AT&T

/

UNIX™ System V
DOCUMENTER'S WORKBENCH™
Software Release 2.0

Product Overview

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Introduction

The DOCUMENTER'S WORKBENCH Software is a set of computer programs developed at AT&T Bell Laboratories to run under the UNIX operating system. These programs help you format any type of document. The DOCUMENTER'S WORKBENCH Software supports a range of output devices from typewriter-like printers to phototypesetting equipment.

Description

The DOCUMENTER'S WORKBENCH Software is a powerful and sophisticated set of text formatting tools that helps you produce a wide variety of documents, including letters, research papers, memoranda, reports, and books. You can use the DOCUMENTER'S WORKBENCH Software to create documents that contain tables , mathematical equations, line drawings, and plots of data.

With the DOCUMENTER'S WORKBENCH Software you can dramatically diminish the time you need to plan and prepare the following features of your document.

- margins
- titles
- lists and displays
- footnotes
- page headers and footers
- page numbering
- table of contents
- glossary
- index

Anyone can run the DOCUMENTER'S WORKBENCH programs—a clerk, a secretary, the writer or editor—you need only a basic familiarity with the UNIX operating system. Using any UNIX system text editor, you type in your text and intersperse formatting instructions (such as .P for paragraph), that state precisely how you want your document to look when it is printed. Then you choose the appropriate preprocessors and formatter to process your file for printing.

Programs

The DOCUMENTER'S WORKBENCH programs can be grouped into the following general categories:

Formatters

nroff and **troff** are text-formatting programming languages for typewriter-like printers and photo-typesetters, respectively. These "super word processors" are at the heart of the DOCUMENTER'S WORK-BENCH Software. The macro packages and prepro-cessors (see below) create instructions that the for-matters use to produce a formatted document.

Macro

There are four macro packages available with the DOCUMENTER'S WORKBENCH Software: **mm, mv, man,** and **mptx.** The **mm,** or Memorandum Macros, package allows you to produce memoranda and letters easily. The **mv** package allows you to make high quality typeset transparencies in a variety of sizes. The **man** macro package allows you to format UNIX system manual pages, and **mptx** allows you to format a permuted index.

Preprocessors

Four preprocessors are included with the DOCUMENTER'S WORKBENCH Software: **tbl, eqn, pic,** and **grap. tbl** helps you make tables: large or small, simple or complex. **eqn** enables you to present mathematical notation easily. **pic** enables you to draw a wide variety of forms and line pic-tures, and **grap,** a "language" for describing plots of data, automatically scales and labels axes. Preproces-sors are used in conjunction with the text formatters **nroff** or **troff** to produce your final formatted file.

Programs to Create an Index

subj scans your document to collect a list of key-words. **ndx** creates an index from the keyword list **subj** makes.

Programs for Comparing and Checking Documents

checkmm checks input files and tells you if you have made any syntax errors in the DOCUMENTER'S WORKBENCH formatting instructions. **diffmk**

compares two versions of a document and produces a third version that highlights the differences between the two original files. **macref** produces a cross-reference of the requests, macros, number registers, and strings that you use in a file. It is helpful for those who want to develop new sets of macros.

Postprocessors   **daps** translates **troff** output for an Autologic APS-5 phototypesetter. **di10** translates output from **troff** for an Imagen IMPRINT-10 laser printer. **tc** turns **troff** output into code that a TEKTRONIX 4015 typesetter can use.

