# NAME

updmap – manage TeX font maps, per-user updmap-sys – manage TeX font maps, system-wide

# SYNOPSIS

updmap [OPTION] ... [COMMAND] updmap-sys [OPTION] ... [COMMAND]

## DESCRIPTION

updmap (TeX Live, multi) version \$Id: updmap.pl 26891 2012-06-10 22:41:49Z karl \$

Update the default font map files used by pdftex, dvips, and dvipdfm(x), and optionally pxdvi, as determined by all configuration files updmap.cfg (the ones returned by running "kpsewhich --**all** updmap.cfg", but see below).

Among other things, these map files are used to determine which fonts should be used as bitmaps and which as outlines, and to determine which font files are included in the PDF or PostScript output.

By default, the TeX filename database (ls-R) is also updated.

# **OPTIONS**

## ---cnffile FILE

read FILE for the updmap configuration (can be given multiple times, in which case all the files are used)

## --dvipdfmxoutputdir DIR

specify output directory (dvipdfm(x) syntax)

### --dvipsoutputdir DIR

specify output directory (dvips syntax)

### --pdftexoutputdir DIR

specify output directory (pdftex syntax)

## --pxdvioutputdir DIR

specify output directory (pxdvi syntax)

### --outputdir DIR

specify output directory (for all files)

### --copy

cp generic files rather than using symlinks

## --force

recreate files even if config hasn't changed

## --nomkmap

do not recreate map files

## --nohash

do not run texhash

### -n, --dry-run

only show the configuration, no output

--quiet, --silent
 reduce verbosity
Commands:
 --help show this message and exit
 --version

show version information and exit

- --showoption OPTION show the current setting of OPTION
- --showoptions OPTION show possible settings for OPTION
- --setoption OPTION VALUE set OPTION to value; option names below
- --setoption OPTION=VALUE as above, just different syntax
- --enable MAPTYPE MAPFILE add "MAPTYPE MAPFILE" to updmap.cfg, where MAPTYPE is Map, MixedMap, or KanjiMap
- --enable Map=MAPFILE add "Map MAPFILE" to updmap.cfg
- --enable MixedMap=MAPFILE add "MixedMap MAPFILE" to updmap.cfg
- --enable KanjiMap=MAPFILE add "KanjiMap MAPFILE" to updmap.cfg
- --disable MAPFILE

disable MAPFILE, of whatever type

——listmaps

list all active and inactive maps

--listavailablemaps

same as -- listmaps, but without unavailable map files

--syncwithtrees

disable unavailable map files in updmap.cfg

Explanation of the map types: the (only) difference between Map and MixedMap is that MixedMap entries are not added to psfonts\_pk.map. The purpose is to help users with devices that render Type 1 outline fonts worse than mode-tuned Type 1 bitmap fonts. So, MixedMap is used for fonts that are available as both Type 1 and Metafont. KanjiMap entries are added to psfonts\_t1.map and kanjix.map.

Explanation of the OPTION names for --showoptions, --showoptions, --setoption:

dvipsPreferOutline

true|false (default true)

Whether dvips uses bitmaps or outlines, when both are available.

dvipsDownloadBase35 true|false (default true) Whether dvips includes the standard 35 PostScript fonts in its output.

pdftexDownloadBase14

true|false (default true)

Whether pdftex includes the standard 14 PDF fonts in its output.

#### pxdviUse

true|false (default false)

Whether maps for pxdvi (Japanese-patched xdvi) are under updmap's control.

#### kanjiEmbed

(any string)

#### kanjiVariant

(any string)

See below.

#### LW35 URWkb|URW|ADOBEkb|ADOBE (default URWkb)

Adapt the font and file names of the standard 35 PostScript fonts. URWkb URW fonts with "berry" filenames (e.g. uhvbo8ac.pfb) URW URW fonts with "vendor" filenames (e.g. n019064l.pfb) ADOBEkb Adobe fonts with "berry" filenames (e.g. phvbo8an.pfb) ADOBE Adobe fonts with "vendor" filenames (e.g. hvnbo\_\_\_\_.pfb)

These options are only read and acted on by updmap; dvips, pdftex, etc., do not know anything about them. They work by changing the default map file which the programs read, so they can be overridden by specifying command–line options or configuration files to the programs, as explained at the beginning of updmap.cfg.

The options kanjiEmbed and kanjiVariant specify special replacements in the map lines. If a map contains the string @kanjiEmbed@, then this will be replaced by the value of that option; similarly for kanjiVariant. In this way, users of Japanese TeX can select different fonts to be included in the final output.

### **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, updmap reads all the updmap.cfg files found by running 'kpsewhich -all updmap.cfg', in the order returned by kpsewhich, with one exception: an updmap.cfg found in TEXMFLOCAL is given higher priority than the updmap.cfg in TEXMFMAIN, to ensure that local adjustments by administrators take precedence over what is shipped in TeX Live.

In any case, if multiple updmap.cfg files are found, all the maps mentioned in all the updmap.cfg files are merged.

