

fontscripts

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Abstract

`fontscripts` provides variant font encodings, support metrics and Lua script fragments to automate the creation of $\text{\TeX}/\text{\LaTeX}$ 2 ε font files for 8-bit engines using `l3build`. A template-based system enables the automatic generation of font tables and `l3build` tests. Variables support the addition of encoding subset declarations for the Text Companion (`TS1`) encoding and variable scaling factors in font definition files.

The script fragments¹ make it possible to automate the generation of \TeX font metrics, virtual fonts, map files etc. and the conversion of fonts and encodings. For tools which do not otherwise support it, such as `fontinst`, the scripts enable the automatic addition of variable scaling in font definition files. A semi-automatic system tries to ensure font encoding names are unique.

The script fragments were originally designed for `fontinst`, but support for `afm2tfm` (intended for fonts consisting entirely of ornaments etc.) is provided and a modular approach enables easy modification for other tools. The default configuration is intended to be cross-platform and requires only tools included in \TeX Live, but the documentation includes a simple adaption for integration with FontForge and GNU make.

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*Bug tracker: codeberg.org/cfr/nfssext/issues | Code: codeberg.org/cfr/nfssext | Mirror: github.com/cfr42/nfssext

¹The main script fragments are written in *extremely elementary* Lua. This is the first thing I've ever attempted in Lua and I am not a programmer.

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1 Quick Start

This assumes you are familiar with basic usage of **I3build**. If not, please see **I3build's manual** for basic setup.

Configuring your project for I3build includes creation of a file, `build.lua`, in your working directory. This should specify at least the `module` name, typically the name of your package. So you should have something like this,

```
module = "fontastic"
```

We now need to edit this file to make I3build aware of the Lua `fntbuild` scripts provided by `fontscripts`.

```
module = "fontastic"
require(kpse.lookup("fntbuild.lua"))
```

This should be sufficient to make the functions provided by the script available. To effectively use these functions, however, you will probably need to provide configuration details for your specific workflow and setup. For example, if you want to build fonts this way, you may need to specify which build tool you use and which files contain the code to compile or commands to execute. The remainder of this document explains how to do this². You also need to tell the scripts if you want to override the defaults e.g. if you would like `fntbuild` to insert subset encoding declarations and/or variable scaling factors³ into font definition files or to auto-generate tests and/or font tables.

²Unless you are reading a version which includes the implementation section. In that case, *most* of the document is just code listing and it is the first bit of what remains which explains how to actually use the scripts.

³`fontinst` only. As far as I know, this is simply an oversight on `fontinst`'s part – fixed scaling factors are supported out-of-the-box – and I assume other tools have the ability to include variable scaling without `fntbuild`'s interference.

2 Lua Script Fragments

`fntbuild.lua` provides two custom `l3build` targets and five new Lua functions. In addition, it redefines three `l3build` functions (two of which do nothing by default). As well as those provided by `l3build`, a number of additional variables are used by these functions to determine what, where and how they should operate.

2.1 l3build Targets

`fnttarg` (*targ*) Runs `fnt.fontinst()` by default or `fnt.afm2tfm()` if `fnt.afmtotfm` is `true`.

Builds traditional TeX font files for 8-bit engines. The building is done in `fnt.fntdir`. The results are copied to `fnt.keepdir` and the intermediate results to `fnt.keeptempdir`. Files in the former are copied back into the `builddir` when building documentation, running tests etc.

This target may be redefined if another tool chain is used for font creation⁴.

If additional setup is required, this may be done by defining `fnt.buildinit_hook()`, which is empty by default. See section 2.2.1.

`uniquifyencs` (*targ*) *(encoding tag)*

Tries to ensure that the names of encoding files and font encodings are unique by editing font definition files and map file fragments in `fnt.keepdir`. *(encoding tag)* is optional. If no argument is given and `encodingtag` is empty, a suitable tag will be determined automatically⁵.

Note that it is not necessary to use this target if `l3build` `fnttarg` is used with a tool for which built-in support is provided.

2.2 Lua Functions

2.2.1 New Functions

`fnt.afm2tfm()` (*fn*) `fnt.afm2afm(<dir>)`

A function to generate support files for simple symbolic fonts in *(dir)* using `afm2tfm`. The function generates TFMS, FDs and a MAP. It requires AFMS and, optionally, ENCS. If *(dir)* is unspecified, `fnt.fntdir` is used.

If `fnt.afmtotfm` is `true`, a call to `fnt.afm2tfm()` replaces the default call to `fnt.fontinst()` when the `fnttarg` target is used.

Like `fnt.fontinst()`, `fnt.afm2tfm()` calls `build_fnt()` and `fnt.fntkeeper()`, but it does **not** call `fnt.uniquify()`.

Note this function is designed for only very simple cases. The target TeX fonts must each correspond to a unique `.afm` (though it would not be hard to extend the function to support a one-many mapping).

`fnt.buildinit()` (*fn*) `fnt.buildinit()`

⁴`fnt.afm2tfm()` in `fntbuild.lua` and `build.lua` in `berenisadf` provide examples.

⁵Hopefully.

Sets up the build environment in preparation for building by unpacking and copying files, installing dependencies etc. in preparation for building. Workflows supported out-of-the-box use this function, so there is no need to invoke it explicitly in these cases⁶. This function is intended for use in defining custom build functions. See section 5 for an example. It is called, if needed, by those provided out-of-the-box such as `fnt.fontinst()`.

If `fnt.needs_fontinst` is `true`, the files in `_${TEXMFDIST}/tex/fontinst` are copied to `fnt.fntdir` before user-specified system files are processed. For files provided by `fontscripts`, the prefix `fontscripts-` is removed unless doing so conflicts with an existing file name.

Note that `fontinst` files may be used by tools other than `fontinst`. For example, `otftotfm` can use converted `fontinst` encoding files.

`fnt.buildinit_hook()` (*fn*) `fnt.buildinit_hook()`

A function which does nothing successfully by default, similar to the hooks provided by `I3build`. May be redefined to perform additional tasks when setting up the environment for `fnttarg`. The function should return an error level.

The hook is executed after unpacking, copying etc. at the end of `fnt.buildinit()` so it can be used to modify those preparations, if necessary.

`fnt.build_fnt()` (*fn*) `fnt.build_fnt(<dir>, <cmd>, <file>)`

A wrapper around `runcmd()` which runs `<cmd> <file>` in `<dir>`. If `fnt.buildsearch` is `false` (the default), the function first sets up a restricted environment designed to avoid contaminating the build with undesirable elements from TeX search paths.

Note that the restrictions are designed to avoid contamination resulting from searches using `kpathsea`. If you use this function with a different tool chain, you may need to take additional steps to isolate the build. For example, the function does nothing to prevent a FontForge script accessing resources in `~/.local/share`, `/usr/local/fonts`, `/etc`, `/System/Library` etc.

In general, `I3build` ‘sandboxing’ uses a black-listing rather than a white-listing model. Since this is inherently less reliable, you should not depend on the effectiveness of isolation. This means you should check what actually happens e.g. which paths actually end up in your `.log` files or test the effectiveness of the isolation.

The table `fnt.build_fnt_env` may be used to selectively adapt the default sandboxing, which is sets the `kpathsea` variables shown in table 1.

`fnt.buildinit_tidy()` (*fn*) `fnt.buildinit_tidy()`

Removes `fnt.buildsuppfiles_sys` from `fnt.fntdir`. Note that this does not remove files installed by `fnt.buildinit_fontinst()`.

This function is intended for use in defining custom build functions. It is called, if needed, by those provided out-of-the-box such as `fnt.fontinst()`.

`fnt.finst()` (*fn*) `fnt.finst(<patt>, <dir>, <mode>)`

A wrapper around `fnt.build_fnt()` which runs `pdftex --interaction <mode>` in directory `<dir>` on each file in `<dir>` matching the pattern `<patt>`.

Called by `fnt.fontinst()`. There is usually no need to call this function directly.

⁶See `fnt.fontinst()` and `fnt.afm2tfm()` in `fntbuild-build.lua`.

Table 1: Default environment for ‘sandboxed’ build.

kpathsea variable	value
TEXINPUTS	. fnt.localtexmf()
TEXMF_AUXTREES	{}
TEXMFHOME	{}
TEXMFLOCAL	{}
TEXMFCFG	.
TEXMFVAR	.
VFFONTS	\${TEXINPUTS}
TFMFONTS	\${TEXINPUTS}
TEXFONTMAPS	\${TEXINPUTS}
T1FONTS	\${TEXINPUTS}
AFMFONTS	\${TEXINPUTS}
TTFFONTS	\${TEXINPUTS}
OPENTYPEFONTS	\${TEXINPUTS}
LIGFONTS	\${TEXINPUTS}
ENCFONTS	\${TEXINPUTS}

`fnt.fontinst() (fn) fnt.fontinst(<dir>, <mode>)`

Executes a `fontinst` workflow to generate TeX fonts and associated files in directory `<dir>`, executing `pdftex` with the option `--interaction <mode>`.

This is the default build function called by `fnttarg`.

The function calls `fnt.finst()`, `fnt.fntkeeper()` and `fnt.uniquify()` in addition to performing initial compilation. The process requires the usual `fontinst` setup i.e. a driver to generate the initial files and a second file to create map file fragments.

If a variable scaling factor is used, the font definition files will be edited to ensure this works, since `fontinst` apparently supports scaling only by a fixed factor. For a simple demonstration of how to set this up, see, for example, `baskervaldad`'s driver which includes

```
% \declaresize{}{<-> \string\ybvr@@scale}
```

Shape declarations should then be written without scaling,

```
% \installfont{ybvr8t}{ybvr8r,ybvr8sr,newlatin}{t1-baskervald}{T1}{ybvr}{m}{n}{}
```

since scaling will be added after the font definition files are created,

```
% \expandafter\ifx\csname ybv@scale\endcsname\relax
%   \let\ybvr@@scale\empty
% \else
%   \edef\ybvr@@scale{s*[\csname ybv@scale\endcsname]}%
% \fi
%
% \DeclareFontFamily{T1}{ybvr}{}%
%
% \DeclareFontShape{T1}{ybvr}{m}{n}{
```

```
%   <-> \ybvr@scale ybvr8t
% }
```

to enable a suitable option in the `sty` file.

If `fontinst` is setup to produce a shell script for converting `.pl` and `.vpl` files to `.tfm` and `.vf`, the function executes the commands contained in this script. In order to maintain compatibility on Windows, the commands are extracted and run by Lua rather than calling the shell to execute the commands directly.

`fnt.fntsubsetter () (fn) fnt.fntsubsetter()`

Inserts a font encoding subset declarations into font definition files. Explicit use is only required for custom build functions, as the standard options for `fnt.build_fnt ()` incorporate this function. Returns an error level, but this may not be accurate.

Note that, by default, the presence of this function does nothing because subset declarations are disabled by default. To insert declarations, not only must `fnt.fntsubsetter ()` be executed by the build function. `fnt.subset` must also be set to a non-nil value other than `false`.

`fnt.fntkeeper() (fn) fnt.fntkeeper(<dir>)`

Copies generated files in `<dir>` to `fnt.keepdir` and/or `fnt.keeptempdir` to prevent deletion by `l3build`. Returns an error level.

This function is called by the function executed by the default functions called by `fnttarg()` and may be useful if that target is redefined to call a different function.

`fnt.lsrdir() (fn) fnt.lsrdir(<path>, <filenames>)`

Adds a recursive list of files in `path` to the list of files in `filenames` and returns `filenames` and returns the resulting table. `path` should be a string containing the fully-qualified path to a directory. If specified, `filenames` should be a table. Note that the function appends entries to `filenames` rather than replacing them.

`fnt.test() (fn) fnt.test(<fntpkgnname>, <fds>, <content>, <maps>, <fdssdir>)`

Auto-generates `lvt` files suitable for use with `l3build check` from a template.

`fnt.uniquify() (fn) fnt.uniquify(<tag>)`

Tries to ensure the names of font encodings and encoding files are unique by editing font definition files and map file fragments.

This function is used by `fnt.fontinst()` and `fnt.afm2tfm ()`, may be utilised in a custom definition of `fnt.build_fnt ()` or may be called directly using the `uniquifyencs` target.

2.2.2 Redefined Functions

`checkinit_hook() (fn) checkinit_hook()`

This is a standard `l3build` function which does nothing by default. `fntbuild.lua` redefines it to automatically generate test files suitable for use with `l3build check` if a test template is available. If `checksearch` is `false`, the hook also sets up an environment tailored to font-testing.

Note that `checksearch` is disabled by default. Contrary to `l3build`, `fntbuild.lua`

Table 2: Default additions to ‘sandbox’ if none are specified. For files, the file is added. For directories, the contents are added.

Files	Directories
/tex/latex/base/	
article.cls	/tex/latex/l3build
fontenc.sty	/tex/latex/l3backend
omlcmm.fd	/fonts/enc/dvips/base
omlcmr.fd	/fonts/enc/dvips/cm-super
omscmr.fd	/fonts/type1/public/amsfonts/cm
omscmsy.fd	/fonts/type1/public/cm-super
ot1cmr.fd	/fonts/tfm/public/cm
ot1cmss.fd	/fonts/tfm/jknapen/ec
ot1cmtt.fd	
size10.clo	
size11.clo	
size12.clo	
t1cmr.fd	
t1cmss.fd	
t1cmtt.fd	
tracefnt.sty	
ts1cmr.fd	
ts1cmss.fd	
ts1cmtt.fd	
ucmr.fd	
ucmss.fd	
ucmmtt.fd	
/tex/latex/fonttable/	fonttable.sty

enables sandboxing during both building and testing. If you do not want this, reenable `checksearch` after `fntbuild.lua` is read or, better yet, create a custom `fntbuild-config.lua`.

The default environment for testing does the following:

- concatenates all files specified in `fnt.mapfiles_sys` and writes the result to `pdftex.map` in `testdir`;
- copies the contents of `fnt.keepdir` to `testdir`;
- copies either the files specified in `fnt.checksuppfiles_sys` or the contents of the directories listed in table 2 to `testdir`;
- copies any files specified in `fnt.checksuppfiles_add` to `testdir`;
- copies the file specified by `fnt.regress` to `testdir`;
- copies the template specified by `fnt.testtemp` to `unpackdir` for use in auto-generating tests;
- restricts the environment by setting the variables listed in table 3.

`copyctan()` (*fn*) `copyctan()`

Table 3: Default environment for ‘sandboxed’ testing. Note this configuration is applied *in addition* to the steps taken by `l3build -check` to ‘isolate’ the test environment when `checksearch` is `false`.

kpathsea variable	value
<code>TEXMFAUXTREES</code>	<code>{}</code>
<code>TEXMFHOME</code>	<code>{}</code>
<code>TEXMFLOCAL</code>	<code>{}</code>
<code>TEXMFCONFIG</code>	<code>.</code>
<code>TEXMFVAR</code>	<code>.</code>
<code>VFFONTS</code>	<code>. fnt.localtexmf()</code>
<code>TFMFONTS</code>	<code>. fnt.localtexmf()</code>
<code>TEXFONTMAPS</code>	<code>. fnt.localtexmf()</code>
<code>T1FONTS</code>	<code>. fnt.localtexmf()</code>
<code>AFMFONTS</code>	<code>. fnt.localtexmf()</code>
<code>TTFFONTS</code>	<code>. fnt.localtexmf()</code>
<code>OPENTYPEFONTS</code>	<code>. fnt.localtexmf()</code>
<code>LIGFONTS</code>	<code>. fnt.localtexmf()</code>
<code>ENCFONTS</code>	<code>. fnt.localtexmf()</code>

This is extended to copy files from `fnt.keepdir` and to impose a single-layer of sub-directories of the kind required by [CTAN](#) for font distributions.

`docinit_hook()` (*fn*) `docinit_hook()`

This is a standard `l3build` function which does nothing by default. `fntbuild.lua` redefines it to automatically generate font tables suitable for use with `l3build doc` from a template.

2.3 Variables

Defaults assigned by `fntbuild.lua` to both `l3build` and `fontsheets` variables are listed in table 4 and table 5 respectively.

`fnt.afmtotfm (var) fnt.afmtotfm= <true/false>`

`nil` by default. Setting this to anything other than `false` or `nil` will use `afm2tfm` rather than `fontinst` to build the fonts. This is only designed for *extremely* simple fonts such as those which contain only text symbols.

`fnt.autotestfds (var) fnt.autotestfds = {<globs>}`

`fnt.binmakers (var) fnt.binmakers = {<globs>}`

Scripts to run to convert human-readable `TeX` font metrics/virtual font metrics into binary `TeX` font metrics and virtual fonts.

`fnt.buildsearch (var) fnt.buildsearch= <true/false>`

Whether to search the `texmf` trees while generating font files.

Defaults to `false`.

Note that this is akin to `l3build`’s `checksearch` etc. but for the additional build step

Table 4: fontscripts defaults for l3build variables.

Variable	Value
binaryfiles	= {".pdf", ".zip", ".vf", ".tfm", ".pfb", ".pfm", ".ttf", ".otf", ".tar.gz"}
checkdeps	= {maindir .. "/fnt-tests"}
checkengines	= {"pdftex"}
checkformat	= "latex"
checksearch	= false
cleanfiles	= {fnt.keeptempfiles}
installfiles	= {".afm", ".cls", ".enc", ".fd", ".map", ".otf", ".pfb", ".pfm", ".sty", ".tfm", ".ttf", ".vf"}
sourcefiledir	= sourcefiledir or "."
sourcefiles	= {".afm", "afm/*.afm", ".pfb", ".pfm", ".dtx", ".ins", "opentype/*.otf", ".otf", "tfm/*.tfm", "truetype/*.ttf", ".ttf", "type1/*.pfb", "type1/*.pfm"}
tdslocations	= { "fonts/afm/" .. fnt.vendor .. "/" .. module .. "/" .. "*.afm", "fonts/enc/dvips/" .. module .. "/" .. "*.enc", "fonts/map/dvips/" .. module .. "/" .. "*.map", "fonts/opentype/" .. fnt.vendor .. "/" .. module .. "/" .. "*.otf", "fonts/tfm/" .. fnt.vendor .. "/" .. module .. "/" .. "*.tfm", "fonts/truetype/" .. fnt.vendor .. "/" .. module .. "/" .. "*.ttf", "fonts/type1/" .. fnt.vendor .. "/" .. module .. "/" .. "*.pfb", "fonts/type1/" .. fnt.vendor .. "/" .. module .. "/" .. "*.pfm", "fonts/vf/" .. fnt.vendor .. "/" .. module .. "/" .. "*.vf", "source/fonts/" .. module .. "/" .. "*.etx", "source/fonts/" .. module .. "/" .. "*.mtx", "source/fonts/" .. module .. "/" .. "*-drv.tex", "source/fonts/" .. module .. "/" .. "*-map.tex", "tex/latex/" .. module .. "/" .. "*.fd", "tex/latex/" .. module .. "/" .. "*.sty" }
typesetexe	= "TEXMFDOTDIR=.../local: pdflatex"
typesetfiles	= typesetfiles or {"*.dtx", "*-tables.tex", "*-example.tex"}
typesetsourcefiles	= {fnt.keepdir .. "/" *{}}

Table 5: Default values for fontscripts variables.

