

Index

Symbols & Numbers

/n, 181

/o, 181

%pc, 338–39

% privileged time, 313

% user time, 313

9iRAC, 132, 156

A

ABAP, 21, 39–40, 61, 177, 185,
212, 238, 285, 312, 360

ABAP dumps, 285

ABAPers, 7, 313

Active users, 44, 285, 305, 324,
351

ActiveX, 123, 137, 139, 142,
144, 157

Advanced Planner and
Optimizer (APO). *See* SAP:
APO (Advanced Planner
and Optimizer)

AGate (Application Gate,
component of SAP ITS),
204, 302

agent, 122, 147, 163–64,
176–79, 184, 322, 352

CEN, 150, 183–184

defined, 184

OpenView (HP) SMART
Plug-Ins, 177–78

AIX (IBM), 103, 168, 313,
377

AL02. *See* CCMS

AL03. *See* CCMS

AL05. *See* CCMS

AL08. *See* CCMS

AL11. *See* CCMS

ALE (Application Link
Enabling), 231, 321

Allocation unit, 27, 85, 170,
204

AMD, 227, 366

Apples-to-apples testing, 27,
48, 60, 73, 78–79, 83, 121,
210, 232, 292, 316, 320,
325, 351, 354, 363

API. *See* Application
Programming Interface
(API)

APO (Advanced Planner and
Optimizer), 4, 18, 25, 74,
88, 225–26, 235

Application layer
heterogeneous system
landscape, 226

Application Link Enabling. *See*
ALE

Application Programming
Interface (API)
defined, 95
SAP, 132, 182–83, 241, 255,
268, 271, 290, 338

Application server response
time, 80

Application Servers, 77, 104,
124–25, 127, 136, 147, 150,
172, 195, 203, 210, 214–15,
218, 228, 238, 281–82,
353

Application Service Provider
(ASP), 24

AppManager (NetIQ). *See*
Systems management

ATR, 369

AutoController, 95, 145–48,
152, 158, 243, 256, 263,
268–69, 300, 303, 306–8,
315, 322

client driver, 271

console, 272

virtual client, 269, 272

AutoIT, 136–139, 157, 183,
198, 232

Automated data collection
(scripting), 93, 160, 165,
180, 182, 260–61, 323–24

AutoTester ONE (AT1),
182–183, 249–50, 253, 256,
263, 268, 275, 283, 289

AutoTester ONE CTRL+S, 263

Availability, 7, 30–31, 59,
65–68, 94, 98, 101–2, 121,
132, 150, 171, 178–81,
183–84, 201, 222, 226, 244,
288, 292, 299

Availability through
Redundancy (ATR), 369

Average load testing, 19

B

Background jobs, 67, 77, 183,
331, 336, 338–39

Background noise, 241

Background work process, 336

Bar charts, 115

Baselines, 43, 48, 54, 57, 62,

75, 76, 80, 211–14,

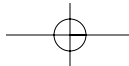
223–224, 229, 239,

300–301, 304, 348, 350–54,

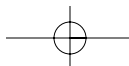
356

establishing, 292–94

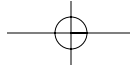
- Basis, SAP, 2, 3, 10, 38–40, 42, 90, 91, 96, 101, 105, 132, 158, 184, 223, 286, 310, 335
- Batch jobs. *See* Background jobs
- Benchmark
 CRM CIC, 236
 generating new Perl code, 137, 140, 232
 high water, 123
 repeatable, 136
 standard (SAP), 72, 86, 109, 137
 starting point for custom testing, 25, 27, 225, 235, 257
 variables (control), 26–27, 223, 246–51, 256, 261, 263
- Best practices, 1, 16, 118, 202, 223, 299, 330, 352, 366
 network, 127
 performance tuning and stress testing, 1, 16
 rebooting prior to testing, 234, 299
 script recording and writing, 142–43, 259–60
 security, 127
 sources of, 352
 staffing testing
 organizations, 89, 92–97
 test package assembly, 222–24
 WAST, 118
- Big hair, 31
- Biztalk (Microsoft), 230
- Blocksize. *See* Allocation unit
- BMC Patrol. *See* Systems management: Patrol (BMC)
- Body of knowledge, 23, 188
- Bottleneck
 defined, 17, 19
 forever–shifting, 26
- Breakout Software MonitorIT, 163
- Bstat, 171
- Budgets, 16, 92, 241
- Business Continuity Planning.
See DR (Disaster Recovery)
- Business processes
 documentation, 160–61, 242
 repeatable, 78–81
 scripts, 242
 which to test and why, 73–75
- Business Sandbox, 61–62
- Business warehouse. *See also* SAP: Business Information Warehouse (BW)
 loads, 50, 225
 stress testing, 47–50
- Buy–in, 32, 187, 191, 253, 268
- ## C
- CA Unicenter, 177
- Capacity on Demand (COD), 24–25
- Capacity planning, 12, 37, 54, 123, 162, 192, 215, 218, 287, 295
- Carrying capacity, 375–76
- CATT (SAP Computer-Aided Test Tool), 91, 143–49, 221, 243
- CCMon. *See* Monitoring tools
- CCMS (SAP Computing Center Management System and T–codes)
 AL02, 311
 AL03, 311
 AL05, 311
 AL08, 77, 83, 181–82, 215, 239, 261, 281, 305, 310, 325, 338
 AL11, 239, 312
 DB02, 150, 181, 239, 302, 325, 356
 DB05, 330–31, 333, 358
 DB13, 239, 358
 historical ST07, 337
 monitoring, 38–39, 159–60, 300–3, 381
 monitoring infrastructure, 195, 290–92
 OS01, 239
 OS07, 181
- RZ03, 312
 RZ04, 312
 RZ08, 311
 RZ10, 239, 360
 RZ20, 184, 239, 302, 308–9, 323, 361, 386
 RZ21, 312
 SA38, 312
 SAINT, 185
 SCC4, 240
 SCC8, 239
 SCCL, 239
 scripting, 150, 182, 261, 341
 SE13, 330
 SE38, 150–51, 312
 SM04, 150, 181, 200, 239, 310, 325
 SM12, 312, 326, 327
 SM13, 312, 326, 327
 SM21, 312
 SM36, 238
 SM37, 238, 311
 SM50, 239, 310–11
 SM51, 239, 261, 300, 312
 SM59, 300, 312
 SM64, 238
 SM66, 239, 305–6, 310, 311, 323, 325, 353
 SMGW, 311
 SMLG, 311, 318, 325
 SMQS, 311
 SSAA, 312, 381
 ST01, 312
 ST02, 215, 239, 310, 329–30, 358, 361, 381
 ST03, 49, 150, 181–83, 215, 219, 227, 236–37, 263, 303, 310, 320, 330, 333, 335–39, 356, 358, 361–62, 381, 383
 ST03G, 335, 337, 338
 ST03N, 182–83, 219, 310, 335–38
 ST03x, 335, 337
 ST04, 150, 181–82, 200, 215, 239, 302, 303, 310, 326, 328, 335, 356–57, 361, 381
 ST05, 312, 361



