manager), 32, 89, 680, 683

- Administrator Console, 688
 - identifying computer attributes, 689
 - identifying computer groups, 689-690

- identifying notification groups, 692

- identifying rules, 690

- identifying scripts, 691

- customizing, 687

- Exchange Server, performance monitoring, 1186

Management Pack

- AKM files, 688

- alert notifications, 686

- computer groups, 689-690

- event monitoring, 684

- importing, 688

- installing, 687

- notification groups, 692

- online catalog website, 687

- performance monitoring, 684

- reports, 706-709

- rules, 690, 693-706

- scripts, 691

- state monitoring, 685

- trend analysis, 686

- XML files, 688

- Operator Console, 692

- SDK website, 687

MOMSDK (Microsoft Operations Manager Software Development Kit) website, 687**monitoring**

- design, 104

- Exchange, 104

ISA Server

- alerts, 422-424

- customizing Dashboard, 421

- session/service activity, 424

MOM, 89**performance**

- disk subsystems, 1175-1176

- documenting, 755

- Exchange Server, 1186

- memory subsystems, 1172-1173

- Network Monitor, 1170

- network subsystems, 1176

- Performance Monitor Console, 1169, 1173

- processor usage, 1175
 - Task Manager, 1171
 - Unified Messaging
 - active calls, 827
 - connectivity, 827
 - event logs, 836-840
 - performance monitors, 828-836
 - monthly database maintenance, 677-678**
 - monthly maintenance, 677. See also maintenance**
 - MOSS (Microsoft Office SharePoint Server)**
 - alerts, 864
 - customizing, 851, 862
 - development of, 848-849
 - document libraries, 853, 855
 - document management, 859-860
 - document workspace, 853
 - lists, 863
 - meeting workspaces, 860-861
 - new features, 850, 864
 - Office 2007 integration, 861-862
 - picture libraries, 855, 863
 - Shared Document pages, 853-855
 - shared workspaces, creating, 852
 - SharePoint Designer, editing via, 867
 - SharePoint discussions, 857-858
 - SharePoint lists, 856-857
 - site directories, 864
 - sites, customizing, 865-867
 - surveys, 859
 - team collaboration, enabling, 851
 - Web Part tool pane, 865, 868
 - move mailbox upgrade method, 529, 533**
 - moving**
 - DNS zones to application partitions,
 - AD forest upgrades (Windows Server 2003 migrations), 475
 - email, 964
 - ExMerge, 554-556
 - mailboxes, 552, 554-556
 - database corruption, 1141
 - EMC, 626-629
 - with EMS, 283-284
 - Exchange Server 2003 migrations, 525-527
 - Exchange Server migrations, 552-555
 - operation master roles, AD forest upgrades (Windows Server 2003 migrations), 470-472
 - public folders, 556-557
 - MRM (Messaging Records Management), 428**
 - custom managed folders, creating, 448
 - managed content settings, creating, 449-450
 - managed folder mailbox policies, 450-451
 - policies, creating, 448
 - scheduling Managed Folder Assistant, 452
 - MSDSS (Microsoft Directory Synchronization Service), 115-120**
 - backing up and restoring information, 119-120
 - identifying limitations on directory synchronization, 118-119
 - implementing, 118
 - installing, 116
 - mstsc.exe, 718-719**
 - multihomed DNS servers, 142-143**
 - multiorganization Exchange 5.5 migration, 539. See also migration, 539**
 - multiple databases, 87-88**
 - multiple forests, 76, 79**
 - MMS, 82
 - multiple panes, OWA, 949**
 - multisite Exchange 5.5 migration, 539. See also migration**
 - MV (metaverse namespace), 109**
 - MX (mail exchange record), 139-141**
- ## N
- name resolution (email), OWA, 978**
 - name server (NS) records, 139**
 - name server records, 139**
 - names, addressing email, 956**
 - namespaces, DNS, 81**
 - naming**
 - cmdlets, 282
 - DNS
 - components, 135-138
 - configuring servers, 150-153

- need for, 133
- requirements, 144, 147-149
- resource records, 138-143
- servers, 134
- SMTP, 143-144
- troubleshooting, 150
- servers, 102
- NAS (network attached storage), 1189-1190**
 - agents, event triggering, 1208
 - content conversion, 1207
 - content indexing, 1206-1207
 - data backups, 1208
 - data restores, 1208
 - database maintenance, 1207
 - defining, 1191
 - disk type, choosing, 1196-1198
 - email conversions, MAPI, 1208
 - exchange servers, consolidating, 1202-1203
 - fault tolerance, 1200-1201
 - implementing, 1192-1193
 - JET database (.edb files), storing, 1205
 - message tracking, 1208
 - network connectivity, selecting, 1194-1195
 - protocol logging, 1208
 - solution recommendations, 1201-1202
 - transaction log files (.log), storing, 1203
 - volume disks, resizing, 1198
- National Association of Securities Dealers 3010 & 3110 (NASD 3010 & 3110), journaling, 634**
- National Institute of Standards and Technologies (NIST), 308**
- National Security Agency (NSA), 308**
- Native Mode**
 - converting, 508-510
 - Exchange Server 2003 migration, 559
 - Exchange Server 2007 migrations
 - converting to, 507-508
 - deleting directory replication connectors, 508-510
 - postmigration cleanup, 510
- navigation, OWA clients, 948-949, 951, 953**
- NDS, synchronizing with Active Directory (using services for NetWare), 116-118**
- .NET Framework 2.0, 177-178**
 - installing, 206, 520
- NetWare, synchronizing eDirectory/NDS with Active Directory, 116-118**
- network configuration documents (backups), 1086**
- network devices, backup strategy development, 1091**
- network diagrams, 747**
- Network Load Balancing (NLB), 149, 1073-1075. See also load balancing**
- Network Monitor, 1170**
- network security, implementing on Edge Transport server roles, 367**
- networks**
 - bandwidth, Outlook deployment considerations, 1020
 - circuit-switched, telephony, 810
 - coexistence, 77
 - packet-switched networks, telephony, 811
 - PSTN, telephony, 811
 - subsystems, performance monitoring, 1176
- New cmdlets (Unified Messaging shell commands), 843**
- New Database Wizard (EMC), 631**
- New Distribution Group Wizard (EMC), 619**
- New Dynamic Distribution Group Wizard (EMC), 620-621**
- New Mail Contact Wizard (EMC), 623-624**
- New Mailbox Wizard (EMC), 611-612**
- New profile setting (OCT), 919**
- New Storage Group Wizard (EMC), 630**
- NIC (Network Interface Cards), NLB configurations, 1073**
- NIS users, adding to Active Directory, 129**
- NIST (National Institute of Standards and Technologies), 308**
- NLB (Network Load Balancing), 149, 1073-1075**
- No Service Account (Exchange Server 2003), 551**
- non-paged pools, 1173**
- non-Windows client access, 994**
 - Linux/UNIX support
 - IMAP, 1011
 - Outlook Express, 997-1001
 - OWA, 996, 1012

- Mac support, 994
 - client functionality/compatibility table, 996-997
 - Entourage, 1004-1007
 - IMAP, 1011
 - Mac OS X Mail, 1001-1003
 - Outlook Express, 997, 999-1001
 - OWA, 996, 1012
 - POP3 functionality, 1011
 - Remote Desktop for Mac, 995-996
 - Terminal Server Client for Mac, 1007-1010
 - Virtual PC, 995-996, 1010
 - mobile computing support, 1011-1012
 - non-Windows client access methods, 1010-1012**
 - non-Windows environments, integration**
 - account provisioning (MIIS), 110
 - applying MSDSS (Novell eDirectory), 115-120
 - deploying MIIS (Novell eDirectory), 114-115
 - group management (MIIS), 112
 - installing, 112
 - LDAP, 120-122
 - MIIS, 108-110
 - Novell eDirectory, 113-114
 - role of MAs (MIIS), 111-112
 - nonpublic personal information (NPI), 436**
 - Notice of Proposed Rulemaking (NPRM), 434**
 - notification groups, Management Pack, 692**
 - Novell eDirectory, 113-114**
 - deploying MIIS 2003 for identity management with, 114-115
 - MIIS, deploying, 114-115
 - MSDSS, applying, 115-120
 - synchronizing with Exchange Server 2007, 113
 - Novell GroupWise, Exchange Server 2007 migrations, 500**
 - NPI (nonpublic personal information), 436**
 - NPRM (Notice of Proposed Rulemaking), 434**
 - NS (name server) records, 139**
 - NSA (National Security Agency), 308**
 - Nslookup, troubleshooting DNS, 152-153**
 - ntbackup.exe (backup utility), 652, 1100**
 - Advanced mode, 1100-1102
 - Exchange server restores (disaster recovery), 1135-1136
 - Wizard mode, 1100
 - ntdsutil (defragmentation utility), 511, 653-654**
- ## O
- OAB (Outlook Address Book), 676**
 - Cached Exchange mode (Outlook), 934
 - OAL (Offline Address List), 676**
 - object-oriented data handling, EMS (Exchange Management Shell), 606**
 - objectives**
 - Design documents, 54
 - Migration document, 58
 - objects, MMS, 82**
 - OCR (Office for Civil Rights), 434**
 - OCS (Office Communications Server), 871-873**
 - OCT (Office Customization Tool)**
 - Apply PRF setting, 919
 - Configure Cached Exchange mode, 919
 - Do not configure Cached Exchange mode, 919
 - Modify profile setting, 919
 - New profile setting, 919
 - Office deployments, creating transforms, 1026-1027
 - Outlook client configuration, 1019
 - Outlook deployments, 918
 - Use existing profile setting, 919
 - Office, transforms (Outlook client configuration), 1020**
 - Office 2003, SharePoint integration, 861-862**
 - Office 2007, MOSS integration, 861-862**
 - Office Communications Server**
 - adding users to, 889
 - administration, 889
 - configuring, 883-885
 - certificates, 885-887
 - configuring
 - server settings, 891
 - user settings, 889

- deploying, 881-883
- installing, 875
 - configuring IIS, 880-881
 - delegating setup/administrative privileges, 878-880
 - extending AD schema, 875-876
 - prepping AD domains, 878
 - prepping AD forests, 876
- installing admin tools, 888
- Instant Messenger Filter, 891
- starting, 887
- validating functionality, 887
- Office Customization Tool. See OCT (Office Customization Tool)**
- Office for Civil Rights (OCR), 434**
- Office Live Meeting, 871, 874**
 - development of, 872
 - installing, 893
 - web conferencing, 894
- Offline Address Book (OAB), 676**
- Offline Address List (OAL), 676**
- offline database maintenance, 669-671**
 - quarterly database maintenance, 678
- offline maintenance, 678. See also maintenance, 678**
- offline synchronization, Entourage, 1005**
- OM (Operations Master), seizing, 511**
- "on behalf of" feature, sending email using (Outlook collaboration), 922-923**
- one way synchronization, 545**
- online database maintenance, verifying, 675**
- opening multiple panes (OWA), 949**
- operating systems**
 - optimizing, 86
 - patching, 90, 194
 - with Windows Software Update Services, 90
 - requirements, 75
 - Windows
 - lockdown guidelines, 307
 - optimizing Windows Server 2003, 299
 - patches/updates, 304
 - security templates, 301-303
- operation master roles, moving, 470-472**
- Operations Master (OP), seizing, 511**
- Operator Console (MOM), 692**
- optimization, 85**
 - clustering, 88-89
 - disk options, 86
 - documentation, 755-756
 - Exchange 5.5 migration, 538-540
 - Global Catalog, demoting, 163
 - migration
 - deploying prototype labs, 510-512
 - move mailbox upgrade method, 529, 533
 - restoring prototype labs, 513
 - validating documents, 513
 - MOM, 89
 - multiple databases, 87-88
 - operating systems, 86
 - OWA, slow access, 989
 - performance
 - Active Directory, 1169
 - CAS, 1167
 - databases, 1179-1180
 - disk subsystems, 1177-1179
 - Edge Transport servers, 1168
 - Exchange logs, 1180
 - Exchange Server, via ongoing maintenance, 1185-1186
 - general optimizations, 1168
 - Hub Transport servers, 1167
 - mailbox clusters, 1166
 - mailbox servers, 1165-1166
 - memory subsystems, 1172-1173
 - Unified Messaging servers, 1168
 - virtual memory, 1174
 - providing for server redundancy and, 96-97
 - servers, 96
 - VM, avoiding fragmentation, 86
 - Windows Server 2003, 299
- options**
 - disaster recovery, 52
 - disks, 86
 - email, configuring, 962

