Index

A

ABORT statement 354
About SAS dialog box 222
access control lists (ACLs) 16
access levels 15
ACLs (access control lists) 16
AFTER= printer option 371
aggregate syntax
  identifying external files 169
ALLOCATE, DCL command 173
Alpha environment
  numeric variables 199
Alpha platform 4
ALQ= data set option
  syntax 249
ALQ= engine/host option
  CONCUR engine 155
  V7 engine 146
ALQ= external I/O option 361
ALQMULT= data set option 250
ALQMULT= engine/host option
  V6 engine 150
  V7 engine 147
ALQMULT= system option 396
ALTLOG= system option 397
ALTPRINT= system option 398
APPLETLOC= system option 398
applets 54, 398
application workspace (AWS) 73
ASCEBC, SAS function 276
ASCII characters
  converting to EBCDIC 276
  generating 272
  locating a specific 306
  locating one particular 276
  sorting 279
assignment statements
  in LOGIN.COM file 6
asynchronous I/O
  processing SAS data sets 208
asynchronous tasks 381
ATTRIB statement 354
attribute resources, Motif environment 103
attributes, Motif environment 96
autocall libraries 464
  creating autocall macros 464
  specifying user autocall libraries 465
autocall library
  location 52
  specifying 434
autocall macros, creating 464
autoexec files 47
  compared with configuration files 48
  creating 48
  customizing SAS sessions 47
  group-level 48
  job-level 48
  location, returning 54
  logging autoexec statements 48
  process-level 48
  specifying 48, 399
  system-level 48
AUTOEXEC= system option 48, 399
automatic macro variables 461
AUTOSCROLL, SAS command 220
AWS (application workspace) 73

B

batch job files, examples 26
batch jobs, submitting 14
batch mode 25
  controlling log and output destinations 195
batch queue, displaying jobs 14
binding keys to actions 89
BKS= data set option
  syntax 251
BKS= engine/host option
  CONCUR engine 156
blinking 96
BlKSIZE= external I/O option 361
block marks 111
bold text 96
bucket size 380
bucket size, specifying 251
BUFFERFULL option, TTOPEN function 315
buffers
  CONCUR engine 159
  I/O buffer number 364
  I/O buffer size 364
  I/O channels 315
  multibuffer count 380
  multibuffer count, specifying 260
  number of 400
  output 252
  performance, data set I/O 207
  SAS data sets 252
  size for sequential writes and reads 207
  size of 401
  terminating input when full 315
BUFNO= system option 400
BUFSIZE= data set option
  compared with CACHESIZ= data set option 254
  performance, data set I/O 207
  syntax 252
BUFSIZE= engine/host option
  V7 engine 147
BUFSIZE= system option 401
BURST= printer option 371
BYTE, SAS function 276

C

CA-OpenIngres engine 161
cache
  number used per SAS file 402
  size of 402
CACHENUM= data set option 253
  performance, data set I/O 207
CACHENUM= engine/host option
  V7 engine 147
CACHENUM= system option 402
caches, data set I/O 207, 208
caches, number per SAS file 253
CACHESIZ= data set option
  compared with BUFSIZE= data set option 254
  performance, data set I/O 208
  syntax 254
CACHESIZ= engine/host option
  V6 engine 150
  V7 engine 147
CACHESIZ= system option 402
CALL routines 276
CAPS, SAS command 220
captive accounts, issuing functions from 40
carriage control 362
carriage controls 403, 412, 416
case sensitivity
  DCL logical names 297
  filenames 8
  paste-buffers 112
  X resources 120
CATALOG procedure 336
CC= external I/O option 362
CC= system option 403

Change Working Directory dialog box 63, 223
CHAR= printer option 371
character expressions, translating 313
character marks 111
character values, writing as hexadecimal values 265
character variables
  storage 199
chinsert, function-key command 239
CIMPORT procedure 336
CLEANUP system option 404
CLEANUP tool 35
CLEANUP, OpenVMS command 36
CNTLLEV= data set option
  CONCUR engine 159
  syntax 255
CNTLLEV= engine/host option
  V7 engine 147
COLLATE, SAS function 279
collating sequence
  for macro character evaluation 467
COLOR, SAS command 221
colors
  COLOR command 221
  color resources, defining 104
  contrast 110
  line numbers 108
  Motif environment 96
  SAS windows 104
  SASCOLOR window 104
  selected text 108
  text labels for columns 107
  text labels for rows 108
  user-aid windows 107
  windowing environment 67
  windows 103, 221
column labels, color 107
.COM file type 10
.COM files
  command procedures 13
  invoking SAS System 22
command files
  print files created by 172
command line
  noninteractive mode 29
command line, DCL 12
  interrupting command-line processing 13
command procedure file 24
  invoking SAS System 22, 24, 25
  invoking SAS System in batch mode 26
command procedures, DCL 13
command window, displaying 118
command window, modifying settings 80
commands, function-key 239
commands, Text-Editor 219
compound expressions 368
concatenated external files 169
concatenated libraries, librefs 379
CONCUR engine 154
  access level 159
  accessing observations 160
  buffer size and number 159
  contiguous ranges of observations 160
  data set internals 158
  data set options 157
  DECnet access 157
  disk space usage 161
  engine/host options 155
  member types supported 155
  passwords 158
  performance 158
  performance comparisons 161
  POINT= option 160
  portable data set options 159
  selecting 154
  system option values 157
concurrency engine
  See also CONCUR engine
  error messages 482
concurrency engine data sets 158
CONFIG= system option 405
configuration files 46
  compared with autoexec files 48
  creating 46
  customizing SAS sessions 46
  displaying contents of 47
  group-level 46
  job-level 46
  listing contents 450
  location, defining 54
  name specification 405
  process-level 46
  system-level 46
  user configuration file, specifying 47
CONFIRM qualifier 36
container windows 73
CONTENTS procedure
  determining observation size 131
  determining page size 131
  syntax 337
CONVERT procedure 339
COPIES= printer option 371
COPY, DCL command 14
copying files 14
CPARMS resources 103
  CPARMS resource set, defining 106
  specifying 104
CPORT procedure 341
CREATE/DIRECTORY, DCL command 14
CTRL-B, recalling SAS statements 28
CTRL-C, interrupting SAS tasks 31
CTRL-Y
  interrupting SAS sessions 31
CTRL-Z, terminating terminal input 29
cursor movement
  host-specific commands 239
  keyboard action names 93
  Motif environment 93
  to command line 230
  windowing environment 239
cursordown, function-key command 239
cursorleft, function-key command 239
cursorright, function-key command 240
cursorup, function-key command 240
customizing SAS sessions 44
  autoexec files 47
  configuration files 46
  displaying system options settings 49
  logical names, OpenVMS 52
  OPTIONS statement 49
  precedence for similar types of options 51
  precedence for system option specifications 50
  SASUSER library 51
  system options, specifying in SAS command 45
customizing the SAS windowing environment 72
  color contrast rersource 110
  customizing cut-and-paste operations 110
  extended-attribute key resources 98
  font resources 100
  font-alias resources 102
  global color and attribute resources (CPARMS) 103
  keys resources 89
  miscellaneous resources 118
  modifying X resource settings 74
  pull-down menu resources 110
  session gravity 115
  session workspace 115
  toolbox resources 83
  window size resources 115
  X resources for the SAS System 119
cut and paste keys, customizing 114
cut-and-paste operations
  automatically copying selected text 114
  customizing 110
  marking text 111
  marking text, with MARK command 111
  marking text, with the mouse 111
  paste buffers 112
  preserving color and attribute information 114

