

**NAME**

fmtutil – manage TeX formats, Metafont bases and Metapost mems, per-user  
 fmtutil-sys – manage TeX formats, Metafont bases and Metapost mems, system-wide  
 mktexfmt – create a TeX format, Metafont base, or Metapost mem

**SYNOPSIS**

**fmtutil** [*OPTION*] ... [*COMMAND*]  
**fmtutil-sys** [*OPTION*] ... [*COMMAND*]  
**mktexfmt** *FORMAT.fmt*|*BASE.base*|*MEM.mem*|*FMTNAME.EXT*

**DESCRIPTION**

fmtutil version svn36788 (2015-04-13 00:53:26 +0900)

Rebuild and manage TeX formats, Metafont bases and MetaPost mems.

If the command name ends in mktexfmt, only one format can be created. The only options supported are **--help** and **--version**, and the command line must consist of either a format name, with its extension, or a plain name that is passed as the argument to **--byfmt** (see below). The full name of the generated file (if any) is written to stdout, and nothing else.

If not operating in mktexfmt mode, the command line can be more general, and multiple formats can be generated, as follows.

**OPTIONS**

- cnfile** FILE  
     read FILE instead of fmtutil.cnf (can be given multiple times, in which case all the files are used)
- fmdir** DIRECTORY
- no-engine-subdir**  
     don't use engine-specific subdir of the fmdir
- no-error-if-no-format**  
     exit successfully if no format is selected
- no-error-if-no-engine=ENGINE1,ENGINE2,...**  
     exit successfully even if the required engine is missing, if it is included in the list.
- quiet**  
     be silent
- test** (not implemented, just for compatibility)
- dolinks**  
     (not implemented, just for compatibility)
- force**  
     (not implemented, just for compatibility)

**Commands:**

- all** recreate all format files
- missing**  
     create all missing format files

- refresh**  
recreate only existing format files
- byengine** ENGINENAME  
(re)create formats using ENGINENAME
- byfmt** FORMATNAME  
(re)create format for FORMATNAME
- byhyphen** HYPHENFILE  
(re)create formats that depend on HYPHENFILE
- enablefmt** FORMATNAME  
enable formatname in config file
- disablefmt** FORMATNAME  
disable formatname in config file
- listcfg**  
list (enabled and disabled) configurations, filtered to available formats
- catcfg**  
output the content of the config file
- showhyphen** FORMATNAME  
print name of hyphenfile for format FORMATNAME
- version**  
show version information and exit
- help** show this message and exit

## ENVIRONMENT

Explanation of trees and files normally used:

If **--cnffile** is specified on the command line (possibly multiple times), its value(s) are used. Otherwise, `fmtutil` reads all the `fmtutil.cnf` files found by running `'kpsewhich --all fmtutil.cnf'`, in the order returned by `kpsewhich`.

In any case, if multiple `fmtutil.cnf` files are found, all the format definitions found in all the `fmtutil.cnf` files are merged.

Thus, if `fmtutil.cnf` files are present in all trees, and the default layout is used as shipped with TeX Live, the following files are read, in the given order.

For `fmtutil-sys`:

```

TEXMFCONFIG $TEXLIVE/YYYY/texmf-config/web2c/fmtutil.cnf
TEXMFVAR    $TEXLIVE/YYYY/texmf-var/web2c/fmtutil.cnf
TEXMFLOCAL  $TEXLIVE/texmf-local/web2c/fmtutil.cnf
TEXMFDIST   $TEXLIVE/YYYY/texmf-dist/web2c/fmtutil.cnf

```

For `fmtutil`:

```

TEXMFCONFIG $HOME/.texliveYYYY/texmf-config/web2c/fmtutil.cnf
TEXMFVAR    $HOME/.texliveYYYY/texmf-var/web2c/fmtutil.cnf
TEXMFHOME   $HOME/texmf/web2c/fmtutil.cnf
TEXMFCONFIG $TEXLIVE/YYYY/texmf-config/web2c/fmtutil.cnf
TEXMFVAR    $TEXLIVE/YYYY/texmf-var/web2c/fmtutil.cnf
TEXMFLOCAL  $TEXLIVE/texmf-local/web2c/fmtutil.cnf

```

TEXMFDIST *\$TEXLIVE/YYYY/texmf-dist/web2c/fmtutil.cnf*

(where YYYY is the TeX Live release version).

According to the actions, `fmtutil` might write to one of the given files or create a new `fmtutil.cnf`, described further below.

Where changes are saved:

If config files are given on the command line, then the first one given will be used to save any changes from **--enable** or **--disable**. If the config files are taken from `kpsewhich` output, then the algorithm is more complex:

1) If *\$TEXMFCONFIG/web2c/fmtutil.cnf* or *\$TEXMFHOME/web2c/fmtutil.cnf* appears in the list of used files, then the one listed first by `kpsewhich --all` (equivalently, the one returned by `kpsewhich fmtutil.cnf`), is used.

2) If neither of the above two are present and changes are made, a new config file is created in *\$TEXMFCONFIG/web2c/fmtutil.cnf*.

In general, the idea is that if a given config file is not writable, a higher-level one can be used. That way, the distribution's settings can be overridden for system-wide using `TEXMFLOCAL`, and then system settings can be overridden again for a particular using `TEXMFHOME`.

Resolving multiple definitions of a format:

If a format is defined in more than one config file, then the definition coming from the first-listed `fmtutil.cnf` is used.

Disabling formats:

`fmtutil.cnf` files with higher priority (listed earlier) can disable formats mentioned in lower priority (listed later) `fmtutil.cnf` files by writing, e.g.,

```
#! <fmtname> <enginename> <hyphen> <args>
```

in the higher-priority `fmtutil.cnf` file.

As an example, suppose you have want to disable the `luajitlatex` format. You can create the file *\$TEXMFCONFIG/web2c/fmtutil.cnf* with the content

```
#! luajitlatex luajittex language.dat,language.dat.lua lualatex.ini
```

and call `fmtutil`.

`fmtutil` vs. `fmtutil-sys` (`fmtutil --sys`):

When `fmtutil-sys` is run or the command line option **--sys** is used, `TEXMFSYSCONFIG` and `TEXMFSYSVAR` are used instead of `TEXMFCONFIG` and `TEXMFVAR`, respectively. This is the primary difference between `fmtutil-sys` and `fmtutil`.

Other locations may be used if you give them on the command line, or these trees don't exist, or you are not using the original TeX Live.

## REPORTING BUGS

Report bugs to: `tex-k@tug.org`

TeX Live home page: `<http://tug.org/texlive/>`