Variable	Value
fnt.afmtotfm	= nil
fnt.autotestfds	= fnt.autotestfds or {}
fnt.binmakers	= fnt.binmakers or {"*-pltotf.sh"}
fnt.builddeps	= fnt.builddeps or {}
fnt.buildfiles	= fnt.buildfiles or { ".afm", ".enc", ".etx", ".fd", ".lig", ".make", ".map", ".mtx", ".nam", ".otf", ".pe", ".tex" , ".tfm" }
fnt.buildsearch	= false
fnt.buildsuppfiles_sys	= fnt.buildsuppfiles_sys or {}
fnt.checksuppfiles_sys	= fnt.checksuppfiles_sys or {}
fnt.checksuppfiles_add	= fnt.checksuppfiles_add or {}
fnt.familymakers	= fnt.familymakers or {"-drv.tex"}
fnt.fntdir	= fnt.fntdir or builddir .. "/fnt"
fnt.fnttestfds	= fnt.fnttestfds or {}
fnt.keepdir	= fnt.keepdir or sourcefiledir .. "/keep"
fnt.keepfiles	= fnt.keepfiles or { ".enc", ".fd", ".map", ".tfm", ".vf" }
fnt.keeptempdir	= fnt.keeptempdir or sourcefiledir .. "/keeptemp"
fnt.keeptempfiles	= fnt.keeptempfiles or { ".mtx", ".pl", "-pltotf.sh", "-rec.tex", ".vpl", ".zz" }
fnt.mapmakers	= fnt.mapmakers or {"-map.tex"}
fnt.mapfiles_sys	= fnt.mapfiles_sys or {}
fnt.mapfiles_add	= fnt.mapfiles_add or {}
fnt.needs_fontinst	= true
fnt.pkgbase	= fnt.pkgbase or ""
fnt.regress	= fnt.regress or "fntbuild-regression-test.tex"
fnt.subset	= false
fnt.subsetdefns	= fnt.subsetdefns or {}
fnt.subsetfiles	= fnt.subsetfiles or {}
fnt.subsettemplate	= fnt.subsettemplate or "\DeclareEncodingSubset{TS1}{\$FONTFAMILY}{\$SUBSET}"
fnt.tablestemp	= fnt.tablestemp or "fntbuild-tables.tex"
fnt.testtemp	= fnt.testtemp or "fntbuild-test.lvt"
fnt.vendor	= fnt.vendor or "public"

required when preparing fonts.

`fnt.builddeps (var) fnt.builddeps = {}`

Dependencies to install when building fonts in a sandbox. If empty, some basic dependencies are installed to ensure straightforward cases work out-of-the-box.

`fnt.buildfiles (var) fnt.buildfiles = {<globs>}`

Source files to copy to the build directory when generating font files.

`fnt.buildsuppfiles_sys (var) fnt.buildsuppfiles_sys = {<globs>}`

`fnt.checksuppfiles_add (var) fnt.checksuppfiles_add = {<globs>}`

Dependencies to install when checking. Supplements default list.

`fnt.checksuppfiles_sys (var) fnt.checksuppfiles_sys = {<globs>}`

Dependencies to install when checking. Overrides default list.

`fnt.familymakers (var) fnt.familymakers = {<globs>}`

Source files `fnt.fontinst()` should compile to generate TeX support files.

For the default definition of `fnt.fontinst()` this variable should specify the driver or drivers to be compiled.

`fnt.fntdir (var) fnt.fntdir= "<directory path>"`

Directory in which to build fonts.

`fnt.fnttestfds (var) fnt.fnttestfds = {<globs>}`

Files to use when generating test files for `l3build`.

`fnt.keepdir (var) fnt.keepdir = "<dir>"`

Directory to store final products of font creation e.g. font definitions, map file fragments, TeX font metrics, virtual fonts etc.

`fnt.keepfiles (var) fnt.keepfiles = {<globs>}`

Files to copy to `fnt.keepdir`.

`fnt.keeptempdir (var) fnt.keeptempdir = "<dir>"`

Directory to store intermediat products of font creation e.g. human-readable TeX font metrics, virtual font metrics etc.

`fnt.keeptempfiles (var) fnt.keeptempfiles = {<globs>}`

Files to copy to `fnt.keeptempdir`.

`fnt.mapfiles_sys (var) fnt.mapfiles_sys = {<globs>}`

Map file fragments to install when checking. If unset, `cm.map`, `cm-super-t1.map`, `cm-super-ts1.map` and `lm.map` are used.

`fnt.mapfiles_add (var) fnt.mapfiles_add = {<globs>}`

Additional map file fragments to install when checking.

`fnt.mapmakers (var) fnt.mapmakers = {<globs>}`

Source files `fnt.fininst()` should compile to generate map file fragments etc.

`fnt.needs_fontinst (var) fnt.needs_fontinst = <true/false>`

true by default. Determines whether .etx and .mtx files under `tex/fontinst` in the distribution's TDS tree are copied to `fnt.fntdir` if `fnt.buildinit()` is called.

Unless you are using files with conflicting names (or whose names would conflict if the prefix `fontscripts-` was removed from those supplied by this package), it is probably best to change the default only if you are certain you do not need the files, you have set `fnt.buildsearch true` or you run into trouble. Note that not only `fontinst` make use of the files installed by `fontinst` and `afm2pl`.

`fnt.pkgbase (var) fnt.pkgbase = "<identifier>"`

May be used to set a string identifying the package if `fntbuild` has trouble determining one automatically⁷.

`fnt.regress (var) fnt.regress= "<filename>"`

The file containing regression tests for use in auto-generating tests. `fntbuild-regression-test.tex` provides a set used by default.

Warning! The implementation of subset declarations in font definition files appears to be broken in current L^AT_EX⁸. Do NOT remove declarations from `.sty` files unless present in the format itself.

`fnt.subset (var) fnt.subset= <true/false>`

nil by default. Set to any value other than nil or false to enable subset declarations.

Note this variable must be given a non-default value if subset encoding declarations should be added. Specifying definitions, files and templates only determines what will be done IF anything is done at all.

`fnt.subsetdefns (var) fnt.subsetdefns = {}`

If different families should get different subset values, the various settings should be configured here.

For example, the following code sets the subset for `<family 1>` to 1 and that for `<family 2>` to 3.

```
fnt.subsetdefns.<family 1> = "1"
fnt.subsetdefns.<family 2> = "3"
```

`fnt.subsetfiles (var) fnt.subsetfiles = {<globs>}`

Font definition files into which encoding subset declarations should be inserted.

`fnt.subsettemplate (var) fnt.subsettemplate = "<>"`

Template to use when constructing subset declarations.

By default, the template simply plugs family and value pairs into a standard declaration as shown in table 5. However, it is also possible to use more complex declarations. For example, `cfr-lm` does not actually include any TS1 fonts at all. Instead, it just says which

⁷None of the packages I've prepared with `fntbuild` have required this. Usually, the script should do a reasonable job of discovering a suitable value automatically.

⁸[GitHub #1669](#).

Latin Modern family should be used for which cfr-lm family. So the only sensible approach is to use whichever subset declarations the relevant Latin Modern font definitions use. Unfortunately, these are provided by the L^AT_EX 2 _{ε} format rather than lm, besides which it is at least theoretically possible the appropriate subsets might change and cfr-lm has no control over this. For this reason, the package simply says ‘for cfr-lm family x , use whichever subset is declared for Latin Modern family y ’ for each pair of families x and y .

This is setup using the following line in the build.lua:

```
fnt.subsettemplate = "\\\ExpandArgs {nnn} \\\DeclareEncodingSubset {TS1} {$FONTFAMILY} {\\"
```

Rather than numerical values, therefore, cfr-lm declares subset encodings such as

```
fnt.subsetdefns.clms = "lmss"
```

The result is that L^AT_EX 2 _{ε} will use whichever subset is declared for lmss for clms, which, after all, is no more than a fancy alias for lmss in the TS1 encoding.

```
fnt.tablestemp (var) fnt.tablestemp= "<filename>"
```

The file containing the template to use when auto-generating font tables. fntbuild-tables.tex provides the default template.

```
fnt.testtemp (var) fnt.testtemp= "<filename>"
```

The file containing the template to use when auto-generating font tests. fntbuild-test.lvt provides the default template.

```
fnt.vendor (var) fnt.vendor = "<fnt.vendor>"
```

Vendor directory for font installation such as public or arkandis.

3 Configuration

For simple cases, configuration may be done in build.lua, along with generic l3build customisation. For more elaborate modifications — or cases where a subset of configuration options should be shared between modules — settings may be placed in one or more fntbuild-config.lua files.

1. fntbuild-vars.lua is loaded. This ensures required variables get default values and modifies a number of l3build defaults.
2. A kpse-based search is performed. If fntbuild-config.lua is found, it is loaded.
3. If it exists, maindir/fntbuild-config.lua is loaded.
4. If it exists, sourcedir/fntbuild-config.lua is loaded.

So more specific settings will override more general ones.

4 Templates

By default, `fntbuild.lua` is able to utilise two kinds of `tex` template. The names of these files are stored in `fnt.testtemp` and `fnt.tablestemp`. If no local alternatives are provided, `fntbuild.lua` will use `kpathsea` to locate them, falling back to those included in the package and installed in `tex/latex/fontschemas/` under the `TEXMFDIST` tree by default.

The default files may be overridden by either or both of the following methods:

1. altering the values of `fnt.testtemp` and/or `fnt.tablestemp`;
2. providing local copies of the files named in `fnt.testtemp` and/or `fnt.tablestemp`.

The default contents are listed in section 5.2.

4.1 Font Tables

A template for producing font tables as part of package documentation is provided. The template is used in `fntbuild.lua`'s `doc_init()` hook to generate `tex` files populated with font information from font definition files. This is then compiled by `l3build doc` to produce font tables.

Alternative content may be provided by supplying a local copy of `fntbuild-tables.tex` or specifying an alternative template in `fnt.tablestemp`. If `TABLES` occurs in the template, `fntbuild.lua` will replace it with a `document` environment containing a series of commands of the form `\sampletable{\{encoding\}}{\{family\}}{\{series\}}{\{shape\}}`, where `\{encoding\}`, `\{family\}`, `\{series\}` and `\{shape\}` are derived from the font definition files.

The default template is listed in section 5.2.1.

4.2 Font Tests

If a template is found in the font test directory, it will be used in `fntbuild.lua`'s `check_init()` hook to generate `lvt` files populated with font information from font definition files. These tests are then compiled by `l3build check` as part of the test suite. Certain file patterns are excluded from testing. In particular, separate tests are not generated for `ts1 fd` files because these families are typically better tested along with their `t1` counterparts.

Alternative content may be provided by supplying a local copy of `fntbuild-test.lvt` or specifying an alternative template in `fnt.testtemp`. If `SAMP` occurs in the template, `fntbuild.lua` will replace it with a series of tests derived from the font definition files. These tests should typically use commands provided explicitly or implicitly by the file specified in `fnt.regress`. By default, tests utilise a macro `\sampler` defined to absorb four arguments of the form `\{\{encoding\}\}\{\{family\}\}\{\{series\}\}\{\{shape\}\}`. The result is a document containing various pieces supplied by `fonttable`.

A custom test suite may be specified by supplying a local copy of `fntbuild-regression-test.tex`, giving an alternative in `fnt.regress` or defining a different set of tests in the template specified by `fnt.testtemp`.

Note that you MUST supply a custom template if you change fnt.regress. It is, however, fine to supply a customised fntbuild-regression-test.tex for use with the default template. Only if you want to use a different filename for the test suite is a custom template required.

The default template is listed in section 5.2.2. The default test suite is listed in section 5.3.

5 Customisation

As in the case of l3build, you can replace functions and targets at will, albeit on a much more limited scale. Although it would be better to just not use fntbuild.lua at all if you want to redefine everything, it can make sense to replace `fnt.fontinst()` if, say, you want to use different font creation tools but make use of the functions for stashing generated files, generating font tables, testing etc.

For example, berenisadf was built using a build.lua containing

```

19 -- require(kpse.lookup("fntbuild.lua"))
20 local function fntmake (dir,mode)
21     dir = dir or fnt.fntdir
22     mode = mode or "errorstopmode --halt-on-error"
23     local autotcfds = { "ts1ybd2j.fd", "ts1ybd2.fd", "ts1ybdj.fd", "ts1ybd.fd" }
24     -- set up the build environment
25     assert(fnt.buildinit(), "Setting up build environment failed!")
26     print("Running make. Please be patient ... \n")
27     assert(run(dir, "chmod +x ff-ybd.pe"), "Attempt to make fontforge script executable is")
28     assert(run(dir, "make -f Makefile.make all"), "'make -f Makefile.make all' failed in")
29     -- make ts1 swash families so tc commands pick up the characters in ly1
30     -- we don't need t1 versions of these families as there's no room for swash
31     -- there
32     -- ideally, we could just tell latex to use the non-swash families for the
33     -- tc encoding, but that doesn't seem possible without rewriting more
34     -- internal stuff than seems altogether wise ...
35     for i, j in ipairs(autotcfds) do
36         local jfam = string.gsub(j, "^ts1(.*)%.fd$", "%1")
37         local jnewfam = jfam .. "w"
38         local jnew = string.gsub(j, "(%.fd)$", "w%1")
39         local f = assert(io.open(dir .. "/" .. j, "rb"))
40         local content = f:read("*all")
41         f:close()
42         -- normalise line endings to be platform-agnostic
43         -- copied from l3build
44         content = string.gsub(content .. (string.match(content, "\n$") and "" or "\n"),
45         "\r\n", "\n")
46         local new_content = string.gsub(content,
47         "{" .. jfam .. "}", "{" .. jnewfam .. "}")
48         new_content = string.gsub(new_content, "(ts1[^%.]*)(%.fd)", "%1w%2")
49         new_content = string.gsub(new_content, "(TS1/ybd[a-z0-9]*)", "%1w")
50         f = assert(io.open(dir .. "/" .. jnew, "w"))
51         f:write((string.gsub(new_content, "\n", fnt.os_newline_cp)))

```

```

52     f:close()
53 end
54 -- call fnt.fntkeeper() to save the build results into fnt.keepdir else
55 -- l3build deletes them before testing or compilation!
56 assert(fnt.fntkeeper(),"FONT KEEPER FAILED IN " .. dir .. "! DO NOT MAKE STANDARD TA
57 return 0
58 end
59 -- make local function available in table bt
60 bt = {}
61 bt.fntmake = fntmake
62 -- redefine fnt.ntarg so that fnttarg calls bt.fntmake rather than fontinst
63 -- fntmake must be specified first
64 -- it just ain't TeX
65 target_list[fnt.ntarg] = {
66     func = bt.fntmake,
67     desc = "Creates TeX font files",
68     pre = function(names)
69         if names then
70             print("fntmake does not need names\n")
71             help()
72             exit(1)
73         end
74         return 0
75     end
76 }

```

That is, `berenisadf` doesn't use any built-in build function at all, but `fnt.fntmake()`, which simply invokes `gnu make` and calls `fnt.fntkeeper()`⁹. Note the use of `fnt.buildinit()` to setup the build environment.

5.1 Examples

The latest versions of the following packages were developed using `fontsheets` and build using `l3build`¹⁰. Full details, including the use of templates and scaling are available on [CODEBERG](#) or [GITHUB](#) as part of the code repository. [ebgaramond-maths](#) provides a further example.

- GUST:
 - `cfr-lm`
- ARKANDIS:
 - `baskervaldadf`
 - `berenisadf`
 - `electrumadf`
 - `librisadf`

⁹It does not ensure encoding names are unique because it uses no custom encodings of its own.

¹⁰Note that it is in no sense a dependency; it contains nothing ever required in typesetting.

- romandeadf
- venturisadf.

5.2 Templates

Templates for auto-generating font tables and regression tests.

5.2.1 Font Tables Template

fntbuild-tables.tex (*tpt*)

```

1  \pdftracingfonts=1
2  \RequirePackage{svn-prov}
3  \ProvidesFile{fnt-tables.tex}[$Id: fontsheets.dtx 10843 2025-02-22 05:01:11Z
   cfrees $}[v0.2 \revinfo] [\filebase: font table template]
4  \DefineFileInfoSVN

5  \documentclass[10pt,a4paper]{article}
6  \usepackage{geometry}
7  \usepackage{fonttable}
8  \newcommand\sampletable[4]{%
9    #1/#2/#3/#4:\par\noindent
10   \xfonttable{#1}{#2}{#3}{#4}%
11   \clearpage
12 }
13
14 TABLES
15

```

5.2.2 Test Template

fntbuild-test.lvt (*tpt*)

```

16 \RequirePackage{svn-prov}
17 \ProvidesFile{fnt-test.lvt}[$Id: fontsheets.dtx 10843 2025-02-22 05:01:11Z
   cfrees $}[v0.0 \revinfo][fontsheets: l3build test template]
18 \listfiles
19 \input regression-test.tex\relax
20 \input fntbuild-regression-test.tex\relax
21 \setlength{\parindent}{0pt}
22 \textheight=250mm
23 \textwidth=160mm
24 \oddsidemargin=0mm
25 \evensidemargin=0mm
26 \headheight=0pt
27 \headsep=0pt
28 \topmargin=-10mm
29 \marginparwidth=0pt
30 \marginparsep=0pt
31
32 SAMP
33

```

5.3 Regression Tests

Simple regression test suite for fonts focused on T1 and TS1 encodings.