D

.DAT file type 11
data cache, I/O
  size of 380
  specifying 380
data caches, number per SAS file 253
data libraries
  See SAS data libraries
data library attributes, listing 380
data lines, including 374
data representation
  missing values 201
  numeric variables, in Alpha environment 199
  numeric variables, in VAX environment 200

variable precision 199
variable storage 199
data security 14
access control lists (ACLs) 16
access levels 15
file protection 15
data set I/O performance 204
asynchronous I/O 208
buffer sizes 207
BUFSIZE= data set option 207
caches 207, 208
data set space allocation 204
disk fragmentation 206
highwater marking 205
data set options
CONCUR engine 157
OPTIONS procedure 345
portable options, CONCUR engine 159
specifying 245
summary table of 246
syntax 246
V5 engine 153
V6 engine 151
V6TAPE engine 152
data set space allocation 204
DATA step, for sending e-mail 181, 183
DATA step, terminating 354
DATASETS procedure 343
datetime values
OpenVMS, converting to SAS format 328
SAS, converting to OpenVMS format 271
DBCS
See double-byte character sets
DBCS system option 406
DBCSLANG= system option 406
DBCSTYPE= system option 407
DBMS interface engines 161
DCL (Digital Command Language) 12
command line 12
command procedures 13
commands 13
DCL commands 13
external files 166
file management 14
for tape access 134, 173
issuing 463
issuing a single command 36
issuing from SAS sessions 36
issuing multiple 39
issuing with procedure syntax 38
LOGIN.COM file for storing 5
order of precedence 174
processing, under OpenVMS 37
submitting 238
terminal session control 13
DCL logical names
case sensitivity 297
getting information about 296
returning 41
DCL symbols
creating 41, 306
values, returning 41, 299
DEALLOCATE, DCL command 174
DECMULT= system option 408
DECnet access
CONCUR engine 157
DECTERM window 453
DEFINE, DCL command 14
defragmentation 206
delchar, function-key command 240
DELETE access 15
DELETE, DCL command 14
DELETE, OpenVMS function 41
DELETE, SAS function 280
delline, function-key command 240
delpchar, function-key command 240
deltoeol, function-key command 240
delword, sas command 240
DEQ= data set option
syntax 256
DEQ= engine/host option
CONCUR engine 156
V6 engine 150
V7 engine 147
DEQ= external I/O option 362
DEQMULT= data set option 257
DEQMULT= engine/host option
V7 engine 147
device information items, returning 295
device information, returning 41
DEVICE= system option 409
device-type keywords 360
dialog boxes
About SAS 222
Change Working Directory 63, 223
Exit 223
File Selection 118
Find 64, 224
Host Font 99, 224
Open 61, 224
Preferences 75, 225
Replace 65, 226
Save As 226
digital command language (DCL)
See DCL (Digital Command Language)
DINFO, SAS function 281
.DIR file type 10
directories
creating 7, 14
default 6
default, changing 7
default, displaying 14
default, setting 14
default, specifying 5
displaying list of files and subdirectories 13
empty directories, deleting 284
file structure 7
home directories 6
OpenVMS 6
subdirectories 6
directory search, releasing resources 277
DIRECTORY, DCL command 13
directory-attribute information 282
disk blocks, adding 380
disk blocks, specifying 249, 256
disk files
routing log to, interactive line mode 191
routing log to, noninteractive mode 193
routing log to, windowing environment mode 189
routing output to, interactive line mode 192
routing output to, noninteractive mode 194
routing output to, windowing environment mode 190
disk fragmentation
data set I/O 206
external I/O 211
disk quota information, returning 41, 298
disk space usage
CONCUR engine 161
disk space, WORK data library 32
disk volume highwater marking
data set I/O 205
external I/O 210
disks
displaying default 14
routing output to 360
setting default 14
specifying default 5
DISMOUNT, DCL command 174
display
routing log to, noninteractive mode 193
routing output to, noninteractive mode 194
-display, X command line option 19
DLGABOUT, SAS command 222
DLGCDIR, SAS command 223
DLGENDR, SAS command 223
DLGFIND, SAS command 224
DLGFONT, SAS command 224
DLGOPEN, SAS command 224
DLGPREF, SAS command 225
DLGREPLACE, SAS command 226
DLGSAVE, SAS command 226
DLGSCRDUMP, SAS command 227
DMS settings, modifying 77
DMSEXP mode, invoking SAS System 24
from a command procedure file 25
from Motif Session Manager 24
with the SAS command 24
DOPTNAME, SAS function 282
DOPTNUM, SAS function 283
double-byte character set 100
double-byte character sets 406, 407
DUMMY keyword 361
dummy variables 201
dump files 410
DUMP= system option 410

