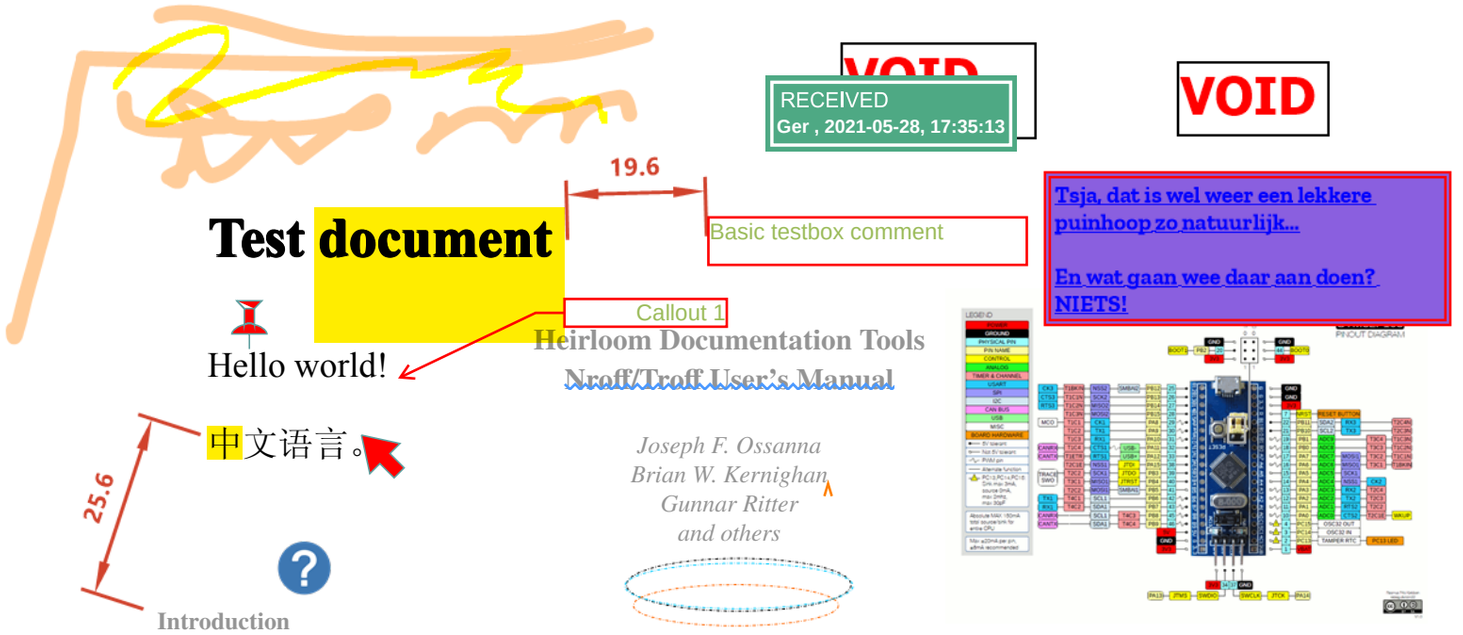

Introduction

nroff and *troff* are text processors under the UNIX Time-Sharing System[1] that format text for typewriter-like terminals and for a typesetter/raster devices, respectively. They accept lines of text interspersed with lines of format control information and format the text into a printable, ~~paginated~~ document having a user-designed style. *nroff* and *troff* offer unusual freedom in document styling, including: arbitrary style headers and footers; arbitrary style footnotes; multiple automatic sequence numbering for paragraphs, sections, etc; multiple column output; dynamic font and point-size control; arbitrary horizontal and vertical local motions at any point; and a family of automatic overstriking, bracket construction, and line drawing functions.

troff produces its output in a device-independent form, although parameterized for a specific device; *troff* output must be processed by a driver for that device to produce printed output.

nroff and *troff* are highly compatible with each other and it is almost always possible to prepare input acceptable to both. Conditional input is provided that enables the user to embed input expressly destined for either program. *nroff* can prepare output directly for a variety of terminal types and is capable of utilizing the full resolution of each terminal.

On the Heirloom Documentation Tools Edition

In Summer 2005, Sun Microsystems, Inc. released the source code to the Solaris system,[6] including the System V Release 4 version of *troff,* a derivative of AT&T *Documenter's Workbench troff,* version 2. It had undergone few changes since the end of the 1980s, so it could serve as a clean starting point for a new version of *troff* which is intended to be highly compatible with UNIX *troff,* but which also provides additional features desirable for a high-quality typesetting application at the beginning of the 21st century.

As with the other components of the *Heirloom Project,* the original code, once it had been released under an Open Source license, has been made portable such that it compiles and runs on the contemporary UNIX-style systems, including Linux. It continues to be freely available under the same license as originally released, including its complete source code.

PostScript and its close relative PDF are now the only device languages which are relevant to high-quality printing; actually, PostScript itself is more and more becoming an intermediate language for the generation of PDF documents. The *Heirloom* version of *troff* is thus primarily directed towards generating PostScript output for further processing by a PDF creator, such as Ghostscript or Adobe Distiller; it can generate PDF-specific instructions for prepress usage as well as for online navigation in PDF documents.

The principal output device independence of *troff* has nevertheless been retained, and changes to the intermediate language have been minor. Many *troff* post-processors will thus continue to be usable with no or little adaptions.

PostScript Type 1, OpenType, and TrueType have become device-independent font formats; virtually all commercial and free fonts are available in one of them. There is thus no need for a *troff*-specific device-independent font format anymore; instead, *Heirloom troff* can read font metrics directly from Type 1, OpenType, and TrueType font files. This has greatly relieved the task of installing fonts—it suffices to copy the original files to a user-selectable font directory—, and makes it possible to access advanced typographic data, such as kerning tables or substitution instructions for old-style numerals.

troff provides convenient access to any character in a font file either by its PostScript name, by its Unicode position as specified in a font-specific or a generic table, or by conversion from POSIX-style locale-specific characters to Unicode

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More stuff.