`build-regression-test.tex (tpt)`

```

34 \pdftracingfonts=1
35 \RequirePackage{svn-prov}
36 \ProvidesFile{SVN[fnt-tests.tex]}{$Id: fontsheets.dtx 10843 2025-02-22 05:01:11Z
37   cfrees $}[v0.0 \revinfo][fontsheets: 13build tests]
38 \documentclass[10pt,a4paper]{article}
39 \usepackage{fonttable}
40 \usepackage{tracefnt}% infoshow is default; debugshow traces maths fonts, too
41 \PassOptionsToPackage{nfssext-cfr}{debug}
42 \newcounter{tccharcnt}
43 \NewDocumentCommand \tcfnttest { o m }
44 {%
45   \iftctest
46     \stepcounter{tccharcnt}{\normalfont\thetccharcnt:~}%
47     \% \texttt{\textbackslash textbackslash #2}:%
48     \IfValueTF{#1}{%
49       \csname #2\endcsname {#1}%
50     }{%
51       \csname #2\endcsname
52     }%
53   \fi
54 }
55 \newif\iftctest
56 \tctesttrue
57 \makeatletter
58 \newcommand\sampler{}
59 \def\sampler#1#2#3#4{%
60   \setcounter{tccharcnt}{0}%
61   \% \tracingoutput=1
62   #1 / #2 / #3 / #4 :
63   \tracinglostchars\thr@@
64   \% \tracingonline\thr@@
65   \showoutput
66   \pikfont{#1}{#2}{#3}{#4}%
67   \aztext
68   \AZtext
69   \digitstext
70   \digitstext
71   \puncttext
72   \knutext
73   \AE\ \AA\ \YY\ \SS\ \€
74
75   \knuone
76
77   \percent: \%
78
79
80

```

```
81  \begin{tabular}{llllllllll}
82    \tcfnttest{S} &
83    \tcfnttest{I}{capitalacute} &
84    \tcfnttest{I}{capitalbreve} &
85    \tcfnttest{I}{capitalcaron} &
86    \tcfnttest{I}{capitalcedilla} &
87    \tcfnttest{I}{capitalcircumflex} &
88    \tcfnttest{I}{capitaldieresis} &
89    \tcfnttest{I}{capitaldotaccent} &
90    \tcfnttest{I}{capitalgrave} &
91    \tcfnttest{I}{capitalhungarumlaut} \\
92    \tcfnttest{I}{capitalnewtie} &
93    \tcfnttest{I}{capitalogonek} &
94    \tcfnttest{I}{capitalring} &
95    \tcfnttest{I}{capitaltie} &
96    \tcfnttest{I}{capitaltilde} &
97    \tcfnttest{textacutedbl} &
98    \tcfnttest{textasciacute} &
99    \tcfnttest{textasciibreve} &
100   \tcfnttest{textasciicaron} &
101   \tcfnttest{textasciicircum} \\
102   \tcfnttest{textasciidieresis} &
103   \tcfnttest{textasciigrave} &
104   \tcfnttest{textasciimacron} &
105   \tcfnttest{textasciitilde} &
106   \tcfnttest{textasteriskcentered} &
107   \tcfnttest{textbackslash} &
108   \tcfnttest{textbaht} &
109   \tcfnttest{textbar} &
110   \tcfnttest{textbardbl} &
111   \tcfnttest{textbigcircle} \\
112   \tcfnttest{textblank} &
113   \tcfnttest{textborn} &
114   \tcfnttest{textbraceleft} &
115   \tcfnttest{textbraceright} &
116   \tcfnttest{textbrokenbar} &
117   \tcfnttest{textbullet} &
118   \tcfnttest{textcelsius} &
119   \tcfnttest{textcent} &
120   \tcfnttest{textcentoldstyle} &
121   \tcfnttest{textcircledP} \\
122   \tcfnttest{textcolonmonetary} &
123   \tcfnttest{textcompwordmark} &
124   \tcfnttest{textcopyleft} &
125   \tcfnttest{textcopyright} &
126   \tcfnttest{textcurrency} &
127   \tcfnttest{textdagger} &
128   \tcfnttest{textdaggerdbl} &
129   \tcfnttest{textdblhypen} &
130   \tcfnttest{textdblhypenchar} &
131   \tcfnttest{textdegree} \\
132   \tcfnttest{textdied} &
133   \tcfnttest{textdiscount} &
134   \tcfnttest{textdiv} &
```

```
135   \tcfnttest{textdivorced} &
136   \tcfnttest{textdollar} &
137   \tcfnttest{textdollaroldstyle} &
138   \tcfnttest{textdong} &
139   \tcfnttest{textdownarrow} &
140   \tcfnttest{texteightoldstyle} &
141   \tcfnttest{textestimated} \\
142   \tcfnttest{texteuro} &
143   \tcfnttest{textfiveoldstyle} &
144   \tcfnttest{textflorin} &
145   \tcfnttest{textfouroldstyle} &
146   \tcfnttest{textfractionsolidus} &
147   \tcfnttest{textgravedbl} &
148   \tcfnttest{textguarani} &
149   \tcfnttest{textinterrobang} &
150   \tcfnttest{textinterrobangdown} &
151   \tcfnttest{textlangle} \\
152   \tcfnttest{textlbrackdbl} &
153   \tcfnttest{textleaf} &
154   \tcfnttest{textleftarrow} &
155   \tcfnttest{textlira} &
156   \tcfnttest{textlnot} &
157   \tcfnttest{textlquill} &
158   \tcfnttest{textmarried} &
159   \tcfnttest{textmho} &
160   \tcfnttest{textminus} &
161   \tcfnttest{textmu} \\
162   \tcfnttest{textmusicalnote} &
163   \tcfnttest{textnaira} &
164   \tcfnttest{textnaira} &
165   \tcfnttest{textnineoldstyle} &
166   \tcfnttest{textnumero} &
167   \tcfnttest{textohm} &
168   \tcfnttest{textonehalf} &
169   \tcfnttest{textoneoldstyle} &
170   \tcfnttest{textonequarter} &
171   \tcfnttest{textonesuperior} \\
172   \tcfnttest{textopenbullet} &
173   \tcfnttest{textordfeminine} &
174   \tcfnttest{textordmasculine} &
175   \tcfnttest{textparagraph} &
176   \tcfnttest{textperiodcentered} &
177   \tcfnttest{textpertenthousand} &
178   \tcfnttest{textperthousand} &
179   \tcfnttest{textpeso} &
180   \tcfnttest{textpilcrow} &
181   \tcfnttest{textpm} \\
182   \tcfnttest{textquotedblleft} &
183   \tcfnttest{textquotedblrigh} &
184   \tcfnttest{textquotyleft} &
185   \tcfnttest{textquoteright} &
186   \tcfnttest{textquotesingle} &
187   \tcfnttest{textquotestraightbase} &
188   \tcfnttest{textquotestraightdblbase} &
```

```

189   \tcfnttest{texttriangle} &
190   \tcfnttest{textrbrackdbl} &
191   \tcfnttest{textrecipe} \\
192   \tcfnttest{textreferencemark} &
193   \tcfnttest{textregistered} &
194   \tcfnttest{textrightarrowarrow} &
195   \tcfnttest{textrquill} &
196   \tcfnttest{textsection} &
197   \tcfnttest{textservicemark} &
198   \tcfnttest{textsevenoldstyle} &
199   \tcfnttest{textsixoldstyle} &
200   \tcfnttest{textsterling} &
201   \tcfnttest{textsurd} \\
202   \tcfnttest{textthreeoldstyle} &
203   \tcfnttest{textthreequarters} &
204   \tcfnttest{textthreequartersemdash} &
205   \tcfnttest{textthreesuperior} &
206   \tcfnttest{texttildelow} &
207   \tcfnttest{textttimes} &
208   \tcfnttest{texttrademark} &
209   \tcfnttest{texttwelvedash} &
210   \tcfnttest{texttwooldstyle} &
211   \tcfnttest{texttwosuperior} \\
212   \tcfnttest{textuparrow} &
213   \tcfnttest{textwon} &
214   \tcfnttest{textyen} &
215   \tcfnttest{textzerooldstyle} &
216   &
217   &
218   &
219   &
220   &
221   \\
222   \end{tabular}
223
224   \vfil\break
225 }
226
227 \makeatother

```

6 Implementation

6.1 Script Fragments

These are not standalone scripts, but files to be read by l3build to provide additional and/or divergent functions. Note that several are based on LPPL files not on CTAN, as the L^AT_EX Project does not package their build scripts.

6.1.1 fntbuild.lua

fntbuild.lua (*lua*) Use `dofile()` in build.lua to add to l3build.

```
1 -- $Id: fntbuild.lua 10802 2025-02-12 20:11:33Z cfrees $
2 -----
3 -----
4 -- I don't know how to bootstrap this ...
5 -- these are needed when fontscripts is part of the same repo
6 -----
7 sourcefiledir = sourcefiledir or "."
8 maindir = maindir or sourcefiledir
9 -----
10 -- namespace
11 ---@usage ??
12 fnt = fnt or {}
13 -- error-tracking
14 ---@usage private
15 fnt.nifergwall = 0
16 -- target names
17 -- fnttarg
18 ---@usage private
19 local ntarg = "fnttarg"
20 -- uniquifyencs
21 ---@usage private
22 local utarg = "uniquifyencs"
23 -----
24 -- fnt.gwall {{{{
25 ---@param msg string
26 ---@param file string
27 ---@param rtn number
28 ---@see
29 ---@usage private
30 function fnt.gwall (msg,file,rtn)
31     file = file or "current file"
32     msg = msg or "Error:"
33     rtn = rtn or 0
34     if rtn ~= 0 then
35         fnt.nifergwall = fnt.nifergwall + rtn
36         print (msg, file, "failed (" .. rtn .. ")\n")
37     end
38 end
39 }}}}
40 -----
41 -----
42 local possplaces = { sourcefiledir, maindir, maindir .. "/fontscripts" }
43 for _,i in ipairs (possplaces) do
44     if fileexists( i .. "/fntbuild.lua" ) then
45         fnt.fntbuild_home = i
46         break
47     end
48 end
49 print("fnt.fntbuild_home:", fnt.fntbuild_home)
50 if fnt.fntbuild_home == nil then
```

```
51  -- dwyn o Joseph Wright: l3build.lua
52  -- ar gael am fod Joseph yn wneud kpse.set_program_name("kpsewhich")
53  -- gweler texdoc luatex
54  local p = kpse.find_file("fntbuild.lua", "lua")
55  if p ~= nil and p ~= "" then
56      fnt.fntbuild_home = dirname(p)
57  else
58      fnt.gwall("Search for ","self",1)
59  end
60end
61-----
62print("Found myself in", fnt.fntbuild_home)
63-----
64-- dwyn o Joseph Wright: l3build.lua
65local function fntbuild_require (frag)
66    require(kpse.lookup("fntbuild-" .. frag .. ".lua", { path = fnt.fntbuild_home }))
67end
68-----
69fntbuild_require("vars")
70fntbuild_require("utils")
71fntbuild_require("build")
72fntbuild_require("check")
73fntbuild_require("doc")
74fntbuild_require("ctan")
75-----
76-- load user config
77-- local (if fnt.buildsearch) - maindir -- sourcefiledir
78-----
79-- execute before testing afmtotfm so fnttarg is correct in case the
80-- config sets it true
81fnt.build_config()
82-----
83-----
84-- fontinst must be specified first
85-- it just ain't TeX
86-- ntarg {{{
87target_list[ntarg] = {
88    func = fnt.fontinst,
89    desc = "Creates TeX font file",
90    pre = function(names)
91        if names then
92            print("fontinst does not need names\n")
93            help()
94            exit(1)
95        end
96        return 0
97    end
98}
99-- }}}
100-- utarg {{{
101
```

```
101 target_list[utarg] = {
102     func = fnt.uniquify,
103     desc = "Uniquifies encodings ONLY",
104     pre = function(names)
105         fnt.standalone = true
106         if names and #names > 1 then
107             print("Too many encoding tags specified; no more than one allowed")
108             help()
109             exit(1)
110         else
111             names = names or fnt.encodingtag or ""
112         end
113         return 0
114     end
115 }
116 -- }}}
117 -- diwedd targets
118 -----
119 -----
120 -- fnt.afmtotfm -> fnttarg {{{
121 if fnt.afmtotfm then
122     target_list[ntarg] = {
123         func = fnt.afm2tfm,
124         desc = "Creates TeX font files",
125         pre = function(names)
126             if names then
127                 print("fntmake does not need names\n")
128                 help()
129                 exit(1)
130             end
131             return 0
132         end
133     }
134 end
135 -- }}}
136 -----
137 -----
138 if options["target"] == "install" then
139     table.insert(sourcefiles,fnt.keepdir .. "/*.*")
140 end
141 -----
142 -----
143 -- override l3build functions {{{
144 checkinit_hook = fnt.checkinit_hook
145 copyctan = fnt.copyctan
146 docinit_hook = fnt.docinit_hook
147 -- }}}
148 -- other exports {{{
149 fnt.ntarg = ntarg
150 -- }}}}
```

```

151 -----
152 -----
153 -- vim: ts=2:sw=2:et:foldmethod=marker:

```

6.1.2 fntbuild-build.lua

`fntbuild-build.lua` (*lua*) Included by `fntbuild.lua`. Functions used when building fonts for `fnttarg`.

```

1 -- $Id: fntbuild-build.lua 10818 2025-02-19 05:44:13Z cfrees $
2 -----
3 -- fntbuild-build
4 -----
5 -----
6 -- buildinit_hook
7 ---@return 0
8 ---@usage public
9 local function buildinit_hook () return 0 end
10 -----
11 -- buildinit {{{
12 -- hack copy of checkinit()
13 ---@return 0 on success, error level otherwise
14 ---@see
15 ---@usage public
16 local function buildinit ()
17     cleandir(fnt.fntdir)
18     -- l3build never cleans this by default?
19     cleandir(localdir)
20     fnt.dep_install (fnt.builddeps)
21     -- is this a appropriate? better not?
22     for i,j in ipairs(filelist(localdir)) do
23         cp(j, localdir, fnt.fntdir)
24     end
25     print("Unpacking ...\\n")
26     -- direct usage is legitimate ...
27     -- https://chat.stackexchange.com/transcript/message/66617079#66617079
28     assert(unpack(),"Unpacking failed in buildinit()!")
29     for i,j in ipairs(fnt.buildfiles) do
30         cp(j, unpackdir, fnt.fntdir)
31     end
32     if #fnt.buildsuppfiles_sys ~= 0 then
33         for _,j in ipairs(fnt.buildsuppfiles_sys) do
34             if fileexists(j) then
35                 cp(basename(j), dirname(j), fnt.fntdir)
36             else
37                 local jpath = kpse.find_file(j)
38                 if jpath == nil then
39                     jpath = kpse.lookup(j)
40                 end
41                 if jpath == nil then

```

```

42         fnt.gwall("Locating ",j,1)
43     end
44     local jdir = dirname(jpath)
45     cp(j,jdir,fnt.fntdir)
46   end
47 end
48
49 if fnt.needs_fontinst then
50   local path = kpse.var_value("TEXMFDIST") .. "/tex/fontinst"
51   local t = fnt.lsrdir(path)
52   for _,i in ipairs(t) do
53     local s = i
54     if string.match(i,"^fontscripts%-") then
55       s = (string.gsub(i,"^fontscripts%-", ""))
56     end
57     local file = kpse.find_file(i)
58     if not fileexists(fnt.fntdir .. "/" .. i) then
59       cp(basename(file),dirname(file),fnt.fntdir)
60       if i ~= s and not fileexists(fnt.fntdir .. "/" .. s) then
61         ren(fnt.fntdir,i,s)
62         table.insert(fnt.buildsuppfiles_sys,s)
63       else
64         table.insert(fnt.buildsuppfiles_sys,i)
65       end
66     end
67   end
68   print("Copied fontinst files to " .. fnt.fntdir)
69 end
70 -- if not fnt.buildsearch then
71 --   -- we aren't typesetting, so we really don't need a map file
72 --   -- not sure this is really needed - do any tools use this anyway?
73 --   -- https://rosettacode.org/wiki/Create_a_file
74 --   io.open(fnt.fntdir .. "/pdftex.map", "w"):close()
75 -- end
76 print("Initialised build.")
77 return fnt.buildinit_hook()
78 end
79 -- }}}
80 -----
81 -----
82 -- build_tidy {{
83 ---@usage public
84 ---@return 0 on success, errorlevel otherwise
85 local function build_tidy ()
86   print("Tidying up build directory ...\\n")
87   for _,i in ipairs(fnt.buildsuppfiles_sys) do
88     local errorlevel = rm(fnt.fntdir,i)
89     fnt.gwall("Removal of ",fnt.fntdir .. "/" .. i,errorlevel)
90   end
91   return 0

```

```

92 end
93 -- }}}
```

```

94 -----
95 -----
96 -- build_fnt {{{

97 ---@param file string
98 ---@param cmd string
99 ---@param file string
100 ---@return 0 on success, error level otherwise
101 ---@see
102 ---@usage public
103 local function build_fnt (dir,cmd,file)
104     file = file or ""
105     cmd = cmd or ""
106     dir = dir or fnt.fntdir
107     local build_fnt_env = fnt.build_fnt_env or {}
108     local build_fnt_envset = ""
109     if #build_fnt_env ~= 0 then
110         for _,i in ipairs(build_fnt_env) do
111             build_fnt_envset = build_fnt_envset .. os_concat .. os_setenv .. " " .. i
112         end
113     end
114     -- steal from l3build-check.lua
115     local preamble =
116         -- would it be simpler to copy the typesetting sandbox here?
117         -- paths in the logs don't matter and copying localdir complicates things a bit
118         -- No use of localdir here as the files get copied to testdir:
119         -- avoids any paths in the logs
120         os_setenv .. " TEXINPUTS=." .. fnt.localtexmf()
121         .. (fnt.buildsearch and os_pathsep or "")
122         .. os_concat ..
123         -- no need for LUAINPUTS here
124         -- but we need to set more variables ...?!
125         (fnt.buildsearch and "" or
126             (os_setenv .. " TEXMFAUTXTREES={}" ..
127             .. os_concat .. os_setenv .. " TEXMFHOME={}"))
128             .. os_concat .. os_setenv .. " TEXMFLOCAL={}"
129             .. os_concat .. os_setenv .. " TEXMFCONFIG=."
130             .. os_concat .. os_setenv .. " TEXMFVAR=."
131             .. os_concat .. os_setenv .. " VFFONTS=${TEXINPUTS}"
132             .. os_concat .. os_setenv .. " TFMFONTS=${TEXINPUTS}"
133             .. os_concat .. os_setenv .. " TEXFONTMAPS=${TEXINPUTS}"
134             .. os_concat .. os_setenv .. " T1FONTS=${TEXINPUTS}"
135             .. os_concat .. os_setenv .. " AFMFONTS=${TEXINPUTS}"
136             .. os_concat .. os_setenv .. " TTFFFONTS=${TEXINPUTS}"
137             .. os_concat .. os_setenv .. " OPENTYPEFONTS=${TEXINPUTS}"
138             .. os_concat .. os_setenv .. " LIGFONTS=${TEXINPUTS}"
139             .. os_concat .. os_setenv .. " ENCFONTS=${TEXINPUTS}")
140         )
141         .. build_fnt_envset