- Media, deploying domain controllers, 163-164
- migration
 - deploying prototype labs, 510-512
 - move mailbox upgrade method, 529, 533
 - restoring prototype labs, 513
 - validating documents, 513
- OWA
 - calendar, 979-982
 - Contacts, 986-988
 - customizing, 972-978
 - meeting invitations, 984-985
 - optimizing slow access, 989
 - security, 988
 - Task, 985
- Reading Pane, 975
- recovery, 103
- redundancy, 97
- Spell Check, 976
- Windows
 - lockdown guidelines, 307
 - optimizing Windows Server 2003, 299
 - patches/updates, 304
 - security templates, 301-303
- Windows-based mail clients, 994
 - Macintosh support, 994-995
 - OWA functionality, 996-997
- Organization Configuration section, EMC, 602**
- organization names, 102**
- Organization tab (EMC mail contact properties), 625**
- OrgPrepCheck tool, 541**
- OrgPrepCheck utility, 541**
- OST files, Cached Exchange mode (Outlook), 933**
- Out of Office assistant, OWA, 972-973**
- Out of Office rules, OWA, 944**
- outbound mail routing, internal DNS servers, 150**
- outlining**
 - built-in Transport agents, 440
 - changes in Exchange Server 2007, 74-75
- Outlook**
 - add-ins, effects on Cached Exchange mode, 934
 - address books, effects on Cached Exchange mode, 935
 - appointments, categorizing via color, 904
 - auto account setup, 1015-1016
 - Autodiscover service, 1015-1016
 - basic encrypted communications, 378-380
 - basic features of, 900
 - Cached Exchange mode, 930-935
 - Calendars, effects on Cached Exchange mode, 934
 - certificates, acknowledging, 389
 - client configuration, 1019-1020
 - collaboration, 901
 - calendar sharing, enabling, 921
 - configuring free/busy time for Internet display, 923-925
 - group schedules, 928-929
 - sending contact information, 926-927
 - sending email "on behalf of" other users, 922-923
 - sharing information outside company, 923, 925-927
 - sharing information via public folders, 928
 - sharing personal information, 921
 - viewing free/busy time via Internet, 925-926
 - viewing shared calendars in multiple panes, 920
 - delegate access, effects on Cached Exchange mode, 934
 - deploying
 - administrative installation points, creating, 1024-1025
 - administrative options, 1033
 - Administrative templates, 1031, 1033
 - automating profile settings, 1025
 - best practices, 1021
 - client installations, 1028-1030
 - defining client options, 1019
 - Exchange Client Policy options, 1031
 - GPO (Group Policy Objects), creating, 1034
 - management of, 1022
 - managing postdeployment tasks, 1040-1041
 - methods of, 1017
 - network topology bandwidth considerations, 1020

- OCT, 918
- predefined configuration options, 1023-1024
- profile generation, 1018-1019
- profiles, creating, 1028
- remote/mobile client systems, 1021
- SMS (Systems Management Server), 1022, 1039-1040
- system requirements, 1022-1023
- testing, 1035
- transforms, creating, 1026-1027
- update/patch, management via Group Policies, 1035-1038
- email, multiple account management, 906. See *also* email
- Entourage support, 1005
- folders, adding, 953
- interface, changes to, 901-902
- Macintosh support, 994-995
- meetings, creating by time zone, 904
- OAB, Cached Exchange mode, 934
- OCS integration, 873
- OCT, 919
- OWA
 - comparisons, 938
 - similarities to, 902
- quick flags, 902-903
- RPC over HTTPS, 915
 - Cached Exchange mode, 933
 - IIS configurations, 915
 - Outlook installations, 916-917
 - server side installations, 915
 - Windows component installations, 915
- RSS feed subscriptions, 907
- searches, 905
- searching, 971
- security, 901
 - Blocked Senders List, 913
 - digital signatures, 909, 934
 - encryption, 909
 - International List, 913
 - junk email filters, 911-914
 - mailboxes, 909-910
 - S/MIME support, 908
 - Safe Recipients List, 913
 - Safe Senders List, 913
 - security labels, 911
 - targeting specific messages, 909
 - web beaconing, 914
- sending and receiving digitally signed and encrypted emails, 387-388
- Trust Center, 906
- version comparisons, 900
- Outlook 2003**
 - Safelist Aggregation, 261-263
 - security, 309
 - authenticating, 313
 - blocking attachments, 314
 - encrypting, 313
 - Internet access, 312
 - spam
 - filtering junk mail, 318-319
 - tools, 315
 - web beaconing, 316-317
- Outlook 2007**
 - outlining MAPI client access, 84
 - Safelist Aggregation, 261-263
 - security, 309
 - authenticating users, 313
 - blocking attachments, 314-315
 - encrypting communications between Outlook and Exchange, 313
 - Outlook Anywhere, 309-312
 - user identification, 314
- Outlook Anywhere, 85, 105, 309-312**
 - CAS, 571-572
- Outlook Email Postmark, 320**
- Outlook Express**
 - address books, 998
 - backing up contacts, 1001
 - migrating, 1001
 - contact address lists, 998
 - contacts, backing up in address books, 1001

- email, 997
- installing, 999
- LDAP (Lightweight Directory Access Protocol), 998
- Linux/UNIX support, 997-1001
- Mac support, 997-1001
- Macintosh, configuring, 999-1001
- non-Windows client support, 997-1001
- passwords, 999
- POP, 998
 - configuring access, 1000-1001
 - security, 999
- Outlook MAPI, 104**
- Outlook Web Access. See OWA (Outlook Web Access)**
- outsourcing, antivirus outsourcing, 352**
- OWA (Outlook Web Access), 19, 99, 104**
 - access, 1012
 - accessing Exchange, 85
 - Active Directory, changing passwords, 978
 - address books, 943, 964-965
 - creating contacts, 986
 - deleting contacts, 987
 - editing contacts, 986
 - calendars
 - appointments, creating, 980-981
 - configuring, 977
 - forwarding meeting requests, 984
 - meeting requests, creating, 981-982
 - recurring appointments/meetings, 982
 - replying to meeting requests, 984
 - views, 979
 - CAS, 566, 570
 - clients, 85
 - calendar, 979-982
 - Contacts option, 986-988
 - customizing email features, 964-971
 - email features, 955, 960-964. *See also* email
 - meeting invitations, 984-985
 - navigating, 948-953
 - optimizing slow access, 989
 - options, 972-978
 - security, 988
 - Tasks option, 985
 - user modes, 947
 - color scheme, customizing, 977
 - contact views, 986
 - contacts, 986-988
 - context menus, 970
 - date/time formats, 977
 - development of, 938
 - email, 951-952
 - adding attachments, 958
 - addressing, 956-957
 - blocking attachments, 988
 - categorizing, 970
 - creating, 955
 - customizing text, 964
 - deleting, 961
 - forwarding, 960-961
 - importance options, 962
 - junk email filters, 976
 - marking as read/unread, 965
 - message classification, 988
 - moving to folders, 964
 - name resolution, 978
 - privacy settings, 976
 - reading, 959
 - reading attachments, 960
 - removing users from To/CC/BCC fields, 957
 - replying to, 960-961
 - sending, 958
 - sending from contacts in, 988
 - sensitivity options, 962
 - signatures, 974-975
 - spam beacon blocking, 988
 - spell checking, 968-969, 976
 - tracking options, 962
 - Folder list, 949
 - functionality, 996-997
 - Help, 954
 - Infobar, 950
 - Log Off button, 955

- invitations, launching in separate windows, 984
- ISA Server, 401
 - importing/exporting certificates, 402-405
 - publishing rules, creating, 405-411
- items per page, configuring, 973
- keyboard shortcuts, 971
- Linux/UNIX support, 996, 1012
- logging off, 955
- logins, 955
- Mac support, 996, 1012
- mail notification pop-up, 949
- mailboxes
 - folders, creating, 953
 - opening another user's mailbox, 944
- message list, 949
- middle pane, 949
- mobile device management, 940-941
- navigating, 950-951
- non-Windows client support, 996, 1012
- Out of Office assistant, configuring, 972-973
- Out of Office rules, 944
- Outlook comparisons, 938
- property sheets, 967-968
- pull-down menus, 950
- reading pane, 950, 953
 - options, setting, 975
 - viewing attachments, 953
- regional settings, 944
- reminders
 - configuring, 977
 - dismissing, 985
 - preferred reminder times, changing, 984
 - receiving, 985
 - snooze feature, 985
- Rules Editor, 970
- Scheduling Assistant, 939
- searches, 971
 - improvements to, 942
- security, 321-324, 988-989
- security settings, 948

- SharePoint comparisons, 938
- SharePoint integration, 940
- shortcut bar, 949
- sizing panes, 950
- slow connection users, tips for, 989-990
- task views, 986
- tasks, creating, 985
- UI, navigating, 948
- user modes, 945
 - Light Client mode, 947
 - Standard Authentication mode, 946-947
- XML, 939

OWA certificates, internal CA, 770-774

OWA (Outlook Web Access) rules (Client Access rules), 699

OWA (Outlook Web Access) tab (mailbox features properties), 614

P

packet-switched networks, telephony, 811

paged pools, 1173

pages, Shared Document (actions), 854-855

Palm devices, Entourage support, 1005

panes. *See also* interfaces

- OWA, sizing, 950
- reading
 - options, 975
 - OWA, 953

passwords

- Active Directory, changing via OWA (Outlook Web Access), 978
- Active Directory Restore mode password (Windows Server 2003), 1106
- email, modifying, 978
- Outlook Express, 999
- Remote Desktop for Administration, 722
- synchronizing with IDMU, 128

patches, 304-305

- Outlook deployments, Group Policies, 1035-1038
- secure messaging environments, 340

