Index

A

a.out, 26, 29
acc compiler, 18
access
  to devices or processes, 27
  to the system, 25, 26
administrator, system, 3, 5
at command, 29

B

batch command, 4, 25, 29
buffering
  and file I/O, 13
  minimizing, 5
busy time, 30

C

C*-on-a-node, 18, 19
cc compiler, viii
CM run-time system (CMRTS), 39
<cm/cmmd.h>, 11
'cm/cmmd-fort.h', 12
CM_NO_PN_CORE, 35, 37
CM_panic, 32, 34, 35
CM_timer_, 31
CM-5 system, 2
  gaining access to, 25
  sample system, 26, 27
cmf compiler, vii, viii, 20, 22
CMF-on-a-node, 20, 21
cmmd-ld, 18, 22, 23, 31
  command-line length limit, 24
CMMD_disable_safety, 35
CMMD_enable_host, 9
CMMD_enable_safety, 35
CMMD_error, 32, 34, 35
CMMD_partition_size, 5
-cmmd_root, 24
-cmos_root, 24
CMOST, 3, 26
  timers, 31
CMPN_panic, 32, 34, 35
cmps command, 5, 27, 31
  output, 28
CMRTS, 39
<cmsys/cm_memory.h>, 40
<cmsys/dp.h>, 40, 42
CMTSD files, 37
-comp, 23
-comphost, 22, 23
compilers
  acc, 18
  C and C++ programs, 17
  C* programs, 18
  CM Fortran programs, 20
  cmf, vii, viii, 20, 22
  cs, vii, viii, 18, 22
  f77, viii, 19
  Fortran 77 programs, 19
compiling, 17
  and vector units, 20
  host/node programs, 21
  hostless programs, C, 17
  hostless programs, Fortran, 19
control processor (CP), 2
core dump files, 32, 36, 37
CP. *See* control processor
cs compiler, vii, viii, 18, 22
<csgl.h>, 12

D

-dalign, 20
-DCP_CODE, 21

Copyright © 1995 Thinking Machines Corporation

debugging, 33
Distributed Job Manager (DJM), 3, 29
DPEAC, 4, 18, 21, 39

E

elapsed time, 30
error files, 32
error handling, 34
  customized, 35
errors
  diagnosing, 36
  errors file, 36
  handling, 34
executing a program, 29
execution model for VUs
  C*, 18
  CM Fortran, 21
`exit` routine, 9, 10, 34
expanding the stack or heap, 40

F

`-f`, 20
`f77` compiler, viii, 19
Fortran 77 symbol table size, 19
Fortran I/O, 13
Fortran tracebacks, 36, 37

G

global independent I/O mode, 12
global routines, 5
global synchronous broadcast I/O mode, 12
global synchronous sequential I/O mode, 12
global/local C*, 19
global/local CM Fortran, 21
global/local programming, 10, 23

H

heap, parallel, 39
`-host`, 22, 23
host program, 2, 7, 9, 10, 21, 22, 23, 24, 29
host/node programming model, 2, 11
host/node programs, 7, 9
  compiling, 21
hostless programming model, 1, 11
hostless programs, 7, 8
  compiling, 19
    See also programs
hostless versus host/node programming, 11

I

I/O modes, 12
  Fortran issues with, 13
  global independent, 15
  local, 15
  mixing F77 and CMF, 15
  restrictions, 13
  synchronous, 13
idle time, 30
include files, 11, 12, 21

J

`jrun`, 29, 31
`jsub`, 25, 29, 31

L

`-l`, `-L`, 24
layout, 5
`ld`, 24, 31
linking, 17, 20, 22, 23
local independent I/O mode, 12
logging in, 26

M

massively parallel, 2
memory pointer system calls, 41
mixing F77 I/O and CM Fortran I/O, 15

N

Network Queueing System (NQS), 29
`-node`, 18, 20, 22, 23
node program, 2, 9

Version 3.3, April 1995
Copyright © 1995 Thinking Machines Corporation

-Nx option, 19

O

-o, 24

P

parallel heap, 39
parallel stack, 39
partition, 2, 4, 26
  size, 5
partition manager, 2, 26, 29
PM. *See* partition manager
pmalloc, 43
PN, 2
polling, 36
porting, 4
printf, 34, 36
Prism, 32, 33, 35, 37
processing elements. *See* PN
processing nodes. *See* PN
prog.trace, 37
programming languages supported, 1, 8, 9
programming models, 1, 8, 9, 11
programs
  C and C++, 17
  C*, 18
  CM Fortran, 20
  compiling, 17, 19, 21
  components of, 7
  debugging, 33
  developing, 7
  executing, 25, 29
  Fortran 77, 19
  global/local, 23
  host/node, 7, 9
  hostless, 7, 8
  linking, 23
  sample, 15
  terminating with errors, 36
  timing, 29
ps command, 29, 31

Q

qsub, 25, 29, 32

R

remote shells, 26
rlogin, 4, 25, 26, 31
rsh, 4, 25, 26, 31
run-time system, 39

S

safety routines, 35
sample programs, 15
set system calls, 41
SIGTERM signal, 35, 36
source code, 7
space-sharing, 3
stack, parallel, 39
STOP, 34
supervisor mode, 27
symbol table size, 19
synchronous I/O modes, 13
system administrator, 3, 5
system status, 27

T

termination
  host/node programs, 10
  hostless programs, 9
  SIGTERM signal, 36
'timer-fort.h', 31
timers, 29, 31, 32
timesharing, 3, 4, 26
timing a program, 29
tracebacks, 36, 37

U

UNIX facilities, 3
user mode, 27

Copyright © 1995 Thinking Machines Corporation

V

-v, 24
vector units, 2, 3
  execution model, C*, 18
  execution model, CM Fortran, 21
VU. *See vector units*
-vu, 18, 20, 23
VU regions, 39

Version 3.3, April 1995
Copyright © 1995 Thinking Machines Corporation