NAME

hitex − HINT output from TeX

SYNOPSIS

hitex [*options*] [**&***format*] [*file*|*\commands*]

DESCRIPTION

Run the HiTeX typesetter on *file*, usually creating *file.hnt*. If the file argument has no extension, ".tex" will be appended to it. Instead of a file name, a set of HiTeX commands can be given, the first of which must start with a backslash. With a **&** *format* argument HiTeX uses a different set of precompiled commands, contained in *format***.fmt**; it is usually better to use the **-fmt** *format* option instead.

HiTeX is a version of TeX that creates HINT files. The HINT file format is designed for on-screen reading of documents. Using a HINT viewer (see **https://hint.userweb.mwn.de**) to display a HINT file its content will dynamically adapt to the available display area.

The typical use of HiTeX is with pre generated formats. The **hitex** command uses the equivalent of the plain TeX format, and the **hilatex** command uses the equivalent of the LaTeX format. To generate formats, use the **-ini** switch.

HiTeX's handling of its command-line arguments is similar to that of of the other TeX programs in the *web2c* implementation.

HiTeX incorporates the e-TeX extensions (see **etex**(1)) if used with the **-etex** switch.

HiTeX incorporates the extensions needed for LaTeX (see **latex**(1)) if used with the **-ltx** switch.

OPTIONS

This version of HiTeX understands the following command line options.

-cnf-line *string*

Parse *string* as a *texmf.cnf* configuration line. See the Kpathsea manual.

-compress

Enable the use of compression for the HINT file. Compressed files are smaller but require decompression when viewing. Use only for large files if the file size matters.

-empty-page

When writing books, often empty pages are inserted - for example to begin chapters on a right hand side page. These empty pages are a nuisance for on-screen reading where there are no left or right hand side pages. This option keeps empty pages in the output.

-no-empty-page

This option tries to eliminate empty pages in the output. It is set as a default.

-etex   Enable the e-TeX extensions. This option is only effective in combination with **-ini**. See **etex**(1).

-file-line-error

Print error messages in the form *file:line:error* which is similar to the way many compilers format them.

-no-file-line-error

Disable printing error messages in the *file:line:error* style.

-fmt *format*

    Use *format* as the name of the format to be used, instead of the name by which HiTeX was called or a *%&* line.

-help   Print help message and exit.

-hint-debug *bitmask*

    Sets HINT file debugging flags according to the *bitmask*. See the **-hint-debug-help** option for details.

-hint-debug-help

    Print an explanation of the HINT debugging flags and exit.

-hyphenate-first-word

    TeX will usually not attempt to insert hyphenation points into the first word of a paragraph. If a HINT file must be displayed on a very small device such hyphenation points might prove necessary. This option is set by default and enables the generation of these hyphenation points.

-no-hyphenate-first-word

    Disable the automatic insertion of hyphenation points in the first word of a paragraph. Needed only if complete compatibility with TeX is required.

-ini   Start in *INI* mode, which is used to dump formats. The *INI* mode can be used for typesetting, but no format is preloaded, and basic initializations like setting catcodes may be required.

-interaction *mode*

    Sets the interaction mode. The mode can be either *batchmode*, *nonstopmode*, *scrollmode*, and *errorstopmode*. The meaning of these modes is the same as that of the corresponding \commands.

-jobname *name*

    Use *name* for the job name, instead of deriving it from the name of the input file.

-kpathsea-debug *bitmask*

    Sets path searching debugging flags according to the bitmask. See the *Kpathsea* manual for details.

-ltx   Enable the LaTeX extensions. This option is only effective in combination with **-ini**. See **latex**(1).

-mfmode *mode*

    Use *mode* as the Metafont *mode* when generating missing fonts. See **mf**(1) for details.

-mktex *fmt*

    Enable mktex *fmt*, where *fmt* must be either *tex*, *tfm*, *fmt*, or *pk*.

-no-mktex *fmt*

    Disable mktex *fmt*, where *fmt* must be either *tex*, *tfm*, *fmt*, or *pk*.

