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TEXT EDITING PROGRAM

1. Introduction

The text editing program has been developed in order to permit the mechanical production of documentation, thus giving more rapid production and document maintenance.

This document describes the commands which can be used to edit a source text. A source text is a sequence of source lines. A source line is a string composed from commands and words. The following categories of commands exist:

1. Heading commands
   Commands in this category are used to describe the document identification, the author and date. Such commands are allowed only at the beginning of a source text.

2. editing commands
   Each source line may start with a string of editing commands. Such a string is identified by a special character, called "control character".

   Editing commands are used to control the lay-out of the output document, labeled items, margins settings, horizontal tabulation, section titles, etc.

3. translation commands
   Normally the words in a source text are translated conform to the standard translation rules. With the translation commands this translation can be suppressed. This category of commands includes also commands causing underlining of a part of the output text.

   The translation commands may appear at any position in the source text, except within a string of editing commands. The translation commands are represented by a single special character.

Each line which contains a heading command or an editing command begins with the control character. This is the character '.'. The control character is immediately followed by the commands.

A word in a source text is a string of characters. This string is terminated by a blank, by the current tabulation character and by the end of the source line. A string of consecutive blanks is equivalent to a single blank.

A character in a word may be any printable character, except the representation of a translation command. Means are provided to print the representation of the translation commands.

In the following sections first the standard lay-out of an output document is given, followed by the detailed specification of all commands. Finally the use of the text editing program is described.

The appendix contains a summary of all commands and an example of a source text.

2. Format of an output document

An output document consists of a string of numbered pages. As far as the page format is considered, there exist two types of pages: page 1 and other pages.

Each page comprises 60 lines, numbered 0 through 59. Each line contains 100 print positions. These positions are numbered:

-4,-3,-2,-1,0,1,2,3,.....95

Page 1 will contain the following:

line	0	philips identification and department
	1	document number
	2	date
	3	author identification
	4-7	space
	8	document title
	9-12	space
	13-59	text

The lines 8-12 are also used for text if there is no document title.

The other pages have the following lay-out:

line	0	philips identification and document number
	1	page number
	2-3	space
	4-59	text

In conclusion, each text line contains 96 usable print positions, page 1 comprises 47 or 52 text lines and the other pages contain 56 text lines.

3. Heading commands

When heading commands are used, they have to be the first commands in a source text. All heading commands, except the DATA-command, may be omitted. The heading commands are to be given at the beginning of a source line. A source line may contain only 1 heading command. The heading commands are:

1. Title
   This command describes the document title. Its format is:

   T[ITLE] <text>

   <text> is the document title; it is without any modification printed on line 8 of page 1, starting at print position 0. <text> occupies the remainder of the source line.

2. afd
   This command specifies the department. Its format is:

   A[FD] <text>

   <text> denotes the department, up to 15 characters are, without any modification, printed on line 0 of page 1. The remainder of the source line is ignored.

3. number
   The number command gives the document number. Its format is:

   N[UMBER] <text>

   <text> denotes the document number. Up to 15 characters are without any modification printed on line 1 of page 1 and on line 0 of the other pages. The remainder of the source line is ignored.

4. author identification
   The format of this command is:

   P[AR] <text>

   Up to 15 bytes of <text> are printed on line 3 of page 1. The remainder of the source line is ignored.

5. Continuation
   This command is useful when an document is produced in several parts. It is to be used to specify the last used page number and title level of leveled section titles (see below) of the preceding part. The general format of this command is:

   C[ONTINUATION] P=<nr> , T=<nr> [. <nr>]

   The key 'P=' identifies the number of the preceding page and the key 'P=' indicates the level of the preceding leveled section title.

   One or both parameters may be omitted. The default value of the page number is 1, the default value of the title level is 0.

6. date
This command specifies the date; its format is:

DD <text>

Up to 15 characters of the source line following the command are printed on line 2 of page 1. The remainder of the source line is ignored.

Note: When the command is omitted the current date is used.

7. Data
This command is always the last heading command. Its format is:

DA[TA]

Next to this command no heading commands will be recognized and other commands and data can be accepted. All data following the command in the source line are ignored.