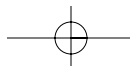
- ST06, 150, 181, 215, 239,
303, 305, 310, 333, 381
- ST07, 150, 181, 215, 239,
305–6, 310, 337, 358
- ST09, 311
- ST10, 330–31, 358
- ST11, 312
- ST12, 311
- ST22, 312
- STAD, 186, 310–11,
320–21, 324, 330, 333,
335, 338–39
- STAT, 310
- STATRACE, 186, 323
- Central Instance (CI), 170, 195,
214, 255, 358, 360, 370
- Change Control. *See* Change
Management
- Change Management, 10, 34,
53, 91–92, 101–2, 180, 319
- Change Waves, 7, 23, 30, 49,
89
- Character sets. *See* Unicode
- CheckIt Diagnostics (or
CheckIt Utilities), 115–16,
162–63, 212, 213
- Checklists
execution, 173, 192–93,
205–6, 295, 301, 304,
323
paper-based, 180
- chkdsk, 170
- Christian Metal, 31
- Citrix MetaFrame. *See*
MetaFrame (Citrix)
- Client copies, 239, 273
- Client drivers
installing, 268–69
sizing, 253, 267, 269
tuning, 282, 285, 287
- Clients
client strategy, 267
front-end, 6, 38, 96, 125,
220, 270, 321
- Client/server, 38, 146
- CI. *See* Central Instance (CI)
- Clones, 262, 273
- Clusters, 25, 68, 132, 166–68,
369–71
- Collaboration, 30, 41, 58
- Collaboration Engine (SRM), 54
- Collecting statistics, 321–25,
328, 333–37
- Commands (OS)
bstat, 171
chkdsk, 170
estat, 171
glance, 168
gpm, 168
iostat, 168, 171
lsdev, 168
ping, 138, 163, 372
ps, 168
sar, 168
swapinfo, 168, 283
top, 168, 282
tracert, 138
vmstat, 168, 282
w, 168
- Comparative analysis, 130
- Competency Centers, 99, 112,
187, 352, 376
benefits of using, 191–92
- Component testing, 110, 123,
128, 136, 159, 231–32
- Components (mySAP). *See*
SAP
- Compression, 12, 171
- Computer-Aided Test Tool. *See*
CATT; eCATT
- Computing Center Management
System. *See* CCMS (SAP
Computing Center
Management System and
T-codes)
- Concurrent users, 44, 104, 127,
276
- Consolidation (IT), 15, 29–31,
45–46, 58, 363–64, 382–84
- Constraints, 31–34
- Continuous improvement, 107,
287
- control variables, 25–27
- cooling (data center facilities),
85, 104
- Comma-separated value. *See*
CSV (comma-separated
value)
- Core script development,
243–44
- Costs
acquisition, 377
delta analysis, 377–378
downtime, 35
lifecycle, 377
staffing (people costs), 35,
377–378
standardization, 30–31
- CPUs
delta testing, 72, 121, 279,
363
- Crash and burn resources
(C&B), 196
- CRM (Customer Relationship
Management). *See* SAP:
Customer Relationship
Management (CRM)
- Cross-application business
processes, 25, 56, 225, 236,
282, 352
- CSV (comma-separated value),
175
- Current-state baseline, 160,
193, 376
- Current-state documentation,
160–65
- Customer-specific
benchmarking, 20, 109,
232
- Cutover, 15
- D**
- Daily operations, 381
- Data
clean, 200
inline data input, 246
list of good data
combinations, 249
- Data collection
cutoff, 277
manual, 163, 280
observation (by way of),
181–82
using SAP CCMS, 44, 180,
198, 210, 280
- Data General, 4
- Data locking, 71

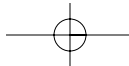


- Data types
 - batch input, 270
 - input, 18, 70, 124, 193, 204–5, 207–9, 270
 - input files, 249–51
 - mapping, 349
 - output, 146, 206, 214, 254, 231, 254, 260–61
 - valid, 230–32, 247, 267
 - Database Administrator (DBA), 3, 98, 152
 - Database connectivity, 56, 146
 - Databases
 - data archiving, 79, 179, 199
 - Informix, 7, 177, 198, 215
 - load tools, 121, 122, 124, 129–36, 230–31, 365
 - management tools, 38–39, 170–71
 - Oracle, 4, 56, 73, 103, 146, 166, 198, 215, 227, 358, 377, 383
 - populating via tools, 262
 - SQL Server, 4, 73, 102, 127, 129–36, 146, 198, 203, 208, 215, 358, 377
 - tuning, 84, 214–16, 356–58
 - DB Request time, 182–83, 308, 330, 335, 345, 383
 - DB02. *See* CCMS
 - DB13. *See* CCMS
 - DBA Planning Calendar, 358
 - Dell OpenManage, 172
 - Delta analysis, 378
 - Delta testing, 71–72, 109, 115, 116, 130, 152, 162, 193, 279, 363, 383
 - Demand Planning (relative to APO), 53, 91
 - Design
 - goals for your SAP System Landscape, 66
 - high-availability strategy, 373–74
 - network, 18
 - SAN, 83, 355–56
 - SAP System Landscape for SEM, 51
 - success criteria, 75–78
 - systems management approach, 175–76
 - test infrastructure, 75, 195, 244
 - Desktop computers
 - Citrix and desktop TCO, 221
 - client drivers, 268
 - inventorying, 163–67
 - standard configuration, 56
 - testing with physical desktops, 140–41, 230, 234, 241
 - versus virtual clients, 242–44, 270
 - Development (Business) Sandbox, 61, 62
 - Development System, 3, 25, 60, 72–74
 - Dialog steps, 45, 50, 76, 79, 183, 224, 238–39, 261, 285, 330, 356
 - Disaster Recovery. *See* DR
 - Disk partitions, 27, 83, 133, 208, 224
 - Disk subsystem
 - clones, 262, 273
 - disk controllers, 25, 27, 84, 86, 133, 167, 196, 213, 356, 363, 373
 - disk partitions, 133, 224
 - LUNs, 83, 298, 322, 355
 - NAS. *See* NAS (Network Attached Storage)
 - RAID, 5, 68, 194, 203, 214, 298, 355–56, 363, 365, 369–70
 - SAN fabric, 85, 355–56, 364–66
 - SAN (Storage Area Network), 5, 31, 46–48, 63, 85, 86, 101, 105, 167–68, 203, 220, 238, 302, 355–56, 364–66, 383
 - SPOFs (single points of failure), 370
 - testing, 5, 46, 103, 203, 355–57
 - tools, 129–36
 - tuning, 58, 68–72, 80, 83–85, 129, 132, 144, 193–94, 204, 214, 240, 322, 356–58
 - upgrades, 48, 69, 72, 364–65
 - Disaster Recovery. *See* DR
 - DLLs (Dynamic Link Libraries), 137
 - DMI (Desktop Management Interface), 167
 - Documentation
 - checklists, 13, 75, 173, 180, 190, 191, 203, 205–6, 232, 288, 291, 292, 295–96, 301, 323, 366
 - current state, 159–66, 170, 171, 184, 196–200
 - Downtime windows, 2, 23, 128, 366, 380
 - DR (Disaster Recovery), 373, 378–80
 - causes of downtime, 34–35
 - clusters, 25, 68, 132, 166–68, 369–71
 - compared to High Availability, 379
 - downtime clock, 55
 - stress testing (using DR for), 379–80
 - Drivers (testing), 27, 116, 120, 166
 - Dumb luck, 367
 - Dynamic Link Libraries. *See* DLLs
 - Dynamo, 133
- ## E
- EBP (Enterprise Buyer Professional). *See* SAP: Enterprise Buyer Professional (EBP)
 - eCATT (extended CATT), 91, 96, 143–44, 149, 158, 221
 - Ecora, 162–64



