Whitesmiths, Ltd.

IDRIS PROGRAMMERS' MANUAL

Date: January 1985

The C language was developed at Bell Laboratories by Dennis Ritchie; Whitesmiths, Ltd. has endeavored to remain as faithful as possible to his language specification. The external specifications of the IDRIS operating system, and of most of its utilities, are based heavily on those of UNIX, which was also developed at Bell Laboratories by Dennis Ritchie and Ken Thompson. Whitesmiths, Ltd. gratefully acknowledges the parentage of many of the concepts we have commercialized, and we thank Western Electric Co. for waiving patent licensing fees for use of the UNIX protection mechanism.

The successful implementation of Whitesmiths' compilers, operating systems, and utilities, however, is entirely the work of our programming staff and allied consultants.

For the record, UNIX is a trademark of Bell Laboratories; IAS, RSTS/E, VAX, VMS, P/OS, PDP-11, RT-11, RSX-11M, and nearly every other term with an 11 in it all are trademarks of Digital Equipment Corporation; CP/M is a trademark of Digital Research Co.; MC68000 and VERSAdos are trademarks of Motorola Inc.; ISIS and iRMX are trademarks of Intel Corporation; A-Natural, IDRIS, and ctext are trademarks of Whitesmiths, Ltd. C is not.

SECTIONS

I. Whitesmithing

II. IDRIS System Interface

III. Programming File Formats

IV. IDRIS Support Library

SCOPE

This manual is meant to familiarize the more technically sophisticated user with the IDRIS program development environment. Section I provides tutorial descriptions introducing the environment and tools used to build new programs. Section II contains descriptions of the system calls and other routines that constitute the IDRIS system interface across various machines. Section III details the formats of numerous files used by the IDRIS resident or utilities that are of particular note to programmers, while Section IV documents library routines developed for use with the IDRIS utilities.

Tutorials and detailed descriptions of standard utilities, as well as the System Administration Guide, may be found in the IDRIS Users' Manual. More succinct documentation for the programming utilities, may be found in the C Interface Manual for the appropriate target machine; and the machine dependent aspects of each IDRIS implementation are discussed in the IDRIS Interface Manual for each target machine.

TABLE OF CONTENTS

I. Whitesmithing

II. IDRIS System Interface

III. Programming File Formats

IV. IDRIS Support Library