- security, 304
- servers, 340
- patching operating systems, 90, 194**
- Paths tab (ISA Server), 411**
- Patriot Act, journaling, 634**
- PBX (Private Branch Exchanges), telephony, 811, 814**
- PDCs (Primary Domain Controllers), 156**
- per-user settings, ActiveSync, 765-766**
- performance, 85**
 - analyzing, 1161-1164
 - clustering, 88-89
 - configuring disk options for, 86-87
 - disk, predicting, 1199-1200
 - disk options, 86
 - documentation, 755-756
 - improvements to, 1160-1161
 - MOM, 89
 - monitoring
 - disk subsystems, 1175-1176
 - Exchange Server, 1186
 - Network Monitor, 1170
 - network subsystems, 1176
 - Performance Monitor Console, 1169, 1173
 - processor usage, 1175
 - Task Manager, 1171
 - multiple databases, 87-88
 - operating systems, 86
 - optimizing, 1198
 - Active Directory, 1169
 - CAS, 1167
 - databases, 1179-1180
 - disk subsystems, 1177-1179
 - Edge Transport servers, 1168
 - Exchange logs, 1180
 - general optimizations, 1168
 - Hub Transport servers, 1167
 - LUN, 1198-1199
 - mailbox clusters, 1166
 - mailbox servers, 1165-1166
 - memory subsystems, 1172-1173
 - Unified Messaging servers, 1168
 - virtual memory, 1174
 - Unified Messaging monitoring/troubleshooting, 828-836
 - VM, avoiding fragmentation, 86
- Performance Collection rules (Management Pack), 705-706**
- performance documentation, 755-756**
- Performance Monitor, troubleshooting DNS, 152**
- Performance Monitor Console, 1169**
 - memory, 1173
- performance monitoring, Management Pack, 684**
- Performance Reporting rules (Unified Messaging rules), 704**
- performance tools**
 - EMC toolbox, 642-643
 - Exchange Server Performance Monitor, 652
 - Performance Troubleshooter, 652
- Performance Troubleshooter, 643, 652**
- performing scripted installation of Exchange Server 2007, 213-214**
- perimeter security, establishing with Edge server role, 215**
- permissions**
 - Active Directory requirements for Exchange Server 2007, 183-184
 - administrator permissions, Edge Transport server, 370-371
 - Exchange Organization Administrators Role, 599
 - Exchange Recipient Administrators Role, 599
 - Exchange Server Administrators Role, 600
 - Remote Desktop for Administration, 723
- personal address books, migrating, 1001**
- personalizing**
 - MOSS integration, 862
 - SharePoint, 862-863
- pfmigrate tool, 556-557**
- PGP (Pretty Good Privacy), 378**
- phases, upgrades, 36**
 - documentation, 37
 - initiation, 38-49
 - pilot, 63-65

- planning, 49-60
- prototype, 61-63
- phishing, assessing risks, 330**
- picture libraries**
 - MOSS, 855, 863
 - SharePoint, 855
- pilot group, choosing, 64-65**
- Pilot phase**
 - deploying services to limited number of users, 63-65
 - upgrades, 63-65
 - Windows Server migration, 460
- pilot test document, 746**
- piloting phase (SAN/NAS implementation), 1192**
- Pipeline tracing, troubleshooting Transport agents, 439-440**
- Pipelining, EMS syntax, 277-278**
- pipng data between commands, EMS, 605**
- PKI (Public Key Infrastructure), 353, 374**
 - asymmetrical encryption, 376
 - basic encrypted communications using Outlook, 378-380
 - CA, 374-375
 - Certificate Services, 374-375
 - certificate templates, 377-378
 - certificates, 377
 - planning, 375-376
 - private/public keys, 376
 - symmetrical encryption, 376
 - transport-level security, 353
- placeholder domain structure, 80**
- placement, 82**
 - client access points, 84-85
 - of documentation, 735
 - of domain catalogs, 95
 - of domain controllers, 95
 - environment sizing, 84
 - GC, 95
 - GC/DC, 82
 - of servers, designing, 96

- planning, 36**
 - Active Directory infrastructure, 184-188
 - attachment filtering processing, 250-251
 - disaster recovery, 754-755
 - Exchange 5.5 migration, 536-538
 - for Exchange Server 2007, 73-74
 - implementation, of Edge Transport servers, 218
 - for message processing order of Edge services, 218-219
 - migration
 - deploying prototype labs, 510-512
 - move mailbox upgrade method, 529, 533
 - restoring prototype labs, 513
 - validating documents, 513
 - PKI, 375-376
 - for Remote Desktop for Administration, 717
 - for Terminal Services, 712
 - upgrade phase, 49-51
 - Design documents, 51-54
 - migration documents, 55-60
 - pilot, 63-65
 - prototype, 61-63
- Planning phase, 37**
 - Design document, 51
 - agreeing on design, 55
 - collaboration sessions, 52
 - disaster recovery options, 52-53
 - structure, 53-54
 - discovery, 49-51
 - Migration document, 55
 - project schedule, 55-60
 - SAN/NAS implementation, 1192-1193
- Play on Phone feature (Unified Messaging), 798**
- Pocket PC access, 1012**
- Pocket PC, Exchange Server support for, 1011**
- policies**
 - ActiveSync. See ActiveSync, policies
 - administrative policies. See administrative policies
 - auditing, 334-335
 - audits, 334

- creating new security policies for Edge Transport servers, 368-370
 - security, documentation, 756-757
- policy management, Transport agents, 439**
- political limitations, multiple forests, 79**
- POP (Post Office Protocol), 1011**
 - access, Outlook Express (Mac), 999-1000
 - CAS, 575
 - Outlook Express, 998
 - configuring access in, 1000-1001
- POP3 (Post Office Protocol 3), 105**
 - ISA Server, configuring publishing rules, 413-414
 - non-Windows client access, 1011
- POP3 rules (Client Access rules), 699**
- populating Active Directory, 508-510**
- port zoning, 1196**
- Portal Server (SharePoint), 848-849**
- ports**
 - NLB configuration, 1073
 - Unified Messaging assignments, 812
- Post Office Protocol 3. See POP3**
- postmaintenance procedures, 679**
- postmigration cleanup, 510**
- postmarks, Outlook Email Postmarks, 320**
- POTS (Plain Old Telephone System), telephony, 811**
- power supplies, UPS, 677**
- power systems, redundancy (SAN/NAS fault tolerance), 1201**
- PowerShell, 270-271**
 - versus EMS, 275-276
 - viewing antispam reports, 266-267
- PowerShellIDE, 293**
- PRA (Purported Responsible Address), 237**
- preferences, Windows-based mail clients, 994**
 - Macintosh support, 994-995
 - OWA functionality, 996-997
- preferred reminder times, changing in OWA (Outlook Web Access), 984**
- preinstallation checks, 203-205**
- preparing to install Exchange Server 2007, 200-201**
 - choosing to install a test or production environment, 201
 - prototyping installation, 201-203
- prerequisites for Exchange Server 2007**
 - 64-bit architecture, 179-180
 - EMS, 178
 - IIS 6.0, 178
 - MMC, 178
 - .NET Framework 2.0, 177-178
 - Windows Server 2003, 178
- presence menus, SharePoint, 865**
- Pretty Good Privacy (PGP), 378**
- PRF files**
 - Outlook deployments, 1028-1029
 - Outlook profile generation, 1018-1019
- PrimalScript, 293**
- Primary Domain Controllers (PDCs), 156**
- primary zones, 136-137**
- primary-secondary replication, 138**
- primary-secondary zone transfers, 138**
- prioritizing**
 - maintenance, 673-677
 - Transport agents, 439
- privacy, email, 976**
- private keys, 376**
- Private mode (OWA security settings), 948**
- procedural documents, 751**
- procedures. See also documentation**
 - security documentation, 757
- processor recommendations, 97**
- processors, performance monitoring, 1175**
- production migration/upgrade, 65-66**
 - Windows Server migration, 460
- PROFS/SNADS connectors, 538**
- Prohibit Post At (KB) option (EMC), databases, 632**
- Prohibit Send and Receive At (KB) option (EMC), databases, 632**
- project documentation, 736. See also documentation**
 - communication plan document, 739
 - design and planning document, 737-738
 - migration plan document, 739-742
 - pilot test document, 746
 - prototype lab document, 743-746

- support and project completion document, 746
- training plan document, 742-743
- project schedule, Migration document (Planning phase), 55-60**
- Project Schedule and Migration documents, 37**
- projects, Initiation phase**
 - identifying goals, 40-44
 - scope of project, 38-40
- promoting domain controllers to global catalog, 161-162**
- property sheets, OWA (Outlook Web Access), 967-968**
- property sheets, viewing, 968**
- protecting against spam, 315**
 - blocking read receipts, 320
 - Exchange Server 2007 antispam features, 315-316
 - filtering junk mail, 318-319
 - filtering with Safe Senders and Block Senders, 319-320
 - Information Rights Management, 321
 - Outlook Email Postmark, 320
 - web beaconing, 316-317
- Protocol Analysis reports (Message Hygiene Analysis reports), 707**
- protocol logging, 1208**
- protocol logs (SMTP logging)**
 - changing paths, 662
 - configuring maximum age for, 663-664
 - sizing, 662-663
- protocols**
 - logging, 658
 - SMTP, locking down, 364
 - WER, 729
- prototype lab document, 743-746**
- prototype labs**
 - Exchange Server 2003, 510-513
 - Exchange Server 2007 migrations, 510
 - FSOM roles, 511-512
 - restoring exchange environments, 513
 - temporary domain controllers, 511
 - validating/documenting design decisions/procedures, 513

- Prototype phase, 37, 61-63**
 - Windows Server migration, 460
- prototype phase, upgrades, 61-63**
- provisioning**
 - accounts, 110
 - storage groups, with EMS, 285
- proxies, DNS, 147-148**
- presence information, OCS, 873**
- PST import tool, Entourage, 1005**
- PSTN (Public Switched Telephone Networks), telephony, 811**
- PTE (Page Table Entries), 1173**
- public folder connection agreements, Exchange Server migrations, 545**
- Public Folder database, Do Not Permanently Delete Mailboxes... option (EMC), 633**
- public folders**
 - Cached Exchange mode (Outlook), effects on, 935
 - connection agreements, 545
 - integrity checks, isinteg.exe, 654-655
 - migrating, 556-557
 - replication, 529-530
 - verifying, 675
 - sharing information via (Outlook collaboration), 928
- Public Key Infrastructure. See PKI**
- public keys, 376**
- Public mode (OWA security settings), 948**
- Public Name tab (ISA Server), 411**
- publishing rules, ISA Server**
 - IMAP, 414-415
 - OWA, 405-407, 409-411
 - POP3, 413-414
 - SMTP, 416
- pull-down menus, OWA, 950**
- Purported Responsible Address (PRA), 237**
- puzzle validation, configuring content filtering, 247**

Q

- quarantined mailbox for captured messages, configuring, 241-242**
- quarterly maintenance, 678. See also maintenance**

queries, 137-138

Query Builder, Outlook searches, 905

Queue Viewer, 642, 652

queues

mailbox delivery queues (SMTP Receive Connector), 591

message queues, daily database maintenance, 674

messages, reviewing, 674

remote delivery queues (SMTP Receive Connector), 591

submission queues (SMTP Receive Connector), 590

quick flags (Outlook), 902-903

as reminders, 903

email, enabling, 970

Quorum resources, clustering, 1047

quorum-device clusters, 1047

R

RAID, hardware versus software (optimizing disk subsystems), 1179

RAID configurations, SAN/NAS fault tolerance, 1200

RAID sets, backups, 1108

RAID1, disk mirroring (optimizing disk subsystems), 1178

RAID5, 1201

disk striping, optimizing disk subsystems, 1178

RAID array failures (disaster recovery), 1127

RDP (Remote Desktop Protocol), 716

read receipts, blocking, 320

read/unread, marking email as, OWA, 965

reading email, 959

attachments, 959-960

marking read/unread, 965

reading pane (OWA), 950, 953

options, setting, 975

viewing attachments, 953

Reading Pane options, 975

real-time block list providers, 224

rebalancing mailbox distribution, EMS, 289-292

Receive Connectors

configuring, on Edge Transport server, 362

SMTP connectors, 356

Receive Connectors tab, Exchange Management Console, 223

receiving digitally signed and encrypted emails, Outlook, 387-388

Recipient Configuration section, EMC, 602

recipient connection agreements, Exchange Server migrations, 545

recipient data, managing in Exchange Security Groups, 598

Recipient Filter reports (Message Hygiene Analysis reports), 707

recipient filtering, 348

adding blocked recipients, with Exchange Management Shell, 233

configuring, 231-233

Recipient Filtering Agent, 231-232

recipient management tasks, 271

Recipient Update Services (Recipient Update Services), 504, 551

recipients, email, 956

records

baselining, 736

CNAME, 141

host records, 139

mail exchange, 139

name server, 139

service records, 141

SPF records, 235

creating, 236-238

recovery

data, Windows Server migrations, 463

Database Recovery Management tool, 640

Database Recovery Management utility, 652

Database Troubleshooter, 640, 651

disaster

testing, 62

upgrading, 52

documentation, 754

options, 103

recovery (disaster)