Obsolete Programs

Several programs that were included with Release 1.0 of the DOCUMENTER'S WORKBENCH Software are not in Release 2.0.

checkcw   is used with **ocw**, the preprocessor for **otroff**. It checks whether left and right delimiters and .CW/.CN pairs are properly balanced. Because **otroff** is not distributed with DOCUMENTER'S WORKBENCH Software 2.0, there is no longer a need for **checkcw**.

checkeq   is used with **eqn**. **checkeq** is not included in DOCUMENTER'S WORKBENCH Release 2.0 because the command **checkmm** provides more extensive checking of proper equation formatting.

dx9700   prepares **troff** documents for the Xerox 9700 printer. The Xerox 9700 is no longer a supported device, and so the command is not distributed with DOCUMENTER'S WORKBENCH Release 2.0.

mmlint   is a **sroff/mm—nroff/mm** document compatibility checker. Because **sroff/mm** is not distributed with DOCUMENTER'S WORKBENCH Release 2.0, there is no longer a need for **mmlint**.

non-btl.sh   reinstalls **mm** macros without AT&T Bell Laboratories specific features. This command is not included with DOCUMENTER'S WORKBENCH Release 2.0 because AT&T Bell Laboratories specific strings have been moved to an external file called **/usr/pub/strings.mm**. The system administrator can edit this external file to meet local needs.

ocw   is a preprocessor for **otroff**. Because **otroff** is not distributed with DOCUMENTER'S WORKBENCH Release 2.0, there is no longer a need for **ocw**.

osdd   The **osdd** adapter macro package is a tool used with the **mm** macro package to prepare Operations Systems Deliverable Documentation. The command is not distributed with DOCUMENTER'S WORKBENCH Release 2.0.

otc   is a postprocessor for **otroff**. Because **otroff** is not distri-
           buted with DOCUMENTER'S WORKBENCH Release 2.0, there
           is no longer a need for **otc**.

otroff   The **otroff** text formatter is an early version of **troff** that for-
           mats text for only one device, the C/A/T phototypesetter.
           otroff is not distributed with DOCUMENTER'S WORKBENCH
           Release 2.0.

sroff   **sroff** formats text for printing on typewriter-like devices and
           line printers, including the Xerox 9700 printer. The Xerox
           9700 is no longer a supported device; therefore, **sroff** is not
           distributed with DOCUMENTER'S WORKBENCH Release 2.0.

x9700   prepares **nroff** documents for the Xerox 9700 printer. The
           Xerox 9700 is no longer a supported device; therefore, the
           command **x9700** is not distributed with DOCUMENTER'S
           WORKBENCH Release 2.0.

Documentation

The following documents are available for Release 2.0 of the DOCUMENTER'S WORKBENCH Software system:

- *UNIX System V DOCUMENTER'S WORKBENCH Software User's Guide* (Select Code 310-004): The *User's Guide* contains three sections: 1) the "Sampler," which shows files before and after formatting, 2) a preface, and 3) tutorials. The first two sections familiarize the novice with the software in general, and the tutorials cover its use in detail.

- *UNIX System V DOCUMENTER'S WORKBENCH Software Technical Discussion and Reference Manual* (Select Code 310-005): Organized to suit the more experienced user, this technical explanation of the software is presented according to patterns of customary use. The components of the software are discussed in detail, and manual pages are also provided.

- *UNIX System V DOCUMENTER'S WORKBENCH Software Handbook* (Select Code 310-008): The Handbook is a memory jogger for accomplished users who want a more technical understanding of the software.

- *UNIX System V DOCUMENTER'S WORKBENCH Software Handbook for New Users* (Select Code 310-009): This handbook is aimed at new users. It is task-oriented, and it incorporates aspects of the "Sampler" from the *User's Guide*.

- *UNIX System V DOCUMENTER'S WORKBENCH Software Product Overview* (Select Code 310-006): This document provides a summary of the software and its features, a list of available documents, and a brief technical description for those who might be asked to evaluate the software.

- *UNIX System V DOCUMENTER'S WORKBENCH Software Release Notes* (Select Code 310-007): The *Release Notes*, written for system administrators, includes the software installation procedures for all processors that support the DOCUMENTER'S WORKBENCH Software. In addition, it gives transition information for owners of earlier product releases.