```

```

142     .. os_concat
143     local errorlevel = runcmd(
144         preamble .. " " .. cmd .. " " .. file, dir
145     )
146     fnt.gwall(cmd,file,errorlevel)
147     return errorlevel
148 end
149 -- }}}
150 -----
151 -----
152 --- fntkeeper {{{

153 ---@param dir string
154 ---@return 0 on success, error level otherwise
155 ---@see
156 ---@usage public
157 local function fntkeeper (dir)
158     dir = dir or fnt.fntdir
159     if fileexists(dir .. "/pdftex.map") then
160         local errorlevel = rm(dir,"pdftex.map")
161         fnt.gwall("Removing ", "pdftex.map",errorlevel)
162     end
163     local rtn = direxists(fnt.keepdir)
164     if not rtn then
165         local errorlevel = mkdir(fnt.keepdir)
166         if errorlevel ~= 0 then
167             print("DO NOT BUILD STANDARD TARGETS WITHOUT RESOLVING!!\n")
168             fnt.gwall("Attempt to create directory ", fnt.keepdir, errorlevel)
169         end
170     else
171         local errorlevel = cleandir(fnt.keepdir)
172         if errorlevel ~= 0 then
173             print("KEEP CONTAMINATED!\n")
174             fnt.gwall("Attempt to clean directory ",fnt.keepdir,errorlevel)
175         end
176     end
177     local keepdir = abspath(fnt.keepdir) -- abspath requires existence
178     if fnt.keepfiles ~= {} then
179         for i,j in ipairs(fnt.keepfiles) do
180             local rtn = cp(j, dir, keepdir)
181             if rtn ~= 0 then
182                 fnt.gwall("Copy ", j, errorlevel)
183                 print("DO NOT BUILD STANDARD TARGETS WITHOUT RESOLVING!\\n")
184             end
185         end
186     else
187         print("ARE YOU SURE YOU DON'T WANT TO KEEP THE FONTS??!!\\n")
188     end
189     if fnt.keeptempfiles ~= {} then
190         rtn = direxists(fnt.keeptempdir)
191         if not rtn then

```

```

192     local errorlevel = mkdir(fnt.keeptempdir)
193     if errorlevel ~= 0 then
194         fnt.gwall("Attempt to create directory ", fnt.keeptempdir, errorlevel)
195     end
196     else
197         local errorlevel = cleandir(fnt.keeptempdir)
198         if errorlevel ~= 0 then
199             print("keeptemp contaminated!\n")
200             fnt.gwall("Attempt to clean directory ",fnt.keeptempdir,errorlevel)
201         end
202     end
203     for i,j in ipairs(fnt.keeptempfiles) do
204         local errorlevel = cp(j,dir,fnt.keeptempdir)
205         if errorlevel ~= 0 then
206             fnt.gwall("Copy ", j, errorlevel)
207         end
208     end
209   end
210   return fnt.nifergwall
211 end
212 -- }}}
213 -----
214 -----
215 -- fnt_subset {{{
216 ---@params fd, family, fnt.subset
217 ---@usage private
218 local function fnt_subset (fd,fam,subset)
219   local defn = string.gsub(fnt.subsettemplate,"%$FONTFAMILY",fam)
220   defn = string.gsub(defn,"%$SUBSET",subset)
221   local f = assert(io.open(fnt.fntdir .. "/" .. fd, "rb"))
222   local content = f:read("*all")
223   f:close()
224   local patt
225   if string.match(content, "\\\endinput") then
226     patt = "(\\endinput)"
227   else
228     patt = "()$"
229   end
230   f = assert(io.open(fnt.fntdir .. "/" .. fd, "w"))
231   f:write("% Encoding subset declaration added by fontsheets\n",
232         (string.gsub(content,patt,"\n\n" .. defn .. "\n\n%"))
233   )
234   f:close()
235   return 0      -- how to make this return an error level?
236 end
237 -----
238 -- fntsubsetter {{{
239 ---@param
240 ---@description add encoding fnt.subset definitions for TS1 if applicable and requested

```

```

242 ---@return 0 on success, error level or 1 otherwise
243 ---@see
244 ---@usage public
245 local function fntsubsetter ()
246   local tcsubset = tcsubset or "9"
247   if fntsubset == nil or fntsubset == false then return 0 end
248   local subsetfiles = fntsubsetfiles or {}
249   if type(subsetfiles) == "string" and subsetfiles ~= "auto" then
250     local s = subsetfiles
251     subsetfiles = { s }
252   end
253   if #subsetfiles == 0 then
254     for i in lfs.dir(fnt.fntdir) do
255       -- we avoid using filelist() here because it doesn't support char sets
256       if string.match(i, "[Tt][Ss]1.*%.fd$") then
257         table.insert(subsetfiles,i)
258       end
259     end
260   end
261   if #subsetfiles == 0 then return 0 end
262   for _, i in ipairs(subsetfiles) do
263     local fam = string.gsub(i, "[Tt][Ss]1(.+)%fd$", "%1")
264     local s = fntsubsetdefns[fam] or tcsubset
265     local errorlevel = fnt_subset(i,fam,s)
266     fnt.gwall("Inserting TS1 subset definition ",i,errorlevel)
267   end
268   return fnt.nifergwall
269 end
270 -- }}}
271 -----
272 -----
273 -- uniquify {{
274 -- oherwydd fy mod i bron ag anfon pob un ac mae'n amlwg fy mod i wedi anfon
275 -- bacedi heb ei wneud hwn yn y gorffennol, well i mi wneud rhywbeth (scriptiau
276 -- gwneud-cyhoeddus a make-public yn argraffu rhybudd os encs yn y cymysg
277 -- (cymraeg yn ofnadwy hefyd)
278 ---@param tag string
279 ---@return 0 on success, error level or 1 otherwise
280 ---@see
281 ---@usage public
282 local function uniquify (tag)
283   local dir = ""
284   tag = tag or fnt.encodingtag or ""
285   local pkgbase = fnt.pkgbase or ""
286   local pkglist = {}
287   if fnt.standalone then
288     dir = fnt.keepdir
289   else
290     dir = fnt.fntdir
291   end

```

```

292  -- if fileexists(dir .. "/pdftex.map") then
293  --   print("\nRemoving temporary pdftex.map from ", dir, "...\\n")
294  --   local errorlevel = rm(dir,"pdftex.map")
295  --   fnt.gwall("Removing ","pdftex.map",errorlevel)
296  -- end
297  if pkgbase == "" then
298    print("pkgbase unspecified. Trying to guess ... ")
299    if not fnt.standalone then
300      pkglist = filelist(dir,"*.sty")
301      if #pkglist == 0 then
302        pkglist = filelist(unpackdir,"*.sty")
303      end
304      if #pkglist ~= 0 then
305        pkgbase = string.gsub(pkglist[1], "%.sty", "")
306        print("Guessing ", pkgbase)
307      end
308    end
309  end
310  if pkgbase == "" then
311    if ctanpkg ~= module and module ~= "" and module ~= nil then
312      print("Guessing ", module)
313      pkgbase = module
314    else
315      pkgbase = string.gsub(ctanpkg, "adf$", "")
316      if pkgbase ~= "" then
317        print("Guessing ", pkgbase)
318      end
319    end
320  end
321  if pkgbase == "" then
322    pkgbase = "NotAMatchAtAll"
323    fnt.gwall("Guessing pkgbase","",1)
324  end
325  local encs = encs or filelist(dir,"*.enc")
326  local maps = maps or filelist(dir,"*.map")
327  print("Uniquifying encodings ... ")
328  for _,i in ipairs(encs) do print(" ", i) end
329  print("\nUniquifying maps ... ")
330  for _,i in ipairs(maps) do print(" ", i) end
331  print(" ...\\n")
332  if #encs == 0 then
333    return 0
334  elseif tag == "" then
335    if #maps ~= 0 then
336      if #maps == 1 then
337        tag = string.gsub(maps[1], "%.map$", "")
338      else
339        local t = ""
340        local tt = ""
341        for i,j in ipairs(maps) do

```

```

342         if tt == t then
343             tt = string.gsub(j,"%w%.map$","",)
344         elseif t == "" then
345             t = string.gsub(j,"%w%.map$","",)
346         end
347     end
348     if t == tt then
349         tag = tt
350     else
351         fnt.gwall("Attempt to find tag","",1)
352     end
353   end
354 end
355 if tag ~= "" then
356   for i, j in ipairs(encs) do
357     if string.match(j,"- .. tag .. "%..enc$")
358       or string.match(j, module)
359       or string.match(j,ctanpkg)
360       or string.match(j,pkgbase)
361       or string.match(j, string.gsub(module, "adf", ""))
362     then
363       print(j, "... OK\n")
364     else
365       local targenc = (string.gsub(j,"%..enc$","- .. tag .. ".enc"))
366       print("Target encoding is", targenc, "\n")
367       if fileexists(dir .. "/" .. targenc) then
368         fnt.gwall("Target encoding exists !! ", targenc, 1)
369         return 1
370       else
371         local f = assert(io.open(dir .. "/" .. j,"rb"))
372         local content = f:read("*all")
373         f:close()
374         local new_content = (string.gsub(content,
375           "(\n%%%%BeginResource: encoding fontinst%-autoenc[^\\n ]*)( *\n/fontinst%-a
376           "\n%/% Encoding renamed by fontsheets\n\n%1-
377           .. tag .. "%2- .. tag .. "%3"
378           ))
379         if new_content ~= content then
380           print("Writing unique encoding to ", targenc)
381           f = assert(io.open(dir .. "/" .. targenc,"w"))
382           -- remove the second value returned by string.gsub
383           f:write((string.gsub(new_content,"\n",fnt.os_newline_cp)))
384           f:close()
385           if fileexists(dir .. "/" .. targenc) then
386             local errorlevel = rm(dir,j)
387             if errorlevel ~= 0 then
388               fnt.gwall("Attempt to rm old encoding ",j,errorlevel)
389             end
390             if #maps ~= 0 then
391               local jpatt = string.gsub(j,"%-","%%-")
392               jpatt = string.gsub(jpatt,"%.", "%%.")

```

```

392     for k,m in ipairs(maps) do
393         f = assert(io.open(dir .. "/" .. m,"rb"))
394         local mcontent = f:read("*all")
395         f:close()
396         local new_mcontent = (string.gsub(mcontent,
397             "(%<%[?])" .. jpatt ..
398             "( %<%w+%.pfb \" fontinst%-autoenc[%w%-_]*)(" .. ReEncodeFont .. ",
399             "%1" .. targenc .. "%2-" .. tag .. "%3"
400         ))
401         if new_mcontent ~= mcontent then
402             print("Writing adjusted map lines to ", m)
403             f = assert(io.open(dir .. "/" .. m,"w"))
404             -- remove the second value returned by string.gsub
405             f:write("%% Encodings renamed by fontsheets\n",
406                 (string.gsub(new_mcontent,"\n",fnt.os_newline_cp)))
407             f:close()
408         else
409             print("Nothing to do for ", m, ".\n")
410         end
411     end
412     else
413         print("FOUND NO MAPS??\n")
414     end
415     else
416         fnt.gwall("Attempt to write ",targenc,1)
417     end
418     else
419         fnt.gwall("Attempt to uniquify " .. j .. " as ",targenc,1)
420     end
421     end
422   end
423 end
424 return fnt.nifergwall
425 end
426 print("Something weird happened.\n")
427 return 1
428 end
429 end
-- }}}
```

```

431 -----
432 -----
433 -- fontinst
434 -----
435 -- finst {{{
436 ---@param patt string
437 ---@param dir string
438 ---@param mode string
439 ---@return
440 ---@see
441 ---@usage public
```

```

442 local function finst (patt,dir,mode)
443   dir = dir or "."
444   mode = mode or "nonstopmode"
445   local cmd = "pdftex --interaction=" .. mode
446   -- https://lunarmodules.github.io/luafilesystem/examples.html (expl)
447   -- l3build-file-functions.lua (filelist fn)
448   local targs = filelist(dir,patt)
449   for i,j in ipairs(targs) do
450     -- local errorlevel = tex(j,dir,cmd)
451     local errorlevel = build_fnt(dir,cmd,j)
452     fnt.gwall("Compilation of ", j, errorlevel)
453   end
454 end
455 -- }}}
456 -----
457 -- fontinst {{{
458 ---@param dir string
459 ---@param mode string
460 ---@return 0 on success, error level otherwise
461 ---@see
462 ---@usage public
463 local function fontinst (dir,mode)
464   -- dir = dir or unpackdir
465   dir = dir or fnt.fntdir
466   mode = mode or "errorstopmode --halt-on-error"
467   fnt.standalone = false
468   fnt.encodingtag = fnt.encodingtag or ""
469   local errorlevel = 0
470   buildinit ()
471   local tfmfiles = filelist(dir,"*.tfm")
472   for i,j in ipairs(tfmfiles) do
473     local plname = string.gsub(j, "%.tfm$", ".pl")
474     if fileexists(dir .. "/" .. plname) then
475       print(plname, "already exists!")
476       return 1
477     else
478       local cmd = "tftopl " .. j .. " " .. plname
479       -- safe or not?
480       errorlevel = runcmd(cmd,dir)
481       -- necessary or not?
482       -- local errorlevel = build_fnt(cmd,dir)
483       fnt.gwall("Conversion to pl from tfm ",j,errorlevel)
484       -- remove tfm to reduce pollution of package later
485       rm(dir,j)
486       fnt.gwall("Deletion of tfm ", j, errorlevel)
487     end
488   end
489   print("Creating families ...\\n")
490   for i,j in ipairs(fnt.familymakers) do
491     errorlevel = finst(j,dir,mode)

```

```
492     fnt.gwall("Compilation of driver ", j, errorlevel)
493 end
494 if fnt.nifergwall ~= 0 then return fnt.nifergwall end
495 for i,j in ipairs(fnt.mapmakers) do
496     errorlevel = finst (j,dir,mode)
497     fnt.gwall("Compilation of map ", j, errorlevel)
498 end
499 if fnt.nifergwall ~= 0 then return fnt.nifergwall end
500 errorlevel = build_tidy ()
501 fnt.gwall("Tidying ",fnt.fntdir,errorlevel)
502 -- print("Tidying up build directory ...\\n")
503 -- for _,i in ipairs(fnt.buildsuppfiles_sys) do
504 --     local errorlevel = rm(dir,i)
505 --     fnt.gwall("Removal of ",dir .. "/" .. i,errorlevel)
506 -- end
507 for i,j in ipairs(fnt.binmakers) do
508     local targs = filelist(dir,j)
509     -- https://www.lua.org/pil/21.1.html
510     for k,m in ipairs(targs) do
511         targ = dir .. "/" .. m
512         -- is this really the right way to do this?
513         -- surely it is not at all safe?
514         -- though presumably no worse than executing the script directly
515         for line in io.lines(targ) do
516             if string.match(line,"^pltotf [a-zA-Z0-9%-]+%.pl [a-zA-Z0-9%-]+%.tfm$") then
517                 -- local errorlevel = runcmd(line,dir)
518                 errorlevel = build_fnt(dir,line)
519                 fnt.gwall("Creation of TFM using " .. line .. " from ", j, errorlevel)
520             else
521                 print("Ignoring unexpected line \" .. line .. "\" in", j .. ".\\n")
522                 fnt.nifergwall = fnt.nifergwall + 1
523             end
524         end
525     end
526 end
527 if fnt.nifergwall ~= 0 then return fnt.nifergwall end
528 local targs = filelist(dir,"*.vpl")
529 for i,j in ipairs(targs) do
530     -- local cmd = "vptovf " .. j
531     -- local errorlevel = runcmd(cmd,dir)
532     local cmd = "vptovf"
533     errorlevel = build_fnt(dir,cmd,j)
534     fnt.gwall("Creation of virtual font from ", j, errorlevel)
535 end
536 -- edit the .fd files if a scale factor is declared because fontinst
537 -- doesn't allow us to do this and the last message to the mailing list
538 -- is from 2022 with no response from the maintainer
539 local fdfiles = filelist(dir, "*.fd")
540 for i,j in ipairs(fdfiles) do
541     local f = assert(io.open(dir .. "/" .. j,"rb"))
```

```

542     local content = f:read("*all")
543     f:close()
544     local new_content = content
545     local csscaleaux = string.match(content, "%<%-%> *\\([%a%d] [%a%d]*@@scale)")
546     if csscaleaux ~= nil then
547         local csscale = string.gsub(csscaleaux, "@(@)", "%1")
548         if csscale ~= nil then
549             new_content = string.gsub(content, "(\\DeclareFontFamily{",
550             "%%% addaswyd o t1phv.fd (dyddiad y ffeil fd: 2020-03-25)\n\\expandafter\\ifx\\"
551             .. csscale .. "\\endcsname\\relax\\n \\let\\\" .. csscaleaux
552             .. "\\empty\\n\\else\\n \\edef\\\" .. csscaleaux
553             .. "{s*[\\csname " .. csscale .. "\\endcsname]}%\\n\\fi\\n\\n%1")
554         end
555     end
556     csscaleaux = string.match(content,
557     "\\DeclareFontFamily{[^}]*}{[^}]*}{[^}]*}\\hyphenchar *\\font *[=^]\\n*}")
558     if csscaleaux ~= nil then
559         content = new_content
560         new_content = string.gsub(content,
561             "(\\DeclareFontFamily{[^}]*}{[^}]*}{[^}]*}\\hyphenchar) *(\\font) *(=[^]\\n*) *([^\"]*"
562             "%1%2%3%4")
563     end
564     if new_content ~= content then
565         local f = assert(io.open(dir .. "/" .. j, "w"))
566         -- this somehow removes the second value returned by string.gsub??
567         f:write("% Scaling added by fontscripts\\n", (string.gsub(new_content,
568             "\n", fnt.os_newline_cp)))
569         f:close()
570     end
571 end
572 errorlevel = uniquify(fnt.encodingtag)
573 if errorlevel ~= 0 then
574     fnt.gwall("Encodings not uniquified! Do not submit to CTAN! uniquify("
575     .. fnt.encodingtag .. ")", "", errorlevel)
576 end
577 errorlevel = fntsubsetter()
578 if errorlevel ~= 0 then
579     fnt.gwall("Encoding fnt.subset definitions not inserted! fntsubsetter() ", "", errorlevel)
580 end
581 errorlevel = fntkeeper()
582 if errorlevel ~= 0 then
583     fnt.gwall(
584         "FONT KEEPER FAILED! DO NOT MAKE STANDARD TARGETS WITHOUT RESOLVING!! fntkeeper("
585         dir, errorlevel)
586 end
587 return fnt.nifergwall
588 end
589 -- }})
590 -----
591 -----

```

```

592 -- afm2tfm (simple symbol fonts only)
593 -----
594 -- afm2tfm (dir) {{{
595 ---@param dir string
596 ---@return 0 on success, number of errors otherwise
597 ---@see
598 ---@usage public
599 local function afm2tfm (dir)
600   dir = dir or fnt.fntdir
601   local fntbasename = fntbasename or module
602   local map = mapfile or fntbasename .. ".map"
603   local fntencs = fnt.encs or {}
604   fnt.standalone = false
605   fnt.encodingtag = fnt.encodingtag or ""
606   buildinit ()
607   print("Running afm2tfm. Please be patient ...\\n")
608   local afms = filelist(dir,"*.afm")
609   local content = ""
610   for i,k in ipairs(afms) do
611     j = string.gsub(k,"%afm","", "")
612     if fntencs[j] == nil then
613       local rtn = fileexists(dir .. "/" .. j .. ".enc")
614       if not rtn then
615         errorlevel = build_fnt(dir,"afm2tfm " .. k " >> " .. dir
616           .. "/" .. map .. ".tmp")
617       else
618         errorlevel = build_fnt(dir, "afm2tfm " .. k .. " -p " .. j
619           .. ".enc" .. " >> " .. dir .. "/" .. map .. ".tmp")
620       end
621     elseif not fileexists(dir .. "/" .. fntencs[j]) then
622       fnt.gwall("Search for encoding specified for " .. j .. " ",dir,1)
623     else
624       errorlevel = build_fnt(dir, "afm2tfm " .. k .. " -p " .. fntencs[j]
625           .. " >> " .. dir .. "/" .. map .. ".tmp")
626     end
627     if errorlevel ~= 0 then
628       fnt.gwall("afm2tfm (" .. j .. ") ",dir,errorlevel)
629     else
630       local g = assert(io.open(dir .. "/" .. map .. ".tmp","rb"))
631       local c = g:read("all")
632       g:close()
633       content = content .. string.gsub(c, "\n", " <
634           .. string.gsub(k,"%afm",".pdf") .. "\n")
635       rm(dir, map .. ".tmp")
636     end
637   end
638   -- need to do this as uniquify() isn't used
639   -- otherwise the file ends up in localdir (and probably the package)
640   -- catching this is the only benefit I can see in my inability to clean localdir
641   -- if fileexists(dir .. "/pdftex.map") then