- Active Directory, 1148
 - authoritative restores, 1149-1150
 - global catalog servers, 1152
 - nonauthoritative restores, 1148-1149
 - partial authoritative restores, 1150-1152
 - SYSVOL folder restores, 1152-1153
- backup process documentation, 1122
- boot failures, 1128-1129
- Cluster Service, 1147
- complete server failures, 1129
 - ASR (Automated System Recovery) restores, 1134-1135
 - boot loader file restores, 1135
 - manual recovery, 1130-1131
 - restoring versus rebuilding, 1130
 - System State restores, 1131-1133
- data corruption, 1117-1118
- database corruption, 1138
 - Database Recovery Management tool, 1139
 - ESEUTIL utility, 1142-1143
 - flat-file copying, 1139
 - ISINTEG utility, 1142-1143
 - moving mailboxes to other onsite servers, 1141
- deleted mailbox content, 1116-1117
- determining extent of problem, 1115-1116
- disk failures, 1127-1128
- domain controllers (Windows 2003), 1147
- Edge Transport server, 1119
- Exchange database file restores, 1136-1138
- Exchange environment documentation, 1121
- Exchange Server, 1118
 - Ntbackup.exe (Windows backup utility), 1135-1136
- full server recovery process, backups, 1119-1120
- Hub Transport server, 1118
- IIS (Internet Information Services), 1146-1147
- lost data, restoring from backup, 1117
- Recovery Console, 1129
- recovery process documentation, 1122
 - recovery storage groups, 1144-1146
 - server failures, 1117
 - site failures, 1123
 - alternate client connectivity methods, 1126
 - failing back after site recovery, 1125
 - failing over between sites, 1125
 - redundant/failover sites, creating, 1124-1125
 - testing, 1123
- Recovery Console (disaster recovery), 1129**
- recovery options, outlining in Exchange, 103**
- recovery process documentation (disaster recovery), 1122**
- recovery storage groups, disaster recovery, 1144-1146**
- recurring appointments/meetings, OWA calendars, 982**
- recursive queries, 138**
- redundancy, 535**
 - designing for, 97
 - options, 97
 - servers, 96
- redundant backplanes, SAN/NAS fault tolerance, 1201**
- redundant power systems, SAN/NAS fault tolerance, 1201**
- redundant sites, creating (disaster recovery), 1124-1125**
- redundancy, providing for server redundancy, 96-97**
- regional OWA settings, 944**
- relationships, servers (AD Global Catalogs), 159**
- reliability, 22-23, 85**
 - clustering, 88-89
 - disk options, 86
 - MOM, 89
 - multiple databases, 87-88
 - operating systems, 86
- reminders**
 - customizing, 977
 - email, enabling quick flags, 970
 - OWA
 - configuring in, 977
 - dismissing, 985

- preferred reminder times, changing, 984
 - receiving, 985
 - snooze feature, 985
- quick flags as, 903
- remote access, 19-20**
- remote administration**, installing (Terminal Services for), 713-714
- Remote Administration (HTML), 723-727**
 - installing and enabling, 725-727
- remote computing, Outlook deployment considerations, 1021**
- remote control, Remote Desktop for Administration, 721**
- remote delivery queues (SMTP Receive Connector), 591**
- Remote Desktop, 715**
- Remote Desktop Client, command-line options, 718-719**
- Remote Desktop for Administration, 607, 716**
 - enabling, 717
 - enabling remotely, 718
 - keyboard shortcuts, 720
 - planning for, 717
 - security, 720-723
 - tips for using, 719-720
- Remote Desktop for Mac, 995-996**
- Remote Desktop Protocol (RDP), 716**
- Remote Desktop tool, 729-730**
- remote management**
 - MMC, 607
 - Remote Desktop for Administration, 607
 - Telnet, 607
- Remote Wipe function (ActiveSync), CAS, 570**
- remotes, scans (MBSA), 336-337**
- Removable Storage service, media backups, 1111-1112**
- removing EdgeSync subscriptions, 261**
- records, mail exchange records, 139-141**
- replicating public folders**
 - Exchange Server 2003 migrations, 529-530
 - weekly database maintenance, 675

- replication**
 - Active Directory, 156
 - design, 95
 - Cluster Continuous Replication, 23
 - deleting, 508
 - DNS, 138
 - Local Continuous Replication, 22
 - MMS, 82
 - public folders, 529
 - verifying, 675
 - SRS, 550-551
- replication topology layout, Active Directory, 95**
- replying, email (attachments), 960-961**
- reporting**
 - EMS, 287
 - event logs, 292
 - generating largest mail user reports, 287-288
 - generating user distribution reports, 288-289
 - rebalancing mailbox distribution, 289-292
 - spammers, 349
- reporting functions, EMS, 275**
- reporting spammers, antis spam measures, 349**
- reports**
 - Management Pack, 706-709
 - performance, 755
- requirements**
 - Active Directory requirements, 76
 - for Exchange Server 2007, 180-184
 - DNS, 144, 147-149
 - DNS requirements for Exchange Server 2007, 144-146
 - Exchange version requirements, 76-77
 - hardware, 75
 - hardware requirements, 75
 - for Exchange Server 2007, 179
 - operating system requirements, 75
 - Unified Messaging, 808
- Reset Connectivity Credentials rules (Mailbox rules), 703**
- resetting ActiveSync devices, 785-786**

- Resource DLL (Exres.dll), 1046**
- resource forests, 76**
- resource groups, clustering, 1047**
- Resource Mailbox Wizard, 543**
- resource records (RRs), 138-1442**
- resource utilization analysis, weekly database maintenance, 676**
- resources**
 - for EMS, on the Web, 292
 - geographic distribution of, 50-51
 - upgrades, 47
- resources required, summarizing in Statement of Work (Initiation phase), 47**
- response codes, SIP, 844**
- responsibilities, Migration document, 58**
- restoring**
 - backup, 652
 - data, 1208
 - from backup, 1117
 - backup strategy development, 1090
 - Exchange Server 2003, prototype labs, 513
 - MSDSS, 119-120
- restricting logon access, 333**
- results pane (EMC), 603**
 - E-mail Address Policies tab, 616
 - filtering data, 604
- retirement, legacy Exchange 2000 Servers, 533**
- retiring domain controllers, AD forest upgrades, 472**
- Retry Remote Delivery Queue Length performance counter, 700-701**
- reverse lookup zones, 135**
- reviewing**
 - event logs, 212
 - installation logs, 212
 - message queues, 674
- revisions**
 - email, Spell Check feature, 968
 - Spell Check, customizing, 976
- RFC standards, DNS and SMTP, 145**
- rights management, Hub Transport servers, 587-588**
- Rights Management Services (RMS), configuring, 442**
- risks**
 - assessing, 329-330
 - Migration document, 58
 - summarizing, in Statement of Work (Initiation phase), 48
 - upgrades, 48
- RMS (Rights Management Services), configuring, 442**
- roles**
 - of MAs, 111-112
 - Migration document, 58-59
 - OP, 511
 - of servers. See server roles
 - of sites, 30
 - SMTP Categorizer, 169
- root certificates, installing on Windows Mobile devices, 774-777**
- routers, configuration documents (backups), 1086**
- routine reporting, 755**
- routing**
 - email, 143
 - outbound, 150
- routing groups, Exchange Server migrations, 502**
- routing services (Hub Transport servers), 578-579**
- RPC and Database Performance reports (Metric reports), 707**
- RPC over HTTPS, Outlook, 915**
 - Cached Exchange mode, 933
 - IIS configurations, 915
 - Outlook installations, 916-917
 - server side installations, 915
 - Windows component installations, 915
- RRs (resource records), DNS components, 138-142**
- RSS feeds, Outlook subscriptions, 907**
- RTC (Real-Time Communications)**
 - Communicator client, 874
 - installing, 892
 - OCS, 871-873
 - Office Communications Server
 - adding users to, 889
 - administration, 889
 - configuring, 883-887

- configuring server settings, 891
- configuring user settings, 889
- deploying, 881, 883
- installing, 875-876, 878, 880-881
- installing admin tools, 888
- instant messenger filter, 891
- starting, 887
- validating functionality, 887
- Office Live Meeting, 871, 874
 - development of, 872
 - installing, 893
 - web conferencing, 894
- RTP (Real-Time Transport Protocol), telephony, 812**
- rules, Management Pack, 690, 693**
 - ActiveSync Connectivity rules, 699
 - Client Access rules, 698-699
 - Common Components rules, 693-698
 - Edge Transport rules, 700
 - Event rules, 706
 - Hub Transport rules, 701
 - Mailbox rules, 702-703
 - Performance Collection rules, 705-706
 - scenarios, 706
 - Unified Messaging rules, 704
- Rules Editor (OWA), 970**
- RUS (Recipient Update Services)**
 - Exchange Server migrations, 504, 551

S

- S/MIME (Secure/Multipurpose Internet Mail Extensions), 387-389**
 - encryption process, 389
 - Outlook support for, 908
 - signing process, 388
 - transport-level security, 354
- safe lists, 319**
 - OWA, 324
- Safe Recipients List (Outlook), 913**
- Safe Senders, filtering, 319-320**
- Safe Senders List (Outlook), 913**

- Safelist Aggregation, implementing for Outlook 2003/2007, 261-263**
- SAN (storage area networks), 1189-1190**
 - agents, event triggering, 1208
 - content conversion, 1207
 - content indexing, 1206-1207
 - data backups, 1208
 - data restores, 1208
 - database maintenance, 1207
 - defining, 1190-1191
 - disk type, choosing, 1196-1198
 - email conversions, MAPI, 1208
 - exchange servers, consolidating, 1202-1203
 - fault tolerance, 1200-1201
 - implementing, 1192-1193
 - JET database (.edb files), storing, 1205
 - message tracking, 1208
 - network connectivity, selecting, 1195-1196
 - protocol logging, 1208
 - solution recommendations, 1201-1202
 - transaction log files (.log), storing, 1203
 - volume disks, resizing, 1198
 - zoning, 1196
- SAPIEN, 293**
- Sarbanes-Oxley Act of 2002 (SOX), 438**
 - journaling, 634
- SATA disks, 1197**
- saving Outlook searches, 905**
- scalability, 535**
 - SMTP 149-150
- scaling, 77**
 - Exchange Server 2007, 77
- scans**
 - antivirus applications, 351
 - MBSA, 336-337
- SCC (Single Copy Clusters), 1057**
 - adding second nodes, 1061
 - CCR (Cluster Continuous Replication) versus, 1067
 - configuring shared storage, 1059
 - creating, 1059-1061

