Inessential 'roff

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ABSTRACT

This document provides a guide to using **troff**, **nroff**, **groff**, and similar variants on Athena. At MIT other document preparation systems have traditionally been used (TeX, Scribe, LaTeX, RUNOFF, ASCII text, FrameMaker). Despite general ignorance on the part of the community, it remains the dominant language for writing UNIX® documentation (man pages).

The majority of documents in the Internet Engineering Task Force (IETF)'s Request For Comments (RFC) and Internet-Drafts serieses are authored in 'roff (although templates for LaTeX and Scribe are widely available).

Revisions: use \fB instead of .B for punctuation.

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1. Introduction [maybe put in TOC? -elliot]

´roff is the classic UNIX typesetting system. A version comes with almost all UNIX variants, and they are generally compatible. For those systems without it, GNU **groff** is available, written in C++.

As typesetting systems go, ’roff is fairly lightweight and executes quickly. Many UNIX systems invoke it in real time to provide formatted documentation (man pages). Other typesetting packages (such as TeX and its derivatives) tend to be much slower and consume more resources.

´roff output conforms to well-defined standards, and can be used to produce output destined for high-quality typesetting devices, desktop PostScript printers, as well as CRT devices (such as the xterm program). Other applications prove the dominance of ’roff by including conversion programs, such as Frame Technology’s **troff2mif** program (distributed with FrameMaker), or the **ms2html** program.

´roff can be used for more than just typesetting. Larry Wall, UNIX guru and author of **patch** and **perl** has been known to post to Usenet **nroff** scripts to accomplish various tasks too difficult to perform in Perl. Try doing *that* in LaTeX.

2. Scripting

Umm, go look at the perl scripts that double as nroff?

3. The -man Macros

4. Using EMACS

Emacs has a **nroff-mode** to make editing ’roff files easier. If you use the default Emacs setup on Athena, it will automatically invoked when you read in a file that ends with .mm, .me, .ms, .man, or .1 through .8 (for man pages). This mode provides features such as filling and indenting paragraphs properly, counting the actual number of lines in the document (with editing commands excluded), centering a line, and hiliting.

5. Historical

A TROFF Tutorial by Brian W. Kernighan states "**troff** resembles an assembly language -- a remarkably powerful and flexible one."

6. To-do

We need sections on -me, -ms, -mandoc, -man, scripting, using nroff for fillout forms, using RFC1543 RFC macros, and maybe something else (ideas?). Folks should volunteer. [perhaps also pic, tbl, eqn, and nroff emacs-mode -elliot] elliot has agreed to do the form-filling-out section, and -man/man pages, and emacs mode.

Given that EZ depends heavily on nroff as its primary back end, a section on EZ interactions would be helpful.

Since sometimes you get a document and it's not clear whether it's written for the -me or -ms macro sets, a trivial set of instructions on how to identify those would be nice.

Using nroff as your default shell on athena might be interesting. Probably we'll need to create an nroff locker so that folks can have a path that's consistent on all platforms...

How to do change bars in 'roff would be useful, since so very few people know how to do them properly in their document preparation system of choice.

7. Acknowledgements

We stole the text from lots of places. We cheated and used a PostScript figure. We used -ms macros.