- EDI (Electronic Data Interchange), 230
 Electronic Data Interchange.
 See EDI
 End users, 43, 109
 Endpoints, 127
 EnjoySAP initiative, 123, 126
 Enterprise Buyer Pro. *See* SAP
 EP (Enterprise Portal). *See*
 SAP: Enterprise Portal (EP)
 Error handling, 232
 estat, 171
 eTestingLabs, 120
 eTimer. *See* Lab utilities
 Event trigger. *See* CCMS (SAP
 Computing Center
 Management System and
 T-codes): SM64
 Exchange Infrastructure (XI).
 See SAP
 Execution checklist. *See*
 Checklists
 Execution windows, 45, 53, 67,
 70, 217, 218, 384–85
 extended CATT. *See* eCATT
 External consultants, 24
- F**
- Failover, 59, 62, 68, 168–69,
 370
 Failover testing, 370–71
 Fat tree, 355
 FD32, 214, 259
 Feedback, 33, 132, 217, 253,
 306
 File systems, 132–35, 258, 308,
 342
 File System Requests button,
 357
 Format, 133, 213
 Free monitoring tools, 161–65
 Free testing tools. *See* Test
 tools: Iometer; Jmeter;
 NTIOGEN; OpenLoad;
 PenguinMeter; StressTool
 FTP, 139, 146, 163, 173
 Front-end clients, 23, 28, 38,
 72, 81, 86, 104, 124, 140,
 147, 152, 167, 205, 216,
 220–21, 231, 302, 322
 Front-end tuning, 361–62
 Functional testing, 3, 15, 91,
 119, 160, 247
 Functional upgrades, 365–66
- G**
- GUI (Graphical user interface)
 HTML SAPGUI, 52, 96,
 140, 143, 220
 JavaGUI (SAPGUI for
 Java), 52, 96, 140
 SAPGUI (Win32 GUI), 140,
 220–21, 338
 WebGUI, 52, 96, 140, 143,
 220
- H**
- Hardware
 oversizing, 354
 sizing, 83, 215
 sizing questionnaire, 153
 sizing relative to BW, 50
 sizing relative to MCODE, 58
 sizing relative to pagefiles,
 214
 sizing relative to test
 consoles, 269, 271
 sizing relative to upgrades,
 31
 sizing relative to validation,
 21
 Hardware partitioning, 24, 46
 HBAs (host bus adapters), 85,
 352, 355
 High Availability
 ATR, 369
 compared to DR, 379–80
 defined, 368–70
 “five nines of availability,”
 7
 maximizing, 368
 Horizontal scalability, 214,
 374–75
 Host bus adapters (HBAs). *See*
 HBAs (host bus adapters)
 Hot pluggable, 372
- HP (Hewlett Packard)
 CCMon (Cluster Consis-
 tency Monitor), 168
 GetConfig, 162
 Insight Manager, 162, 172
 Openview, 176–78
 SAN Management
 Appliance, 168
 Survey, 162, 164
 Toptools, 172
 HP-UX, 135, 148, 168, 178,
 198, 313, 377
 HTTP, 40, 125, 128, 146, 163,
 230
- I**
- I/O, 18–19, 59, 196, 208, 214
 average size of I/Os, 84
 client copies, 240
 defined, 18
 output used in monitoring,
 205–6
 requests per second, 83
 tools, 120, 129–36, 167–70,
 302, 313
 IBM AIX. *See* AIX (IBM)
 IBM Insight for Oracle
 Database, 171
 IBM Performance Diagnostic
 Tool, 168
 IBM Performance Toolbox, 168
 IDE (Integrated Drive
 Electronics), 363
 IDES (Internet Demonstration
 and Evaluation System), 4,
 234–35
 InfoCubes (BW), 18, 225
 Information Technology (IT), 3
 Informix. *See* Databases
 Inline data input, 246
 Input files, 118, 205, 245, 248,
 249, 252, 338
 Intel, 7, 98, 103, 145, 227, 363,
 377
 Internet Information Services
 (IIS)
 capturing current-state data,
 163





Internet Information Services (IIS) (*cont.*)
 managing with OpenView, 177
 testing, 116

Internet Transaction Server (ITS)
 AGate, 204, 302
 configuring, 86
 managing with Patrol, 177
 testing, 86, 103, 116, 227
 WGate, 116, 164, 204

Iometer(open source), 133–34
 iostat, 168, 171

iPaq, 12

IT Consolidation, 15, 29–31,
 45–46, 58, 363–64, 382–84

IT goals, 33, 65–68, 253, 258,
 259, 265

ITS. *See* Internet Transaction Server (ITS)

J

Java, 7, 139, 143, 144, 157,
 184–85

Java Applets, 171

Java Beans, 148

Java connectivity and interoperability, 230

Java developers and coding, 212, 360

Java-based test tools, 119

JavaGUI (SAPGUI for Java).
See GUI: JavaGUI (SAPGUI for Java)

JavaScript, 119

J2EE, 21

K

Kernel

kernel for (SAP), 169
 kernel patches, 85, 204
 kernel updates, 352, 361
 OS kernels, 21, 313, 373