- DTC, creating, 1062
- Exchange Server
 - advantages of, 1066-1067
 - installing on active node, 1062, 1065-1066
 - storage configurations, 1066
 - operating system preparation, 1058-1059
 - requirements for, 1057
- scenarios (rules), configuring Management Pack, 706
- Schedule tab (ISA Server), 411
- schedules, migration, 55-56
- scheduling
 - automatic database maintenance, 668-669
 - mailbox moves, EMC, 628-629
 - maintenance, 90, 673-677
- Scheduling Assistant (OWA), 939
- SCL (Spam Confidence Level), 221
- scope
 - groups, 170
 - journaling rules, 635
 - upgrading, 38-43
 - upgrading, 44. *See also* upgrading
- scope of projects, Initiation phase, 38-40
- scope of work, summarizing in Statement of Work (Initiation phase), 45
- scripted installation of Exchange Server 2007, performing, 213-214
- scripting, EMS, 606
- ScriptInternals, 293
- scripts, Management Pack, 691
- SCSI disks, 1197
- SCW (Security Configuration Wizard), 337-339
- SCW template, Edge Transport server roles, 367-368
- SDL (Security Development Lifecycle), 328
- Search rules (Mailbox rules), 703
- searches
 - contacts, OWA (Outlook Web Access), 987
 - Outlook, 905
 - OWA (Outlook Web Access), 971
 - improvements to, 942
- searching
 - Address Book, OWA, 964
 - email, 971
- secondary zones, 137
 - DNS, 136-137
- secure email, certificate templates, 377
- secure messaging environments, 332
 - Windows Server 2003, 332-341
- Secure Sockets Layer. *See* SSL
- Secure/Multipurpose Internet Mail Extensions (S/MIME). *See* S/MIME
- secured email communications, implementing, 382
- securing
 - Outlook 2007, 309
 - authenticating users, 313
 - blocking attachments, 314-315
 - encrypting communications between Outlook and Exchange, 313
 - Outlook Anywhere, 309-312
 - user identification, 314
 - OWA, 321-324
 - servers
 - with security patches and updates, 340
 - with security templates, 339
 - Windows environments, 298-299
 - client-based virus protection, 307
 - lockdown guidelines, 308
 - security patches and updates, 304-307
 - security templates, 301-304
 - Windows Server 2003 security improvements, 299
 - Windows Vista security improvements, 300
 - Windows for Edge Transport server roles, 366-367
 - implementing network security, 367
- security
 - access to ActiveSync with SSL, 766-767
 - forcing SSL encryption for ActiveSync traffic, 774
 - installing root certificates on Windows Mobile devices, 774, 776-777
 - installing third-party CA on CAS, 767-770
 - internal CA for OWA certificates, 770-771, 773-774

- Active Directory
 - authentication, 157
 - changing passwords via OWA, 978
- ActiveSync with ISA Server 2006, 778-783
- administrative roles, 330-331
- application-layer filtering, 398-399
- assessing risks, 329-330
- audit logging, 656-660
- breaches, cost of, 397
- client-based virus protection, 307
- client-level security, 308-309
- clients
 - lockdown guidelines, 307
 - new features, 308-309
 - optimizing Windows Server 2003, 299
 - patches/updates, 304
 - templates, 301-303
- documentation, 756-757
- Edge Transport, 148
- email, modifying passwords, 978
- event codes, 658
- events, auditing, 333
- Exchange Server 2007 implementation, 89-90
- Exchange Server 2007 through administrative policies. *See* administrative policies
- firewalls, importance of, 397-398
- groups, 169, 343-344
 - administrative policies, 343-344
- HTTP traffic, 399-400
- implementing, 89-90
- importance of in Exchange Server 2007, 327-328
- ISA Server, 396
 - Action tab, 409
 - Alerts tab, 422, 424
 - Application Settings tab, 411
 - Authentication Delegation tab, 411
 - Bridging tab, 411
 - connectivity verifiers, 424, 426
 - customizing Dashboard, 421
 - From tab, 410
 - General tab, 409
 - HTTP traffic security concerns, 399-400
 - IMAP, 414-415
 - Link Translation tab, 411
 - Listener tab, 410
 - logs, 418-420
 - MAPI, 411-413
 - messaging security, 401
 - outlining the need for, 396-399
 - OWA (Outlook Web Access), 401-411
 - Paths tab, 411
 - POP3, 413-414
 - Public Name tab, 411
 - Schedule tab, 411
 - Services tab, 424
 - Sessions tab, 424
 - SMTP (Simple Mail Transfer Protocol), 416-417
 - To tab, 410
 - Traffic tab, 410
 - Users tab, 411
- Kerberos failure codes, 659
- layers, 334
- message tracking, 664-667
- mobile devices Terminal Services, 727-729
- multiple forests, 79
- NT Status codes, 660
- Outlook. *See* Outlook, security
- Outlook 2003. *See* Outlook 2003, security
- Outlook Express, 999
- OWA, 321, 948, 988-989
- patches and updates, 304-307
- proxies, 147-148
- Remote Desktop for Administration, 720-723
- secure messaging environments, 332
 - Windows Server 2003, 332-341
- server-level security. *See* server-level security
- servers
 - antivirus applications, 351
 - hardening, 334-337, 343-344
 - patches/updates, 340

- spam, 347-349
- templates, 339
- services, 336
- SMTP, 147-148
- SMTP logging
 - EMC, 661
 - EMS, 661-664
- SMTP mail security, 147-148
- Terminal Services, 712-713
- transport-level
 - CA, 374-375
 - certificates, 377
 - locking down SMTP, 364
 - PKI, 353, 374
 - planning PKI, 375-376
 - private/public keys, 376
- transport-level security. See transport-level security
- Trustworthy Computing, 328-329
- virus checking, 147-148
- Windows lockdown guidelines, 308
- Windows Server 2003, 299
- Windows Vista, 300
- Security Configuration and Analysis tool, 301**
- Security Configuration Wizard (SCW), 337-339**
- Security Development Lifecycle (SDL), 328**
- security documentation, 756-757**
- security events, auditing, 333**
- Security Exchange Commission Rule 17a-4 (SEC Rule 17 A-4), journaling, 634**
- security groups, 169**
- security logs, viewing, 658-660**
- security standards, 429**
 - GLBA, 436-438
 - HIPAA, 431-436
 - ISO/IEC 17799, 429-430
 - Sarbanes-Oxley, 438
- security templates, 301-302**
 - customizing, 303-304
 - securing servers, 339
- seizing OM, 511**
- selection, components, 96**
- Send Connectors (on Edge Transport server), 362-363**
 - automatic creation of, 359-360
 - configuring, 362
 - manual creation of, 360
 - SMTP connectors, 356-357
- Send Connectors tab, Exchange Management Console, 223**
- Send/Receive button (Outlook Cached Exchange mode), 933**
- Sender Filter reports (Message Hygiene Analysis reports), 707**
- sender filtering, 230-231**
- Sender Filtering Agent, 230**
- sender filtering policies, 447**
- Sender Policy Framework (SPF), 447**
- Sender Policy Framework record, creating, 236-238**
- sender reputation, 348**
 - configuring with Exchange Management Shell, 254
- Sender Reputation Agent, 252**
 - Configuring with Exchange Management Console, 253-254
- Sender/IP Reputation, 252**
 - configuring, 252-253
- SenderID, 348, 447-448**
 - configuring with EMS, 239
 - Edge Transport servers, 233
 - configuring, 234-236
- SenderID Agent, configuring on Edge Transport servers, 238-239**
- SenderID Filter reports (Message Hygiene Analysis reports), 707**
- sending**
 - digitally signed and encrypted emails, Outlook, 387-388
 - digitally signed email, 389-392
 - email, 958
 - adding attachments, 958
 - configuring options, 962
 - deleting, 961
 - forwarding, 960-961

- modifying text, 964
 - reading attachments, 959-960
 - replying, 960-961
- encrypted email messages, 392-393
- Sendmail, Exchange Server 2007 migrations, 500**
- sensitivity options (email), OWA, 962**
- sensitivity, configuring email options, 962**
- server authentication, certificate templates, 377**
- Server Build documents, 37**
 - backups, 1085
- server build procedure documentation, 747**
- server build procedures, 747-748**
- server builds, 747**
 - standardizing, administrative policies, 346
- server configuration documents (backups), 1085**
- Server Configuration section, EMC, 602**
- server data, managing in Exchange Security Groups, 598**
- server failures (disaster recovery), 1117**
 - complete server failures, 1129
 - ASR (Automated System Recovery) restores, 1134-1135
 - boot loader file restores, 1135
 - manual recovery, 1130-1131
 - restoring versus rebuilding, 1130
 - System State restores, 1131-1133
- server management tasks, 272**
- server operating systems, considerations for, 97**
- server roles, 83**
 - CAS, 83
 - Client Access Server Role, 649
 - Edge Transport server, 83
 - Edge Transport Server Role, 648
 - in Exchange environments, 98-102
 - Hub Transport server, 83
 - Hub Transport Server Role, 648-649
 - identifying, 25-28
 - Mailbox server, 83
 - Mailbox Server Role, 649
 - OCS, 873
 - Unified Messaging server, 83
 - Unified Messaging Server role, 649
 - verifying installation of, 212
- Server rules (Common Components rules), 696-697**
- server-level security, 346**
 - antispam measures, 347-349
 - protection from viruses, 350-352
- servers**
 - antivirus applications, 351
 - auditing, logging, 658
 - configuring settings, Office Communications Server, 891
 - connectors, migrating, 557-559
 - deleting, 508
 - designing number and placement, 96
 - DNS
 - configuring, 150-153
 - multihomed, 142
 - need for, 133
 - third-party DNS, 134
 - troubleshooting, 150
 - types of, 134
 - UNIX BIND DNS, 134
 - Global Catalog, 162-164
 - hardening, 334-337, 343-344
 - installing, 547-551
 - mailboxes, migrating, 552, 554-556
 - management
 - backup, 652
 - eseutil utility, 655
 - ntdsutil utility, 653
 - Queue Viewer, 652
 - memory, 97
 - migration
 - deploying prototype labs, 510-512
 - finalizing, 508-510
 - move mailbox upgrade method, 529, 533
 - restoring prototype labs, 513
 - validating documents, 513
 - multihomed DNS servers, 142-143
 - naming, 102
 - optimizing, 96