E

e-mail 181
  DATA step for sending 181, 183
  FILENAME statement for 182
  SCL code for sending 181, 184
  sending from SAS System 181
e-mail, sending 66
EBCASC, SAS function 283
EBCDIC, converting to ASCII 283
ECHO option, TTOPEN function 315
ECHOAUTO system option 48
echoing terminal input 315
EDIT, DCL command 14
Editing settings, modifying 78
editor, invoking 14
electronic mail
  See e-mail
empty directories
  deleting 284
engine/host options
  CONCUR engine 155
  V6 engine 150
  V6TAPE engine 152
  V7 engine 146
ENGINE= system option 411
engines
  See SAS engines
error codes, translating to text 41
error messages 471
  concurrency engine 482
  host subsystem messages 472
  operating environment messages 471
  TPU interface 481
  types of 471
error messages, setting case 423
executable images, specifying search path 53
EXECUTE access 15
Exit dialog box 118, 223
EXPANDLNM system option 412
Explorer window 20
  invoking SAS System 21
extended paste buffers 112
extended-attribute key resources 98
external files
  blocks, specifying 362
  copying to a window 230
  deleting 284
  external I/O options 370
  file access attributes, overriding 362
  file types 11
  file-sharing attributes 365
  filerefs for 357
  filerefs, assigning/deassigning 286
  opening 293
  pathname, returning 305
  specifying as input 375
  verifying existence of, when associated with a fileref 284
  veryifying existence of, by physical name 286
external files and devices 166
  access methods 166
  carriage control 403
  concatenated files 169
  default file types 170
  displaying information about 172
  e-mail, sending from SAS System 181
  filerefs, assigning 167
  identifying, to the SAS System 166
  identifying, with aggregate syntax 169
  identifying, with OpenVMS pathnames 168
  in default directory 170
  logical names, assigning 167
  OpenVMS commands, reading from/writing to 179
  order of precedence for specifications 166
  performance 209
  pipes 179
  print files, reading and writing 171
  remote access 179
  tape access 172
  text libraries, identifying 169
  wildcards in specifications 168
external I/O performance 209
  disk fragmentation 211
  file space allocation 209
  highwater marking 210
  multiblock count, specifying default 211
external I/O statement options 361, 370

F

F selection-field command
  routing output to disk file, windowing environment mode 190
FAC= external I/O option 362
FAQs (Frequently Asked Questions) 42
FDELETE function 284
FEED= printer option 371
file attributes, default 171
FILE command
  routing log to disk file, windowing environment mode 189
  routing output to disk file, windowing environment mode 190
file filter, default 119
file information items 285
file management, DCL commands 14
file protection 15
  for a process 15
  for individual files 16
File Selection dialog box, default directory 118
file space allocation 209
FILE statement
  accessing external files 166
  printer options 371
  syntax 355
file structure 7
file system 6
  directories 6
  file types 10
  filenames 8
  files 8
file types 10
  .COM 10, 13
  .DAT 11
  .DIR 10
  external files 11
  .LIS 10, 11
  .LOG 10, 11
  .MAI 10
  OpenVMS file types used by SAS System 10
  .SAS 11
  SAS files 11
  .TLB 11
FILE, SAS command 228
FILEATTR, SAS function 285
FILECC system option 412
FILECLOSE= data set option 258
FILEEXIST, SAS function 284, 286
FILENAME statement
  accessing external files 166
  examples 372
  for e-mail 182
  printer options 371
  syntax 357
FILENAME, SAS function 286
filenames 8
  case sensitivity 8
  fully qualified names 8
  length 8
  permissible characters 8
  special characters in 9
  version numbers 9
  wildcard characters 9
FILEREF, SAS function 290
filerefs
  for external files 357
  reserved 359
  verifying 290
filerefs, assigning to external files 167
files 8
  copying 14
  displaying contents 14
  displaying list of 13
  filenames 8
  invoking editor to create or modify files 14
  managing with DCL commands 14
  printing 14
  purging 14
  removing access to a file 14
files, indexed
  random access 369
  restricting records read 368
  writing to 366
files, RMS
  I/O buffer number 364
  I/O buffer size 364
  reading 363, 367

FILL, SAS command 229
Find dialog box 64, 224
FINDEND CALL routine 277
FINDFILE, OpenVMS function 41
FINDFILE, SAS function 291
FINFO, SAS function 292
FIRSTOBS= data set option 339
  CONCUR engine 160
FLAG= printer option 371
FMTSEARCH= system option 413
font resources 100
font-alias resources 102
fonts
  customizing 98
  default 99
  normal, determining 101
  SAS graphics 101
  system, specifying 101
Fonts dialog box 99
FOOTNOTE statement 374
FOPEN, SAS function 293
FOPTNAME, SAS function 293
FOPTNUM, SAS function 294
FORM= printer option 371
FORM window, invoking 240
format catalogs, search order 413
FORMAT procedure 344
formats 263
  associating with variables 354
  HEX 265, 264
  IB 266, 339
  PD 267
  PIB 268
  RB 269
  UIC 270
  user-defined, creating 344
  VMSMSG 271
  VMSTIMEF 271
  VMSZN 272
FORMS= system option 414
forms, default for windowing environment output 414
Frequently Asked Questions (FAQs) 42
FSFORM, SAS command 240
FULLSTIMER system option 414
fully qualified names 8
function keys 463
  displaying 58
function-key commands 239
functions, issuing from captive accounts 40
functions, SAS 275

G

General settings, modifying 75
generation data sets 137
GETDVI
  SAS function 295
GETDVI, OpenVMS function 41
GETJPI
  SAS function 295
GETJPI, OpenVMS function 41
GETLOG
  SAS function 296
GETLOG, OpenVMS function 41
GETMSG
  SAS function 297
GETMSG, OpenVMS function 41
GETOPTION function 50
GETQUOTA
  SAS function 298
GETQUOTA, OpenVMS function 41
GETSYM
  SAS function 299
GETSYM, OpenVMS function 41
GETTERM, OpenVMS function 41
GETTERM, SAS function 300
GISMAPS= system option 415
global color resources 103
GRAPH window
  saving as an image file 227
graphics devices, specifying destination 53
graphics options, returning values 50
graphics stream files (GSF)
  carriage control 416
  format, specifying 363
GROUP access level 15
group-level autoexec files 48
group-level configuration files 46
GSFCC= external I/O option 363
GSFCC= system option 416
GSTORE file, location of 118

H

HDR= printer option 371
HED, SAS command (TPU) 67, 234
help
  Frequently Asked Questions (FAQs) 42
  location of files 417
  online, browser for 119
  sample programs 42
  SAS Notes 42
  SAS Windowing Environment 68
HELP facility, invoking 14
help files, specifying location 53
HELP, DCL command 14
HELPLOC system option 417
HEX format 265, 264
HEX informat 323, 322
hexadecimal values, converting 323
highwater marking
  data set I/O 205
  external I/O 210
home directories 6
HOME, SAS command
  Motif equivalent 94
  syntax 230
Host Font dialog box 99, 224
host subsystem
  error messages 472
host variables, returning 310