Keyboard input, 137, 175, 246,
 251, 262

L

Lab utilities

AutoShutdown Pro
 (Barefoot, Inc), 172

eTimer (Barefoot, Inc) 78,
 173, 300, 303, 314

EventComb (Microsoft),
 174–75

Ghost (Symantec), 172

PrintKey (freeware by
 Alfred Bollinger), 172

PsTools. *See* Test tools

Recovery Manager
 (Winternals), 172

Snagit, 139, 173

TxShuttle (WinShuttle) *See*
 Test tools

Landscape. *See* SAP System
 Landscape

LANs (local area networks),
 85–86, 232, 240, 242, 247

Latency, 148

Layers (SAP Technology
 Stack), 24, 28
 illustrated, 29

Leafs, 355

Level One testing, 72, 231–32

Level Two testing, 232

Level Three testing, 232–33

Linux (SuSe), 85, 179, 320

Load test tools. *See* Test Tools

Local Area Networks. *See*
 LANs

Locking down data, 277–78

Locking down hardware
 infrastructure, 278–80

Locking down script
 development and testing,
 278

Locking down test platform,
 277

Logged-in users, 325, 341, 350

Logon load balancing, 81, 85,
 254, 281, 284, 305, 311,
 325, 353

lsdev, 168

LT06, 263

M

\$MACHINE variables. *See*
 Variables

Manual data collection, 163

Manual testing, 240

Management tools. *See* Systems
 management

MARA, 325

MB03, 239

MB1C, 153, 251, 263

MCOD (Multiple Components
 on One Database), 31, 46,
 55, 58–59, 105, 383

ME23, 239

ME53, 239

MeatGrinder. *see* Test tools,
 MeatGrinder (Compaq/
 HP)

Memory leaks, 179

Memory management. *See*
 RAM

MetaFrame (Citrix), 148, 167,
 204, 221, 279

Metered Services, 24

Microsoft

Biztalk, 230

Cluster Server, 166, 372

MMC (Microsoft
 Management Console),
 169

MSCS (Microsoft Cluster
 Services/Server), 166,
 372

PerfMon (Microsoft
 Performance Monitor),
 169

Scriptomatic, 166

SQL Profiler, 135

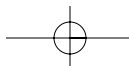
SQL Server. *See* SQL Server

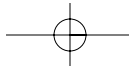
SQLIO, 129–31

SQLIOStress, 131–32

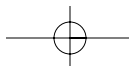
Windows 2000, 85, 117,
 121, 127, 135, 163, 165,
 166, 271, 282, 363, 383
 Datacenter Edition, 383

Windows NT, 117, 127, 163,
 173–74, 203, 383

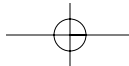




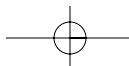
- Windows Server 2003, 121, 127, 165, 195, 270, 300, 383
- Windows XP, 165, 166, 174, 270
- MM03, 153, 214, 239
- Monitoring the execution of a load test, 160, 291–304
- Monitoring tools
 - Administrators' Pak (Winternals), 175
 - agent-free, 163
 - AssetDB (Compulsion Software), 162, 166, 198
 - Breakout Software, 163
 - CCMon (HP Cluster Consistency Monitor), 168
 - CCMS. *See* CCMS (SAP Computing Center Management System)
 - CCMS Monitoring Infrastructure, 184–86
 - CEN (SAP Central Monitoring System), 183–84
 - Cluster Administrator (Microsoft), 170
 - CMS (SAP), 183–84
 - Compaq Insight Manager, 162, 164
 - Compaq Survey, 162, 164
 - Compulsion Software, 162, 166, 198
 - Configuration Auditor (Ecora), 163
 - current-state configuration documentation, 160–66
 - current-state data collection utilities, 160–66
 - Dell OpenManage, 172
 - discrete utilities, 160
 - DSview (HP), 167
 - Ecora. *See* Monitoring tools: Configuration Auditor (Ecora); PatchMeister
 - EventComb (Microsoft), 164–75
 - GetConfig (HP), 162
 - glance. *See* Commands (OS)
 - good monitoring tool, defined, 161
 - gpm. *See* Commands (OS)
 - HP CCMon (Cluster Consistency Monitor), 168
 - HP DSview, 167
 - HP Insight Manager, 162, 172
 - HP MeasureWare, 168
 - HP Openview, 177
 - HP PerfView, 169
 - HP Survey, 162, 164
 - HP Tootools, 172
 - HP VTDPY, 167
 - IBM Insight for Oracle Database, 171
 - IBM Insight for SAP R/3, 171
 - IBM Performance Diagnostic Tool, 168
 - IBM Performance Toolbox, 168
 - Insight for Oracle Database (IBM), 171
 - Insight for SAP R/3 (IBM), 171
 - Insight Manager (HP/Compaq), 162, 172
 - Lab tools and utilities. *See* Lab utilities
 - MeasureWare (HP), 168
 - Microsoft Cluster Administrator, 170
 - Microsoft EventComb, 164–75
 - Microsoft Management Console (MMC), 170
 - Microsoft System Information, 162
 - MMC (Microsoft Management Console), 170
 - MonitorIT (Breakout Software), 163
 - nmon. *See* Commands (OS)
 - OpenManage (Dell), 172
 - Openview (HP), 176–78
 - Oracle-aware, 166
 - Oracle Enterprise Manager, 170–71
 - Oracle Statspack. *See* Statspack (Oracle)
 - OS commands. *See* Commands (OS)
 - OS utilities. *See* Commands (OS)
 - PatchMeister (Ecora), 163–64
 - PerfMon (Microsoft Performance Monitor), 169
 - Performance Diagnostic Tool (IBM), 168
 - Performance Toolbox (IBM), 168
 - PerfView (HP), 168
 - PrimalScript (Sapient), 139, 183
 - SAN Management Appliance, 168
 - Sapient PrimalScript. *See* PrimalScript (Sapient)
 - SAP-aware, 159–60
 - SAP CCMS. *See* CCMS (SAP Computing Center Management System)
 - SAP CCMS Monitors for Optional Components, 183
 - SAP CEN. *See* Monitoring tools, CEN (SAP)
 - SAP CMS. *See* Monitoring tools, CEN (SAP)
 - scripting, use of, 183
 - Scriptomatic (Microsoft), 166
 - SmithMicro. *See* CheckIt Diagnostics
 - snap-in modules, 170, 179
 - snapshots, used in taking, 161, 164, 165, 167, 169



