Introduction

Overview

This introduction provides an overview of NCSA XDIFF/XFIX capabilities and features. The organization and use of this manual are described and notational conventions explained.

What Is NCSA XDIFF/XFIX?

NCSA XDIFF/XFIX actually consists of two applications, XDIFF and XFIX, which were designed to help you maintain duplicate sets of code on different systems. After you edit an ASCII text file on your local machine using any editor, you can use the XDIFF and XFIX programs to update a duplicate of that file on another system by transferring just the differences and incorporating them into the file.

For example, if you keep identical copies of your source code on the Cray supercomputer and on a Macintosh at home, you can use a Macintosh editor to make changes to the code on your Macintosh, use NCSA XDIFF to create a file of just your edits, transfer this file to the Cray, and use NCSA XFIX to incorporate the changes into your source file on the Cray.

Table I.1 lists the NCSA XDIFF/XFIX programs that are currently available. All NCSA XDIFF programs are compatible with all NCSA XFIX programs.

Table I.1 NCSA XDIFF/XFIX Programs

XDIFF (origin)	**XFIX (target)**
Macintosh	Macintosh
Sun	Sun
Alliant	Alliant
	Cray

System Requirements

To run NCSA XDIFF/XFIX, you need enough memory to work with two copies of your source file. The amount of memory used by NCSA XDIFF is generally 64K plus twice the size of the file you are editing. To run NCSA XDIFF on a Macintosh system, you should have System software version 5.0 or later. There are no special software requirements for larger systems.

Use of This Manual

This section describes the organization of this manual and the conventions and nomenclature used in developing it.

This manual assumes that you are relatively experienced with your system, are familiar with file transfer procedures and editing files, and have basic file management and backup skills. For information regarding common editors or transferring files using the file transfer protocol (FTP), refer to other NCSA manuals, such as *NCSA Telnet* and the *NCSA User's Guide.*

Specifically, before using NCSA XDIFF, you should be familiar with your local system, your editor, and your file transfer programs.

Manual Contents

This manual is organized into the following chapters:

Chapter 1, "Getting Started," outlines the basic steps involved in using NCSA XDIFF/XFIX.

Chapter 2, "UNIX-Based Systems," explains how to use NCSA XDIFF/XFIX on UNIX-based systems.

Chapter 3, "Macintosh Systems," explains how to use NCSA XDIFF/XFIX on a Macintosh.

Chapter 4, "Helpful Hints," provides guidelines and tips regarding the use of NCSA XDIFF/XFIX and general maintenance of files.

Form of Presentation

The material in this manual is presented in text, screen displays, or command line notation.

Text

In explaining various features and commands, this manual often presents a word within a paragraph in *italics* to indicate that the word is defined within the paragraph.

Portions of this manual refer to other sections or chapters where related topics are explained. These cross references usually mention the title of sections or chapters enclosed in quotation marks, such as, See Chapter 1, "Getting Started."

Command Line Format Notation

Throughout this manual, many explanations instruct you to make entries by typing on the keyboard. These entry instructions are printed in lowercase, **`courier bold type`** and appear within a paragraph or on a separate line.

Keys that are labeled with more than one character (such as the RETURN key), are identified with all uppercase letters. Keys meant to be pressed simultaneously or in succession are linked with a hyphen. For example, press CONTROL-A.

The meaning of each special notation applied to format lines is listed in Table I.2.

Table I.2 Meaning of Entry Format Notations

Appearance	Example	Entry Method
On separate line; lowercase, courier bold type	**dothis**	Enter each key as it appears.
Within a text line; uppercase	RETURN	Press the single key indicated.
Within a text line; uppercase; hyphens between key names last hyphen.	CONTROL-A	While holding down the first key(s) indicated, press the key following the
On separate line or within a text line; italic, lowercase, courier bold type	***filename***	This notation is a variable, which represents a certain kind of entry, but may consist of different characters every time you make the entry.

Figure I.1 shows you how to read and enter a command line.
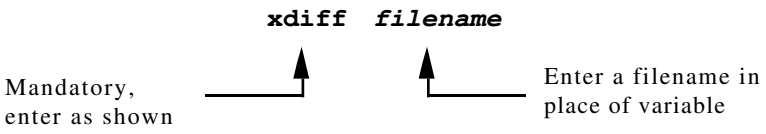
Figure I.1 Reading and Entering a Command Line