I

I/O channels
  assigning to terminals 42, 315
  buffers 315
  closing 42, 313
  echoing terminal input 315
  modifying 42, 314
  opening 42
  reading from 317
  timeout delay 316
  writing to 42, 317
I/O data cache 451
  size of 380
  specifying 254, 261, 380
I/O data caches, number per SAS file 253
IB format 266
IB informat 324
iconizing windows 66
icons, Motif environment 117
icons, user-defined 117, 118
image information, printing 419
images, unloading at end of each SAS step 449
in-memory macro variables 425
%INCLUDE statement 374
  recalling SAS statements 29
INCLUDE, SAS command 230
INFILE statement 375
  accessing external files 166
informats 321
  associating with variables 354
  HEX 323, 322
  IB 324
  PD 325
  PIB 325
  RB 326
  user-defined, creating 344
  VMSTIME 328
  VMSZN 329
  ZD 330
  ZDV 332
INITIALIZE, DCL command 173
INITSTMT= system option 417
insert mode 96, 119, 239
integer binary values
  reading 324
  writing 268
interactive line mode 27
  controlling log and output destinations 191
  invoking SAS System 27
interior windows 73
interrupts
  command line, DCL 13
  SAS tasks and sessions 31

J

Java applets 54, 398
job-level autoexec files 48
job-level configuration files 46
job-process information, returning 41, 295

K

KEY= external I/O option 363, 366
key translations 89
  creating 90
keyboard action names 93
keyboard actions, default 97
keyboard, customizing
  defining function keys 463
  Motif environment 89
%KEYDEF macro statement 463
keys resources 89
keysyms, determining 90
KEYVALUE= external I/O option 363, 367
kp_application, function-key command 240
kp_numeric, function-key command 240

L

LENGTH statement 377
LIBASSIGN command 125
LIBNAME function 125
  syntax 302
LIBNAME statement 125, 378
  engine/host-options 379
  logical names in 127
  specifying SAS engines 127
libraries 423
LIBREF, SAS function 303
librefs
  assigning 124, 302
  assigning to SAS data libraries 140
  assigning, with LIBASSIGN command 125
  assigning, with LIBNAME function 125
  assigning, with LIBNAME statement 125
  assigning, with SAS Explorer window 125
  associating 378
  clearing 130
  compared with logical names 124
  deassigning 302
  for concatenated libraries 379
  listing 131
  logical names as 127
  multiple data libraries in a single directory 126
  multiple, for a single library 126
  OSIRIS files 162
  SAS data libraries 378
  SPSS files 163
  verifying assignment of 303
line numbers, color 108
LINESIZE= external I/O option 363
LINESIZE= system option 418
.LIS file type 10, 11
LOADLIST= system option 419
  optimizing memory usage 213
local paste buffers 112
locked records 258
LOCKREAD= data set option 258
LOCKWAIT= data set option 259
.LOG file type 10, 11
LOG qualifier 36
LOG statement, PRINTTO procedure
  routing log to disk file, interactive line mode 191
  routing log to disk file, noninteractive mode 194
  routing log to disk file, windowing environment mode 189
  routing log to display, noninteractive mode 193
  routing log to printer, interactive line mode 191
  routing log to printer, noninteractive mode 193
  routing log to printer, windowing environment mode 189
LOG= system option 420
Log window, scrolling 220
logging SAS system options 427
logical names 12, 52
  as librefs 127
  assigning to SAS data libraries 126
  associating with file specifications 14
  compared with librefs 124
  concatenating SAS data libraries 128
  concealed 128
  in LIBNAME statement 127
  overriding system-level names 52
  user-defined 52, 53
logical names, assigning to external files 167
logical-name tables 12
login procedure 4
  files affecting 5
LOGIN.COM file 5
LOGIN.COM file restrictions
  assignment statements in 6
LOGMULTREAD system option 421
logout procedure 6, 14
LOGOUT, DCL command 14
logs
  detail level 424
  news files 426
  routing 420
  shared read access 421
LRECL= external I/O option 363

M

macro facility 461
  autocall libraries 464
  automatic macro variables 461
  collating sequence for macro character evaluation 467
  host-specific aspects 467
  macro functions 464
  macro statements 463
  stored compiled macro facility 465
  system options used by 467
macro functions 464
  example 464
macro statements 463
macro variable symbol tables
  memory for 424
macro variables, automatic 461
macro variables, in-memory 425
.MAI file types 10
map data 421
MAPS= system option 421
MARK command 111
marking text 111
  with MARK command 111
  with the mouse 111
MBC= external I/O option 364
MBF= data set option
  syntax 260
MBF= engine/host option
  CONCUR engine 157
MBF= external I/O option 364
member types 11
  CONCUR engine 155
  V5 engine 153
  V6 engine 149
  V6TAPE engine 152
  V7 engine 146
  V7TAPE engine 148
members 11
memory
  for macro variable symbol tables 424
  for procedure termination 431
  for SAS System termination 444
  for storing macro variables 466
  limit on total amount 422
memory usage, optimizing 213
  disabling privileged unloading 215
  enabling privileged unloading 214
  LOADLIST= system option 213
  UNLOAD system option 213
MEMSIZE= system option 422
menus, creating 346
menus, turning on and off 110
missing values 201
MOD external I/O option 365
MOPEN, SAS function 304
Motif environment
  attribute resources 103
  attributes, clearing 96
  attributes, color 96
  attributes, display 96
  bold text 96

command window settings, modifying 80
command window, displaying 118
CPARM resources 103
cursor movement 93
customizing the SAS windowing environment 72
Exit dialog box, enabling 118
file filter, default 119
File Selection dialog box, default directory 118
global color resources 103
GSTORE file, specifying location of 118
HOME command equivalent 94
icon files, search path 117
icons, maximum number 117
insert mode 96
invoking SAS System 22, 23
keyboard action names, default 97
keyboard, customizing 89
modifying X resource settings 75
overstrike mode 96
paste-buffer names 112
pmenu mnemonics 110
Preferences dialog box 75
pull-down menus 110
reverse video 96
scrolling windows 95
session gravity 115
session workspace 115
text effects 96
timeout delay, specifying 119
toolbar settings, modifying 80
underlining 96
Web browser, specifying 119
workspace, resizing 115
X resource options, passing to 456
Motif Session Manager
invoking SAS System 25
MOUNT command 135
MOUNT, DCL command 173
mouse
in SAS windowing environment 67
marking text 111
mouse pointer shapes 67
movebol, function-key command 240
moveeol, function-key command 240
MSG= system option 423
MSGCASE system option 423
MSGLEVEL= system option 424
MSYMTABMAX= system option 424, 466
multiblock count, external I/O performance 211
multibuffer count, specifying 260
MVARSIZE= system option 425, 466
MYPROC.SAS procedure 38