```

```

642 --     local errorlevel = rm(dir,"pdftex.map")
643 --     fnt.gwall("Removing ","pdftex.map",errorlevel)
644 -- end
645 local f
646 f = assert(io.open(dir .. "/" .. map, "w"))
647 f:write((string.gsub(content,"\n",fnt.os_newline_cp)))
648 f:close()
649 errorlevel = fntkeeper()
650 if errorlevel ~= 0 then
651     fnt.gwall("FONT KEEPER FAILED! DO NOT MAKE STANDARD TARGETS WITHOUT RESOLVING!! ",
652             dir, errorlevel)
653 end
654 return fnt.nifergwall
655 end
656 -- }}}
657 -----
658 -----
659 -- exports {{
660 fnt.build_fnt = build_fnt
661 fnt.build_tidy = build_tidy
662 fnt.buildinit = buildinit
663 fnt.buildinit_fontinst = buildinit_fontinst
664 fnt.buildinit_hook = buildinit_hook
665 fnt.finst = finst
666 fnt.fntkeeper = fntkeeper
667 fnt.fntsubsetter = fntsubsetter
668 fnt.afm2tfm = afm2tfm
669 fnt.fontinst = fontinst
670 fnt.uniquify = uniquify
671 -- }}}
672 -----
673 -----
674 -- vim: ts=2:sw=2:et:foldmethod=marker:

```

6.1.3 fntbuild-check.lua

`fntbuild-check.lua` (*lua*) Included by `fntbuild.lua`. Configures l3build hook to auto-generate (additional) test files if templates are provided.

```

1 -- $Id: fntbuild-check.lua 10834 2025-02-20 18:57:33Z cfrees $
2 -----
3 -- fntbuild-check
4 -----
5 -- writes lvt files
6 -- ensures build products are available
7 -- enforces sandbox if checksearch is false
8 -----
9 -----
10 local copio = fnt.copio

```

```
11 -----
12 -----
13 -- local test {{{
14 ---Generates lvt files for l3build check from fds and template.
15 ---@param fntpkgname string
16 ---@param fds table
17 ---@param content string
18 ---@param maps table
19 ---@param fdssdir string
20 ---@return 0 on success, error level otherwise
21 ---@see
22 ---@usage public
23 local function test (fntpkgname,fds,content,maps,fdssdir)
24     local coll = ""
25     -- suffix ly -> ly1 ; no suffix -> t1
26     local collly = ""
27     local targname = fntpkgname .. "-auto-test.lvt"
28     local targnamely = fntpkgname .. "-auto-test-ly1.lvt"
29     local targfile = unpackdir .. "/" .. targname
30     local targfilely = unpackdir .. "/" .. targnamely
31     -- ly1 boolean
32     local yy = 0
33     -- texnansi/ly1 fds
34     local lys = {}
35     -- ec/t1 fds
36     local ecs = {}
37     -- local mapsly = ""
38     print("Creating test file for", fntpkgname, "with fds: ")
39     for i, j in ipairs(fds) do print("  fd:", j) end
40     print("\n")
41     -- l3build-tagging.lua
42     for i, j in ipairs(fds) do
43         -- local errorlevel = cp(j, fnt.keepdir, unpackdir)
44         if string.match(j,"^ly1") then
45             yy = 1
46             table.insert(lys,j)
47         else
48             table.insert(ecs,j)
49         end
50         if fdssdir ~= unpackdir then
51             local errorlevel = cp(j, fdssdir, unpackdir)
52             if errorlevel ~= 0 then
53                 fnt.gwall("Copy ", j, errorlevel)
54                 return errorlevel
55             end
56         end
57     end
58     -- restart so we get the filtered list (hopefully)
59     for i, j in ipairs(ecs) do
60         j = unpackdir .. "/" .. j
```

```
61    for line in io.lines(j) do
62        -- it would be much better to filter the file list ...
63        if string.match(line,
64            "^\\\\DeclareFontShape{[^%]}*[%^]{[^%]}%{[^%]}*%{[^%]}*%{[^%]}*%{$") then
65            coll = (coll .. string.gsub(string.gsub(line,"%{$","%%%$"),
66                "%\\\\DeclareFontShape{[^%]}*%{[^%]}%{[^%]}*%{[^%]}*%{[^%]}*%{$"),
67                "\n\\TEST{test-%1-%2-%3-%4}{%%%%\n  \\sampler{%-1}{%-2}{%-3}{%-4}{%%%%\n}}"))
68        end
69    end
70  end
71  if yy == 1 then
72    for i, j in ipairs(lys) do
73      j = unpackdir .. "/" .. j
74      for line in io.lines(j) do
75          -- it would be much better to filter the file list ...
76          if string.match(line,
77              "%\\\\DeclareFontShape{[^%]}*%{[^%]}%{[^%]}*%{[^%]}*%{[^%]}*%{$") then
78              collly = (collly .. string.gsub(string.gsub(line,"%{$","%%%$"),
79                  "%\\\\DeclareFontShape{[^%]}*%{[^%]}%{[^%]}*%{[^%]}*%{[^%]}*%{$"),
80                  "\n\\TEST{test-%1-%2-%3-%4}{%%%%\n  \\sampler{%-1}{%-2}{%-3}{%-4}{%%%%\n}}"))
81          end
82      end
83    end
84    -- changes to no. of lines here affect logs if they include non-normalised line no
85    coll = "\n%% map file lines in local pdftex.map\n\\usepackage[enc=t1]{" .. fntpkgn
86    .. "}\n\\begin{document}\n\\START\n"
87    .. coll .. "\n\\END\n\\end{document}\n"
88    collly = "\n%% map file lines in local pdftex.map\n\\usepackage[enc=ly1]{" .. fntpl
89    .. "}\n\\begin{document}\n\\START\n" .. collly
90    .. "\n\\END\n\\end{document}\n"
91  else
92    -- assume package doesn't have an encoding option and is t1/ts1 only
93    coll = "\n%% map file lines in local pdftex.map\n\\usepackage{" .. fntpkgnname
94    .. "}\n\\begin{document}\n\\START\n" .. coll
95    .. "\n\\END\n\\end{document}\n"
96  end
97  local new_content =
98    "%% Do not edit this file as changes will be overwritten.\n%% It was generated by 13
99    .. os.date("%Y-%M-%d %H:%m:%S") .. ".\n"
100   .. string.gsub(content, "\nSAMP *\n", coll)
101  local f = assert(io.open(targfile,"w"))
102  f:write((string.gsub(new_content,"\n",fnt.os_newline_cp)))
103  f:close()
104  if yy == 1 then
105    new_content = "%% Do not edit this file as changes will be overwritten.\n%% It was
106    .. os.date("%Y-%M-%d %H:%m:%S") .. ".\n" .. string.gsub(content,
107      "\nSAMP *\n", collly)
108    local f = assert(io.open(targfilely,"w"))
109    -- this somehow removes the second value returned by string.gsub??
110    f:write((string.gsub(new_content,"\n",fnt.os_newline_cp)))
```

```

111      f:close()
112  end
113  -- PAID Â CHEISIO YR ISOD!!
114  -- cp(targname,unpackdir,testfiledir)
115  local errorlevel = cp(targname,unpackdir,testdir)
116  if errorlevel ~= 0 then
117      fnt.gwall("Attempt to copy ", targname, errorlevel)
118  end
119  errorlevel = cp(targnamely,unpackdir,testdir)
120  if errorlevel ~= 0 then
121      fnt.gwall("Attempt to copy ", targnamely, errorlevel)
122  end
123  return fnt.nifergwall
124 end
125 -- }}}
```

```

126 -----
127 -----
128 -- redefine l3build function
129 -----
130 -- local check_init {{{

131 ---Additional setup for testing tailored to font packages.
132 ---@return 0 on success, error level otherwise
133 ---@see l3build
134 ---@usage N/A
135 local function check_init ()
136     local filename = fnt.testtemp
137     local regfile = fnt.regress
138     local file = unpackdir .. "/" .. filename
139     -- local fnttestdir = maindir .. "/fnt-tests"
140     local maps = ""
141     local mapfiles=filelist(fnt.keepdir, "*.map")
142     local mapsdir = ""
143     local fdsdir = ""
144     -- local adds = checksuppfiles_addlst or maindir .. "/checksuppfiles-add.lst"
145     if not checksearch then
146         fnt.map_cat_sys(fnt.mapfiles_sys,testdir)
147     end
148     -- how did this ever work?
149     for _,i in ipairs(filelist(fnt.keepdir)) do
150         if i ~= ".." and i ~= "." then
151             local errorlevel = cp(i,fnt.keepdir,testdir)
152             fnt.gwall("Copying ",i,errorlevel)
153         end
154     end
155     if not checksearch then
156         print("\nAssuming some basic files should be available during testing.\n\nAdding f
157         if #fnt.checksuppfiles_sys == 0 then
158             fnt.checksuppfiles_sys = {
159                 "/tex/latex/base/article.cls",
160                 "/tex/latex/base/fontenc.sty",

```

```

161      "/tex/latex/base/omlcmm.fd",
162      "/tex/latex/base/omlcmr.fd",
163      "/tex/latex/base/omscmr.fd",
164      "/tex/latex/base/omsccmsy.fd",
165      "/tex/latex/base/omxcmex.fd",
166      "/tex/latex/base/ot1cmr.fd",
167      "/tex/latex/base/ot1cmss.fd",
168      "/tex/latex/base/ot1cmtt.fd",
169      "/tex/latex/base/size10.clo",
170      "/tex/latex/base/size11.clo",
171      "/tex/latex/base/size12.clo",
172      "/tex/latex/base/t1cmr.fd",
173      "/tex/latex/base/t1cmss.fd",
174      "/tex/latex/base/t1cmtt.fd",
175      "/tex/latex/base/tracefnt.sty",
176      "/tex/latex/base/ts1cmr.fd",
177      "/tex/latex/base/ts1cmss.fd",
178      "/tex/latex/base/ts1cmtt.fd",
179      "/tex/latex/base/ucmr.fd",
180      "/tex/latex/base/ucmss.fd",
181      "/tex/latex/base/ucmmtt.fd",
182      "/tex/latex/l3build",
183      "/tex/latex/l3backend",
184      "/tex/latex/fonttable/fonttable.sty",
185      "/fonts/enc/dvips/base",
186      "/fonts/enc/dvips/cm-super",
187      "/fonts/type1/public/amsfonts/cm",
188      "/fonts/type1/public/cm-super",
189      "/fonts/tfm/public/cm",
190      "/fonts/tfm/jknappen/ec",
191  }
192 end
193 copio(fnt.checksuppfiles_sys,testdir,"TEXMFDIST")
194 if fileexists(testdir .. "/" .. regfile) then
195   print("Using regression tests from " .. testdir .. "/" .. regfile .. ".\n")
196 elseif fileexists(unpackdir .. "/" .. regfile) then
197   cp(regfile,unpackdir,testdir)
198   print("Using regression tests from " .. unpackdir .. "/" .. regfile .. ".\n")
199 else
200   table.insert(fnt.checksuppfiles_add,regfile)
201   print("Adding " .. regfile .. " to fnt.checksuppfiles_add.\n")
202 end
203 if #fnt.checksuppfiles_add ~= 0 then
204   local str = kpse.var_value("TEXMFDIST")
205   if string.match(str,"%-") then str = string.gsub(str,"%-","%%-") end
206   for _,j in ipairs(fnt.checksuppfiles_add) do
207     if string.match(j,"^/") then
208       copio({j},testdir,"TEXMFDIST")
209     else
210       local jpath = kpse.lookup(j)

```

```

211         if jpath ~= nil then
212             local jdir = dirname(jpath)
213             if string.match(jdir,"^" .. str) then
214                 print(" " .. jpath)
215                 local errorlevel = cp(j,jdir,testdir)
216                 fnt.gwall("Copying ",j,errorlevel)
217             else
218                 fnt.gwall("Restricted search for ",j,1)
219             end
220         else
221             fnt.gwall("Finding ",j,errorlevel)
222         end
223     end
224   end
225 end
226
227 -- setup & test creation
228 if #mapfiles == 0 then
229   mapfiles=filelist(unpackdir, "*.map")
230   if #mapfiles == 0 then
231     fnt.gwall("Attempt to find map files ", ".map", 1)
232     return 1
233   else
234     print("\nUsing maps from", unpackdir)
235     mapsdir = unpackdir
236   end
237 else
238   mapsdir = fnt.keepdir
239   print("\nUsing maps from", fnt.keepdir)
240 end
241 assert(fnt.map_cat_pkg(mapfiles,mapsdir,testdir),"Could not concatenate new maps!")
242 local fntpkgnames = fntpkgnames or filelist(unpackdir,"*.sty")
243 for i, j in ipairs(fntpkgnames) do
244   fntpkgnames[i] = string.gsub(j,"%..sty","", "")
245 end
246 -----
247 local autotestfdstmp = filelist(fnt.keepdir, "*.fd")
248 -- if they're not kept, they may be source (e.g. berenisadf)
249 if #autotestfdstmp == 0 then
250   autotestfdstmp = filelist(unpackdir, "*.fd")
251   if #autotestfdstmp == 0 then
252     fnt.gwall("Attempt to find fd files ", ".fd", 1)
253     return 1
254   else
255     fdsdir = unpackdir
256     print("Using fds from", unpackdir)
257   end
258 else
259   fdsdir = fnt.keepdir
260   print("Using fds from", fnt.keepdir)

```

```

261     end
262     if #autotestfdstmp == 0 then
263         print("Something is amiss - this code should never be executed!")
264         fnt.gwall("Attempt to locate fd files ", ".fd", 1)
265     elseif #fnt.autotestfds == 0 then
266         for i, j in ipairs(autotestfdstmp) do
267             if not ( string.match(j,"^ts1") or string.match(j,"^u") ) then
268                 table.insert (fnt.autotestfds, j)
269             end
270         end
271     end
272     -----
273     -- if fnttestfds.<package name> has been specified, use that (should be a table)
274     -- o/w assign the fnt.autotestfds table to fnttestfds.<package name>
275     -- but remember fnt.fnttestfds may be pairs and/or ipairs ...
276     -- there must be a better way to do this ...
277     if #fnt.fnttestfds == 0 then
278         print("\n#fnt.fnttestfds:", #fnt.fnttestfds)
279         if #fnt.autotestfds ~= 0 then
280             print("#fnt.autotestfds:",#fnt.autotestfds)
281             for i,j in ipairs(fntpkgnames) do
282                 if fnt.fnttestfds[j] == nil then
283                     print("Auto-assigning fnt.autotestfds to fnt.fnttestfds[" .. j .. "] ...\\n")
284                     fnt.fnttestfds[j] = {}
285                     for a,b in ipairs(fnt.autotestfds) do
286                         table.insert(fnt.fnttestfds[j],b)
287                     end
288                 end
289             end
290         end
291     else
292         local testmes = {}
293         for i,j in ipairs(fnt.fnttestfds) do
294             table.insert(testmes,j)
295         end
296         for i, j in ipairs(fntpkgnames) do
297             -- I really don't understand tables (and I know this is very, very basic)
298             if fnt.fnttestfds[j] == nil then
299                 fnt.fnttestfds[j] = {}
300                 -- use only if fnt.fnttestfds isn't specified either as table of tables or
301                 -- table of files/globs
302                 -- this doesn't seem very robust
303                 for k, l in ipairs(testmes) do
304                     table.insert (fnt.fnttestfds[j], l)
305                 end
306             end
307         end
308     end
309     -----
310     if next(fnt.fnttestfds) == nil then

```

```

311     print("Skipping test creation.\n")
312 else
313     print("Creating (additional) test file(s).\n")
314     if not fileexists(unpackdir .. "/" .. filename) then
315         if fileexists(testdir .. "/" .. filename) then
316             cp(filename,testdir,unpackdir)
317             print("Using local " .. filename .. " from " .. testdir .. "...\\n")
318         elseif fileexists(localdir .. "/" .. filename) then
319             cp(filename,localdir,unpackdir)
320             print("Using " .. filename .. " from " .. localdir .. "...\\n")
321         else
322             local ffeil = kpse.find_file(filename)
323             if ffeil ~= nil then
324                 cp(filename,dirname(ffeil),unpackdir)
325                 print("Using " .. filename .. " from " .. dirname(ffeil) .. "...\\n")
326             else
327                 print("Skipping test creation. This is probably not what you want if I've co"
328                 filename = 0
329                 fnt.gwall("Copy ", filename, 1)
330             end
331         end
332     else
333         print("Using local " .. filename .. "...\\n")
334     end
335     if filename ~= 0 then
336         -- need to get content here
337         -- copy this from l3build-tagging.lua
338         local f = assert(io.open(file,"rb"))
339         local content = f:read("*all")
340         f:close()
341         -- ought to normalise line endings here
342         -- copied from l3build
343         -- but I don't understand why the first subs is needed
344         -- is it a problem if the file doesn't end with a newline?
345         content = string.gsub(content .. (string.match(content,"\\n$") and ""
346         or "\\n"), "\\r\\n", "\\n")
347         content = string.gsub(content,
348         "\\\\"RequirePackage%{svn%-prov%}\\n\\\\ProvidesFileSVN%{[^%]*%}%%[[^%]*%][[^%]*%]\\"
349         ""))
350         for i, j in ipairs(fntpkgnames) do
351             -- create the test file for each package
352             -- errorlevel = test(j,fnt.fnttestfds[j],content,maps)
353             -- dyw fnt.fnttestfds.j ddim yn gweithio yma! !
354             errorlevel = test(j,fnt.fnttestfds[j],content,maps,fdsdir)
355             if errorlevel ~= 0 then
356                 fnt.gwall("Font test creation ", j, errorlevel)
357                 return errorlevel
358             end
359         end
360         rm(unpackdir,filename)