Thus, if updmap.cfg 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 updmap-sys:

```
TEXMFSYSCONFIG $TEXLIVE/YYYY/texmf-config/web2c/updmap.cfgTEXMFSYSVAR$TEXLIVE/YYYY/texmf-var/web2c/updmap.cfgTEXMFLOCAL$TEXLIVE/texmf-local/web2c/updmap.cfgTEXMFMAIN$TEXLIVE/YYYY/texmf/web2c/updmap.cfg
```

## TEXMFDIST \$TEXLIVE/YYY/texmf-dist/web2c/updmap.cfg

## For updmap:

TEXMFCONFIG\$HOME/.texliveYYYY/texmf-config/web2c/updmap.cfgTEXMFVAR\$HOME/.texliveYYYY/texmf-var/web2c/updmap.cfgTEXMFHOME\$HOME/texmf/web2c/updmap.cfgTEXMFSYSCONFIG \$TEXLIVE/YYYY/texmf-config/web2c/updmap.cfgTEXMFSYSVAR\$TEXLIVE/YYYY/texmf-var/web2c/updmap.cfgTEXMFLOCAL\$TEXLIVE/YYY/texmf-local/web2c/updmap.cfgTEXMFMAIN\$TEXLIVE/YYYY/texmf/web2c/updmap.cfgTEXMFDIST\$TEXLIVE/YYYY/texmf-dist/web2c/updmap.cfg

(where YYYY is the TeX Live release version).

There is another exception to keep upgradability from earlier versions of TeX Live: if a file TEXMFLOCAL/web2c/updmap–local.cfg exists (formerly used by tlmgr to merge local fonts), then the file TEXMFLOCAL/web2c/updmap.cfg is ignored (if it exists) and that updmap–local.cfg is used instead. In this case, updmap recognizes the previous syntax for disabling map files in updmap–local.cfg (this syntax is different from what is used now).

According to the actions, updmap might write to one of the given files or create a new updmap.cfg, 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 **--setoption**, **--enable** or **--disable**. If the config files are taken from kpsewhich output, then the algorithm is more complex:

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

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

Resolving multiple definitions of a font:

If a font is defined in more than one map file, then the definition coming from the first–listed updmap.cfg is used. If a font is defined multiple times within the same map file, one is chosen arbitrarily. In both cases a warning is issued.

Disabling maps:

updmap.cfg files with higher priority (listed earlier) can disable maps mentioned in lower priority (listed later) updmap.cfg files by writing, e.g.,

#! Map mapname.map

or

#! MixedMap mapname.map

in the higher-priority updmap.cfg file.

As an example, suppose you have a copy of MathTime Pro fonts and want to disable the Belleek version of the fonts; that is, disable the map belleek.map. You can create the file \$TEXMFCONFIG/web2c/updmap.cfg with the content

#! Map belleek.map Map mt-plus.map Map mt-yy.map

and call updmap.

updmap writes the map files for dvips (psfonts.map) and pdftex (pdftex.map) to the TEXMFVAR/fonts/map/updmap/{dvips,pdftex}/ directories.

The log file is written to TEXMFVAR/web2c/updmap.log.

When updmap-sys is run, TEXMFSYSCONFIG and TEXMFSYSVAR are used instead of TEXMFCONFIG and TEXMFVAR, respectively. This is the only difference between updmap-sys and updmap.

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.

To see the precise locations of the various files that will be read and written, give the  $-\mathbf{n}$  option (or read the source).

## EXAMPLES

For step-by-step instructions on making new fonts known to TeX, read http://tug.org/fonts/fontinstall.html. For even more terse instructions, read the beginning of updmap.cfg.

## **FILES**

Configuration and input files:

updmap.cfg

Main configuration file. In *texmf/web2c* by default, but may be located elsewhere depending on your distribution. Each texmf tree read should have its own *updmap.cfg*.

dvips35.map

Map file for standard 35 PostScript fonts for use with dvips(1).

pdftex35.map

Map file for standard 35 PostScript fonts for use with **pdftex**(1).

### ps2pk35.map

Map file for standard 35 PostScript fonts for use with **ps2pk**(1).

Output files:

#### psfonts.map

For **dvips**(1). Same as *psfonts\_t1.map* if option **dvipsPreferOutline** active, else as *psfonts\_pk.map*.

### psfonts\_pk.map

For **dvips**(1). Without information from MixedMap files. (Setting of **dvipsPreferOutline** ignored.)

### psfonts\_t1.map

For **dvips**(1). With information from MixedMap files. (Setting of **dvipsPreferOutline** ignored.)

#### download35.map

For **dvips**(1). Always downloads the standard 35 fonts. (Setting of **dvipsDownload-Base35** ignored.)

### builtin35.map

For **dvips**(1). Never downloads the standard 35 fonts. (Setting of **dvipsDownload-Base35** ignored.)

### pdftex.map

For **pdftex**(1). Same as *pdftex\_dl14.map* if option **pdftexDownloadBase14** active, else as *pdftex\_ndl14.map*.

# pdftex\_dl14.map

For **pdftex**(1). Always downloads the standard 14 fonts.

## pdftex\_ndl14.map

For **pdftex**(1). Never downloads the standard 14 fonts.

### ps2pk.map

Similar to *psfonts.map* file, but forces all fonts to be downloaded, so this map file can be used with **xdvi**(1) and **ps2pk**(1).

## Configuration files for **dvips**(1):

### config.builtin35

Loads *builtin35.map* instead of *psfonts.map*.

### config.download35

Loads download35.map instead of psfonts.map.

## config.outline

Loads *psfonts\_t1.map* instead of *psfonts.map*.

#### config.pdf

Loads *psfonts\_t1.map* instead of *psfonts.map* and has additional optimizations for PDF generation.

#### config.pk

Loads *psfonts\_pk.map* instead of *psfonts.map*.

#### config.www

Loads *psfonts\_t1.map* instead of *psfonts.map*. (For compatibility with old versions.)

## config.gstopk

Loads *psfonts\_t1.map* instead of *psfonts.map*.

# **REPORTING BUGS**

Report bugs to: tex-k@tug.org TeX Live home page: <a href="http://tug.org/texlive/">http://tug.org/texlive/</a>