N

NAME= printer option 371
-name, X command line option 19
native editor section file 53
NEW external I/O option 365
newline, function-key command 240
news files 426
NEWS= system option 426
nextfield, function-key command 240
nextword, function-key command 240
NLA0, directing output to 361
NOBUFFERFULL option, TTOPEN function 315
NOCONFIRM qualifier 36
node name, returning 304
NODENAME, SAS function 304
NODUPKEY data set option 349
NOECHO option, TTOPEN function 315
NOLOG qualifier 36
noninteractive mode 28
command line 29
controlling log and output destinations 192
invoking SAS System 29
nonnative SAS files 133
NOTE= printer option 372
NOTIFY= printer option 372
null device, directing output to 361
numeric data
converting to OpenVMS UIC string 270
writing as character strings 271
writing as integer binary values 266
writing as real binary data 269
numeric keypad
customizing 95
numeric precision 199
numeric variables
Alpha platform 199
storage 199
VAX platform 200

O

OBS= data set option 339
CONCUR engine 160
OBS= system option 427
observations
length, determining with CONTENTS procedure 131
sorting 349
specifying last 427
OLD external I/O option 365
online help
browser specification 119
online help files, specifying location 53
online training courses 448
Open dialog box 61, 224
OpenVMS commands, reading from/writing to 179
OpenVMS directories
filerefs, assigning/deassigning 286
getting information about 281
number of information items 283
OpenVMS environment 3, 4
access to 4
Alpha platform 4
file system 6
VAX platform 4
OpenVMS error codes, translating to text 297
OpenVMS logical names
concealed, expanding 412
logging 305
OpenVMS process 5
file protection for 15
operating environment
error messages 471
operating environment commands, issuing 278, 383
OPLIST system option 427
OPTIONS procedure 49, 345
OPTIONS statement 49
customizing SAS sessions 49
ORACLE engine 161
Oracle Rdb engine 161
OSIRIS= data set option 339
OSIRIS engine 161, 340
accessing OSIRIS files 162
assigning librefs to OSIRIS files 162
referencing OSIRIS files 163
referencing OSIRIS files, example 163
restrictions on 162
OSIRIS system files, converting to SAS data sets 339
OUT= data set option 339
out-of-resource conditions 404
output
default form for windowing environment 414
destination for printed output 446
line size 363
page size 365
record format 365
record length 363
output destination, specifying 53
output devices, assigning/deassigning filerefs 286
Output window, scrolling 220
output, routing
See procedure output, routing
overstrike mode 96, 119
OWNER access level 15

P

P selection-field command
routing output to printer, windowing environment mode 190
packed decimal data
reading 325
writing 267
page number, resetting 428
page size
determining with CONTENTS procedure 131

PAGENO= system option 428
pages
  allocation of 396
  extending to a SAS file 380
  number extended to a SAS file 257
  number preallocated to a file 250
  number to extend to a file 408
  page size, specifying 429
  preallocating to a file 380
PAGESIZE= external I/O option 365
PAGESIZE= system option 429
PARAM= printer option 372
parameters, passing to SAS programs 445
PARMCARDS file, file reference for 430
PARMCARDS= system option 430
PASSALL= printer option 372
passwords 4
  CONCUR engine 158
  validating 5
paste buffers 112
  automatically copying selected text 114
  exchanging information with 115
PATHNAME, SAS function 305
PD format 267
PD informat 325
performance 203
  CONCUR engine 158
  CONCUR engine, comparisons 161
  data set I/O 204
  external I/O 209
  logging statistics 414, 442
  memory usage optimization 213
  system start-up 212
  time display on statistics for 441
  unloading images 449
PIB format 268
PIB informat 325
PIPE keyword 361
pipes 179
PLOTTER keyword 360
PMENU facility 67
pmenu mnemonics 110
PMENU procedure 346
POINT= option, SET statement
  CONCUR engine 160
Preferences dialog box 75, 225
  modifying command window settings 80
  modifying DMS settings 77
  modifying Editing settings 78
  modifying General settings 75
  modifying Results settings 79
  modifying toolbox settings 80
prevfield, function-key command 240
prevword, function-key command 240
PRINT command
  routing log to printer, windowing environment mode 189
  routing output to printer, windowing environment mode 190
print files
  carriage control 412
  created by command files 172
  default attributes 171
  default format 171
  reading 171
  writing 171
PRINT statement, PRINTTO procedure
  routing output to disk file, interactive line mode 192
  routing output to disk file, noninteractive mode 195
  routing output to disk file, windowing environment mode 190
  routing output to display, noninteractive mode 194
  routing output to printer, interactive line mode 192
  routing output to printer, noninteractive mode 194
  routing output to printer, windowing environment mode 190
PRINT= system option 431
PRINT, DCL command 14
  routing log to printer, noninteractive mode 193
  routing output to printer, noninteractive mode 194
printed output, destination for 446
PRINTER keyword 360
printer options 371
printers
  routing log to, interactive line mode 191
  routing log to, windowing environment mode 189
  routing output to, noninteractive mode 194
  routing output to, windowing environment mode 189
printing files 14
PRINTTO procedure 347
  LOG statement 189, 191, 193, 194
  PRINT statement 190, 192, 194, 195
  routing log to disk file, interactive line mode 191
  routing log to disk file, noninteractive mode 194
  routing log to disk file, windowing environment mode 189
  routing log to display, noninteractive mode 193
  routing log to printer, interactive line mode 191
  routing log to printer, noninteractive mode 193
  routing log to printer, windowing environment mode 189
  routing output to disk file, interactive line mode 192
  routing output to disk file, noninteractive mode 195
  routing output to disk file, windowing environment mode 190
  routing output to display, noninteractive mode 194
  routing output to printer, interactive line mode 192
  routing output to printer, noninteractive mode 194
  routing output to printer, windowing environment mode 190
privileged unloading
  disabling 215
  enabling 214
procedure output
  directing 347
  footnotes 374
  routing, ALTPRINT= option 398
  routing, PRINT= option 431
  titles 383
procedure output, routing 187
  attributes of procedure output file 188
  batch mode 195
  controlling output destination 188
  controlling output destination, batch mode 195
  controlling output destination, interactive line mode 191
  controlling output destination, noninteractive lmode 192
  controlling output destination, windowing environment mode 189
  PRTFILE command 196
  to disk file, interactive line mode 192
  to disk file, noninteractive mode 194
  to disk file, windowing environment mode 190
  to display, noninteractive mode 194
  to printer, changing control information 196
  to printer, interactive line mode 191
  to printer, noninteractive mode 194
  to printer, windowing environment mode 189
procedure stack size 441
process 5
  file protection for 15
process-level autoexec files 48
process-level configuration files 46
process-level logical names 455
PROCLEAVE= system option 431
Program Editor
  autosave interval, setting 118
  autosave, enabling 118
program files 26
PRTFILE command
  routing log and procedure output 196
pull-down menus 110
PURGE, DCL command 14
purging files 14
PUTLOG, SAS function 305
PUTSYM, OpenVMS function 41
PUTSYM, SAS function 306