- placement, 82, 96
 - client access points, 84-85
 - environment sizing, 84
- primary-secondary replication, 138
- public folders, migrating, 556-557
- redundancy, 96
- relationships, AD Global Catalog, 159
- securing, with security templates, 339
- security
 - patches/updates, 340
 - templates, 339
- server operating system considerations, 97
- services, migrating, 557-559
- SharePoint Portal, 848-849
- spam, 347-349
- transport-level security. *See* transport-level security
- upgrade pilot phase, 64
- upgrading
 - Active Directory forests/domains, 540-541
 - migrating Exchange 5.5, 535
 - optimizing Exchange 5.5 migration, 538-540
 - preparing Exchange 5.5 migration, 536-538
 - Windows Server 2003, optimizing, 299
- service (SRV) records, 141**
- service accounts, Exchange Server migrations, 551**
- Service Availability reports (Management Pack), 708-709**
- Service Availability Summary reports (Service Availability reports), 708**
- Service Level Agreements (Service Level Agreements), 43, 1082-1084**
- Service Monitoring rules**
 - Client Access rules, 699
 - Common Components rules, 698
 - Edge Transport rules, 700
 - Hub Transport rules, 701
 - Mailbox rules, 703
 - Unified Messaging rules, 704
- service packs (SPs)**
 - servers, 340
 - upgrading, 538
- services**
 - migrating, 557-559
 - Exchange Server 2003, 557
 - security, 336
 - SharePoint. *See* SharePoint
 - SRS, 550-551
- Services tab (ISA Server), 424**
- session disconnect, Remote Desktop for Administration, 722-723**
- sessions, upgrading collaboration, 52**
- Sessions tab (ISA Server), 424**
- setup privileges, delegating in Office Communications Server, 878-880**
- shared calendars (Outlook collaboration), 920-921**
- Shared Document pages**
 - actions, 854-855
 - MOSS, 853-855
- shared folders, effects on Cached Exchange mode (Outlook), 934**
- shared workspaces, 852**
- SharePoint**
 - alerts, 864
 - customizations, 851
 - discussions, 857-858
 - document libraries, 853, 855
 - document management, 860
 - document management platform, 851
 - file uploads, 864
 - interface, 859
 - lists
 - advantages, 863
 - editing, 863
 - listing of, 856
 - viewing, 863
 - meeting workspaces, 860-861
 - Office 2003 integration, 861-862
 - OWA
 - comparisons, 938
 - integration, 940

- personalizing, 862-863
- picture libraries, 855
- Portal server, 848-849
- presence menus, 865
- Site Directory, 864
- sites
 - customizing, 865
 - FrontPage 2003 integration, 867-868
 - templates, 866
- surveys, 864
- team collaboration, 851
- Team Services, 848-849
- technologies, 849
- templates, 864
- Word Shared Workspaces, 852
- SharePoint Designer, SharePoint Server (MOSS), 867**
- SharePoint discussions, MOSS, 857-858**
- SharePoint lists, MOSS, 856-857**
- SharePoint Portal Server (SPS), 848-849**
- SharePoint Server (MOSS)**
 - alerts, 864
 - customizing, 851, 862
 - development of, 848-849
 - document libraries, 853, 855
 - document management, 859-860
 - document workspace, 853
 - lists, 863
 - meeting workspaces, 860-861
 - new features, 850, 864
 - Office 2007 integration, 861-862
 - picture libraries, 855, 863
 - Shared Document pages, 853, 855
 - shared workspaces, creating, 852
 - SharePoint Designer, editing via, 867
 - SharePoint discussions, 857-858
 - SharePoint lists, 856-857
 - site directories, 864
 - sites, customizing, 865-867
 - surveys, 859
 - team collaboration, enabling, 851
 - Web Part tool pane, 865, 868
- SharePoint Team Services, 848-849**
- sharing**
 - information outside company (Outlook collaboration), 923-927
 - information via public folders (Outlook collaboration), 928
 - knowledge, 735
- shell commands, Unified Messaging, 840-842**
- short message service. See SMS**
- shortcut bar (OWA), 949**
- shortcuts (keyboard), OWA, 971**
- signatures**
 - email, setting default signatures in OWA, 974-975
 - S/MIME, 388-389
- signatures, configuring, 974**
- SilentDelete, 251**
- Simple Mail Transfer Protocol. See SMTP (Simple Mail Transfer Protocol)**
- simulation, migration, 511**
- Single Copy Clusters. See SCC (Single Copy Clusters), 1061**
- single forests, 76**
- single member server migrations (Windows Server 2003 migrations), 462-465**
- single site Exchange 5.5 migration, 539. See also migration**
- SIP (Session Initiation Protocol)**
 - basic call example, 845
 - methods, 844
 - response codes, 844
 - telephony, 811
 - terminology, 843
- site connectors, 558**
- site directories, MOSS, 864**
- site failures (disaster recovery), 1123**
 - alternate client connectivity methods, 1126
 - failing back after site recovery, 1125
 - failing over between sites, 1125
 - redundant/failover sites, creating, 1124-1125
- site links, planning Active Directory infrastructure, 187**
- site membership, planning Active Directory infrastructure, 187**

Site Replication Service (SRS), 550-551

deleting, Exchange Server migrations, 509

sites

MOSS sites, customizing, 865-867

role of, 30

SharePoint

customizing, 865

FrontPage 2003 integration, 867-868

size restrictions, email messages, 614**sizing**

CAS, 1182

databases, 1179-1180

Edge Transport servers, 1183

environments, 84

Exchange Server, 1177

database sizing/optimization, 1179-1180

memory requirements, 1180-1181

optimizing disk subsystems, 1177-1179

optimizing Exchange logs, 1180

server role-based sizing, 1181-1184

Hub Transport servers, 1182-1183

interfaces, OWA, 950

mailbox servers, 1181-1182

message logs, 666-667

OWA panes, 950

protocol logs (SMTP logging), 662-663

Unified Messaging servers, 1184

SLA (Service Level Agreements), 43, 1082-1084**slow access, optimizing OWA, 989****Slow Transition strategy (Windows Server migration), 461-462****slow-link connection awareness (Outlook Cached Exchange mode), 933****SMS (short message service), 762**

Outlook deployments, 1022, 1039-1040

SMTP (Simple Mail Transport Protocol), 85

Categorizer, 169

clients, 85

DNS, 143

clients, 144

DNS and, RFC standards, 145

ISA Server, 416-417

locking down, 364

scalability, 149

security, 147-148

server scalability and load balancing, 149-150

SMTP Categorizer, 169**SMTP connectors, 354-355**

connector topology, 355

how they are created, 357-358

Hub Transport server connectors, 358-359

automatic creation of Send Connectors, 359-360

manual creation of Send Connectors, 360

Receive Connectors, 356

Send Connectors, 356-357

SMTP logging, 661-664**SMTP mail routing, 143-144****SMTP mail security, 147-148****SMTP relays, 350****SMTP Receive Connector (Hub Transport servers), 590-591****SMTP Rejection Response, configuring, 249****SMTP Send Connectors, Hub Transport server configurations, 592-593****Snapshotting, SAN/NAS fault tolerance, 1200****SNMP (Simple Network Management Protocol), 104****snooze feature, OWA reminders, 985****SOA (Start of Authority), 139****SOA (Start of Authority) record, 139****soft/hard zoning, 1196****software, RAID sets, 1108****Software Update Services (SUS), 306**

servers, 340

spam. See also antispam

assessing risks, 330

filtering

Entourage, 1004

junk mail, 318-319

Outlook security, 911-914

OWA, 976

- protecting against, 315
 - blocking read receipts, 320
 - Exchange Server 2007 antispam features, 315-316
 - filtering junk mail, 318-319
 - filtering with Safe Senders and Block Senders, 319-320
 - Information Rights Management, 321
 - Outlook Email Postmark, 320
 - web beaconing, 316-317
- reporting, 349
- servers, 347-349
- tools, 315
- Web beaconing, 316-317
- spam beacon blocking, OWA, 988**
- Spam Confidence Level (SCL), 221**
- spam quarantine, 348**
 - configuring, 242
- Spamhaus Project, 224**
- Spell Check, email, 968**
- spell checking email, OWA, 968-969, 976**
- Spelling Options, 976**
- SPF (Sender Policy Framework), 447**
- SPF (Sender Policy Framework) records, 235-238**
- spreadsheet data, SharePoint list of, 856**
- SPs (service packs), servers, 340**
- SPS (SharePoint Portal Server), 848-849**
- SQL 2000, installing MIIS, 112**
- SQL 2000/2005, installing MIIS 2003, 112**
- SRS (Site Replication Services)**
 - deleting, 509
 - Exchange Server migrations, 550-551
- SRV (service) records, 141**
- SSL (Secure Sockets Layer)**
 - forcing SSL encryption for ActiveSync traffic, 774
 - securing access to ActiveSync, 766-767
- Statement of Work document, 37**
- stability, 535**
- stand-alone root CA, 375, 771**
- stand-alone subordinate CA, 375, 771**
- standalone servers, upgrading (Windows Server 2003 migrations), 464-465**
- Standard Authentication mode (OWA), 946-947**
- Standard Edition, Exchange Server 2007, 11**
- Standard Edition, Exchange 2003 Server, 11, 515**
- Standard version, 76**
- standardizing server builds, administrative policies, 346**
- standards**
 - implementing, industry standards and guidelines, 336-337
 - security standards, 429
 - GLBA, 436-438
 - HIPAA, 431-436
 - ISO/IEC 17799, 429-430
 - Sarbanes-Oxley, 438
- Start of Authority (SOA), 139**
- Start of Authority (SOA) record, 139**
- starting EdgeSync synchronization, 261**
- state monitoring, Management Pack, 685**
- Statement of Work, creating in Initiation phase, 44-49**
- STM databases, 502**
- storage**
 - Active Directory
 - authentication, 157
 - domains, 155
 - DSAccess, 166
 - DSProxy, 168
 - forests, 155
 - functionality, 169-172
 - Global Catalog, 159-160, 162-164
 - replication, 156
 - SMTP Categorizer, 169
 - trees, 155
 - universal group caching, 164-165
 - data. See NAS, SAN
 - LCR storage groups, recovering, 1076-1077
 - SCC configurations, 1066

storage groups, 87-88

- creating, EMC, 629-630
- design, 102
- layout, determining, 102
- LCR, 1098
- provisioning with EMS, 285

storage limits, databases, 632**Storage Quotas tab (mailbox settings properties), 613****storing**

- JET database (.edb files), NAS/SAN, 1205
- transaction log files (.log), NAS/SAN, 1203

storing data, Unified Messaging, 825**Strip, 251****structure, Design document (Planning phase), 53-54****stub zones, 137****Submission Queue Length performance counter, 700-701****submission queues (SMTP Receive Connector), 590****subnets, associating with sites, 186-187****Subscriber Access feature (Unified Messaging), 796-797****subscriber access numbers, associating to dial plans (Unified Messaging), 816****subscribing**

- to RSS feeds in Outlook, 907
- servers to Exchange Server 2007 organization with EdgeSync, 258

subscription files, creating new EdgeSync subscription files, 260**subscriptions, removing EdgeSync subscriptions, 261****summarizing, Statement of Work (Initiation phase)**

- budgets, 48
- goals, 45-46
- resources required, 47
- risks and assumptions, 48
- scope of work, 45
- timelines and milestones, 46

support, upgraded environments, 66**support and project completion document, 746****surveys**

- MOSS, 859
- SharePoint, 864

SUS (Software Update Services), 306

- servers, 340

switches, configuration documents (backups), 1086**symmetrical encryption, 376****synchronization**

- MIIS, 108-110
 - account provisioning, 110
 - group management, 112
 - installing, 112
 - role of MAs, 111-112
- offline, Entourage, 1005

synchronizing

- directory information with MIIS 2003, 108
- eDirectory/NDS with Active Directory using services for NetWare, 116-118
- Exchange Server 2007 with Novell eDirectory, 113
- passwords, with IDMU, 128
- user information between AD and UNIX, 128-129

syntax, 276**System Attendant rules (Mailbox rules), 703****system caches, 1173****system failover documentation, 755. See also documentation****system failures, backup strategy development, 1089-1090****system PTE (Page Table Entries), 1173****System state**

- complete server failures, restoring (disaster recovery), 1131-1133
- Windows Server 2003, backups, 1105

system volume failures (disaster recovery), 1127**system volumes, backups, 1105****Systems Management Server (SMS), 1022**