```

```

361     end
362   end
363   if not checksearch then
364     local localtexmf = fnt.localtexmf()
365     checkopts = checkopts
366     .. " --cnf-line=TEXMF_AUXTREES={} --cnf-line=TEXMFHOME={} --cnf-line=TEXMFLOCAL={}
367     .. localtexmf .. " --cnf-line=TFMFONTS=."
368     .. localtexmf .. " --cnf-line=TEXFONTMAPS=."
369     .. localtexmf .. " --cnf-line=T1FONTS=."
370     .. localtexmf .. " --cnf-line=AFMFONTS=."
371     .. localtexmf .. " --cnf-line=TTFFONTS=."
372     .. localtexmf .. " --cnf-line=OPENTYPEFONTS=."
373     .. localtexmf .. " --cnf-line=LIGFONTS=."
374     .. localtexmf .. " --cnf-line=ENCFONTS=."
375     .. localtexmf
376   end
377   return 0
378 end
379 -- }}}
380 -----
381 -----
382 -- exports {{{
383 fnt.checkinit_hook = check_init
384 fnt.test = test
385 -- }}}
386 -----
387 -----
388 -- vim: ts=2:sw=2:et:foldmethod=marker:

```

6.1.4 fntbuild-ctan.lua

`fntbuild-ctan.lua` (*lua*) Included by `fntbuild.lua`. Changes the way the `ctan` target builds the archive to match [CTAN](#) requirements for font distributions.

```

1  -- $Id: fntbuild-ctan.lua 10743 2025-01-29 02:29:53Z cfrees $
2 -----
3  local exts = {}
4 -----
5  --
6  -- origcopyctan()
7  -- copy David Carlisle
8  local origcopyctan = copyctan
9 -----
10 --
11 -- local extname(filename) {{{
12 local function extname(filename)
13   local b = basename(filename)
14   ext = string.gsub(b, "[^%.]*%.", "")
15   if ext == nil then

```

```

16         fnt.gwall("Failed to get extension ",ext,1)
17     end
18     return ext
19 end
-- }}}

-----
22 -- local copysubctan(files,srcdir,targdir) {{{
23 local function copysubctan(files,srcdir,targdir)
24     local errorlevel
25     local extdir
26     if not direxists(targdir) then
27         errorlevel = mkdir(targdir)
28         if errorlevel ~= 0 then return errorlevel end
29     end
30     for i,j in ipairs(files) do
31         local ext = extname(j)
32         if exts[ext] == nil then
33             extdir = ext
34             exts[ext] = ext
35         else
36             extdir = exts[ext]
37         end
38         if not direxists(targdir .. "/" .. extdir) then
39             errorlevel = mkdir(targdir .. "/" .. extdir)
40             if errorlevel ~= 0 then return errorlevel end
41         end
42         errorlevel = cp(j,srcdir,targdir .. "/" .. extdir)
43         if errorlevel ~= 0 then return errorlevel end
44     end
45     return 0
46 end
-- }}}

-----
49 -- local copy_ctan() {{{
50 local function copy_ctan()
51     local keepdir = fnt.keepdir or sourcefiledir .. "/keep"
52     local errorlevel
53     local targdir = ctandir .. "/" .. ctanpkg
54     keptfiles = {}
55     if #exts == 0 then exts = {"afm","dtx","enc","fd","ins","map","md",
56         "otf","pdf","pfb","pfm","tex","tfm","txt","vf"} end
57     if not exts["pfb"] then exts["pfb"] = "type1" end
58     if not exts["pfm"] then exts["pfm"] = "type1" end
59     if not exts["ttf"] then exts["ttf"] = "truetype" end
60     if not exts["otf"] then exts["otf"] = "opentype" end
61     if not exts["fd"] then exts["fd"] = "latex" end
62     if not exts["dtx"] then exts["dtx"] = "source" end
63     if not exts["ins"] then exts["ins"] = "source" end
64     if not exts["md"] then exts["md"] = "doc" end
65     if not exts["txt"] then exts["txt"] = "doc" end

```

```

66     if not exts["tex"] then exts["tex"] = "doc" end
67     if not exts["pdf"] then exts["pdf"] = "doc" end
68     for i,j in ipairs(filelist(keepdir,"*.*")) do
69       if j ~= ".." and j ~= "../" then
70         table.insert(keptfiles,j)
71       end
72     end
73     copysubctan(keptfiles,keepdir,targdir)
74     origcopyctan()
75     local g = {}
76     for i,j in ipairs(exts) do
77       local f = filelist(targdir,"*." .. j)
78       if #f ~= 0 then
79         for m,n in ipairs(f) do
80           if n ~= "README.md" and n ~= "README" then
81             table.insert(g,n)
82           end
83         end
84       end
85     end
86     if #g ~= 0 then
87       errorlevel = copysubctan(g,targdir,targdir)
88       if errorlevel ~= 0 then return errorlevel end
89     end
90     for i,j in ipairs(exts) do
91       errorlevel = rm(targdir, "*." .. j)
92       if errorlevel ~= 0 then return errorlevel end
93     end
94     if fileexists(targdir .. "/COPYING") then
95       if not direxists(targdir .. "/doc") then mkdir(targdir .. "/doc") end
96       errorlevel = cp("COPYING",targdir,targdir .. "/doc")
97       if errorlevel ~= 0 then return errorlevel end
98       errorlevel = rm(targdir, "COPYING")
99       if errorlevel ~= 0 then return errorlevel end
100    end
101   -- this is horrible: ctan() copies all the files, we deal with them,
102   -- and then it copies all the textfiles a second time!
103   textfiles = {"README","README.md"}
104   return 0
105 end
106 -- end copyctan() }}}
```

```

107 -----
108 -----
109 -- exports {{{
110 fnt.copyctan = copy_ctan
111 -- }}}
112 -----
113 -----
114 -- vim: ts=2:sw=2:et:foldmethod=marker:
```

6.1.5 fntbuild-doc.lua

`fntbuild-doc.lua` (lua) Included by `fntbuild.lua`. Configures l3build's documentation hook to produce template-based documentation supplement e.g. for auto-generating font tables.

```

1 -- $Id: fntbuild-doc.lua 10769 2025-02-05 20:41:12Z cfrees $
2 -----
3 -- fntbuild-doc
4 -----
5 -----
6 -- redefine l3build fn
7 -----
8 -- local doc_init {{{
9 ---Additional setup for typesetting tailored to font packages with optional
10 ---creation of template-based docs e.g. font tables.
11 ---@return 0 on success, error level otherwise
12 ---@see l3build
13 ---@usage N/A
14 local function doc_init ()
15     -- local fdfiles = filelist(fnt.keepdir, "*.fd")
16     local fdfiles = filelist(unpackdir, "*.fd")
17     local filename = fnt.tablestemp
18     local targname = ctnapkg .. "-tables.tex"
19     local file = unpackdir .. "/" .. filename
20     local targfile = unpackdir .. "/" .. targname
21     local coll = ""
22     -- local fnttestdir = maindir .. "/fnt-tests"
23     local maps = ""
24     local mapfiles=filelist(unpackdir, "*.map")
25     local yy = 0
26     for i, j in ipairs(mapfiles) do
27         maps = maps .. "\n\\pdfmapfile{-" .. j .. "}\n\\pdfmapfile{+" .. j .. "}"
28     end
29     if not fileexists(unpackdir .. "/" .. filename) then
30         if fileexists(typesetdir .. "/" .. filename) then
31             cp(filename,typesetdir,unpackdir)
32             print("Using " .. filename .. " from " .. typesetdir .. ".")
33         elseif fileexists(localdir .. "/" .. filename) then
34             cp(filename,localdir,unpackdir)
35             print("Using " .. filename .. " from " .. localdir .. ".")
36         else
37             local ffeil = kpse.find_file(filename)
38             if ffeil ~= nil then
39                 cp(filename,dirname(ffeil),unpackdir)
40                 print("Using " .. filename .. " from " .. dirname(ffeil) .. ".")
41             else
42                 print("Skipping font tables.\n")
43                 filename = nil
44             end
45         end

```

```

46     else
47         print("Using " .. filename .. " from " .. unpackdir .. ".")
48     end
49     if filename then
50         print("Creating font tables ...\\n")
51         -- need to get content here
52         -- copy this from l3build-tagging.lua
53         local f = assert(io.open(file,"rb"))
54         local content = f:read("*all")
55         f:close()
56         -- ought to normalise line endings here
57         -- copied from l3build
58         -- but I don't understand why the first subs is needed
59         -- is it a problem if the file doesn't end with a newline?
60         content = string.gsub(content .. (string.match(content,"\\n$") and ""
61         or "\\n"), "\r\\n", "\\n")
62         content = string.gsub(content,
63             "\\RequirePackage%{svn%-prov%}\\n\\ProvidesFileSVN%{[%]}*%}%{[%]}*%}%{[%]}*%}\\n"
64             "")
65         -- l3build-tagging.lua
66         for i, j in ipairs(fdfiles) do
67             if string.match(j,"^ly1") then
68                 yy = 1
69             end
70             j = unpackdir .. "/" .. j
71             for line in io.lines(j) do
72                 if string.match(line,
73                     "^\\DeclareFontShape%{[%]}*%}%{[%]}*%}%{[%]}*%}%{[%]}*%}%{[$"
74                 ) then
75                     coll = (coll .. string.gsub(string.gsub(line,"%{$","%%%"),
76                     "^\\DeclareFontShape","\\n\\sampletable"))
77                 end
78             end
79         end
80         if yy == 1 then
81             maps = "\\input{ly1enc.def}\\n" .. maps
82         end
83         coll = maps .. "\\begin{document}\\n" .. coll .. "\\end{document}\\n"
84         local new_content =
85             "% Do not edit this file as changes will be overwritten.\\n%% It was generated by l3"
86             .. os.date("%Y-%M-%d %H:%m:%S") .. ".\\n" .. string.gsub(content,
87             "\\n%s*TABLES%s*\\n", coll)
88         local f = assert(io.open(targfile,"w"))
89         f:write((string.gsub(new_content,"\\n",fnt.os_newline_cp)))
90         f:close()
91         rm(unpackdir,filename)
92         cp(targname,unpackdir,typesetdir)
93     end
94     return 0
95 end

```

```

96 -- }}}
97 -----
98 -----
99 -- exports {{
100 fnt.docinit_hook = doc_init
101 -- }}}
102 -----
103 -----
104 -- vim: ts=2:sw=2:et:foldmethod=marker:

```

6.1.6 fntbuild-utils.lua

`fntbuild-utils.lua` (*lua*) Included by `fntbuild.lua`. Internal functions used in various places.

```

1  -- $Id: fntbuild-utils.lua 10818 2025-02-19 05:44:13Z cfrees $
2 -----
3  -- fntbuild-utils
4 -----
5 -----
6  -- l3build duplicates
7 -----
8  -- copy non-public things from l3build
9  -- these are just copied because they aren't documented
10 -- so we duplicate them as we're not entitled to use them o/w
11 -- I've tried to eliminate local shorthands for clarity
12 -- should these all be local? or renamed? or both?
13 -----
14 -- os_newline_cp {{
15 local os_newline_cp = "\n"
16 if os.type == "windows" then
17     if tonumber(status.luatex_version) < 100 or
18         (tonumber(status.luatex_version) == 100
19          and tonumber(status.luatex_revision) < 4) then
20         os_newline_cp = "\r\n"
21     end
22 end
23 -- }}}
24 -----
25 -- localtexmf {{
26 -- from l3build-aux.lua
27 -- Construct a localtexmf including any tdsdirs
28 -- Needed for checking and typesetting, hence global
29 local function localtexmf()
30     local paths = ""
31     for src,_ in pairs(tdsdirs) do
32         paths = paths .. os_pathsep .. abspath(src) .. "//"
33     end
34     if texmfdir and texmfdir ~= "" and direxists(texmfdir) then
35         paths = paths .. os_pathsep .. abspath(texmfdir) .. "//"

```

```
36     end
37     return paths
38   end
39 -- }}}
40 -----
41 -- get_script_name {{{
42 local function get_script_name()
43   if string.match(arg[0], "l3build$") or string.match(arg[0], "l3build%.lua$") then
44     return kpse.lookup("l3build.lua")
45   else
46     return arg[0] -- Why no lookup here?
47   end
48 end
49 -- }}}
50 -----
51 -- dep_install {{{
52 ---@param
53 ---@return
54 ---@see
55 ---@usage
56 local function dep_install(deps)
57   local error_level
58   for _, dep in ipairs(deps) do
59     print("Installing dependency:", dep)
60     error_level = run(dep, "texlua " .. get_script_name() .. " unpack -q")
61     if error_level ~= 0 then
62       return error_level
63     end
64   end
65   return 0
66 end
67 -- }}}
68 -----
69 -----
70 -- additions
71 -----
72 -- lsrdir_aux {{{
73 ---@param path string
74 ---@param filenames table
75 ---@return table
76 ---@see
77 ---@usage private
78 local function lsrdir_aux (path,filenames)
79   for file in lfs.dir(path) do
80     if file ~= "." and file ~= ".." then
81       local f = path .. "/" .. file
82       local attr = lfs.attributes (f)
83       -- why is this necessary?
84       -- lfs.attributes does or doesn't return a table?
85       -- David Carlisle: poss. nil rather than table
```

```
86      -- -> assert then gives error
87      assert (type(attr) == "table")
88      if attr.mode == "directory" then
89          lsrdir_aux (f,filenames)
90      else
91          table.insert(filenames,file)
92      end
93  end
94 end
95 return filenames
96 end
97 -- }}}
98 -- lsrdir {{{
99 -- https://lunarmodules.github.io/luafilesystem/examples.html
100 ---@param path string
101 ---@param filenames table
102 ---@return table
103 ---@see
104 ---@usage public
105 local function lsrdir (path,filenames)
106     local filenames = filenames or {}
107     filenames = lsrdir_aux (path,filenames)
108     return filenames
109 end
110 -- }}}
111 -----
112 -- local copio_aux {{{
113 ---Copy files or directory contents recursively.
114 ---@return 0, table of names on success, error level otherwise
115 ---@see copio
116 ---@param path string
117 ---@param dest string
118 ---@param filenames table
119 ---@param indent string
120 ---@param patt string
121 ---@usage private
122 local function copio_aux (path,dest,filenames,indent,patt)
123     indent = indent .. " "
124     patt = patt or ".*"
125     local attr = lfs.attributes (path)
126     if attr.mode == "directory" then
127         for file in lfs.dir(path) do
128             if file ~= "." and file ~= ".." then
129                 local attri = lfs.attributes (path .. "/" .. file)
130                 assert (type(attri) == "table")
131                 if attri.mode == "directory" then
132                     copio_aux (path .. "/" .. file,dest,filenames,"",patt)
133                 elseif string.match(file,patt) then
134                     table.insert(filenames,file)
135                     cp(file,dest,dest)
```

```
136         end
137     end
138   end
139 end
140 return filenames
141 end
142 -- }}}
```

```
143 --
144 -- local copio {{{
145 ---@description Copy files or directory contents recursively.
146 ---@description Optionally use kpse lookup if not found.
147 ---@return 0 on success
148 ---@see copio_aux, fntbuild-check, fntbuild-build (buildinit_fontinst)
149 ---@param locs table
150 ---@param dest string
151 ---@param kpsevar string
152 ---@param patt string
153 ---@param ls boolean
154 ---@param filenames table
155 ---@usage private
156 local function copio (locs,dest,kpsevar,patt)
157   assert(locs ~= nil)
158   if type(locs) == "string" then locs = { locs } end
159   assert(#locs > 0)
160   assert(direxists(dest))
161   kpsevar = kpsevar or "TEXMFDIST"
162   patt = patt or ".*"
163   local filenames = {}
164   local root = ""
165   if kpsevar ~= "" then
166     root = kpse.var_value(kpsevar) .. "/"
167   end
168   for _,path in ipairs(locs) do
169     local file = basename(path)
170     local attr = lfs.attributes (path)
171     if type(attr) ~= "table" then
172       path = root .. (string.gsub(path,"^/","", ""))
173       attr = lfs.attributes (path)
174     end
175     assert(type(attr) == "table")
176     if attr.mode == "directory" then
177       copio_aux(path,dest,filenames,"",patt)
178     elseif file ~= ".." and file ~= "." and string.match(file,patt) then
179       table.insert(filenames,file)
180       cp(file,dirname(path),dest)
181     end
182   end
183   if ls then
184     return filenames, 0
185   else
```

```

186     return 0
187   end
188 end
-- }}}

190 -----
191 -----
192 -- build_config() {{{
193 ---use fntbuild-config.lua if found
194 ---@usage private
195 local function build_config()
196   local configs = {}
197   -- not sure what the correct test is here?
198   -- if options["target"] .. "search" then
199   if fnt.buildsearch then
200     local f = kpse.find_file("fntbuild-config.lua")
201     if f ~= nil then
202       dofile(f)
203       print("\nWARNING: Using local configuration from", f
204         .. ".\nYour package may not build elsewhere.\n")
205       table.insert(configs,f)
206     end
207   end
208   if fileexists(maindir .. "/fntbuild-config.lua") then
209     dofile(maindir .. "/fntbuild-config.lua")
210     print("\nUsing local configuration from", maindir
211       .. "/fntbuild-config.lua.\nEnsure this is included when publishing sources.\n")
212     table.insert(configs,maindir .. "/fntbuild-config.lua")
213   end
214   if fileexists(sourcefiledir .. "/fntbuild-config.lua") then
215     dofile(sourcefiledir .. "/fntbuild-config.lua")
216     print("\nUsing local configuration from", sourcefiledir
217       .. "/fntbuild-config.lua.\nEnsure this is included when publishing sources.\n")
218     table.insert(configs,sourcefiledir .. "/fntbuild-config.lua")
219   end
220   if #configs == 0 then
221     print("\nNo fntbuild-config.lua found.\nUsing defaults.\n")
222   end
223   return 0
224 end
-- }}}

226 -----
227 -- map_cat_aux (frags,dir,mapfile,append) {{{
228 ---@param frags table
229 ---@param dir string
230 ---@param mapfile string
231 ---@param append boolean
232 ---@return 0 on success, number of errors otherwise
233 ---@see
234 ---@usage private
235 local function map_cat_aux (frags,dir,mapfile,append)

