AN INTRODUCTION TO FORMAT:
The SOFTWARE TOOLS TEXT FORMATTING PROGRAM

C. Agazzi

December 1984

For Reference
Not to be taken from this room

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An Introduction to Format
The Software Tools Text Formatting Program

December, 1984

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An Introduction to FORMAT

Format is the name of the Software Tools formatter. It allows you to format text according to instructions that you place within the text.

The text and instructions for each document you wish to create are kept in files. Each instruction, called a "request line," makes changes in the way your document is laid out. For example, you can change the margins within your document to visually set off lists of items or topics. You can also bold face or underline words or sentences to highlight them.

Throughout this manual you will see examples of how to use the Format "request lines" along with illustrations of the effects request lines have on an example letter.

The request lines begin with a period in the first column on the screen. Each request line performs a specific function and is placed on the line immediately in front of the text to be formatted.

Output lines are automatically "filled," that is, their right margins are justified, without regard to the format of the input text lines.

The examples you are to type are shown in dark type. The results of the request lines and text you type are shown in lighter type. Changes to the input file are indicated by an arrow at the left margin.
Getting Started

In This Section:

Using Format
Making Changes to the Document
Using Format

To access the Software Tools Format Program, you must log on to VMS and enter the Shell.

To enter the shell type "sh" at the DCL level prompt ($). To exit the shell type "Control z." In this document you will create files containing text and request lines with the editor EDT.

To format the document on the screen type: "format filename" at the shell level prompt (%). Remember to follow the file name rule: a maximum of nine characters followed by a "." and an appropriate three character extension. Example -- schedule.let

To format only a screen full of text at a time type: "format <filename | crt."

To format the document on a line printer type: "format <filename | lpr."

(For more detailed information please refer to "man format". A copy of the on-line documentation for format may be found in Appendix A of this document.)

Making Changes

To change the text or the request lines in the examples use the editor EDT.
Margins

In This Section:

Left Margin
Right Margin
Page Offset
The left margin ("indentation") is controlled by the "\texttt{.in number}" request line. The number refers to the column at which the text will begin. Columns are numbered beginning with zero. If you do not use the "\texttt{.in}" request line, text will be printed starting at column 0.

For example, the left margin in the following paragraph is set using "\texttt{.in 10}.

\begin{verbatim}
\texttt{.in 10}
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
\end{verbatim}

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
The margin request line can be used relative to previous margin settings already used in your document. For example, if we add an indent of "in +5" after the third sentence in our paragraph, Format will move the following text to column 15. (Five spaces added to the previous margin setting of 10.)

```
.in 10
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
```

```
⇒ .in +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
```

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
The margin request lines will remain in effect for the entire document, unless they are replaced by another request line. To set the margin back to the default setting of 0, use an indentation of zero.

⇒ .in 0

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Right Margin

The right margin is controlled by the "\texttt{.rm number}\" request line. The number refers to the column just after the end of the text line. If you do not use the "\texttt{.rm number}\" request line, your text will end at column 65.

For example, the right margin in the following paragraph is set using "\texttt{.rm 35}." With an indent of 0, this allows 35 characters per line.

\texttt{\textbackslash .rm 35}

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock.

In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Page Offset

Page offset request line "\texttt{.po number}" shifts the entire body of the text to the right.

The page offset command shifts the text to the specified column without changing the line length. Therefore the "\texttt{.po 5}" request line will start the text in column five and the right margin will be moved out 5 columns.

It differs from the indent request line in that the "\texttt{.in}" controls only the left margin and the right margin will always stay the same.

\texttt{.po 5}

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

\texttt{.po 5}

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Paragraphs and Spacing

In This Section:

Single, Double Spaced Text
Blank Lines
Temporary Indenting
No Fill and Fill In
Single and Double Spacing Text

Format will single space all text unless instructed otherwise. The request line for controlling the line spacing is "ls number."

If double spacing is desired the request line "ls 2" should be used. In the following example the paragraph is set to double spacing.

⇒ .ls 2

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
To set the line spacing back to single spacing, use the "ls 1" request line.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock. I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Spacing

The request line "\sp number" adds blank line spaces within the text. (Note that if no "number" is given for this request, "1" is used.)

\section*{Spacing}

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

\section*{Spacing}

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Temporary Indenting

The request line \( .ti +\text{number or } .ti -\text{number} \) allows you to indent only the line that follows the request line.