- deploying Outlook, 1017

T**T.38 (Real-Time Facsimile Transport Protocol), telephony, 812****task assignments (backup strategy development), 1090-1091****Task Manager, performance monitoring, 1171**

Task option, OWA, 985**tasks**

- diagnostic tasks, 272
- maintenance, verifying, 675
- organizational management tasks, 272
- OWA, 985-986
- recipient management tasks, 271
- server management tasks, 272
- SharePoint list of, 856

TCS (Transactions and Code Sets), 432**TDM (Time-Division Multiplexing), telephony, 811****team designations (backup strategy development), 1090-1091****Team Services (SharePoint), 848-849****technical training documentation, 758****technical reporting, 756. See also documentation****technologies, SharePoint, 849****telephony**

- circuit-switched networks, 810
- circuits, 810
- hunt group objects, Unified Messaging, 802
- hunt groups, 814
 - Unified Messaging, creating in, 820-822
- IP/PBX (Internet Protocol/Private Branch Exchange), 810
- IP/VoIP gateways, 810, 814
- packet-switched networks, 811
- PBX, 811, 814
- POTS, 811
- PSTN, 811
- RTP, 812
- SIP, 811
 - basic call example, 845
 - methods, 844
 - response codes, 844
 - terminology, 843
- T.38, 812
- TDM, 811
- Unified Messaging, 810-811
 - installation prerequisites, 813-814

Unified Messaging integration, 794

VoIP, 811

Telnet, 607**templates**

- adding to certificate servers, 384
- as-built documentation, 748
- security, 301-304
- servers, 339
- SharePoint, 864
 - development enhancements, 866

temporary prototype domain controllers, 511**Terminal Server Client for Mac, 1007-1008**

- installing, 1009-1010

Terminal Services, 711-712

- access, Remote Desktop, 715
- accessing, with web-based clients, 714-715
- accessing 32-bit Windows RDP clients, 714
- installing for remote administration, 713-714
- licenses, 713
- mobile devices, 727
 - securing, 727-729
- planning considerations for, 712
- Remote Desktop, 715
- remotely connecting to a terminal server console, 715-716
- security, 712-713

Terminal Services Client, Macintosh, 1007-1008

- functionality, 1008-1010

Test cmdlets (Unified Messaging shell commands), 842**Test-UMConnectivity cmdlet, Unified Messaging, monitoring/troubleshooting, 827****testing, 36. See also Prototype phase**

- backup strategies, 1092
- databases, 655
- disaster recovery, 62
- disaster recovery plans, 1123
- Exchange Server migrations, 517-518
- free disk space, 674
- Outlook deployments, 1035

- Unified Messaging, 824-825
- UPS (Uninterruptible Power Supply), monthly database maintenance, 677
- text, email, 964**
- third-party antispam products, antispam measures, 349**
- third-party antivirus products, 351-352**
- third-party CA, installing on CAS, 767-770**
- third-party DNS, 134**
- third-party functionality, 78**
- third-party product functionality, identifying, 78**
- time zones, meetings, creating by (Outlook), 904**
- time/date formats, OWA (configuring in), 977**
- timed logoffs, OWA security, 989**
- timelines**
 - Migration document, 59
 - summarizing, in Statement of Work (Initiation phase), 46
 - upgrades, 46
- Tip of the Day feature (EMS), 607**
- TLS (Transport Layer Security), 18**
 - transport-level security, 354
- To fields (email), removing users from (OWA), 957**
- To tab (ISA Server), 410**
- Toolbox (EMC), 602, 638**
 - Configuration Management Tools section, ExBPA, 639-640
 - Database Recovery Tools section, 640
- tools**
 - ADC, 541-547
 - ADClean, 510
 - dnscmd utility, troubleshooting DNS, 154
 - DNSLINT, troubleshooting, 153
 - EMC
 - disaster recovery tools, 651-652
 - ExBPA, 651, 677
 - mail flow tools, 652
 - Mail Flow Tools section, 640-642
 - performance tools, 652
 - Performance Tools section, 642-643
 - ExMerge, 554-556
 - Ipconfig, troubleshooting DNS, 151
 - maintenance
 - backup, 652
 - best practices, 670-671
 - eseutil utility, 655
 - managing, 679-680
 - ntdsutil utility, 653
 - postmaintenance procedures, 679
 - Queue Viewer, 652
 - scheduling best practices, 673-677
 - MBSA, 336-337
 - ntdsutil, 511
 - OrgPrepCheck, 541
 - pfmigrate, 556-557
 - Security Configuration and Analysis, 301
 - spam, 315
- topologies**
 - Active Directory, replication, 95
 - diagrams, 749
- topology diagrams, environment documentation, 749**
- tracking**
 - backups, 1087
 - email, 963
 - user access, audit logging, 656-660
- tracking logs, messages, 1208**
- tracking options (email), OWA, 962**
- Traffic tab (ISA Server), 410**
- training**
 - documentation, 757-758
 - Migration document, 59
- Training and Support phase (Windows Server migration), 461**
- training documentation, 757-758**
- training plan, Migration document, 59**
- training plan document, 742-743**
- transaction log files (.log), storing, 1203**
- Transactions and Code Sets (TCS), 432**
- transfers, DNS zones, 138**

transforms

- Outlook client configuration, 1020

- Outlook deployments

- client installations, 1028-1030

- creating for, 1026-1027

- profiles, creating, 1028

transport agents, 350, 439

- Edge Transport server role, 446-448

- Hub Transport role, 440

- email disclaimers, 445-446

- journaling and mail retention policies, 442-445

- RMS, 442

- Transport rules agents, 441-442

- outlining, 440

- prioritizing, 439

- role in policy management, 439

- troubleshooting, with Pipeline tracing, 439-440

transport dump feature (Hub Transport servers), CCR, 1056**Transport Layer Security (TLS), 18**

- transport-level security, 354

transport pipelines

- Exchange Server performance, improvements to, 1161

- Hub Transport servers, 589

Transport rules

- Edge Transport rules, 700

- Hub Transport rules, 701

Transport rules agent, 441-442**transport rules agent (Hub Transport servers), 580**

- rules, creating, 580-581

Transport Rules tab, Exchange Management Console, 224**transport-level security, 352**

- encrypting email communications, 352-353

- PKI, 353, 374

- CA, 374-375

- certificates, 377

- planning, 375-376

- private/public, 376

- S/MIME, 354

- SMTP locking down, 364

- TLS, 354

trees, Active Directory, 155**trend analysis, Management Pack, 686****triple mirroring, SAN/NAS fault tolerance, 1200****troubleshooting**

- Database Troubleshooter, 640, 651

- disaster recovery, documentation, 754-755

- DNS, 150

- dnscmd, 154

- DNSLINT, 153

- Event Viewer, 151

- ipconfig utility, 151-152

- nslookup, 152-153

- Performance Monitor, 152

- documentation, benefits of, 734-736

- Mail Flow Troubleshooter, 640, 652

- maintenance

- best practices, 670-671

- scheduling best practices, 673-677

- MSDSS, 118-120

- OWA, 954

- Performance Troubleshooter, 643, 652

- postmaintenance procedures, 679

- postmigration cleanup, 510

- servers

- antivirus applications, 351

- spam, 347-349

- spam, 315

- filtering junk mail, 318-319

- Web beaconing, 316-317

- tools

- backup, 652

- eseutil utility, 655

- ntdsutil utility, 653

- Queue Viewer, 652

- Transport agents, Pipeline tracing, 439-440

- Unified Messaging

- active calls, 827

- connectivity, 827

- event logs, 836-840

- performance monitors, 828-836

- VM, avoiding fragmentation, 86

- Windows Server 2003, 334-337, 343-344

troubleshooting documents, 751

Trust Center (Outlook), 906

trusted scripts, EMS, 606

Trustworthy Computing, 297-298, 328-329

Tsmmc.msc, 715

two way synchronization, 545

two-line view (OWA), 952

types

- of groups, Windows, 169

- of servers, DNS, 134

U

UC (unified communications)

- Communicator client, 874

- installing, 892

- development of, 872

- OCS, 872-873

- Office Communications Server

- adding users to, 889

- administration, 889

- configuring, 883-887

- configuring server settings, 891

- configuring user settings, 889

- deploying, 881, 883

- installing, 875-881

- installing admin tools, 888

- Instant Messenger Filter, 891

- starting, 887

- validating functionality, 887

- Office Live Meeting, 874

- installing, 893

- web conferencing, 894

UI (user interface), navigating OWA, 948-953

UM Connectivity rules (Unified Messaging rules), 704

UMIP gateway objects, Unified Messaging, 801

Unattended mode, 213-214

Unicast mode (NLB), 1073

Unified Messaging, 21-22

- audio codecs, 807

- Auto Attendant, 798, 803-804

- auto attendants, creating, 819-820

- call answering, 795

- components of, 799

- data storage, 825

- dial plan objects, 800-801

- dial plans

- associating auto attendants with, 819-820

- associating servers with, 819

- associating subscriber access numbers to, 816

- creating, 816

- linking IP gateways to, 817-818

- removing servers from, 840

- faxes, 796

- hunt group objects, 802

- hunt groups, creating, 820-822

- Inbox, 795

- installing, 813-815

- IP/VoIP gateways, 809

- IP gateways, 817-818

- mailbox policy objects, 803

- mailboxes, enabling, 822

- monitoring/troubleshooting

- active calls, 827

- connectivity, 827

- event logs, 836-838, 840

- performance monitors, 828-836

- operating system requirements, 808

- Play on Phone feature, 798

- port assignments, 812

- shell commands

- Add/Remove cmdlets, 840-841

- Copy cmdlets, 843

- Enable/Disable cmdlets, 842

- Get/Set cmdlets, 841

- New cmdlets, 843

- Test cmdlets, 842

- Subscriber Access feature, 796-797
- telephony, 810-811
 - circuit-switched networks, 810
 - circuits, 810
 - hunt groups, 814
 - installation prerequisites, 813-814
 - IP/BPX (Internet Protocol/Private Branch Exchange), 810
 - IP/VoIP gateways, 810, 814
 - packet-switched networks, 811
 - PBX (Private Branch Exchanges), 811, 814
 - POTS (Plain Old Telephone System), 811
 - PSTN (Public Switched Telephone Networks), 811
 - RTP (Real-Time Transport Protocol), 812
 - SIP (Session Initiation Protocol), 811, 843-845
 - T.38 (Real-time Facsimile Transport Protocol), 812
 - TDM (Time-Division Multiplexing), 811
 - VoIP (Voice over Internet Protocol), 811
- telephony integration, 794
- testing, 824-825
- UMIP gateway objects, 801
- unified messaging server objects, 805
- user properties, 806
- Web Services, 806
- Unified Messaging Local Fax Service Availability Summary reports (Service Availability reports), 708**
- Unified Messaging Local Voice Service Availability Summary reports (Service Availability reports), 709**
- Unified Messaging Remote Fax Service Availability Summary reports (Service Availability reports), 709**
- Unified Messaging Remote Voice Service Availability Summary reports (Service Availability reports), 709**
- Unified Messaging role, 100**
- Unified Messaging rules (Management Pack), 704**
- Unified Messaging server, 83**
- unified messaging server objects, **Unified Messaging, 805**
- Unified Messaging server roles, 28, 649**
 - installing, 215
- Unified Messaging Servers**
 - backups, 1096
 - Exchange Server 2003 migrations, 529
 - optimizing, 1168
 - sizing, 1184
- Unified Messaging tab (mailbox features properties), 614**
- universal group caching, 164-165**
- universal groups, 171**
- UNIX**
 - components of services, 124
 - development of services, 123-124
 - installing services for UNIX R2, 125-128
 - prerequisites of services, 124-125
 - synchronizing user information between Active Directory, 128-129
- UNIX BIND DNS, 134**
- UNIX desktops, Exchange Server support for**
 - Outlook Express, 997-1001
 - OWA, 996, 1012
- UNIX R2, installing services for, 125-128**
- UNIX systems, integrating with Active Directory and Exchange Server 2007, 122-123**
- Unreachable Queue Length performance counter, 700-701**
- unread, marking email messages, 965**
- unread/read, marking email as (OWA), 965**
- unsupported connectors, 559**
- updates. See also migration**
 - backup documentation, 1086
 - link state updates, Exchange Server migrations, 503
 - Outlook deployments, Group Policies, 1035-1038
 - security, 304
 - security patches and updates, 340
 - servers, 340
 - Windows Update, 304, 340
 - WSUS, 340-341
- updating**
 - operating systems, 194
 - Windows 2003 Server Automatic Updates, 90

upgrading, 36, 65-66. See also migration

Active Directory

- forests, separate forests to single forests (Windows Server 2003 migrations), 476-481