```

```

236     mapfile = mapfile or "pdftex.map"
237     append = append or false
238     if #frags == 0 then return 0 end
239     if fileexists(dir .. "/" .. mapfile) and not append then
240         local errorlevel = rm(dir,mapfile)
241         fnt.gwall("Removal of ",dir .. "/" .. mapfile,errorlevel)
242     end
243     local m = assert(io.open(dir .. "/" .. mapfile,"a"))
244     for _,i in ipairs(frags) do
245         local f = assert(io.open(i,"rb"))
246         local l = f:read("*all")
247         f:close()
248         m:write(l)
249     end
250     m:close()
251     return 0
252 end
253 -- }}}
254 -----
255 -- map_cat_sys (frags,dir,mapfile,append) {{{
256 ---@param frags table
257 ---@param dir string
258 ---@param mapfile string
259 ---@param append boolean
260 ---@return 0 on success, number of errors otherwise
261 ---@see
262 ---@usage private
263 local function map_cat_sys (frags,dir,mapfile,append)
264     mapfile = mapfile or "pdftex.map"
265     append = append or false
266     local n = 0
267     if #frags == 0 then
268         frags = { "cm.map", "cm-super-t1.map", "cm-super-ts1.map", "lm.map" }
269     end
270     if #fnt.mapfiles_add ~= 0 then
271         for _,i in ipairs(fnt.mapfiles_add) do
272             table.insert(frags,i)
273         end
274     end
275     local ffrags = {}
276     if #frags ~= 0 then
277         for _,i in ipairs(frags) do
278             -- kpse.find_file assumes filetype tex i.e. ignores file ext.
279             local ff = kpse.find_file(i,"map")
280             if ff ~= "" then
281                 table.insert(ffrags,ff)
282             else
283                 fnt.gwall("Search for map fragment ",i,1)
284                 n = n + 1
285             end

```

```
286     end
287     frags = ffrags
288   end
289   n = n + map_cat_aux(frags,dir,mapfile,append)
290   return n
291 end
292 -- }}}
```

```
293 -- map_cat_pkg (frags,dir,mapfile,append) {{{
294 ---@param frags table
295 ---@param fragdir string
296 ---@param dir string
297 ---@param mapfile string
298 ---@param append boolean
299 ---@param errors number
300 ---@return 0 on success, number of errors otherwise
301 ---@see
302 ---@usage private
303 local function map_cat_pkg (frags,fragdir,dir,mapfile,append)
304   mapfile = mapfile or "pdftex.map"
305   append = append or true
306   local n = 0
307   if #frags == 0 then return 0 end
308   -- abspath() only works for directories
309   for i,j in ipairs(frags) do
310     if fileexists(j) then
311       frags[i] = abspath(dirname(j) .. "/" .. basename(j))
312     elseif fileexists(fragdir .. "/" .. j) then
313       frags[i] = abspath(fragdir) .. "/" .. j
314     elseif fileexists(dir .. "/" .. j) then
315       frags[i] = abspath(dir) .. "/" .. j
316     else
317       fnt.gwall("Finding mapfile fragment ",j,1)
318       frags[i] = nil
319       n = n + 1
320     end
321   end
322   if #frags == 0 then return n end
323   return map_cat_aux(frags,dir,mapfile,append)
324 end
325 -- }}}
```

```
326 -- exports {{{
327 fnt.build_config = build_config
328 fnt.copio = copio
329 fnt.dep_install = dep_install
330 fnt.localtexmf = localtexmf
331 fnt.lsrdir = lsrdir
332 fnt.os_newline_cp = os_newline_cp
333 fnt.map_cat_pkg = map_cat_pkg
```

```

336 fnt.map_cat_sys = map_cat_sys
337 -----
338 -----
339 -- vim: ts=2:sw=2:et:foldmethod=marker:

```

6.1.7 fntbuild-vars.lua

fntbuild-vars.lua (lua) Included by fntbuild.lua. Additional variables and changes to default values of existing l3build variables. These may be overridden in fntbuild-config.lua and/or build.lua.

```

1  -- $Id: fntbuild-vars.lua 10802 2025-02-12 20:11:33Z cfrees $
2  -- fntbuild variables
3  -----
4  -----
5  -- l3build variables needed before l3build defines them {{{
6  -----
7  sourcefiledir = sourcefiledir or "."
8  maindir = maindir or sourcefiledir
9  -- builddir
10 -- should be global? or local is better?
11 builddir = builddir or maindir .. "/build"
12 -- }}}
13 -----
14 -- l3build variables with changed defaults {{{
15 -----
16 binaryfiles = {"*.pdf", "*.zip", "*vf", "*tfm", "*pfb", "*pfm", "*ttf",
17     "*otf", "*tar.gz"}
18 -- also very easy for font files not to get installed properly and the old ones used
19 -- note this overrides the l3build default
20 checksearch = false
21 -- maindir before checkdeps
22 -- maindir = "../.."
23 -- checkdeps = { maindir .. "/fnt-tests" }
24 checkengines = { "pdftex" }
25 checkformat = "latex"
26 -- cleanfiles changed below
27 installfiles = {"*.afm", "*.cls", "*.enc", "*.fd", "*.map", "*otf", "*pfb",
28     "*pfm", "*sty", "*tfm", "*ttf", "*vf"}
29 -- need module test or default?
30 sourcefiles = {"*.afm", "afm/*.afm", "*pfb", "*pfm", "*dtx", "*ins",
31     "opentype/*otf", "*otf", "tfm/*tfm", "truetype/*ttf", "*ttf",
32     "type1/*pfb", "type1/*pfm"}
33 -- tdslocations changed below
34 typesetexe = "TEXMFDOTDIR=.../local: pdflatex"
35 typesetfiles = typesetfiles or {"*.dtx", "-tables.tex", "--example.tex"}
36 -- typesetsourcefiles changed below
37 -- }}}
38 -----
39 -----

```

```
40 -- additional variables (inc. dependant changes) {{{
41 -----
42 -----
43 -- font definitions to use when auto-generating tests
44 ---@see fnt_test() checkinit_hook() fnt.fnttestfds
45 ---@usage public
46 fnt.autotestfds = fnt.autotestfds or {}
47 -- script containing commands to convert pl and vpl files to binary form
48 ---@see fontinst()
49 ---@usage public
50 fnt.binmakers = fnt.binmakers or {"*-pltotf.sh"}
51 ---@usage public
52 -- it is way too easy to pick up the same package's files in the dist tree
53 -- when that happens, some installation tools fail to generate duplicate files
54 -- once the update goes to ctan, the files disappear ...
55 fnt.buildsearch = false
56 fnt.builddeps = fnt.builddeps or {}
57 -- should use existing fnt variables, I think
58 fnt.buildfiles = fnt.buildfiles or { "*.afm", "*.enc", "*.etx", "*.fd", "*.lig",
59   "*.make", "*.map", "*.mtx", "*.nam", "*.otf", "*.pe", "*.tex", "*.tfm" }
60 fnt.buildsuppfiles_sys = fnt.buildsuppfiles_sys or {}
61 -- sys replaces defaults; add ads to them
62 fnt.checksuppfiles_sys = fnt.checksuppfiles_sys or {}
63 fnt.checksuppfiles_add = fnt.checksuppfiles_add or {}
64 -- \TeX{} files to compile to produce pl, vpl etc.
65 ---@see fontinst()
66 ---@usage public
67 fnt.familymakers = fnt.familymakers or {"*-drv.tex"}
68 fnt.fntdir = fnt.fntdir or builddir .. "/fnt"
69 -- font definitions to use when auto-generating tests
70 ---@see fnt_test() checkinit_hook() fnt.autotestfds
71 ---@usage public
72 fnt.fnttestfds = fnt.fnttestfds or {}
73 fnt.mapfiles_sys = fnt.mapfiles_sys or {}
74 fnt.mapfiles_add = fnt.mapfiles_add or {}
75 -- sourcefiledir must be specified first
76 -- directory to store build products
77 ---@usage public
78 fnt.keepdir = fnt.keepdir or sourcefiledir .. "/keep"
79 -- directory to store keeptempfiles
80 ---@usage public
81 fnt.keeptempdir = fnt.keeptempdir or sourcefiledir .. "/keeptemp"
82 -- build products
83 ---@usage public
84 fnt.keepfiles = fnt.keepfiles or {"*.enc", "*.fd", "*.map", "*.tfm", "*.vf"}
85 -- files to keep for diagnostics, but which shouldn't be packaged
86 ---@usage public
87 fnt.keeptempfiles = fnt.keeptempfiles or {"*.mtx", "*.pl", "*-pltotf.sh", "*-rec.tex",
88   "*.vpl", "*.zz"}
89 cleanfiles = {fnt.keeptempfiles} -- ** changed default
```

```
90 -- \TeX{} files to compile to produce map file fragments etc.
91 ---@see fontinst()
92 ---@usage public
93 fnt.mapmakers = fnt.mapmakers or {"*-map.tex"}
94 -- file containing regression tests
95 ---@see check_init() in fntbuild-check.lua
96 ---@usage public
97 fnt.regress = fnt.regress or "fntbuild-regression-test.tex"
98 -- should fontinst files be available during build?
99 -- @see buildinit_fontinst() in fntbuild-build.lua
100 ---@usage public
101 ---@boolean
102 ---@description whether to copy contents of texmf-dist/tex/fontinst to fnt.fntdir during build
103 fnt.needs_fontinst = true
104 ---@see utarg in fntbuild.lua
105 ---@usage private
106 ---@boolean
107 fnt.standalone = false
108 ---@see fntsubsetter()
109 ---@usage public
110 ---@boolean
111 ---@description whether to add fnt.subset defns to fd files for TC encodings
112 fnt.subset = false
113 ---@see fntsubsetter()
114 ---@usage public
115 ---@usage fnt.subsetdefns.<family> = <fnt.subset>
116 ---@description table: list of TC fds to insert fnt.subset defns into
117 ---@description entry keys should be family names; entry values should be values
118 ---@description for fnt.subsetdefns.<key> = <value>,
119 ---@description <key> will be substituted for $FONTFAMILY and
120 ---@description <value> will be substituted for $SUBSET into the fnt.subsettemplate
121 fnt.subsetdefns = fnt.subsetdefns or {}
122 ---@see fntsubsetter()
123 ---@usage public
124 ---@usage value should be list of filenames as table
125 ---@description list of font defn files to insert fnt.subset defns into
126 ---@description defaults to all fds matching [Tt][Ss]1.*\.\fd
127 fnt.subsetfiles = fnt.subsetfiles or {}
128 ---@see fntsubsetter()
129 ---@description $FONTFAMILY and $SUBSET may be used as placeholders
130 ---@description template for inserted lines specifying TS1 encoding subsets in
131 ---@description fnt.subsetfiles
132 ---@usage public
133 fnt.subsettemplate = fnt.subsettemplate or
134     "\\\DeclarEncodingSubset{TS1}{$FONTFAMILY}{$SUBSET}"
135 -- file to use as template for tables
136 ---@see doc_init() in fntbuild-doc.lua
137 ---@usage public
138 fnt.tablestemp = fnt.tablestemp or "fntbuild-tables.tex"
139 -- file to use as template for tests
```

```

140 ---@see check_init() in fntbuild-check.lua
141 ---@usage public
142 fnt.testtemp = fnt.testtemp or "fntbuild-test.lvt"
143 -----
144 -- fnt.vendor and module must be specified before tdslocations
145 ---@usage public
146 fnt.vendor = fnt.vendor or "public"
147 tdslocations = { -- ** changed default
148     "fonts/afm/" .. fnt.vendor .. "/" .. module .. "/" .. "*.afm",
149     "fonts/enc/dvips/" .. module .. "/" .. "*.enc",
150     "fonts/map/dvips/" .. module .. "/" .. "*.map",
151     "fonts/opentype/" .. fnt.vendor .. "/" .. module .. "/" .. "*.otf",
152     "fonts/tfm/" .. fnt.vendor .. "/" .. module .. "/" .. "*.tfm",
153     "fonts/truetype/" .. fnt.vendor .. "/" .. module .. "/" .. "*.ttf",
154     "fonts/type1/" .. fnt.vendor .. "/" .. module .. "/" .. "*.pfb",
155     "fonts/type1/" .. fnt.vendor .. "/" .. module .. "/" .. "*.pfm",
156     "fonts/vf/" .. fnt.vendor .. "/" .. module .. "/" .. "*.vf",
157     "source/fonts/" .. module .. "/" .. "*.etx",
158     "source/fonts/" .. module .. "/" .. "*.mtx",
159     "source/fonts/" .. module .. "/" .. "*-drv.tex",
160     "source/fonts/" .. module .. "/" .. "*-map.tex",
161     "tex/latex/" .. module .. "/" .. "*.fd",
162     "tex/latex/" .. module .. "/" .. "*.sty"
163 }
164 typesetsourcefiles = {fnt.keepdir .. "/*"} -- ** changed default
165 -- }}}
166 -----
167 -----
168 -----
169 -- vim: ts=2:sw=2:et:foldmethod=marker:

```

6.2 Metrics

These files influence the characters which end up in the TEX fonts. For example, they may construct otherwise missing glyphs or adjust kerning pairs.

6.2.1 fontscripts-dotsccbld.mtx

fontscripts-dotsccbld.mtx (mtx)

```

228 \relax
229
230 \metrics
231
232 \needsfontinstversion{1.917}
233
234 \usemtxpackage{ltcmds}
235 \ProvidesMtxPackage{dotsccbld}
236
237 \begincomment

```

```

238 \section{Proper latin small capitals}
239
240 \subsection{Some utility commands}
241 \endcomment
242
243 \setcommand\setcsctopglyph#1#2#3#4{
244   \ifareglyphs{#2.sc,#3}\then
245     \setglyph{#1}
246     \topaccent{#2.sc}{#3}{#4}
247   \endsetglyph
248   \setleftrightkerning{#1}{#2.sc}{1000}
249   \Fi
250 }
251 \setcommand\setcscbotglyph#1#2#3#4{
252   \ifareglyphs{#2.sc,#3}\then
253     \setglyph{#1}
254     \botaccent{#2.sc}{#3}{#4}
255   \endsetglyph
256   \setleftrightkerning{#1}{#2.sc}{1000}
257   \Fi
258 }
259 \begincomment\medskip
260 A \textbf{Try: Set glyph} is an ordinary \textbf{Set glyph} which is
261 conditional on that a set of glyphs (those used to construct the
262 composite glyph) are available. It is technically e.g.
263 \begin{quotation}
264   \setcsctopglyph{\macroparameter{1}}{\macroparameter{2}}%
265   {\macroparameter{3}}{\macroparameter{4}}
266   \setcscbotglyph{\macroparameter{1}}{\macroparameter{2}}%
267   {\macroparameter{3}}{\macroparameter{4}}\par
268 \end{quotation}
269 (both of which are implemented in the code as simple four argument
270 commands), but in the list of commands below those two commands will
271 be typeset as
272 \resetcommand\setcsctopglyph#1#2#3#4{%
273   \Aheading{Try: Set glyph '\TypesetStringExpression{#1}'}
274   \topaccent{#2.sc}{#3}{#4}
275   \setleftrightkerning{#1}{#2.sc}{1000}
276 }
277 \resetcommand\setcscbotglyph#1#2#3#4{%
278   \Aheading{Try: Set glyph '\TypesetStringExpression{#1}'}
279   \botaccent{#2.sc}{#3}{#4}
280   \setleftrightkerning{#1}{#2.sc}{1000}
281 }
282 \begin{quotation}
283   \setcsctopglyph{\macroparameter{1}}{\macroparameter{2}}%
284   {\macroparameter{3}}{\macroparameter{4}}
285   \setcscbotglyph{\macroparameter{1}}{\macroparameter{2}}%
286   {\macroparameter{3}}{\macroparameter{4}}
287 \end{quotation}
288 \endcomment
289
290 \ifareglyphs{L,l.sc}\then
291   \setint{smallcapscale}{
```

```

292     \div{\mul{1000}{\height{l.sc}}}{\height{L}}
293 }
294 \Else
295   \setint{smallcapscale}{800}
296 \Fi
297
298
299 \setcsctopglyph{aacute.sc}{a}{acute}{500}
300 \setcsctopglyph{abreve.sc}{a}{breve}{500}
301 \setcsctopglyph{acircumflex.sc}{a}{circumflex}{500}
302 \setcsctopglyph{adieresis.sc}{a}{dieresis}{500}
303 \setcsctopglyph{agrave.sc}{a}{grave}{500}
304 \setcscbotglyph{aogonek.sc}{a}{ogonek}{900}
305 \setcsctopglyph{aring.sc}{a}{ring}{500}
306 \setcsctopglyph{atilde.sc}{a}{tilde}{500}
307
308 \setcsctopglyph{cacute.sc}{c}{acute}{500}
309 \setcsctopglyph{ccaron.sc}{c}{caron}{500}
310 \setcsctopglyph{cedilla.sc}{c}{cedilla}{500}
311
312 \setcsctopglyph{dcaron.sc}{d}{caron}{500}
313
314 \setcsctopglyph{eacute.sc}{e}{acute}{500}
315 \setcsctopglyph{ecaron.sc}{e}{caron}{500}
316 \setcsctopglyph{ecircumflex.sc}{e}{circumflex}{500}
317 \setcsctopglyph{edieresis.sc}{e}{dieresis}{500}
318 \setcsctopglyph{egrave.sc}{e}{grave}{500}
319 \setcscbotglyph{eogonek.sc}{e}{ogonek}{850}
320
321 \setcsctopglyph{gbreve.sc}{g}{breve}{500}
322
323 \setcsctopglyph{iacute.sc}{i}{acute}{500}
324 \setcsctopglyph{icircumflex.sc}{i}{circumflex}{500}
325 \setcsctopglyph{idieresis.sc}{i}{dieresis}{500}
326 \setcsctopglyph{idotaccent.sc}{i}{dotaccent}{500}
327 \setcsctopglyph{igrave.sc}{i}{grave}{500}
328
329 \setcsctopglyph{lacute.sc}{l}{acute}{250}
330
331 \ifareglyphs{l.sc,quoteright}\then
332   \setglyph{lcaron.sc}
333   \glyph{l.sc}{1000}
334   \ifisint{monowidth}\then\Else \movert{-100} \Fi
335   \glyph{quoteright}{\int{smallcapscale}}
336 \endsetglyph
337 \setleftkerning{lcaron.sc}{l.sc}{1000}
338 \Fi
339
340 \setcsctopglyph{nacute.sc}{n}{acute}{500}
341 \setcsctopglyph{ncaron.sc}{n}{caron}{500}
342 \setcsctopglyph{ntilde.sc}{n}{tilde}{500}
343
344 \setcsctopglyph{oacute.sc}{o}{acute}{500}
345 \setcsctopglyph{ocircumflex.sc}{o}{circumflex}{500}