Q

QUEUE= printer option 372

R

RANK, SAS function 306
RB format 269
RB informat 326
READ access 15
real binary data
  reading 326
  writing as hexadecimal values 264
recalling SAS statements 29
RECFM= external I/O option 365
records, locked 258
RENAME, OpenVMS function 41
RENAME, SAS function 307
Replace dialog box 65, 226
RESHOW, SAS command 231
resources, releasing 277
RESTART= printer option 372
Results settings, modifying 79
reverse video 96
routing printed output 446
row labels, color 108
RSASUSER system option 432

S

S= system option 433
sample programs 42
$SAS/ALTLOG= command
  routing log to disk file, noninteractive mode 193
  routing log to disk file, windowing environment mode 189
  routing log to display, noninteractive mode 193
  routing log to printer, noninteractive mode 193
  routing log to printer, windowing environment mode 189
$SAS/ALTPRINT= command
  routing output to disk file, noninteractive mode 195
  routing output to disk file, windowing environment mode 190
  routing output to display, noninteractive mode 194
  routing output to printer, noninteractive mode 194
  routing output to printer, windowing environment mode 190
SAS catalogs
  exporting 341
  managing 336
SAS command 19
  invoking SAS System 21, 23, 24
  specifying system options in 45
SAS commands 219
SAS data libraries
  appending SAS data sets to 343
  assigning librefs 140
  assigning logical names 126
  concatenated, search order 129
  concatenating with search-string logical names 128
  default access method 411
  default, specifying 449
  definition 124
  for SAS/GIS census tract maps 415
  indexes for 343
  librefs, assigning/deassigning 302
  librefs, LIBNAME statement syntax 378
  listing attributes of 378
  multiple librefs for a single library 126
  multiple, in single directory 126
  pathname, returning 305
  printing content descriptions 337
SAS data sets
  appending to SAS data libraries 343
  bucket size 380
  bucket size, specifying 251
  buffer size, output 252
  buffers, specifying 400
  converting VAX format to Alpha format 351
  copying 343
  created with CONCUR engine 155
  deleting 343
  disk blocks, addig 380
  disk blocks, specifying 249, 256, 379
  estimating size 131
  exporting 341
  generation data sets 137
  I/O data cache, specifying 380
  listing 343
  multibuffer count 260, 380
  processing with asynchronous I/O 208
  renaming 343
  shared access level, specifying 255
  sorting 349
  tape, closing 258
  temporary, deleting 33
  temporary, redirecting 33
  with same name 129
SAS engines 140
  CA-OpenIngres 161
  CONCUR engine 154
  CONCUR, performance 161
  DBMS interface engines 161
  file types created by 141
  ORACLE 161
  Oracle Rdb 161
  OSIRIS engine 161
  specifying by default 130
  specifying default 411
  specifying with LIBNAME statement 130
  SPSS engine 161
  SYBASE 161
  under OpenVMS 140
  V5 engine 153
  V6 engine 149
  V6TAPE engine 151
  V7 engine 145
  V7TAPE engine 148
SAS error messages 423
SAS Explorer window
  assigning librefs 125
SAS file
  pages, number to extend 257
.SAS file type 11
SAS files 123
  accessing 124
  appending to 365
  assigning librefs 124
  attribute information 285
  cache size for each open file 402
  caches, number per file 402
  copying from disk to tape 136
  deleting 280
  deleting with DELETE OpenVMS function 41
  extending pages to 380
  file types 11
  finding 41, 291
  I/O data cache, specifying 254, 380
  I/O data caches, number per file 253
  importing 336
  in concatenated SAS data libraries 129
  keys, specifying 366
  multiuser access 133
  nonnative 133
  opening 304
  opening for output 365
  output, specifying 355
  output, specifying device type for 360
  pages, number preallocated 250
  pages, number to extend 408
  preallocating pages to 380
  renaming 307
  renaming with RENAME OpenVMS function 41
  sharing between OpenVMS platforms 133
  tape access 134
  tape access, DCL commands for 134
  tape access, reading and writing 135
SAS/GIS census tract maps 415
SAS help
  location of files 417
SAS jobs
  completion status 43
  terminating 354
SAS list file 54
SAS log
  destination for copy of 397
  displaying output from X command 454

$SAS/LOG= command
routing log to disk file, noninteractive mode 193
routing log to display, noninteractive mode 193
routing log to printer, noninteractive mode 193
SAS log files
alternate filename, returning 53
filename, returning 54
SAS log, routing 187
attributes of SAS log file 188
batch mode 195
controlling log destination 188
controlling log destination, batch mode 195
controlling log destination, interactive line mode 191
controlling log destination, noninteractive mode 192
controlling log destination, windowing environment mode 189
PRTFILE command 196
to disk file, interactive line mode 191
to disk file, noninteractive mode 193
to disk file, windowing environment mode 189
to display, noninteractive mode 193
to printer, changing control information 196
to printer, interactive line mode 191
to printer, noninteractive mode 193
to printer, windowing environment mode 189
SAS macro facility
See macro facility
$SAS/NODMS/ALTLOG= command
routing log to disk file, interactive line mode 191
routing log to printer, interactive line mode 191
$SAS/NODMS/ALTPRINT= command
routing output to disk file, interactive line mode 192
routing output to printer, interactive line mode 192
$SAS/NODMS/LOG= command
routing log to disk file, interactive line mode 191
routing log to printer, interactive line mode 191
$SAS/NODMS/PRINT= command
routing output to disk file, interactive line mode 192
routing output to printer, interactive line mode 192
SAS Notes 42
SAS output, linesize 418
$SAS/PRINT= command
routing output to disk file, noninteractive mode 195
routing output to display, noninteractive mode 194
routing output to printer, noninteractive mode 194
SAS procedures 335
SAS sequential data libraries, default access method 436
SAS sessions
ending 28
interrupting 31
issuing DCL commands 36
overriding defaults 20
saving settings on exit 119
starting 19
suspending 384
terminal specification 19
terminating 354
SAS sessions, customizing
See customizing SAS sessions
SAS source programs, default location 443
SAS statements 353
executing at startup 417
including from files 29, 374
length, specifying 433
recalling 28, 29
saving 28
SAS System
batch mode 25
in detached process 30
in SPAWN/NOWAIT subprocess 30
interactive line mode 27
invoking in SPAWN/NOWAIT subprocess 440
memory, limit on total amount 422
noninteractive mode 28
under OpenVMS 18
SAS System extensions, user written 52
SAS system options
See system options
SAS System Options window 50
SAS System, invoking from
.COM file 22, 24
command procedure file 22, 24
interactive line mode 27
Motif 22, 23
noninteractive line mode 29
SAS command 21, 23
SAS Explorer window 21
SAS windowing environment 23
SAS System, invoking in DMSEXP mode 24
from a command procedure file 25
from Motif Session Manager 25
with the SAS command 24
SAS toolboxes 60, 82
application toolboxes, creating 88
changing an existing tool icon 85
changing appearance of entire ToolBox 85
clearing from display 60
command window 60
creating 88
customizing 83
displaying icons on 84
loading a different ToolBox 88
modifying 84
redisplaying 60
restoring defaults 87
saving changes 87
Tool Editor 84
tool icons 61
tool icons, adding 86
tool icons, deleting 87
tool icons, reorganizing 86
window-specific toolboxes, creating 88
SAS user profile library, specifying name 436
SAS window session ID 73
SAS Windowing Environment 22, 60
function keys, displaying 58
introduction 57
invoking SAS System 23
toolbar, closing 61
toolbar, customizing 61
toolbar, opening 61
command window 60
help 68
iconizing windows 66
mouse use 67
PMENU facility 67
special character attributes 67
text attributes, setting 67
text color, setting 67
text highlights, setting 67
ToolBox 60
TPU editor 67
SAS windowing environment, customizing 72
SAS windows, color 104
SAS WORK directory, specifying root directory 451
SAS$ALTLOG logical name 53
SAS$ALTPRINT logical name 54
SAS$APPLETLOC logical name 54
SAS$CONFIG logical name 54
SAS$EXTENSION logical name 52
SAS$GDEVICE logical name 53
SAS$HELPLOC logical name 53
SAS$INIT logical name 54
SAS$LIBRARY logical name 53
SAS$LOG logical name 54
SAS$PRINT logical name 54
SAS$SECTION logical name 53
SAS$STATUS symbol 43
SAS$TERMINAL logical name 53
SAS$TRANTAB logical name 54
SAS$USER logical name 53
SAS$WORKLIB logical name 54
SAS$WORKROOT logical name 53
SAS$XDEFAULTS logical name 53
SAS$X_STATUS logical name 54
SASAUTOS= system option 434
SASAUTOS, logical name 52
SASCOLOR window 104
SASHELP library, specifying location 435
SASHELP= system option 435

