1 Overview

Audience

This manual is written for those who are using iWarp C to develop programs on the iWarp Computer System. The manual assumes that the reader understands the UNIX operating system and the C programming language.

Using this manual

This manual is both a user's guide and a reference manual, and is intended for both the new and experienced iWarp C programmer.

The manual is designed as follows:

Chapter 1:	Provides an overview of iWarp C
Chapter 2:	Describes how to invoke the iWarp C compiler
Chapter 3:	Explains the iWarp extensions to the C programming language
Chapter 4:	Explains how to increase the performance of your iWarp C programs
Chapter 5:	Explains how to interface iWarp C programs to programs in other languages
Chapter 6:	Provides details on the iWarp C preprocessor
Appendix A:	Provides a quick-reference to the iWarp C extensions
Appendix B:	Lists the iWarp include files
Appendix C:	Describes the implementation specifics of iWarp C

iWarp C Overview

The iWarp C compiler is a port of the AT&T Portable C Compiler (PCC2) with a few iWarp-specific extensions added. As a port of PCC2, it is a Kernighan and Ritchie (K&R) compiler with a few widely-recognized extensions, all of which are standard on UNIX systems. These include:

- signed types
- enum
- void type
- hexadecimal constants
- structure assignment
- structure parameters

- structure return values
- long identifier names

K&R C (without any extensions) is described in the book: The C Programming Language, by Brian W. Kernighan and Dennis M. Ritchie, 1978 (first edition), Prentice–Hall. The second edition of the book (1988) discusses all the widely-recognized extensions supported in the iWarp compiler. It does however, also discuss further extensions which are part of the ANSI standard and are not supported by the iWarp compiler. This manual does not explain concepts which are found in the original K&R book.

Path and MANPATH settings

To access the iWarp software and iWarp man pages you must add **/iwarp/bin** to the beginning of your *path* and **/iwarp/man** to your *MANPATH*.
Use the following commands to do the setup (add to ~/.cshrc):

```
setenv MANPATH /iwarp/man:/usr/share/man
set path = ( /iwarp/bin $path )
```

You can now use the man command to access iWarp manpages. The following manpages provide information about the iWarp C compiler and its components:

- man iwcc — iWarp C compiler
- man iwccomq — PCO (global optimizer)
- man iwcpp — iWarp C preprocessor