-output-directory *directory*

    Write output files in *directory* instead of the current directory. Look up input files in *directory* first, then along the normal search path.

-parse-first-line

> If the first line of the main input file begins with *%&* parse it to look for a dump name.

-no-parse-first-line

> Disable parsing of the first line of the main input file.

-progname *name*

> Pretend to be program *name*. This affects both the format used and the search paths.

-resolution *number*

> When using Metafont to generate missing pk fonts, use a resolution of *number* DPI.
> See **mf**(1) for details.

-version

> Print version information and exit.

ENVIRONMENT

See the Kpathsea library documentation (e.g., the 'Path specifications' node) for precise details of how the environment variables are used. The **kpsewhich** utility can be used to query the values of the variables.

One caveat: In most HiTEX formats, you cannot use ˜ in a file name you give directly to HiTEX, because ˜ is an active character in TEX, and hence is expanded, not taken as part of the file name. Other programs, such as Metafont, do not have this problem.

TEXMFOUTPUT

> Normally, HiTEX puts its output files in the current directory. If any output file cannot be opened there, it tries to open it in the directory specified in the environment variable TEXMFOUTPUT. There is no default value for that variable. For example, if you say *hitex paper* and the current directory is not writable and TEXMFOUTPUT has the value */tmp*, HiTEX attempts to create */tmp/paper.log* (and */tmp/paper.hnt*, if any output is produced.) TEXMFOUTPUT is also checked for input files, as TEX often generates files that need to be subsequently read; for input, no suffixes (such as ".tex") are added by default, the input name is simply checked as given.

TEXINPUTS

> Search path for *\input* and *\openin* files. This normally starts with ".", so that user files are found before system files. An empty path component will be replaced with the paths defined in the *texmf.cnf* file. For example, set TEXINPUTS to ".:/home/user/tex:" to prepend the current directory and "/home/user/tex" to the standard search path.

TEXFORMATS

> Search path for format files.

TFMFONTS

> Search path for font metric (*.tfm*) files.

SOURCE_DATE_EPOCH

> If set, its value, taken to be in epoch-seconds, will be used for the creation date and as the reference moment for the time related primitives of LATEX. This is useful for making reproducible builds.

FORCE_SOURCE_DATE

> If set to the value "1", the time-related TEX primitives (*\year*, *\month*, *\day*, *\time*) are also initialized from the value of SOURCE_DATE_EPOCH. This is not recommended

if there is any viable alternative.

Many, many more environment variables may be consulted related to path searching. See the Kpathsea manual.

FILES

The location of the files mentioned below varies from system to system. Use the **kpsewhich** utility to find their locations.

*.tfm   Metric files for HiTeX's fonts.

*.fmt   Predigested HiTeX format files.

*.pk *.pfb
          Font files used by HiTeX.

NOTES

This manual page is not meant to be exhaustive. The complete documentation for HiTeX can be found in the *HiTeX user manual* Further information can be found in the manual of the *Kpathsea library* and in *HINT: The file format* which is available as a book or in electronic form from the HINT project home page at **https://hint.userweb.mwn.de**.

BUGS

This version of HiTeX fails to handle correctly glues and kerns with a width that depends on \hsize or \vsize. Similarly, when the layout of table entries or mathematical formulas depends on \hsize or \vsize their output might be distorted.

AVAILABILITY

HiTeX should compile on a large variety of machine architectures and operating systems. HiTeX is part of the TeX Live distribution.

The HiTeX home page is at **https://hint.userweb.mwn.de**. There you find additional software, most importantly viewers for HINT files, and further information.

SEE ALSO

histretch(1), **hishrink**(1), **latex**(1), **tex**(1), **kpsewhich**(1),

AUTHORS

The primary author of HiTeX is Martin Ruckert, with eTeX extensions by Peter Breitenlohner, LaTeX extensions by Thierry Laronde, and the kpathsearch library by Karl Berry.

TeX was designed by Donald E. Knuth, who implemented it using his WEB system for Pascal programs.

Many, many more contributed to the typesetting system now known as TeX; far too many to name all of them here.