Positive numbers indent to the right; negative numbers indent to the left of the margin.

\[ .ti +5 \]

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

\[ .sp \]

\[ .ti +5 \]

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
The following is an example of "ti-number" request line.

\[ \Rightarrow \text{.in 5} \]
\[ \Rightarrow \text{.ti -5} \]

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

\[ \text{.sp} \]
\[ \text{.ti +5} \]

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Fill and No Fill

The request line "nf" (no fill) and "ft" (fill in) allows the text to be left exactly as it was typed in. In the following example these request lines are added to an address.

```
\nf
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
\n\n```

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock.

In this way we can take care of the needs of our offices before disposing of our stock.

```
\n\n```

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
Without the no fill and fill request lines the address would be formatted as below:

Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837  
.sp  
.ti +5  
It has come to my attention that with the current high  
levels of inventories, some of our divisional offices are  
disposing of overstocked materials to local  
customers at greatly reduced prices. Perhaps it would be well  
for a divisional office to circularize other divisional  
offices before disposing of usable stock.  
In this way we can take care of the needs of our offices before  
disposing of our stock.  
.sp  
.ti +5  
I am eager to have your inventories balanced as rapidly as possible  
and do not wish to slow down the sale or disposal  
of surplus materials. I shall, however, appreciate your  
sending a circular letter to other divisions before  
surplus materials are sold.
Breaking Lines and Pages

In This Section:

Breaking Lines
Beginning Pages
The "\.br\" request line will break a line exactly where the "\.br\" occurs in the text. For example the request line "\.br\" can be used to create a signature block.

\.
\nf
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
\fi
\sp
\ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
\sp
\ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
\Rightarrow \sp
\Rightarrow Sincerely,
\Rightarrow \br
\Rightarrow Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,
Jerome Tosky
If the "\br" command were not used, format would have wrapped the lines together as such:

.nf
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
.fi
.sp
.ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock.
In this way we can take care of the needs of our offices before disposing of our stock.
.sp
.ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
.sp
Sincerely,
Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely, Jerome Tosky
The "\.bp number" request line enables you to begin a new page at any desired point. "\.bp" was added after the first paragraph in the letter below.

Also three spaces were added to the signature block and the "\.br" request line was removed.

nf
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
139838 Industrial Drive
Austin, TX 39837
.fi
.sp
.ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

⇒ .bp
.sp
.ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
.sp
Sincerely,
⇒ .sp 3
Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837  

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Placing Headers and Footers on a Page

In This Section:

Titles at the Top of Pages (Headers)
Titles at the Bottom of Pages (Footers)
Headers

The "he /l/c/r/" request line places a title at the top of all following pages. The titles are three-part titles. There is a left justified part, a centered part, and a right-justified part. A "/" separates these three titles. All three parts may be used or only portions. For example, in the following letter a three part header is used.

The "%" sign is a special character that stands for the current date when it is used in a header or footer request line.

The header is placed after the begin page request line, because we do not want a header on the first page of the letter.

.nf
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
.fi
.sp
.ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock.
In this way we can take care of the needs of our offices before disposing of our stock.
.bp
⇒ .he /J. Tosky/Letter/%/
.sp
.ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
.sp
Sincerely,
.sp 3
Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Footer Titles

The "/fo /l/c/r/" request line places titles at the bottom of a page. The left, center, and right justified titles follow the same principle as the header titles. In the following footer example we will center the page numbers at the bottom of the page.

(The "#" sign is a special symbol that will keep track of page numbers automatically.)

⇒ .fo //Page #//
 .nf
 Ms. G.F. Drinkwalter
 Divisional Office Manager
 Lone Star Incorporated
 39838 Industrial Drive
 Austin, TX 39837
 .fi
 .sp
 .ti +5
 It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock.
 In this way we can take care of the needs of our offices before disposing of our stock.
 .bp
 .he /J. Tosky/Letter/%/
 .sp
 .ti +5
 I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
 .sp
 Sincerely,
 .sp 3
 Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,
Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Positioning Lines and Font Changes

In This Section:

Centering Lines
Underlining
Bold Face
Centering Lines

The "ce number" request line will center the specified number of lines following the request line. If no number is given, only one line will be centered.

In the following example we will center our address lines and the signature block.

```
.nf
⇒ .ce 5
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
.fi
.sp
.ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
.sp
.ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
.sp
⇒ .ce
Sincerely,
.sp 3
⇒ .ce
Jerome Tosky
```
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Underlining

The "ul number" request line will underline the specified number of lines following the request line. If no number is given, only one line will be underlined.

In the following example the words "divisional" in the body of the letter will be underlined. In order to underline only that word, the lines will have to be broken up so that only the word "divisional" is on a line by itself. The centering request lines in the signature block will also be replaced by the underline request line.

Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,
Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
The "\.bd number" request line will place in bold face type the specified number of lines following the request line. If no number is given, only one line will be placed in bold face type.

In the following example the centering and underlining request lines are replaced with the bold face request line.

```
nf
  \bd 5
  Ms. G.F. Drinkwalter
  Divisional Office Manager
  Lone Star Incorporated
  39838 Industrial Drive
  Austin, TX 39837
  .fi
  .sp
  .ti +5
  It has come to my attention that with the current high
  levels of inventories, some of our
  \bd
  divisional
  offices are
  disposing of overstocked materials to local
  customers at greatly reduced prices. Perhaps it would be well
  for a
  \bd
  divisional
  office to circularize other
  \bd
  divisional
  office before disposing of usable stock.
  In this way we can take care of the needs of our offices before
  disposing of our stock.
  .sp
  .ti +5
  I am eager to have your inventories balanced as rapidly as possible
  and do not wish to slow down the sale or disposal
  of surplus materials. I shall, however, appreciate your
  sending a circular letter to other divisions before
  surplus materials are sold.
  .sp
  \bd
  Sincerely,
  .sp 3
  \bd
  Jerome Tosky
```
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837  

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837  

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Page Control

In This Section:

Page Length
No Justification
The Need Request Line
The Macro Request Lines
The request line "\texttt{.pl number}" will set the page length to the number of lines specified. If no page length is specified Format will automatically set the page length at 66 lines per page.

When determining a page length, five spaces are reserved by Format for the top margin and five spaces for the bottom margin.

The following example has a page length of 26 lines; "\texttt{.pl 26.}"

16 lines of text + 5 lines at the top of the page + 5 lines at the bottom of the page = a page length of 26.

\begin{verbatim}
.nf
Rightarrow .pl 26
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
.fi
.sp
.ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
.sp
.ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
.sp
Sincerely,
.sp 3
Jerome Tosky
\end{verbatim}
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of
surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
The no justification request line "\texttt{.nj}" means the right margin will be ragged. Format will try to come as near the right margin setting as possible.

The "\texttt{.ju}" request line will restore right justification to the formatted text.

In the following example, a "\texttt{.ju}" request line was added before the second paragraph.

\begin{verbatim}
\texttt{.nj}
\texttt{.nf}
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
\texttt{.fi}
\texttt{.sp}
Dear Ms. Drinkwalter:
\texttt{.sp}
\texttt{.ti +5}
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional office before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.
\texttt{.ju}
\texttt{.sp}
\texttt{.ti +5}
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
\texttt{.sp}
Sincerely,
\texttt{.sp 3}
Jerome Tosky
\end{verbatim}
Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837

Dear Ms. Drinkwalter:

   It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

   I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Sincerely,

Jerome Tosky
The Need Request Line

The need request line "**.ne number**" specifies the number of lines your text will need in order to fit on the page. If there is not enough space at the bottom of the page, format will automatically begin a new page and place your text at the top.

This request line helps to eliminate the last line of a paragraph from being carried over to the next page, known as an orphaned line. Or it can eliminate the first line in a paragraph from being separated from the rest of the paragraph, known as a widowed line.

In order to demonstrate this request line we will add two new paragraphs to our letter and indent the left margin to 25, so that it will be long enough to fit on two pages.

We will also add the date and 4 spaces following it at the top of the page. Leave the entire letter with a ragged right margin by removing the "**ju**" request line.
July 28, 1983

Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

Also it has come to my attention that Mr. Frederick has requested that special attention be given to all requests from the Purchasing Department since that department has been overextending its budget for the past three months. It may be necessary to call this fact to the attention of Mr. Price in the Purchasing Department before their entire travel budget for the fiscal year is completely depleted. At the present usage rate, the Purchasing Department will be without travel funds by the middle of September.

Will you please send me copies of all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
July 28, 1983

Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX 39837

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

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Will you please send me copies of
all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
Now, since there is a "widowed" line in the fourth paragraph of the letter, a "need" request line is required to properly format the letter. Add the request line "\texttt{.ne 3}" before the fourth paragraph.

\begin{verbatim}
.in 25
July 28, 1983
.sp 4
.nj
.nf
Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837
.fi
.sp
Dear Ms. Drinkwalter:
.sp
.ti +5
It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock.
In this way we can take care of the needs of our offices before disposing of our stock.
.sp
.ti +5
I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.
.sp
.ti +5
Also it has come to my attention that Mr. Frederick has requested that special attention be given to all requests from the Purchasing Department since that department has been overextending its budget for the past three months. It may be necessary to call this fact to the attention of Mr. Price in the Purchasing Department before their entire travel budget for the fiscal year is completely depleted. At the present usage rate, the Purchasing Department will be without travel funds by the middle of September.
.sp
.ne 3
.ti +5
Will you please send me copies of all correspondence that you prepared regarding these travel funds.
.sp
Sincerely,
.sp 3
Jerome Tosky
\end{verbatim}
July 28, 1983

Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

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Will you please send me copies of all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
July 28, 1983

Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

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Will you please send me copies of all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
July 28, 1983

Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 39837

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

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Also it has come to my attention that Mr. Frederick has requested that special attention be given to all requests from the Purchasing Department before their entire travel budget for the fiscal year is completely depleted. At the present usage rate, the Purchasing Department will be without travel funds by the middle of September.

Will you please send me copies of all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
Macros are groups of request lines contained in one.

The request lines "de xx" "en" are used to create macros.

The "xx" is replaced with two capital letters meaningful to the macro definition.

For example in the following letter a paragraph macro was created as follows:

Define a macro and call it PG, "de PG." (PG -- for paragraph)
This macro will contain a space and a temporary indentation of +5, "sp" "ti +5."
End the definition with a "en"

To use this macro within the text type a "PG."

Macros can be used to group any request lines together. They are a time saver when groups of repetitive request lines are needed.
July 28, 1983

Ms. G.F. Drinkwalter
Divisional Office Manager
Lone Star Incorporated
39838 Industrial Drive
Austin, TX 78737

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

I am eager to have your inventories balanced as rapidly as possible and do not wish to slow down the sale or disposal of surplus materials. I shall, however, appreciate your sending a circular letter to other divisions before surplus materials are sold.

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Will you please send me copies of all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
July 28, 1983

Ms. G.F. Drinkwalter  
Divisional Office Manager  
Lone Star Incorporated  
39838 Industrial Drive  
Austin, TX  39837  

Dear Ms. Drinkwalter:

It has come to my attention that with the current high levels of inventories, some of our divisional offices are disposing of overstocked materials to local customers at greatly reduced prices. Perhaps it would be well for a divisional office to circularize other divisional offices before disposing of usable stock. In this way we can take care of the needs of our offices before disposing of our stock.

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Will you please send me copies of all correspondence that you prepared regarding these travel funds.

Sincerely,

Jerome Tosky
Quick Notes -- Basic Request Line Summary

.in number    Indent left margin to number specified
.rm number    Sets right margin to column number (number=65)
.po number    Sets page offset to specified number of spaces
.ls number    Line spacing specified number of lines
.sp number    Space specified number of lines (except at the top of the page)
.ti number    Temporary indent the next output line specified number of spaces
.nf           No fill
.fi           Fill in output lines
.br           Break line
.bp           Begin page
.he /l/c/r/    3 part title at the tops of pages
.fo /l/c/r/    3 part title at the bottom of pages
.ce number    Center the next specified number of lines
.ul number    Underline words in the next specified number of lines
.bd number    Boldface specified number of lines
.pl number    Page length (number=66)
.nj           No Justification. Leave a ragged right margin.
.ju           Begin justifying the right margin.
.ne number    Needs specified number of lines; or break to a new page
.de xx        Beginning of a macro definition
.en           End of a macro definition

More Information on Format

A complete listing of Format request lines are found by reading the on-line documentation. Type: "man format." A copy of this document follows in Appendix A -- On-line Format Documentation.
Appendix A - On-line Format Documentation

NAME
Format - format (roff) text

SYNOPSIS
format [+n] [-n] [-s] [-pon] [file] ...

DESCRIPTION
Format formats text according to request lines embedded in the text of the given files or standard input if no files are given. If nonexistent filenames are encountered they are ignored. The optional flags are as follows:

+n Start printing at the first page with number "n".

-n Stop printing at the first page numbered higher than "n".

-s Stop before each page, including the first (useful for paper manipulation). The prompt "Type return to begin a page" is given just once before the first page. For each page thereafter, the terminal bell is rung to indicate that another sheet of paper is needed.

-pon Move the entire document "n" spaces (default=0) to the right ("page offset").

Input consists of intermixed text lines, which contain information to be formatted, and request lines, which contain instructions about how to format the text lines. Request lines begin with a distinguishing "control character", normally a period.

Output lines are automatically "filled"; that is, their right margins are justified, without regard to the format of the input text lines. (Right justification may be turned on and off through the use of the ".ju" and ".nj" commands, though.) Strings of embedded spaces are retained so that the output line will contain at least as many spaces between words as the input line. However, input lines beginning with a space are output without modification.