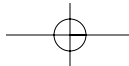
- Monitoring tools (*cont.*)
- Sofotex, 162
 - Solution Manager (SAP), 184–86
 - Solution Manager
 - Optimization Services, 287
 - SQL Enterprise Manager, 170–71
 - Statpack (Oracle), 171
 - SSM for Operations (SAP Solution Manager), 184–86
 - Sun Net Manager (Sun), 172
 - Survey (Compaq/HP), 162, 164
 - systemwide, 172
 - system uptime, capturing, 164
 - TeamQuest, 162
 - Toptools (HP), 172
 - transactional monitors (SAP), 183
 - Troux Technologies, 162
 - versus testing tools, 110
 - Virtual Terminal Display (HP VTDPY), 167
 - WinMSD (Microsoft), 162
 - Winternals Administrators' Pak, 175
 - Winternals Recovery Manager, 172
 - WMI, use in monitoring, 166
 - Unicenter (CA) central monitoring, 177
 - Mouse, 104, 137, 142, 231, 246, 251, 255, 262
 - MRP, 240, 371, 384
 - MSCS, 166, 372
 - MSEG, 325
 - Multiple Components on One Database. *See* MCOD
 - mySAP
 - Business Suite, 15–16, 68, 72, 73, 91, 93, 96, 142, 144, 149, 321
 - BI (Business Intelligence), 74
 - typical noise transactions, 239
 - use of, 238–39
 - using custom Z reports, 239
 - using SE38 to generate noise, 239
- CRM (Customer Relationship Management), 74
- EBP. *See* mySAP SRM
- EP (Enterprise Portal), 4, 18
- ERP (Enterprise Resource Planning), 5, 73
- Financials, 74
- HR (Human Resources), 74
- MDM (Master Data Management), 4
- PLM (Product Lifecycle Management), 4
- SCM (Supply Chain Management), 74
- SEM (Strategic Enterprise Management), 4
- SRM (Supplier Relationship Management), 4
- WebAS (Web Application Server), 4, 86, 269
- WP (Workplace), 4
- XI (Exchange Infrastructure), 4
- N**
- .NET (dot net), 7, 31, 230
 - NAS (Network Attached Storage), 103
 - NASA, 300
 - NetIQ AppManager, 170
 - NetWeaver. *See* SAP
 - Network Attached Storage (NAS), 103
 - Networks
 - latency, 148
 - network infrastructure, 26, 28–29, 63, 84, 104, 114, 124, 125–27, 207–8, 240, 321, 351, 383
 - storage area networks, 5
 - stress testing, 84–85
 - Noise scripts
 - baselining, 224
 - creating, 223–24
 - defined, 223
 - mixed bag testing, 220
 - running T-codes twice, 224
 - tips and tricks, 223–24
- O**
- ODS (Operational Data Store in SAP BW), 200, 225
 - OpenManage (Dell), 260
 - OpenView VantagePoint for Operations, 177
 - Operating Systems (OS)
 - delta testing, 383
 - pagefile/swap file testing and sizing, 214
 - stress testing, 26, 131–32
 - tuning, 23, 84
 - Operational Data Store (ODS), 200, 225
 - Operational viability, 68
 - Oracle. *See* Databases
 - tuning table buffers, 358
 - OS01, 239
 - OS07, 181
 - OS Collector, 180–81
 - OS commands. *See* Commands (OS)
 - OS Monitor. *See* CCMS (SAP Computing Center Management System and T-codes): ST06
 - OS Utilities. *See* Commands (OS)
 - Output
 - cleaning, 338–40
 - charts, tables, and graphs, 344–45
 - chopping off the head and tail, 340–41
 - delta analysis, 343–44
 - dumping into Excel, 341–43
- P**
- PA03, 239
 - Pagefile, 214
 - Paper-based checklists, 180



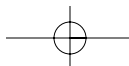
- Patrol (BMC), 177, 182, 196, 303, 381
- Patrol Script Language, 177
- Pay as you go, 2, 24, 194
- PerfMon, 169
- Performance, good
defined, 9–10
- Performance Monitor, 169
- Performance Stress Test Utility, 116
- Performance tuning, 8–9
- Performance tuning team. *See* T3
- Persistent Staging Area (SAP BW PSA), 200
- Physical user, 95, 218
- Pilot
defined, 11
evaluating pilot testing results, 113–14
fitness criteria, 114
obtaining software to pilot, 111–13
test plan (use during piloting), 113
- ping, 138, 163, 372
- PLM (Product Lifecycle Management), 4
- POC (Proof-of-Concept), 73–74, 215, 232, 371
- Post–Go-Live testing, 90
- Prelaunch systems check, 296–97
- Pretuning, 15, 72, 212, 231, 352
- Pretuning SAP Technology Stack, 203
- Print jobs, 383
- Program buffer (SAP), 283
testing, 329
tuning, 329
- Project plan (approach to stress testing), 187–88
- Promote to Production, 101–2
- Proof-of-Concept (POC), 73–74, 215, 232, 371
- Protocols
communication protocols, 120, 123, 146, 151
network protocols, 120, 204, 208, 270, 272, 383
- RFC (Remote Function Call), 221, 237, 321, 324, 361
- security protocols (SSL), 119, 123, 124, 146, 157
- ps, 168
- PSL (BMC Patrol Script Language), 177
- Publishing, 224
- Q**
- QA (Quality Assurance) System, 102, 194, 364
- Quarterly Change Waves. *See* Change Waves
- Queries, 18, 21, 67, 151–52, 214, 215, 225
- Questionnaires, 153
- R**
- R/3 (Enterprise), 1, 126, 178, 190, 347
- RAID (redundant array of independent/inexpensive disks). *See* Disk subsystem
- RAID 0+1, *See* Disk subsystem: RAID
- RAID 5, *See* Disk subsystem: RAID
- RAM, 24, 84–85
- Ramping up users, 275, 292
- Random number generators, 132–33, 252–54
- Real Application Clusters (9iRAC), 132, 156
- Real-world smoke testing. *See* Carrying capacity
- Recurring costs, 378
- Registry, 138, 161, 164, 165, 166, 197
- Regression testing, 30, 145, 157, 230
- Regression test tools, 145, 157
- Relational Database Management Systems (RDBMSs), 103, 131, 193, 258, 313
- Remote access products
Citrix MetaFrame, 148, 167, 204, 221, 279
PC-Duo, 279
Windows Terminal Services, 279
- Reporting (batch), 210, 211, 219
- Resiliency, 68
- Response times, 183
application server response time, 67, 80, 246
DB Request time, 183, 261
enqueue time, 261
front-end average network time, 361
GUI Build time, 67, 311, 322, 361
load time, 261
network time, 67, 322, 361
roll time, 261
wait time, 67
wall clock time, 67, 78–80, 253, 261
- Return on Information (ROI), 21–22
- Return on Investment (ROI), 21–22, 94, 110
- Risk
managing, 3, 107
mitigating, 34, 107
- ROI. *See* Return on Investment (ROI) or Return on Information (ROI)
- ROI exercise, 217
- RZ03, 312
- RZ04, 312
- RZ08, 311
- RZ10, 239, 360
- RZ20, 184, 239, 302, 308–9, 323, 361, 386
- RZ21, 312
- S**
- SA38, 312
- SAINT, 185
- SAN (Storage Area Network). *See also* Disk subsystem consolidation, 48, 364–65