SASUSER library
  access control 432
  creating 52
  customizing SAS sessions 51
  location, specifying 53
SASUSER= system option 436
SASUSER.PROFILE catalog 51
Save As dialog box 226
SCL code, for sending e-mail 181, 184
scrolling windows 95
search-string logical names
  concatenating SAS data libraries 128
security
  See also data security
  login validation 5
Send Mail dialog box 66
SEQENGINE= system option 436
sequential files
  Version 5, accessing on disk 154
session gravity 73, 115
session workspace 115
SET DEFAULT, DCL command 14
SET MAGTAPE, DCL command 173
SET PROTECTION, DCL command 16
SET statement
  POINT= option 160
SETTERM, OpenVMS function 41
SETTERM, SAS function 308
SETUP= printer option 372
$SEVERITY symbol 43
shared access level, specifying 255
SHOW DEFAULT, DCL command 14
SHOW QUEUE, DCL command 14
SHR= external I/O option 365
SIZE= option, TTOPEN function 316
SORT procedure 349
  memory for 438
sort utility 437
sort work files 439
sorting
  collating sequence, customizing 350
  observations 349
SORTPGM= system option 437
SORTSIZE= system option 438
SORTWKNO= data set option 349
SORTWORK= system option 439
space allocation
  data set I/O 204
  external I/O 209
SPACE= printer option 372
SPAWN/NOWAIT subprocess 30, 440
SPAWN= system option 440
special characters
  in filenames 9
SPSS= data set option 339
SPSS engine 161, 340
  accessing SPSS files 163
  assigning librefs to SPSS files 163
  referencing SPSS files 164
  referencing SPSS files, example 164
  restrictions on 162
SPSS system files, converting to SAS data sets 339
ssequential writes and reads 207
STACK= system option 441
$STATUS symbol 43
STIMEFMT system option 441
STIMER system option 442
  time display for output 441
stored compiled macro facility 465
  accessing stored compiled macros 466
  memory availability for storing macro variables 466
subdirectories 6
  displaying list of 13
SUBMIT, DCL command 14
subprocesses 40
  global symbols 457
  keypads 453
  spawning 318
  timeout delay 458
suspending SAS sessions 384
SYBASE engine 161
SYSCC automatic macro variable 461
SYSDEVIC automatic macro variable 461
SYSENV automatic macro variable 462
%SYSEXEC macro statement 278, 463
%SYSGET macro function 464
  example 464
SYSGET, SAS function 310
SYSIN= system option 443
SYSJOBID automatic macro variable 462
SYSLEAVE= system option 444
SYSPARM automatic macro variable 462
SYSPARM= system option 445
SYSPRINT system option 446
SYSRC automatic macro variable 462
SYSSCP automatic macro variable 462
SYSSCPL automatic macro variable 462
SYSSESID automatic macro variable 462
SYSTASK statement 381
SYSTEM access level 15
SYSTEM CALL routine 278
system options 387
  CONCUR engine, values used by 157
  displaying settings 49
  displaying settings, with OPTIONS window 50
  in macro facility 467
  listing values of 345
  logging 427
  logging with OPTIONS procedure 49
  not applicable in OpenVMS 395
  precedence for similar types of options 51
  returning values, with GETOPTION function 50
  rules of precedence for specifications 50
  specifying with OPTIONS statement 49
  specifying, in the SAS command 45
  subscribing to processes 40
  summary of 387
  V5 engine 153
  V6 engine 151
  V6TAPE engine 152
System Options window 50
system performance
  See performance
system start-up performance 212
system utilities
  V5 engine 154
system-level autoexec files 48
system-level configuration files 46