4. Editing commands

Each source line may start with a string of editing commands. Such a string is identified by a special character, the control character. This is the character '.'. The different commands in a string of commands are separated by a colon (':'); the string of editing commands is terminated by a blank.

All editing commands are distributed over the following categories:

1. Line commands
   Commands to start a new line, to insert blank lines, to start a new page and to assure that a given number of lines is available on the current page.

2. labeling commands
   Commands to control the beginning, the continuation and the termination of labeled items (such as this list of classes).

3. title commands
   Commands to identify the beginning of new sections.

4. tabulation commands
   Commands to specify the TAB-character and to define tabulation stops.

5. margin commands
   Commands to modify the current left margin and right margin.

6. mode commands
   Commands to select the alternative editing mode.

7. miscellaneous commands
   All commands not inclued in any other class, such as the MB-command and change indicators.

4.1. Line commands

The line commands are used to start a new line, to insert empty lines, to start a new page and to assure that a given number of lines is available on the current page. The line commands are:

1. \ - new line
   This command terminates the current output line. Following words are edited on the next output line.

2. S[=n] - space
   This command causes the current output line to be closed out and n empty lines to be inserted. The default value of n is 1. Empty lines at the beginning of a page are ignored, so such lines will not continue on a next output page. n is a decimal number of 1 through 3 digits.

3. p - new page
   This command terminates the current output line. The next words are edited on the next output page.

4. R=n - reserve n lines
   This command guarantees that n output lines to be generated next will fall on one page (assuming n is less than 48 on page 1 and less than 57 on the other pages) and not to be split by an automatic page eject. The command terminates the current line followed by a page eject if less than n lines remain on the current page. If the number of remaining lines on the current page is equal to or greater than n, the command has no visible effect.

4.2. Labeling commands

Labeling commands are used to control the editing of labeled items. In the output document a labeled item is an amount of text enclosed by empty lines with a modified left margin. The first line of a labeled item contains a label, starting at the original left margin. This label is either contained in the source text or it is a generated sequence number.

A labeled item may contain all other editing commands, except a Tn-command. A Tn-command terminates the labeled mode. Labeled items can be nested up to a level of 6.

The following labeling commands exist:

1. >[=n] - start labeling
   This command is used to identify the first labeled item at the next deeper level of nesting. n is a decimal number (for exception see below) specifying the indentation of the left margin to the right. Its default value is 4.

   When n is omitted, automatically generated sequence numbers are used. Otherwise the next words of the source line are considered as the label.

   N can also be the character '*'. This indicates that the newly started labeling level is the continuation of the preceding level at the same depth of nesting.

2. - - labeled item
   This command identifies the next labeled item within the same level of nesting. When the specification of n was omitted in the corresponding start labeling command, an automatically generated sequence number is used as label. Otherwise, the following words in the source line are considered as the label.

3. < - terminate labeling level
   This command terminates the current level of nesting in a labeled item environment. The left margin is restored to its preceding value.

All labeling commands will close out the current output line and cause the insertion of one blank output line.

4.3. Title commands

The title commands are used to identify section titles and to cause an automatic skip to a new page upon the detection of a title command below a specified level. The title commands are:

1. Tn - leveled section title
   A collection of 10 commands, T0 through T9, to identify section titles. The text of the title is immediately following the command, so a Tn-command must be the last command in a string of commands.

2. TL[=m] - title level eject
   This command will cause the automatic eject of the current page whenever a Tn-command is detected with a level number less than or equal to m. The initial value of m is -1.

   When m is omitted, a value of -1 is assumed, so not any subsequent Tn-command will cause an automatic page eject.

The title text of a Tn-command is in the output document preceded by an automatically generated sequence number. This number is with the first Tn-command of level n:

```
n=0   1.
n=1   0.1.
n=2   0.0.1.
etc.
```

With each succeeding Tn-command of a certain level the last item of the sequence number is increased by 1.

The following occurs when a Tn-command is detected:

1. The current output line is closed out.

2. two empty lines are inserted.

3. if the current page has less than 4 lines remaining, au automatic skip to a new page occurs.