Line "breaks" may be caused at specified places by certain commands, or by the appearance of an empty input line or an input line beginning with a space.

Because of the nature of its output (backspace and tab characters and a fixed number of lines per page), it is generally necessary to have a tool developed especially for printing the output on the local printers. On most systems this is a combination of the tools 'os' and 'detab', plus some sort of page eject control of the printer. If such as tool
exists, it should be described in Section 3 of this manual.

The capabilities of format are specified in the attached Request Summary. Numerical values are denoted by "n", titles by "t", and single characters by "c". Numbers may be signed + or -, in which case they signify relative changes to a quantity; otherwise they signify an absolute setting. Missing "n" fields are ordinarily taken to be 1, missing "t" fields to be empty, and "c" fields to shut off the appropriate special interpretation.

Running titles may appear at the top and bottom of every page. A title line consists of a line with three distinct fields: the first is text to be placed flush with the left margin, the second centered, and the third flush with the right margin. The first non-blank character in the title will be used as the delimiter to separate the three fields. Any "#" characters in a title are replaced by the current page number, and any "%" characters are replaced by the current date.

The ".nr" defines number registers; there are 26 registers named a-z. The command ".nr x m" sets number register x to m; ".nr x +m" increments number register by m; and ".nr x -m" decrements x by m. The value of number register x is placed in the text by the appearance of $nx; a literal @ may be inserted using @@.

Additional commands may be defined using ".de xx". For example,

```
.de PG
.sp
.ti +3
.en
```

defines a "paragraph" command PG. Defined commands may also be invoked with arguments. Arguments are separated by blanks or tabs. Within the definition of a defined command, arguments are referenced using $1, $2, etc. There is a maximum of 9 arguments. Omitted arguments default to the null string. $0 references the command name itself. For example, the following version of the paragraph command uses the argument to determine the amount of indentation.

```
.de PG
.sp
.ti +$1
.en
```

This command could be invoked by
.PG 3

to get the same effect as the previous version.

The ".so file" command causes the contents of file to be inserted in place of the ".so" command; ".so" commands may be nested.

FILES

none

SEE ALSO

Kernighan & Plauger's "Software Tools", pages 219-250
whatever tool has been devised for printing formatted output
The roff and nroff/troff UNIX commands
The "nroff" and "troff" users manuals by Joseph F. Ossana, Bell Laboratories, Murray Hill, New Jersey

DIAGNOSTICS

invalid number register name
names of number registers must be a single letter a-z

missing name in command definition
a macro was defined using the ".de" command, but no 2-letter name for it was given

so commands nested too deeply
the limit for nesting included source files is dependent upon the MAXOFILES definition in the standard symbols definition file

too many characters pushed back
the buffer holding input characters has been exceeded; its size is determined by the BUFSPACE definition in the source code

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REQUEST SUMMARY

Request Initial Default Break Meaning

###
start of comment line

.bd n n=1 no boldface the next n lines

.bp n n=1 n=+1 yes begin new page and number it n

.br yes break

.cc c c=. c=. no control character becomes c

.ce n n=1 yes center the next n input lines

.cu n n=1 no continuously underline in the next n

.de xx no command xx; ends at .en

.ef t t="" t="" no foots on even pages are t

.eh t t="" t="" no heads on even pages are t

.en no terminate command definition

.fi yes yes begin filling output lines

.fo /l/c/r f="" f="" no foot titles are l(eft), c(enter), r(ight)

.he /l/c/r t="" t="" no head titles are l(eft), c(enter), r(ight)

.in n n=0 n=0 yes set left margin to column n+1

.ju yes yes no begin justifying filled lines

.ls n n=1 n=1 no set line spacing to n

.ml n n=3 n=3 no space between top of page and head

.m2 n n=2 n=2 no space between head and text

.m3 n n=2 n=2 no space between text and foot

.m4 n n=3 n=3 no space between foot and bottom

.me n n=0 y/n need n lines; break if new page

.nf no yes stop filling

.nj no no stop justifying

.nr x m x=0 m=0 no set number register x to m,

.of t t="" t="" no foots on odd pages are t

.oh t t="" t="" no heads on odd pages are t

.pl n n=66 n=66 no set page length to n lines

.po n n=0 n=0 no set page offset to n spaces

.rm n n=65 n=65 no set right margin to column n

.so file no switch input to file

.sp n n=1 yes space n lines, except at top of page

.st n n=0 yes space to line n from top; -n

.sp n n=0 yes spaces to line n from bottom

.ti n n=0 yes temporarily indent next output line n spaces

.ul n n=1 no underline words in the next n input lines
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