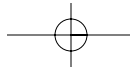
- SAN (Storage Area Network)
(*cont.*)
defined, 5
designing, 365
HBAs (host bus adapters),
85, 352, 355
monitoring tools, 167–171
SAN infrastructure testing,
5, 46, 103, 203, 355–57
SAN Management
Appliance, 168
SAN switch design, 356–57
virtual, 103, 167, 220
- Sandbox Systems
Business (development), 61,
62
Development (business), 61,
62
Technical, 51, 61, 193, 194,
196, 202
- SAP
Advanced Planner and
Optimizer (APO), 4, 18,
25, 74, 88, 225–26, 235
AG, 1, 26, 235, 337
APO. *See* SAP: Advanced
Planner and Optimizer
(APO)
Basis, 2, 10, 90, 101, 310
Basis installation, 102
Basis noise, 223
benchmark kits, 72–74, 86,
225
Business Information
Warehouse (BW), 4, 152
BW, 4, 152
CEN (Central Monitoring
System [also CMS]),
183–84
CMS, 183–84
Customer Relationship
Management (CRM), 4,
18
DB, 358
defined, 1
Enterprise Buyer
Professional (EBP), 4, 18
Enterprise Portal (EP), 18,
25, 46–47
- Exchange Infrastructure
(XI), 4
Internet Demonstration and
Evaluation System
(IDES), 4, 234–35
Internet Transaction Server
(ITS), 4
Master Data Management
(MDM), 4
MaxDB, 358
Multiple Components on
One Database (MCO),
31
NetWeaver, 1, 30, 96, 100,
230
Notes, 23, 352
Product Lifecycle
Management (PLM), 4
R/3 (Enterprise), 1, 126,
178, 190, 347
SAPDB. *See* SAP: MaxDB
short dumps, 200
Solution Manager. *See*
Monitoring tools
Supplier Relationship
Management (SRM), 4
Supply Chain Management
(SCM), 74
Strategic Enterprise
Management (SEM),
4
transactional monitors,
184–86
Web Application Server
(Web AS), 4, 142, 143,
149, 225, 243
XI, 4
- SAP AG, defined, 1
SAP performance validation
market, 142
SAP System Landscape, 31–32,
58–63, 66, 71, 84, 181, 185,
186, 187, 194
SAP Technology Stack, 24, 28,
29
aborting a test run, 315
benchmarking through its
lifecycle, 73, 78, 347,
356
- compare throughput among
different stacks, 261–62
current-state tools, 161
custom POC testing, 74
effect of caching, 299
execution checklist, 288
illustrated, 46
monitoring, 159–60, 206,
280, 288, 309
pretuning, 15, 187, 203
relative to SAP Basis, 38
relative to Total Cost of
Ownership (TCO), 368,
377–78
relative to training SAP IT
staff, 61
replicating Production with
another system, 60
stress test success criteria,
84–86
testing, 204, 352–53, 382,
384
tuning, 75, 81, 84, 172, 354,
356, 382
upgrades, 63, 72
- SAP-aware testing tools,
141–49, 268
AutoTester products, 12, 93,
141–43, 145–46, 152,
158
Compuware products, 12,
93, 143–44, 146–47,
158, 182, 221
Mercury Interactive
products, 12, 93,
144–45, 147–49, 152,
158
- SAPGUI. *See also* GUI
application server response
time, 67, 80, 246
DB Request time, 183, 261
enqueue time, 261
front-end average network
time, 361
German field names, 141,
242, 255
GUI Build time, 67, 311,
322, 361
load time, 261



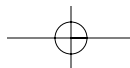
- network time, 67, 322, 361
- OCX controls, 123, 140, 158, 221
- roll time, 261
- staggered SAPGUI login, 256–57
- wait time, 67
- wall clock time, 67, 78–80, 253, 261
- sapevt, 238
- sapxpg, 238
- sar, 168
- Scalability
 - horizontal, 214, 374–75
 - in-the-box, 373
 - verifying, 373–77
- SCC4, 240
- SCC8, 239
- SCCL, 239
- Scripts
 - administrative, 252–54
 - automating a system load, 229–30
 - common/standard subroutines, 248–57
 - CTRL+S, 263
 - data collection, 247, 260, 265
 - data considerations when scripting, 257–59
 - development approach, 230–31, 240–43, 262, 264, 265
 - do-while, 252
 - error routines, 252
 - input file seeds, 252
 - monitoring, 239, 243, 252, 259
 - noise, 238–39
 - pseudorandom number generators, 246, 262
 - random-number generators, 254, 262
 - read-only test case, 239, 262
 - recording, 231
 - SAP-aware commands, 246–48
 - screen scraping, 248, 254–55
 - standard subroutines. *See* Scripts, common/standard subroutines
 - tips and tricks in coding, 261–63
 - utility scripts, 254–57
 - variable files, 256–57
 - version control, 301
 - virtual, turning physical scripts into, 246, 249–51
- SE38, 150–51
- Secure Sockets Layer (SSL), 119, 123, 124, 146, 157
- Server IT consolidation, 363
- Service Level Agreements (SLAs), 8, 25, 34, 82, 107, 125, 367, 368, 371
- Shared resources, 24, 104
- Short dumps, 200
- Single Points of Failure, 369
- Single-threaded client-driver process, 275
- Single-unit testing. *See* Testing
- Sizing
 - client drivers, 253, 267, 269
 - hardware sizing, 83, 215
 - pagefile/swap, 214
 - sizing questionnaire, 153
 - relative to MCOD, 58
 - relative to test consoles, 269, 271
 - reverse-engineering, 376
- Skinny tree, 355
- SM04, 150, 181, 200, 239, 310, 325
- SM12, 312, 326, 327
- SM13, 312, 326, 327
- SM21, 312
- SM36, 238
- SM37, 238, 311
- SM50, 239, 310–11
- SM51, 239, 261, 300, 312
- SM59, 300, 312
- SM64, 238
- SM66, 239, 305–6, 310, 311, 323, 325, 353
- SMART Plug–Ins (HP OpenView), 177, 198
- SMEs (Subject Matter Experts), 90, 92, 97, 180
- SMGW, 312
- Smoke Test
 - carrying capacity, 375–76
 - compared to other forms of stress testing, 216–17
 - defined, 19
 - development of, 19–21
 - executing, 110, 131, 216
 - real-world smoke testing, 375
- SMLG, 312, 318, 325
- SMQS, 312
- SOAP (Simple Object Access Protocol), 230
- Solaris (Sun), 135, 178, 313, 377
- Solution characteristics (SAP design), 31–32
 - key characteristics, 33
 - ranking, 33–34
- Solution Manager, 184–86
- Solution viability, 68
- Solution vision (SAP design), 16, 31, 32
 - crafting a solution vision, 32
 - defined, 32
 - “eyes wide open,” 34
 - holes, 33
 - sample goal statements, 32
- sp_configure, 198
- Spindles, 194, 203, 214
- SPOFs. *See* Single Points of Failure
- Spreadsheets, 35, 130, 141, 182, 245, 261, 338–39, 344–45
- SQL Profiler (Microsoft), 135
- SQL Server (Microsoft). *See also* Databases: SQL Server
 - stored procedures, 135
 - tuning disk layout, 355–56
 - using stress testing to compare with other databases, 73
- SQLIO (Microsoft), 129–31
- SQLIOStress (Microsoft), 131–32