You may get copies of the documents in this list from AT&T. When placing orders, refer to the Select Code for the document that you want (for example 310-004 for the *User's Guide*).

write to: AT&T Customer Information Center
                 P.O.Box 19901
                 Indianapolis, Indiana 46219

or call: 1-800-432-6600 within the continental United States

To order the DOCUMENTER'S WORKBENCH Software Release 2.0 call

                 1-800-828-UNIX for the source product

                 1-800-247-1212 for the binary product

Overview of Technical Information

Supported Hardware

The following list identifies the hardware on which DOCUMENTER'S WORKBENCH Release 2.0 is supported for UNIX System V Release 2.0 as of April 1985:

- AT&T 3B2/300,400 Computers
- AT&T 3B5 Computer
- AT&T 3B20S/A Computers
- VAX 750

The UNIX operating system and components of the DOCUMENTER'S WORKBENCH Software have been run on various other computers, including DEC PDP-11/45, PDP-11/70, and VAX-11/780 mini-computers.

Specifications for the 3B20 Computer and the VAX

For the AT&T 3B20 Computer and the DEC VAX-11/780 and VAX-11/750 computers, the source code for the DOCUMENTER'S WORKBENCH Software Release 2.0 is distributed on a single magnetic tape containing two files in cpio format, written at 1600 bpi. Only a system administrator with root privileges may access this tape. Installing the object code of DOCUMENTER'S WORKBENCH Software Release 2.0 also requires root userid privileges. The *Release Notes* (310-007) presents complete installation instructions.

Specifications for the 3B5 Computer

For the 3B5 Computer, source code is distributed on either a Lark II disk cartridge or a nine-track magnetic tape, and contains two files in cpio format. (The binary version of the DOCUMENTER'S WORKBENCH is only available on nine-track magnetic tape.) Again, it is written at 1600 bpi, and root userid privileges are required. The *Release Notes* (310-007) presents complete installation instructions.

Specifications for the 3B2 Computer

Installing the DOCUMENTER'S WORKBENCH Software on the 3B2 Computer requires four floppy disks. Each floppy disk contains "install" and "uninstall" scripts for the installation and removal of the files contained on it. The required disk space for this product is 5500 blocks in the /usr file system.

The first floppy disk contains all files that you need to use **troff, grap, mmt, mvt, pic, eqn** and **tc** plus a driver (for the Autologic APS-5 typesetter) and the font tables for this driver. The files on this first disk require 1100 blocks (512 bytes/block) of free space in the /usr file system.

The second floppy disk contains all the files you need to use **nroff, neqn, mm,** and **man.** The files on this disk require 750 blocks of free space in the /usr file system.

The third floppy disk contains files used by both **nroff** and **troff.** This disk requires 1300 blocks of free space in the /usr file system.

The fourth floppy disk contains the driver, font tables and raster tables for the Imagen IMPRINT-10 laser printer. The files on this disk require 2350 blocks of free space in the /usr file system.

You can find a detailed list of the files on each floppy together with complete instructions for installation in the *Release Notes.*

Terminal Dependencies

You can display text processed by **nroff, tbl, neqn** and **mm** on a typewriter-like printer or on a terminal without graphics capabilities. Text processed by **troff,** the **mv** macro package, **eqn, pic,** and **grap** must be sent to a terminal or a printer that supports typesetting (for example, a Teletype 5620 terminal).

Software Dependencies

AT&T supports the DOCUMENTER'S WORKBENCH Software Release 2.0 only on UNIX System V Release 2.0 and subsequent releases. AT&T does not support DOCUMENTER'S WORKBENCH Software Release 2.0 on any other

version of the UNIX system. All the software that the DOCUMENTER'S WORKBENCH Software needs for installation and execution is part of UNIX System V Release 2.0 and subsequent releases.

On AT&T 3B2 Computers, the following utilities packages must be installed before the DOCUMENTER'S WORKBENCH Software can be installed:

Directory and File Management Utilities Package

Terminal Filter Utilities Package (must be purchased separately)

The installation script checks that these packages are installed on your 3B2 Computer and will prevent you from installing the DOCUMENTER'S WORKBENCH Software if they are not installed.