4. if the level of the Tn-command is equal to or less than the level indicated by the last TL-command, an automatic skip to a new page occurs.

5. the text of the title, preceded by the sequence number, is printed.

6. an empty line is inserted.

Note that empty lines are ignored at the beginning of a page and that a skip to a new page has no effect when the current page is empty.

A Tn-command has the following side effects:

1. It terminates all current labeled items;

2. It restores the left and right margins to their initial values;

3. It terminates change flagging;

4. It terminates the effects of the translation commands.

4.4. Horizontal tabulation commands

There exist two horizontal tabluation commands: TAB, to define the TAB-character, and TABS, to specify the tabulation stops, as follows:

1. TAB=<char> - define TAB character
   This command defines the TAB-character, <char> can be any character. The tabulation character in a source line causes a shift to the next tabulation stop (if any). When the last tabulation stop has been passed, only a blank is inserted in the output line. The initial value of the TAB-character is H'00', or there is not a TAB-character.

2. TABS=n1[,n2,n3,...n9] - define tab stops
   This command defines the tabulation stops in the output lines. Up to 9 stops can be defined. The numbers denote the print positions of the stops. The initial stops are 10,20,30,40,50,60,70,80,90.

4.5. Margin commands

The margin commands can be used to modify the left and right margins of the output document. The margin commands are:

1. ML[=n] - set left margin
   This command sets the left margin to print position n. The default value of n is 0. Negative values are not allowed; n must be less than the current right margin.

2. MR[=n] - set right margin
   This command sets the right margin of the output document to print position n. The default value of n is 95, which is also the maximum allowed value. n must be greater than the current left margin.

The new margins settings become controlling immedately, but they will not modify the positions of data in the current output line.

4.6. Mode commands

The mode commands are used to select the other editing mode and corresponding translation commands. There exist two editing modes, the standard mode and the alternative mode. The standard mode is characterized by:

1. Upper case letters are translated into the corresponding lower case letters, except the first character following one of the strings:

   '. ' '! ' '? '

2. Several consecutive blanks are replaced by a single blank.

3. An output line starts at the current left margin. An output line is closed out when the next word (i.e. a string of non-blank characters) would exceed the current right margin. Then this word becomes the first word on the next output line.

4. the character strings '##', '@@' and '__' are replaced by a same single character and are not considered as a translation command.

5. a TAB-character causes a shift to the next tabulation stop.

6. the editing commands and translation commands are executed.

In the alternative mode the source lines are without any modification printed in the output document and no editing commands (except AX) is recognized.

The mode commands are:

1. AS
   The current output line is closed out and next input lines are, without any modification, treated as output lines. The only recognized editing command is AX, which terminates the alternative editing mode.

   Note that the AS-command is to be the last command in a string of commands.

2. AX
   This command is recognized only during the alternative editing mode. It terminates this mode.

4.7. Miscellaeous commands

The miscellaneous commands are:

1. MB[=c] - meta blank
   This command defines a single non-blank character which will next be used as "meta-blank", i.e. in the output document, after the composition of an output line but before the line is printed, the character is replaced by a blank. The default value of c is H'00', so there is not a meta-blank.

2. change indicators
   There exist two commands which can be used to flag changed parts of an output document. The first command starts the flagging and the second command terminates the flagging. The commands are:

   1. CI[=c] - start change flagging
      The character c is printed at position -1 of the current output line and all following lines until a CX-command is encountered. The default value of c is '*'.

   2. CX - stop flagging
      This command causes the printing of a blank at print position -1. The command is accepted only when it is preceded by a CI-command.

   The change commands cannot be nested.

3. _ - concatenation
   Normally the end of a source line indicates also the end of the last word in this line. As a result of this, the last character of a source line will be followed by a blank in the output document. This blank can be suppressed by means of the concatenation command. For example, the source lines:

   ```
   word1
   word2
   ```

   Are normally edited as:

   ```
   word1 word2
   ```

   But the source lines:

   ```
   word1
   ._ word2
   ```

   Are edited as follows:

   ```
   word1word2
   ```