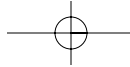


- SSAA. *See* CCMS
- SSL (Secure Sockets Layers). *See* Secure Sockets Layer (SSL)
- SSM for Operations (SAP Solution Manager). *See* Monitoring tools: Solution Manager (SAP)
- ST01, 312
- ST02, 215, 239, 310, 329–30, 358, 361, 381
- ST03, 49, 150, 181–83, 215, 219, 227, 236–37, 263, 303, 310, 320, 330, 333, 335–39, 356, 358, 361–62, 381, 383
- ST03G, 335, 337, 338
- ST03N, 182–83, 219, 310, 335–38
- ST03x, 335, 337
- ST04, 150, 181–82, 200, 215, 239, 302, 303, 310, 326, 328, 335, 356–57, 361, 381
- ST05, 312, 361
- ST06, 150, 181, 215, 239, 303, 305, 310, 333, 381
- ST07, 150, 181, 215, 239, 305–6, 310, 337, 358
- ST09, 311
- ST10, 330–31, 358
- ST11, 312
- ST12, 311
- ST22, 312
- Stack. *See* SAP Technology Stack
- STAD, 186, 310–11, 320–21, 324, 330, 333, 335, 338–39.
- Staffing. *See* T3: staffing
- Staggered SAPGUI login, 256–57
- Staging System, 194
- Stakeholders, 32, 66, 162, 268, 319, 344
- STAT, 310
- Statistics collecting, 328–30
- STATRACE, 186, 323
- STATUS.txt, 314
- Steering Committee, 229
- Storage Area Network. *See* Disk subsystem: SAN
- Strategic Enterprise Management, 4
- Strawman project plan, 187–190
 compared to a
 comprehensive plan, 189
 developing the plan, 189
 things to avoid, 190
- Stress test tools. *See* Test tools
- Success criteria
 developing or defining real world criteria, 75–78
 disk subsystem criteria, 68, 80, 83–84
 identifying real–world business processes, 68–69
 network infrastructure criteria, 72, 84
 operating systems criteria, 70, 80–83, 84–85
 SAP application server criteria, 67, 77, 80–81, 85–87
- Sun Net Manager, 4, 172
- Sun Solaris. *See* Solaris (Sun)
- Supplier Relationship Management (SRM), 4
- Supply Chain Management, 74
- SuSe Linux. *See* Linux (Suse)
- Swapinfo, 168, 283
- System “descriptors,” 33
- System–level (stress) testing. *See* Testing: Component testing
- Systems management
 AppManager (NetIQ), 179
 automated scripting, 166, 172, 177, 182–83
 BMC Patrol, 177, 182, 196, 303, 381
 CA Unicenter, 177
 CEN, 183–84
 CCMS. *See* CCMS (SAP Computing Center Management System)
 checklists. *See* Checklists
 CMS, 183–84
 database management tools, 170–71
 Disk subsystem management tools, 161, 167–68, 171
 Insight Manager (HP/Compaq), 162, 172
 IBM Tivoli, 176, 178–79
 MMC (Microsoft Management Console), 170
 monitoring tools provided by SAP AG, 180–86
 NetIQ Application Manager, 179
 OpenManage (Dell), 260
 Openview (HP), 177
 Operating System management tools, 168–70
 out–of–the–box, 150, 179
 Patrol (BMC), 177, 182, 196, 303, 381
 proxy solution (AppManager), 179
 rules of thumb, 179–80
 RZ20, 184, 239, 302, 308–9, 323, 361, 386
 SAP CMS, 183–84
 SAP Solution Manager, 184–86
 SSAA, 312, 381
 test–bed, 179, 268, 364
 Tivoli (IBM), 176, 178–79
 Unicenter (CA), 177
- Systems testing. *See* Testing: Component testing
- ## T
- T–codes (transaction codes). *See* CCMS (SAP Computing Center Management System and T–codes)
 automating via scripting, 260–61, 283–86, 323–24
 for monitoring and data collection, 93, 160, 165, 180, 182, 260–61, 323–24

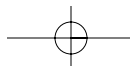


- T3 (Testing and Tuning Team)
 addressing projects, 92
 crash(ing) the project
 schedule, 265
 filling in the gaps, 100–1
 getting “up to speed,” 202
 leadership, 188–89
 mission of, 100, 107
 organization, 92–94
 real-world infrastructure
 projects, 103–4
 staffing for functional
 upgrades, 106–7
 staffing for operational
 change management,
 101–2
 staffing for tactical needs
 and projects, 102–3
 staffing for post-go-live,
 101
 staffing in the real world,
 89, 92, 101, 107
 strategic (long term)
 staffing, 91–92, 94–95
 training methods (OJT
 versus formal training),
 96–99
- Tables (database), 325
 table buffering, 330–33
 using DB05, 330–33
 using ST10, 330–31
- TCO (Total Cost of
 Ownership), 30, 159, 189,
 374
- TCO analysis, 374–75
- TCP/IP, 120, 145, 208, 270
 connections, 145
 defined, 120
 failed communications after
 a failover, 168
- Technical foundation, 90
- Technical Sandbox System, 51,
 61, 193, 194, 196, 202
 replicating the Production
 System, 194
- Test Execution Infrastructure,
 75
 crash and burn resources
 (C&B), 196
 preliminary infrastructure,
 243–45
 Tier one, 195, 215–16
 Tier two, 195–96
- Test mixes and workloads,
 204–5
- Test packages, 211, 217
 best practices for
 assembling, 222
 creating, 274–75
 end-to-end business
 process-oriented
 packages, 223
 functionally focused
 packages, 222
 input, 212–13
 user-based packages, 222
 validate prior to test run
 execution, 300
- Test plan
 piloting (with regard to),
 113–14
- Test runs
 analyze test runs, 319–20
 data sources, 322
- Test System. *See* QA (Quality
 Assurance) System
- Test tool piloting, 109–10, 140,
 154
 obtaining support, 114
 obtaining pilot software, 111
 pilot execution, 113
 selecting the right tools, 110
- Test tools
 Apache Jmeter, 120
 AutoController
 (AutoTester), 145–46
 AutoIT (HiddenSoft),
 136–38
 AutoTester ONE
 (AutoTester, AT1),
 142–43
 Bench32, 134
 Benchmark Factory (Quest),
 121–23
 CATT (SAP Computer
 Aided Test Tool), 149–50
 CCMS (to create a load),
 150
 Chariot (NetIQ), 126–27
 CheckIt Diagnostics utility
 (Smith Micro), 115–16,
 162–63, 212, 213
 Compuware QALoad,
 146–47
 Compuware TestPartner,
 143–44
 DD (HP Disk to Disk), 135
 eCATT (SAP extended
 Computer Aided Test
 Tool), 149–50
 e-Load (Empirix, formerly
 RSW), 119
 HD Tach, 134
 HiddenSoft AutoIT, 136–38
 HP DD, 135
 HP HPRReadData, 135
 HP LMDD, 135
 HP PerfStress, 116
 HP System Stress Test, 116
 HP Thrasher, 116
 HPRReadData (HP), 135
 Interscan (Trend Micro),
 129, 156
 IOgen, 132
 Iometer (open source),
 133–34
 IOzone, 135
 IP Network Emulator
 (PacketStorm
 hardware-based tool),
 126, 155
 Jmeter (Apache), 120
 LMDD (HP Linux version
 of HP DD), 135
 LoadRunner (Mercury
 Interactive), 147–48
 MeatGrinder (Compaq/HP),
 116
 Media Load Simulator
 (Microsoft), 124–25
 Monitoring. *See* Monitoring
 tools
 Nbench (open source), 134
 NetBench (Ziff Davis
 Media), 120–21
 Norton NAV LoadSim
 (Symantec), 128





