About This Manual

Objectives of This Manual

The *CMMD User's Guide* is written for programmers who are writing or porting message-passing programs to run on the Connection Machine model CM-5 or CM-5E.

Intended Audience

This user's guide and its companion, the *CMMD Reference Manual,* are written for programmers who have had some experience in writing message-passing programs.

Software Version Information

This edition of the *CMMD User's Guide* documents Version 3.3 of the CMMD library and Version 7.4 of the CMOST operating system.

For full functionality in programs that use the parallel compiler `cs`, use C* Version 7.2 (Beta or final) or later. For full functionality in programs that use the parallel compiler `cmf`, use CM Fortran Version 2.2 or later.

Organization of This User's Guide

Chapter 1 Introduction
Introduces the CMMD programming models; introduces the CM-5 system as it is used for message-passing programming.

Chapter 2 Developing a CMMD Program
Describes the hostless and host/node programming models and describes how to create a CMMD program. Provides information on include files and CMMD's I/O modes.

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Chapter 3 Compiling and Linking a CMMD Program
Describes how to compile and link message-passing programs.

Chapter 4 Executing Programs
Discusses the steps involved in executing your program. Includes information about CMMD timers.

Chapter 5 Debugging and Error Handling
Describes the CMOST files that contain information about program errors.

Appendix A Non-RTS Parallel Memory Allocation
Provides information for CMMD applications that call DPEAC subroutines.

Related Documents

This user's guide is intended to be used in conjunction with the *CMMD Reference Manual*, which describes the functions provided by the CMMD library and provides some programming guidelines.

Two quick reference guides are available for Version 3.3: *CMMD for Fortran Quick Reference* and *CMMD for C Quick Reference.*

For information about the `cc` or `f77` compilers, which you would use to compile programs written in C, C++, or Fortran 77, please see SunOS documentation.

For information about the parallel compilers `cs` or `cmf`, which you would use to compile message-passing programs written in C* or CM Fortan, see the *C* User's Guide*, Version 7.2, or the *CM Fortran User's Guide*, Version 2.2.

Other documentation that you may find helpful:

- *CM-5 User's Guide*
- *C* Progamming Guide*
- *CM Fortran Libraries Reference Manual*
- SunOS documentation for `f77` and `cc`
- *Using DJM on the CM-5*

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- *NQS for the CM-5*
- *Prism User's Guide*
- *VU Programmer's Handbook*

Notation Conventions

The table below displays the notation conventions observed in this manual.

Convention	Meaning
`typewriter`	CMMD functions and UNIX and CMOST commands, command options, and filenames. Programming language syntax statements, and language elements such as keywords, operators, and function names. Code examples and code fragments.
`italics`	Argument names and placeholders in function and command formats.
`% bold typewriter` `regular typewriter`	In interactive examples, user input is shown in bold typewriter and system output is shown in regular typewriter font.

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