- schema upgrades (Windows Server 2003 migrations), 467-468

- decommissioning the old Exchange environment, 66

- documentation, 37

- domain controllers, AD forest upgrades (Windows Server 2003 migrations), 469

- domain functional levels, AD forest upgrades (Windows Server 2003 migrations), 472-475

- Entourage, 1005

- Exchange 5.5, 535

- Active Directory forests/domains, 540-541

- optimizing migration, 538-540

- preparing migration, 536-538

- from earlier versions of Microsoft Windows, 188-190

- forest functional levels, AD forest upgrades (Windows Server 2003 migrations), 472-475

- in-place upgrades versus new hardware migrations (Windows Server migrations), 461

- initiation phase, 38

- goals, 39-44

- statement of work, 44-49

- migration, move mailbox upgrade method, 529, 533

- pilot phase, 63-65

- planning phase

- Design documents, 51-54

- discovery, 49-51

- migration documents, 55-60

- production migration/upgrade, 65-66

- prototype phase, 61-63

- service packs, 538

- standalone servers (Windows Server 2003 migrations), 464-465

- supporting the new environment, 66

uploading files, SharePoint, 864**UPN (user principal name), 81****UPS (Uninterruptible Power Supply), testing, 677****Use existing profile setting (OCT), 919****user access, tracking, audit logging, 656**

- event auditing, 657

- viewing security logs, 658-660

user accounts, migrating (Windows Server migrations), 489, 493**user certificates, creating to group policies to distribute, 384-385****user identification, Outlook, 314****user interface (UI), navigating OWA, 948-953****user modes (OWA), 945-947****user principal name (UPN), 81****user properties, Unified Messaging, 806****username mapping, synchronizing between Active Directory and UNIX, 128****users**

- adding to, Office Communications Server, 889

- authenticating, in Outlook, 313

- configuring settings, Office Communications Server, 889

- end-user training documentation, 758

- MIIS, 108-110

- account provisioning, 110

- group management, 112

- installing, 112

- role of MAs, 111-112

- modes, OWA clients, 947

- property sheets, viewing, 968

Users tab (ISA Server), 411**utilities**

- ipconfig, troubleshooting DNS, 151-152

- ntdsutil, 511

- Remote Desktop, Terminal Services access, 715

V**validating**

- backup strategies, 1092

- backups, 1087

- full server recovery process (disaster recovery), 1120

- certificates, 385-387

- documents, migration, 513

- Migration document, 63
 - Office Communications Server functionality, 887
 - OrgPrepCheck tool, 541
 - verification**
 - verifying**
 - Active Directory, Global Catalog, 162
 - backups, daily database maintenance, 673-674
 - creation, of global catalog, 162
 - maintenance tasks, 675
 - MMC 3.0 is installed, 206
 - online database maintenance tasks, weekly data-
base maintenance, 675
 - OrgPrepCheck tool, 541
 - public folder replication, 675
 - server roles, 212
 - VeriSign, 378**
 - versions, 76**
 - decommissioning, 66
 - of Exchange, determining, 102
 - Exchange Server 2003
 - Enterprise Edition, 12, 515
 - Standard Edition, 11, 515
 - of Exchange Server 2007, 11-12
 - installing, 102
 - LDAP implementing, 121-122
 - videoconferencing, OCS, 873**
 - viewing**
 - antispam reports with PowerShell scripts,
266-267
 - context menus, 970
 - email, modifying viewing order, 952
 - Event Viewer, logs, 674
 - Queue Viewer, 652
 - reading pane (OWA), 953
 - SharePoint lists, 863
 - user property sheets, 968
 - views, calendars, 979**
 - virtual memory, 1172**
 - optimizing, 1174
 - virtual memory fragmentation issues, avoiding, 86**
 - Virtual PC, 995-996, 1010**
 - virus checking, 147-148**
 - Virus Scanning Application Programming Interface (VSAPI), 103**
 - viruses. See also antivirus**
 - assessing risks, 330
 - client-based virus protection, 307
 - server-level security, 350-352
 - VM (virtual memory), avoiding fragmentation, 86**
 - VoIP (Voice over Internet Protocol), telephony, 811**
 - VPN access, 19**
 - VSAPI (Virus Scanning Application Programming Interface), 103**
 - VSS (Volume Shadow Copy Service), 1104-1107**
- ## W
- WAN connection documents (backups), 1086**
 - Warning Message Interval option (EMC), 632**
 - Web beaconing, 316-317, 914**
 - protecting against, 316-317
 - web beacons, disabling in OWA, 323-324**
 - web conferencing**
 - OCS, 872
 - Office Live Meeting, 894
 - Web Part tool pane (MOSS), 868**
 - sites, customizing, 865
 - Web Services, Unified Messaging, 806**
 - Web Services rules (Client Access rules), 699**
 - web-based clients, accessing Terminal Services, 714-715**
 - weekly database maintenance, 675-676**
 - weekly maintenance, 675. See also maintenance**
 - WEP (Wired Equivalent Protocol), 729**
 - WhatIf, EMS syntax, 278**
 - wildcards, address rewriting, 256**
 - Windows**
 - groups, 169
 - non-Windows environment integration
 - account provisioning (MIIS), 110
 - applying MSDSS (Novell eDirectory), 115-120
 - deploying MIIS (Novell eDirectory), 114-115
 - group management (MIIS), 112

- installing MIIS, 112
- LDAP, 120-122
- MIIS, 108-110
- Novell eDirectory, 113-114
- role of MAs (MIIS), 111-112
- securing for Edge Transport server roles, 366-367
 - administrator permissions, 370-371
 - creating new security policies, 368-370
 - implementing network security, 367
 - SCW template, 367-368
- securing Windows environments, 298-299
 - client-based virus protection, 307
 - lockdown guidelines, 308
 - security patches and updates, 304-307
 - security templates, 301-304
 - Windows Server 2003 security improvements, 299
 - Windows Vista security improvements, 300
- security
 - lockdown guidelines, 307
 - patches/updates, 304
 - templates, 301-303
- upgrading from earlier versions of, 188-190
- Windows 2003, domain controllers, 1147**
- Windows 2003 Group Policy, deploying Outlook, 1017**
- Windows backup utility. See ntbackup.exe (backup utility)**
- Windows certificate of authority, installing, 380**
- Windows group types, 169**
- Windows Management Instrumentation, 110**
- Windows Mobile, 762**
- Windows Mobile 5.0 Device Emulator, 789-790**
- Windows Mobile devices, installing root certificates, 774-777**
- Windows Mobile Pocket PC, 786-788**
- Windows Mobile Smartphone, 786-789**
- Windows Mobile, Exchange Server support for, 1011**
- Windows NT 4.0 domain, upgrading from, 189**
- Windows Server 2000, migrating to Windows Server 2003**
 - Active Directory forest upgrades, 465-475
 - “Big Bang” versus Slow Transition strategies, 461-462
 - combining Active Directory forests, 476-481
 - consolidating/migrating domains, 481-489, 493-495
 - Exchange Server 2007 in native functional level domains, 458
 - in-place upgrades versus new hardware migrations, 461
 - migration options, 462
 - migration requirements, 457-459
 - phases of, 460
 - single member servers, 462-465
- optimizing, 299

- prerequisites for Exchange Server 2007, 178
 - secure messaging environments, 332
 - auditing policies, 334-335
 - auditing security events, 333
 - implementing industry standards and guidelines, 336-337
 - keeping services to a minimum, 336
 - layered approach, 332-333
 - locking down the file system, 336
 - MBSA, 336
 - physical security considerations, 333
 - restricting logon access, 333
 - securing servers with security templates, 339
 - Security Configuration Wizard, 337-339
 - security patches and updates, 340-341
 - security, 339-340
 - security improvements, 299
 - troubleshooting, 334, 336-337, 343-344
 - Windows Server 2003 Active Directory, 171-173**
 - Windows Server 2003 Automatic Updates, 90**
 - Windows Server 2003 Service Pack 1, installing, 192-194**
 - Windows Server Group Policies, Outlook deployments (update/patch management), 1035-1038**
 - Windows Server Group Policy**
 - Outlook client configuration, 1019
 - Outlook deployments
 - Exchange Client Policy options, 1031
 - managing, 1022
 - Windows Server Update Services (WSUS), 306-307**
 - Windows Software Update Services, patching operating systems, 90**
 - Windows Update, 304, 340**
 - servers, 340
 - Windows Vista, security improvements, 300**
 - Windows-based mail clients, 994**
 - Macintosh support, 994-995
 - OWA functionality, 996-997
 - wiping ActiveSync devices, 785-786**
 - Wired Equivalent Protocol, 729**
 - Wizard mode (Ntbackup.exe), 1100**
 - wizards**
 - CIW, creating transforms, 1026-1027
 - Connection Agreement, 544-547, 550
 - Mailbox Resource Wizard, 543
 - Microsoft Sender ID Framework SPF Record Wizard, 236
 - New Database Wizard (EMC), 631
 - New Distribution Group Wizard (EMC), 619
 - New Dynamic Distribution Group Wizard (EMC), 620-621
 - New Mail Contact Wizard (EMC), 623-624
 - New Mailbox Wizard (EMC), 611-612
 - New Storage Group Wizard (EMC), 630
 - Security Configuration Wizard, 337-339
 - WMI (Windows Management Instrumentation), 110**
 - Word, creating shared workspaces, 852**
 - workspaces**
 - meeting, SharePoint, 860-861
 - Word Shared Workspaces, 852
 - WSS (Windows SharePoint Services), 848-850**
 - WSUS (Windows Server Update Services), 306-307, 340-341**
 - WWN (World Wide Name) zoning, 1196**
- ## X
- X.500 directory services, 120**
 - x64-bit hardware, Exchange Server migration, 501**
 - x64-bit platforms, 16-17**
 - XML (Extensible Markup Language)**
 - EMS (Exchange Management Shell), 606
 - OWA (Outlook Web Access), 939
 - XMLfiles, Management Pack, 688**
- ## Y
- Yahoo!, OCS connectivity, 873**
- ## Z
- zone transfers, DNS components, 138**
 - zones**
 - Active Directory-integrated zones, 136
 - DNS, 135-137
 - transfers, 138

1288 zones

DNS components, 135-137

forward lookup zones, 135

primary zones, 136-137

reverse lookup zones, 135

secondary zones, 137

stub zones, 137

zoning, 1196