T

tape access 172
  DCL commands for 173
  multivolume tapes 175
  order of commands for 174
  reading from labeled tapes 177
  reading from unlabeled tapes 177
  SET MAGTAPE command 173
  writing to labeled tapes 175
  writing to unlabeled tapes 176
tape files 134
  accessing with DCL commands 134
  closing 258, 446
  copying SAS files from disk to tape 136
  multivolume tapes 135
  reading and writing SAS files on tape 135
  tape usage 136
  V6TAPE engine 151
  V7TAPE engine 148
TAPE keyword 360
tape libraries, closing 446
tape, directing output to 360
TAPECLOSE= system option 446
tapes, closing 258
Technical Support 42
TEMP keyword 360
temporary files, directing output to 360
TERMIN, OpenVMS function 41
TERMIN, SAS function 311
terminal
  directing output to 360
  echoing input 315
terminal characteristics
  changing 308
  returning 300
terminal device
  modifying a characteristic of 41
  returning characteristics of 41
terminal device drivers 409
terminal I/O, blocking 447
terminal input, enabling 29, 41, 311
TERMINAL keyword 360
terminal output, enabling 41, 312
terminal session control, DCL command 13
terminal-access, SAS function 275

terminals
  assigning I/O channels to 315
  assigning to I/O channels 42
  specifying for SAS sessions 19
TERMINATOR= option, TTOPEN function 315
TERMIO= system option 447
TERMOUT
  SAS function 312
TERMOUT, Open VMS function 41
text attributes, setting windowing environment 67
text color, setting windowing environment 67
text editor 354
text effects 96
text highlights, setting windowing environment 67
text libraries 169
text, marking 111
Text-Editor commands 219
time display, for STIMER output 441
timeout delay, specifying
  I/O channels 316
  Motif environment 119
  subprocesses 40, 458
TIMEOUT= option, TTOPEN function 316
TITLE statement 383
.TLB file type 11
Tool Editor 84
tool icons 61
  adding 86
  changing 85
  deleting 87
  reorganizing 86
toolbar
  closing 61
  customizing 61
  opening 61
toolbar settings, modifying 80
ToolBox
  See SAS toolboxes
toolbox resources 83
toolboxes
  See SAS toolboxes
toolboxes, windowing environment 232
TOOLCLOSE, SAS command 232
TOOLEDIT, SAS command 232
TOOLLARGE, SAS command 233
TOOLLOAD, SAS command 233
toolsets 83
  customizing 83, 88
  for specific applications or windows 88
tooltips, enabling/disabling 234
TOOLTIPS, SAS command 234
top-level windows 73
TPU editor
  invoking 234
  SAS interface to 67
TPU interface
  error messages 481
TPU SAS command (HED, HOSTEDIT) 234
TRAILER= printer option 372
training courses 448
TRAINLOC= system option 448
TRANSLATE, SAS function 313
translation table names 54
transport files
  creating 341
  restoring 336
troubleshooting 42
TTCLOSE
  SAS function 313
TTCLOSE, OpenVMS function 42
TTCONTRL
  SAS function 314
TTCONTRL, OpenVMS function 42
TTOPEN
  SAS function 315
TTOPEN, OpenVMS function 42
TTREAD
  SAS function 317
TTWRITE
  SAS function 317
TTWRITE, OpenVMS function 42
TYPE, DCL command 14

U

UAF (user authorization file) 5
UIC format 270
underlining 96
UNDO, SAS command 235
UNLOAD system option 449
  optimizing memory usage 213
user authorization file (UAF) 5
user name 4
user name, validating 5
USER= system option 449
utilities
  LOGIN.COM file for storing 5
  V5 engine system utilities 154

V

V5 engine 153
  accessing V5 sequential-format files on disk 154
  data set options 153
  member types supported 153
  selecting 153
  system options 153
  system utilities 154
  when to use 153
V6 engine 149
  data set options 151
  engine/host options 150
  member types supported 149
  selecting 149
  system options 151
  when to use 149
V6TAPE engine 151
  data set options 152
  engine/host options 152
  member types supported 152
  selecting 151
  when to use 151
V6TAPE option
  system options 152
V7 engine 145
  engine/host options 146
  member types supported 146
  selecting 146
  when to use 145
V7TAPE engine 148
  member types supported 148
  when to use 148
V8TAPE engine
  selecting 148
variables
  dummy variables 201
  length, specifying 377
  precision 199
  storage 199
VAX environment
  numeric variables 200
VAX platform 4
VAXTOAXP procedure 351
verbose mode 450
VERBOSE system option 47, 450
version numbers
  filenames 9
VMS function 278, 318
VMS zoned numeric data 329
VMSMSG format 271
VMSSASIN automatic macro variable 462
VMSTIME informat 328
VMSTIMEF format 271
VMSZN format 272
VMSZN informat 329

W

WAITFOR statement 384
WBROWSE, SAS command 236
WCOPY, SAS command 237
WCUT, SAS command 237
Web browsers
  invoking 236
  specifying 119
  specifying for online help 119
wildcard characters
  in external file specifications 168
  in filenames 9
window managers 72
window session ID 73
window size resources 115
windowing environment

See also SAS Windowing Environment
commands 219
controlling log and output destinations 189
default form for output 414
function-key commands 239
windowing environment, customizing
See customizing the SAS windowing environment
windows
color 221
color attributes 103
highlighting 221
iconizing 66
refreshing 231
toolbox, closing 232
types of 73
writing to file 228
WORK data library 32
deleting 35
location, changing 33
path, specifying 54
root directory, specifying 53
system options 34
WORK= system option 451
WORKINIT system option 34
workspace, resizing 115
WORLD access level 15
WPASTE, SAS command 237
WRITE access 15
WRKCACHE= data set option 261
WRKCACHE= system option 451
WUNDO, SAS command 238

X

X command
compared with SYSTEM CALL routine 278
completion status 54
DECTERM window for 453
displaying output from 455
displaying output in SAS log file 454
issuing DCL commands from SAS sessions 36
specifying, for current SAS session 452
subprocess system options 40
X command line options 19
-display 19
-name 19
-xrm 20
X resource files 75
X resource options, passing to Motif environment 456
X resource settings, changing 74
X resources
case sensitivity 120
color contrast 110
default location, specifying 53
extended-attribute key resources 98
font resources 100
font-alias resources 102
keys resources 89
list of 120
miscellaneous resources 118
modifying settings 75
settings, changing 74, 75
specifying 75
summary of 119
toolbox resources 83
window size resources 115
X Logical Font Description (XLFD) 100
X SAS command 238
X statement 383
compared with SYSTEM CALL routine 278
completion status 54
issuing DCL commands from SAS sessions 36
issuing several DCL commands 39
subprocess system options 40
X statement subprocesses
Command Line Interpreter (CLI) symbols 40
displaying statement output 40
keypad definitions 40
logical name usage 40
timeout, specifying 40
X synchronization, changing 239
X Window System 72
XCMD system option 452
XCMDWIN system option 453
xev utility 90
XKEYPAD system option 40, 453
XLFD (X Logical Font Description), X resource 100
XLOG system option 454
XLOGICAL system option 40, 455
XOUTPUT system option 40, 455
XRESOURCES= system option 456
-xrm, X command line option 20
XSYMBOL system option 40, 457
XSYNC, SAS command 239
XTIMEOUT= system option 40, 458

Z

ZD informat 330
ZDV informat 332
zoned decimal data, reading 330, 332