- Test tools (*cont.*)
- NTIOGEN (Symbios), 132–33
 - OpenLoad, 120
 - OpenSTA (open source), 123–24
 - PAT (HP Performance Assessment Tool), 135
 - PenguinoMeter (open source), 133
 - PerfStress (Compaq/HP), 116
 - Perl, 140
 - PrimalScript (Sapien), 139
 - PsTools (Sysinternals), 173–74
 - QALoad (Compuware), 146–47
 - QBench, 135
 - QCheck (NetIQ), 126–27
 - Quest, 121–23
 - QuickTest Professional (Mercury Interactive), 144–45, 153
 - RAIDMark, 135
 - real-time feedback, 306–7
 - regression test tool, 120, 152
 - SAPGUI Scripting, 154
 - Sapien, 139
 - SAP-aware tools and test suites, 140–49
 - SE38 (using SAP transaction SE38 to drive a load), 150
 - SQL Profiler (Microsoft SQL Server 7.0 and 2000 utility), 135
 - SQL Trace (SQL 6.5 version of SQL Profiler), 135
 - SQLIO (Microsoft), 129–31
 - SQLIOStress (Microsoft), 131–32
 - StressTool, 120
 - System Stress Test (Compaq/HP), 116
 - TestPartner (Compuware), 143–44
 - Thrasher (Compaq/HP), 116
 - ThreadMark (Adaptec), 132
 - TxShuttle (WinShuttle), 139–40
 - Visual Test, 140
 - WAST (Microsoft), 116–18
 - WebBench (Ziff Davis Media), 121
 - WebLOAD (RadView), 119–20
 - Web Application Stress Tool (Microsoft WAST), 116–18
 - WebBench (Ziff Davis Media), 121
 - WinBench (Ziff Davis Media), 135
 - WinRunner for R/3 (Mercury Interactive), 144–45
 - WinShuttle TxShuttle, 139–40
- Test week, 264, 267–89
- Testable units, 187, 189
- Testing
- apples-to-apples, 375
 - apples-to-oranges, 353
 - capacity characterization, 72
 - component testing, 73, 236
 - customer-specific business process load, 20
 - mixed bag, 220
 - monkey method, 233
 - “not once, but twice,” 293–94
 - ramping up users, 275–77, 291–92
 - single-unit, 20–21, 71–72, 78, 80, 204, 229–32, 244, 249, 253, 268, 274–76
 - using IDES for R/3 testing, 234–35
 - using RSRCATTTRACE for BW or SEM, 152
 - using RSRT for BW or SEM, 152
 - using RSRTRACE for BW or SEM, 151
 - using trained monkeys, 233
 - volume, 109
 - what-if, 376, 381–85
 - XI (Exchange Infrastructure), 224–27
- Testing and Tuning Team (T3). *See* T3
- Test/QA System. *See* QA (Quality Assurance) System
- Three little rules, 385–86
- Timers. *See* Lab utilities: eTimer
- Tivoli Storage Manager for ERP, 178–79
- top, 168, 282
- Top 10, 237
- Top 40, 210
- Toptools (HP). *See* Monitoring tools
- Top transactions, 237
- Total Cost of Ownership (TCO). *See* TCO (Total Cost of Ownership)
- Tracert, 138
- Training System, 202
- TU. *See* Testable units
- Tune Summary, 381
- Tuning
- database, 354–55
 - iterative stress testing, 348, 366
 - lessons learned in the real world, 362–63
 - line-in-the-sand-approach, 347
 - proactive, 2, 110, 169, 353
 - SAP application layer, 354–61
 - SAP Profiles, 360
 - SAP Technology Stack, 75, 81, 84, 172, 354, 356, 382
 - SAPGUI or SAP front-end, 361–62
- U**
- Unicode, 39–40, 57
 - Unix, 168–69, 171, 178, 179, 282–83, 302, 313



Upgrades, 365–66
Uptime, 30, 165, 178, 292, 369
User interface. *See* GUI
Users. *See also* End users
 active, 44, 285, 305, 324, 351
 concurrent, 3, 44–47, 77, 229
 logged-in, 47, 77, 215, 284, 294, 325
Utility computing, 24
Utility scripts, 254–57

V

VA01, 21, 70, 81, 141, 154, 239, 247
VA03, 154, 214, 239, 263, 305
Variables
 \$MACHINE, 256, 260
 \$\$SAP_SESSION, 256
 FI.OUTPUT, 260
 files, 141–44
 LOGIN.COUNTER, 256
 LOGIN.COUNTERTXT, 256
 RESULTS.OUTPUT, 260–61
 RESULTS.SCREEN, 260–61

vatwrun process, 275–76
Version control, 194, 301
Virtual client (AutoController), 145–46, 244–45, 250, 252–53
Virtual users, 20–21, 119, 123, 141–43, 146–49, 195, 211, 242, 301–307
 benefits of, 140–41, 147, 242–43
 ramping up, 269, 275–77
 tools for shrinking staff, 95
Vision. *See* Solution Vision
Vmstat, 168, 282
VMware, 5, 24, 46, 245, 271
Volume testing, 109–10

W

w, 168
WANs (wide area networks), 148, 158
War room, 242
WAST (Web Application Stress Test), 116–18
WBEM (Web-Based Enterprise Management), 167
Web AS (SAP Web Application Server), 4, 142, 143, 149, 225, 243

Web Services, 39, 42, 163, 268
XML and SOAP, 39
WGate (Web Gate, component of SAP ITS), 116, 164, 204
Wide Area Networks (WANs), 148, 153
Windows 9x, 163
Windows 2000, 85, 117, 121, 127, 135, 163, 165, 166, 271, 282, 363, 383
 Datacenter Edition, 383
Windows NT, 117, 127, 163, 173–74, 203, 383
Windows Server 2003, 121, 127, 165, 166, 195, 270, 300, 383
Windows XP, 165, 166, 174, 270
Work processes, 101, 183, 204, 281, 306, 307, 310, 323, 336, 360, 364
Workload baselining, 212

X

XD03, 239
XI (Exchange Infrastructure), 4
XML, 39–41, 139, 148, 185, 230