

# DVI2TTY for VAX/VMS

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This document describes the use of **dvi2tty**, a filter for converting the device independent output files created by  $\text{\TeX}$  to files which may be printed on any ASCII terminal or line printer. This document may be printed on the line printer in CPE-3.102 by entering the command;

```
DOCPRINT SYS$DOCUMENT:DVI2TTY.DOC
```

Copies of this document may be printed on the laser printer in CPE-3.159 by entering the command;

```
PSPRINT SYS$DOCUMENT:DVI2TTY.PS
```

You may view copies of this document on workstations or personal computers which recognize the  $X$  window system protocol by entering the command;

```
XDVI SYS$DOCUMENT:DVI2TTY.DVI
```

## Description

**dvi2tty** converts a  $\text{\TeX}$  DVI-file to a format that is appropriate for terminals and line printers. The program is intended to be used for preliminary proofreading of  $\text{\TeX}$ -ed documents. By default the output is directed to the terminal.

The output leaves much to be desired, but is still useful if you want to avoid walking to the laser printer (or whatever) for each iteration of your document.

Since **dvi2tty** produces output for terminals and line printers the representation of documents is naturally quite primitive. Font changes are totally ignored, which implies that special symbols, such as mathematical symbols, get mapped into the characters at the corresponding positions in the "standard" fonts.

If the width of the output text requires more columns than fits in one line (c.f. the `-w` option) it is broken into several lines by **dvi2tty** although they will be printed as one line on regular  $\text{\TeX}$  output devices (e.g. laser printers). To show that a broken line is really just one logical line an asterisk ("\*") in the last position means that the logical line is continued on the next physical line output by **dvi2tty**. Such a continuation line is started with a space and an asterisk in the first two columns.

## Format

```
dvi2tty [ -o file ] [ -p list ] [ -P list ] [ -w n ] [ -l ] [ -u ] [ -s ] file[.dvi]
```

**dvi2tty** is compiled with VAXC which converts uppercase command line arguments to lowercase. To pass an uppercase argument to **dvi2tty**, the argument must be enclosed in quotation marks ( i.e. `"-P"` ). Arguments enclosed in brackets ( [ ] ) are optional.

## Options

The *file* [.dvi] argument is optional. Options may be specified in either a symbol or logical which is named DVI\$DVI2TTY or on the command line. Any option on the command line, conflicting with one in the environment, will override the one from the environment.

- o *name* Write output to file *name*.
- p *list* Print the pages chosen by *list*. Numbers refer to T<sub>E</sub>X-page numbers (known as \count0). An example of format for *list* is “1,3:6,8” to choose pages 1, 3 through 6 and 8. Negative numbers can be used exactly as in T<sub>E</sub>X, e.g. -1 comes before -4 as in “-p-1:-4,17”.
- P *list* Like -p except that page numbers refer to the sequential ordering of the pages in the dvi-file. Negative numbers don’t make a lot of sense here...
- w *n* Specify terminal width *n*. The legal range is 16-132 with a default of 80. If your terminal has the ability to display in 132 columns it might be a good idea to use -w132 and toggle the terminal into this mode as output will probably look somewhat better.
- l Mark page breaks with the two-character sequence “^L”. The default is to mark them with a form feed character.
- u Don’t make any attempts to find special Scandinavian characters. If such characters are in the text they will map to “a” and “o”. This is probably the default outside of Scandinavia. (The SA made the decision when the program was installed.)
- s Try to find the special Scandinavian characters that on most (?) terminals in Scandinavia are mapped to “{}[\]”. This can be the default, and output from files not containing these special characters will be identical regardless of this option.

## Environment

Either a symbol or logical which is named DVI\$DVI2TTY can be set to hold command line options. As an example, if you wish to normally have your output written to the file *dvi2tty.output* and wish to also have the output be 132 columns in width, you may define the logical name DVI\$DVI2TTY as in;

```
$ DEFINE DVI$DVI2TTY “o dvi2tty.output w 132”
```

Options set in the environment variable will be overridden by conflicting options on the command line.

## See Also

For further information use the DCL command **HELP TeX** to obtain information on T<sub>E</sub>X and how T<sub>E</sub>X may be used on our system. You should also read the L<sup>A</sup>T<sub>E</sub>X *Local Guide* which may be found in SYS\$DOCUMENT:. This document may be printed on the line printer in CPE-3.102 by entering the command;

```
DOCPRINT SYS$DOCUMENT:LOCAL_GUIDE.DOC
```

Copies of this document may be printed on the laser printer in CPE-3.159 by entering the command;

```
PSPRINT SYS$DOCUMENT:LOCAL_GUIDE.PS
```

You may view copies of this document on workstations or personal computers which recognize the X window system protocol by entering the command;

```
XDVI SYS$DOCUMENT:LOCAL_GUIDE.DVI
```

## **Bugs**

Blanks between words get lost quite easy. This is less likely if you are using a wider output than the default 80.

Only one file may be specified on the command line.

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