```

```

346 \setcsctopglyph{o dieresis.sc}{o}{diereesis}{500}
347 \setcsctopglyph{o grave.sc}{o}{grave}{500}
348 \setcsctopglyph{o hungarumlaut.sc}{o}{hungarumlaut}{500}
349 \setcsctopglyph{o tilde.sc}{o}{tilde}{500}
350
351 \setcsctopglyph{r acute.sc}{r}{acute}{500}
352 \setcsctopglyph{r caron.sc}{r}{caron}{500}
353
354 \setcsctopglyph{s acute.sc}{s}{acute}{500}
355 \setcsctopglyph{s caron.sc}{s}{caron}{500}
356 \setcscbotglyph{s cedilla.sc}{s}{cedilla}{500}
357
358 \setcsctopglyph{t caron.sc}{t}{caron}{500}
359 \setcscbotglyph{t cedilla.sc}{t}{cedilla}{500}
360
361 \setcsctopglyph{u acute.sc}{u}{acute}{500}
362 \setcsctopglyph{u circumflex.sc}{u}{circumflex}{500}
363 \setcsctopglyph{u dieresis.sc}{u}{diereesis}{500}
364 \setcsctopglyph{u grave.sc}{u}{grave}{500}
365 \setcsctopglyph{u hungarumlaut.sc}{u}{hungarumlaut}{500}
366 \setcsctopglyph{u ring.sc}{u}{ring}{500}
367
368 \setcsctopglyph{y acute.sc}{y}{acute}{500}
369 \setcsctopglyph{y diereesis.sc}{y}{diereesis}{500}
370
371 \setcsctopglyph{z acute.sc}{z}{acute}{500}
372 \setcsctopglyph{z caron.sc}{z}{caron}{500}
373 \setcsctopglyph{z dotaccent.sc}{z}{dotaccent}{500}
374
375
376 \begincomment
377 \subsection{Other glyphs that can be built}
378 \endcomment
379
380 \ifisglyph{dcroat.sc}\then
381   \setglyph{dbar.sc}
382   \glyph{dcroat.sc}{1000}
383   \endsetglyph
384   \setleftrightkerning{dbar.sc}{dcroat.sc}{1000}
385 \Else\ifisglyph{eth.sc}\then
386   \setglyph{dbar.sc}
387   \glyph{eth.sc}{1000}
388   \endsetglyph
389   \setleftrightkerning{dbar.sc}{eth.sc}{1000}
390 \Fi\Fi
391
392
393 \endmetrics

```

6.2.2 fontscripts-newlatin-dotsc mtx

ripts-newlatin-dotsc.mtx (*mtx*) based on newlatin.mtx - because I couldn't figure out how to pass options...

```
394 \relax
395
396 \documentclass[twocolumn]{article}
397
398 \metrics
399
400 \needsfontinstversion{1.924}
401
402 \usemtxpackage{llbuild}
403
404 \usemtxpackage{lubuild}
405
406 \ifoption{nosc}\then \Else
407
408 \usemtxpackage{dotscbuild}
409 \usemtxpackage{dotscmisc}
410
411 \Fi
412
413 \usemtxpackage{ltpunct}
414
415
416 \usemtxpackage{ltcmds}
417
418 \unfakable{Gamma}
419 \unfakable{Delta}
420 \unfakable{Theta}
421 \unfakable{Lambda}
422 \unfakable{Xi}
423 \unfakable{Pi}
424 \unfakable{Sigma}
425 \unfakable{Upsilon}
426 \unfakable{Upsilon1}
427 \unfakable{Phi}
428 \unfakable{Psi}
429 \unfakable{Omega}
430
431 \foreach{accent}{grave,acute,circumflex,tilde,dieresis,hungarumlaut,%
432   ring,caron,breve,macron,dotaccent}
433   \ifisglyph{\str{accent}}\then
434     \resetglyph{\str{accent}}
435     \glyph{\str{accent}}{1000}
436     \resetdepth{0}
437   \endresetglyph
438   \Fi
439 \endfor{accent}
440
441
442 \setglyph{ringfitted}
443   \movert{\half{\sub{\width{A}}{\width{ring}}}}
444   \glyph{ring}{1000}
445   \movert{\otherhalf{\sub{\width{A}}{\width{ring}}}}
446 \endsetglyph
447
```

```

448
449
450 \setleftkerning{less}{guillemotleft}{1000}
451 \setleftkerning{greater}{guillemotright}{1000}
452
453
454 \endmetrics
455

```

6.2.3 fontsheets-dotscmisc mtx

fontsheets-dotscmisc mtx (mtx)

```

456 \relax
457
458 \metrics
459
460 \needsfontinstversion{1.917}
461
462 \ProvidesMtxPackage{dotscmisc}
463
464 \ifisglyph{i.sc}\then
465   \setglyph{dotlessi.sc}
466   \glyph{i.sc}{1000}
467   \setleftrightkerning{dotlessi.sc}{i.sc}{1000}
468   \endsetglyph
469 \Fi
470
471 \ifisglyph{j.sc}\then
472   \setglyph{dotlessj.sc}
473   \glyph{j.sc}{1000}
474   \setleftrightkerning{dotlessj.sc}{j.sc}{1000}
475   \endsetglyph
476 \Fi
477
478
479 \setint{smallcapsspacing}{0}
480
481 \ifisglyph{f.sc}\then
482
483   \setglyph{ff.sc}
484   \glyph{f.sc}{1000}
485   \movert{\add{\kerning{f.sc}{f.sc}}{\int{smallcapsspacing}}}
486   \glyph{f.sc}{1000}
487   \endsetglyph
488   \setrightkerning{ff.sc}{f.sc}{1000}
489   \setglyph{f_f.sc}
490   \glyph{ff.sc}{1000}
491   \endsetglyph
492   \setrightkerning{f_f.sc}{ff.sc}{1000}
493
494 \ifisglyph{i.sc}\then
495   \setglyph{fi.sc}

```

```
496     \glyph{f.sc}{1000}
497     \movert{\add{\kerning{f.sc}{i.sc}}{\int{smallcapspacing}}}
498     \glyph{i.sc}{1000}
499 \endsetglyph
500
501 \setrightkerning{fi.sc}{i.sc}{1000}
502
503 \setglyph{f_i.sc}
504 \glyph{fi.sc}{1000}
505 \endsetglyph
506 \setrightkerning{f_i.sc}{fi.sc}{1000}
507
508 \setglyph{ffi.sc}
509 \glyph{ff.sc}{1000}
510 \movert{\add{\kerning{f.sc}{i.sc}}{\int{smallcapspacing}}}
511 \glyph{i.sc}{1000}
512 \endsetglyph
513
514 \setglyph{f_f_i.sc}
515 \glyph{ffi.sc}{1000}
516 \endsetglyph
517 \setrightkerning{f_f_i.sc}{ffi.sc}{1000}
518
519 \setrightkerning{ffi.sc}{i.sc}{1000}
520 \fi
521
522 \ifisglyph{l.sc}\then
523   \setglyph{fl.sc}
524   \glyph{f.sc}{1000}
525   \movert{\add{\kerning{f.sc}{l.sc}}{\int{smallcapspacing}}}
526   \glyph{l.sc}{1000}
527 \endsetglyph
528
529 \setrightkerning{fl.sc}{l.sc}{1000}
530
531 \setglyph{f_l.sc}
532 \glyph{fl.sc}{1000}
533 \endsetglyph
534 \setrightkerning{f_l.sc}{fl.sc}{1000}
535
536 \setglyph{ffl.sc}
537 \glyph{ff.sc}{1000}
538 \movert{\add{\kerning{f.sc}{l.sc}}{\int{smallcapspacing}}}
539 \glyph{l.sc}{1000}
540 \endsetglyph
541
542 \setrightkerning{ffl.sc}{l.sc}{1000}
543
544 \setglyph{f_f_l.sc}
545 \glyph{ffl.sc}{1000}
546 \endsetglyph
547 \setrightkerning{f_f_l.sc}{ffl.sc}{1000}
548
549 \fi
```

```

550 \fi % ifisglyph{f.sc}
551
552
553 \ifareglyphs{i.sc,j.sc}\then
554   \setglyph{ij.sc}
555   \glyph{i.sc}{1000}
556   \movert{\add{\kerning{i.sc}{j.sc}}{\int{smallcapspacing}}}
557   \glyph{j.sc}{1000}
558   \endsetglyph
559   \setrightkerning{ij.sc}{j.sc}{1000}
560 \fi
561
562 \ifisglyph{ss.sc}\then
563   \setglyph{germandbls.sc}
564   \glyph{ss.sc}{1000}
565   \endsetglyph
566   \setleftrightkerning{germandbls.sc}{ss.sc}{1000}
567 \Else
568 \ifisglyph{s.sc}\then
569   \setglyph{germandbls.sc}
570   \glyph{s.sc}{1000}
571   \movert{\add{\kerning{s.sc}{s.sc}}{\int{smallcapspacing}}}
572   \glyph{s.sc}{1000}
573   \endsetglyph
574   \setleftrightkerning{germandbls.sc}{s.sc}{1000}
575 \Fi
576 \Fi
577
578 \endmetrics

```

6.2.4 fontscripts-unfakable mtx

This metrics file prevents fontinst from inserting ‘gravestones’ into virtual fonts when a glyph is missing. **It should be used only for TS1. It should NOT be used when using the T1 encoding.**

fontscripts-unfakable.mtx (mtx)

```

579 \relax
580 \metrics
581
582 \ProvidesMtxPackage{fontscripts-unfakable}
583
584 \setcommand\unfakableaccent#1{%
585   \message{Missing glyph '#1'}%
586 }
587 \setcommand\unfakable#1{%
588   \message{Missing glyph '#1'}%
589 }
590
591 \endmetrics

```

6.3 Encodings

None of these files are actually used in typesetting. Rather, they are converted to .enc files, renamed and automatically edited to ensure unique encoding names. These names are then substituted into .map files.

6.3.1 fontscripts-dotoldstyle.etx

ntscripts-dotoldstyle.etx (*etx*)

```
592 \relax
593 \encoding
594 \setcommand\digit#1{\#1.oldstyle}
595 \endencoding
```

6.3.2 fontscripts-dotsc2.etx

fontscripts-dotsc2.etx (*etx*)

```
596 \relax
597
598 \encoding
599
600 \setcommand\lc{\#1\#2{\#2.sc}}
601 \setcommand\uc{\#1\#2{\#1}}
602 \setcommand\lctop{\#1\#2{\#2.sc}}
603 \setcommand\uctop{\#1\#2{\#1}}
604 \setcommand\lclig{\#1\#2{\#2.sc}}
605 \setcommand\uclig{\#1\#2{\#1spaced}}
606
607
608 \ifisint{capspacing}\then
609   \setint{letterspacing}{\int{capspacing}}
610 \fi
611
612 \endencoding
```

6.3.3 fontscripts-dottaboldstyle.etx

cripts-dottaboldstyle.etx (*etx*)

```
613 \relax
614 \encoding
615 \setcommand\digit{\#1{\#1.taboldstyle}}
616 \endencoding
```

6.3.4 fontscripts-lining.etx

fontscripts-lining.etx (*etx*)

```
617 \relax
```

```

618 \encoding
619 \setcommand\digit#1{\#1lining}
620 \endencoding

```

6.3.5 fontsheets-oldstyle.etx

fontsheets-oldstyle.etx (etx)

```

621 \relax
622 \encoding
623 \setcommand\digit#1{\#1oldstyle}
624 \endencoding

```

6.3.6 fontsheets-t1-cfr.etx

fontsheets-t1-cfr.etx (etx)

```

625 %%
626 %% - The commentary in the original is deleted in this version. For
627 %% information about the T1 etc., typeset the original t1.etx
628 %% included with fontinst.
629 %% - Slots are altered to accommodate characters which are named
630 %% differently. For example, this encoding uses "endash" and "emdash"
631 %% whereas t1.etx called for "rangedash" and "punctdash".
632 %% - The original notices at the top of that file concerning authors,
633 %% maintenance etc. are replaced by this notice.
634 %% - The file is renamed.
635 %% - The encoding name is modified.
636 %%
637 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
638 \relax
639 \encoding
640
641 \needsfontinstversion{1.910}
642
643 \setcommand\lc#1#2{\#2}
644 \setcommand\uc#1#2{\#1}
645 \setcommand\lctop#1#2{\#2}
646 \setcommand\uctop#1#2{\#1}
647 \setcommand\lclig#1#2{\#2}
648 \ifisint{letterspacing}\then
649   \ifnumber{\int{letterspacing}}={0}\then \Else
650     \setcommand\uclig#1#2{\#1spaced}
651     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
652       you can't see it as \verb|\verb|\setcommand| commands are invisible in
653       the typeset output.}
654   \Fi
655 \Fi
656 \setcommand\uclig#1#2{\#1}
657 \setcommand\digit#1{\#1}
658
659 \ifisint{monowidth}\then
660   \setint{ligaturing}{0}

```

```

661 \Else
662   % The following empty line is *important* to get the formatting
663   % right here (sigh)! (Remember that it is a \par token.)
664
665   \ifisint{letterspacing}\then
666     \ifnumber{\int{letterspacing}}={0}\then \Else
667       \setint{ligaturing}{0}
668     \Fi
669   \Fi
670   \setint{ligaturing}{1}
671 \Fi
672
673 \setint{italicslant}{0}
674 \setint{quad}{1000}
675 \setint{baselineskip}{1200}
676
677 \ifisglyph{x}\then
678   \setint{xheight}{\height{x}}
679 \Else
680   \setint{xheight}{500}
681 \Fi
682
683 \ifisglyph{space}\then
684   \setint{interword}{\width{space}}
685 \Else\ifisglyph{i}\then
686   \setint{interword}{\width{i}}
687 \Else
688   \setint{interword}{333}
689 \Fi\Fi
690
691 \ifisint{monowidth}\then
692   \setint{stretchword}{0}
693   \setint{shrinkword}{0}
694   \setint{extraspace}{\int{interword}}
695 \Else
696   \setint{stretchword}{\scale{\int{interword}}{600}}
697   \setint{shrinkword}{\scale{\int{interword}}{240}}
698   \setint{extraspace}{\scale{\int{interword}}{240}}
699 \Fi
700
701 \ifisglyph{X}\then
702   \setint{capheight}{\height{X}}
703 \Else
704   \setint{capheight}{750}
705 \Fi
706
707 \ifisglyph{d}\then
708   \setint{ascender}{\height{d}}
709 \Else\ifisint{capheight}\then
710   \setint{ascender}{\int{capheight}}
711 \Else
712   \setint{ascender}{750}
713 \Fi\Fi
714

```

```

715 \ifisglyph{Aring}\then
716   \setint{accicapheight}{\height{Aring}}
717 \Else
718   \setint{accicapheight}{999}
719 \Fi
720
721 \ifisint{descender_neg}\then
722   \setint{descender}{\neg{\int{descender_neg}}}
723 \Else\ifisglyph{p}\then
724   \setint{descender}{\depth{p}}
725 \Else
726   \setint{descender}{250}
727 \Fi\Fi
728
729 \ifisglyph{Aring}\then
730   \setint{maxheight}{\height{Aring}}
731 \Else
732   \setint{maxheight}{1000}
733 \Fi
734
735 \ifisint{maxdepth_neg}\then
736   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
737 \Else\ifisglyph{j}\then
738   \setint{maxdepth}{\depth{j}}
739 \Else
740   \setint{maxdepth}{250}
741 \Fi\Fi
742
743 \ifisglyph{six}\then
744   \setint{digitwidth}{\width{six}}
745 \Else
746   \setint{digitwidth}{500}
747 \Fi
748
749 \setint{capstem}{0} % not in AFM files
750
751 \setfontdimen{1}{italicslant}    % italic slant
752 \setfontdimen{2}{interword}      % interword space
753 \setfontdimen{3}{stretchword}    % interword stretch
754 \setfontdimen{4}{shrinkword}     % interword shrink
755 \setfontdimen{5}{xheight}        % x-height
756 \setfontdimen{6}{quad}          % quad
757 \setfontdimen{7}{extraspace}     % extra space after .
758 \setfontdimen{8}{capheight}      % cap height
759 \setfontdimen{9}{ascender}        % ascender
760 \setfontdimen{10}{accicapheight} % accented cap height
761 \setfontdimen{11}{descender}      % descender's depth
762 \setfontdimen{12}{maxheight}      % max height
763 \setfontdimen{13}{maxdepth}       % max depth
764 \setfontdimen{14}{digitwidth}     % digit width
765 \setfontdimen{15}{verticalstem}   % dominant width of vertical stems
766 \setfontdimen{16}{baselineskip}   % baselineskip
767
768 \ifnumber{\int{ligaturing}}<{0}\then

```

```

769      \comment{In this case, the codingscheme can be different from the
770          default, and therefore we refrain from setting it.}
771  \Else
772      \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - LATIN CFR}
773  \Fi
774
775  \setslot{\lc{Grave}{grave}}
776      \comment{The grave accent '\{}.'}
777  \endsetslot
778
779  \setslot{\lc{Acute}{acute}}
780      \comment{The acute accent '\{}.'}
781  \endsetslot
782
783  \setslot{\lc{Circumflex}{circumflex}}
784      \comment{The circumflex accent '\^{}.'}
785  \endsetslot
786
787  \setslot{\lc{Tilde}{tilde}}
788      \comment{The tilde accent '\~{}.'}
789  \endsetslot
790
791  \setslot{\lc{Dieresis}{dieresis}}
792      \comment{The umlaut or dieresis accent '\\"{}.'}
793  \endsetslot
794
795  \setslot{\lc{Hungarumlaut}{hungarumlaut}}
796      \comment{The long Hungarian umlaut '\H{}.'}
797  \endsetslot
798
799  \setslot{\lc{Ring}{ring}}
800      \comment{The ring accent '\r{}.'}
801  \endsetslot
802
803  \setslot{\lc{Caron}{caron}}
804      \comment{The caron or h\`a\v cek accent '\v{}.'}
805  \endsetslot
806
807  \setslot{\lc{Breve}{breve}}
808      \comment{The breve accent '\u{}.'}
809  \endsetslot
810
811  \setslot{\lc{Macron}{macron}}
812      \comment{The macron accent '\={}' .}
813  \endsetslot
814
815  \setslot{\lc{Dotaccent}{dotaccent}}
816      \comment{The dot accent '\.{}' .}
817  \endsetslot
818
819  \setslot{\lc{Cedilla}{cedilla}}
820      \comment{The cedilla accent '\c {}.'}
821  \endsetslot
822

```

```

823 \setslot{\lc{0gonek}{ogonek}}
824   \comment{The ogonek accent '\k {}'.}
825 \endsetslot
826
827 \setslot{quotesinglbase}
828   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
829     but with different sidebearings.}
830 \endsetslot
831
832 \setslot{guilsinglleft}
833   \comment{A French single opening quote mark '\guilsinglleft',
834     unavailable in \plain\ \TeX.}
835 \endsetslot
836
837 \setslot{guilsinglright}
838   \comment{A French single closing quote mark '\guilsinglright',
839     unavailable in \plain\ \TeX.}
840 \endsetslot
841
842 \setslot{quotedblleft}
843   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
844 \endsetslot
845
846 \setslot{quotedblright}
847   \comment{The English closing quote mark '\,\textquotedblright\,'.}
848 \endsetslot
849
850 \setslot{quotedblbase}
851   \comment{A German double quote mark '\quotedblbase' similar to two commas,
852     but with tighter letterspacing and different sidebearings.}
853 \endsetslot
854
855 \setslot{guillemotleft}
856   \comment{A French double opening quote mark '\guillemotleft',
857     unavailable in \plain\ \TeX.}
858 \endsetslot
859
860 \setslot{guillemotright}
861   \comment{A French closing opening quote mark '\guillemotright',
862     unavailable in \plain\ \TeX.}
863 \endsetslot
864
865 \setslot{endash}
866   \ligature{LIG}{hyphen}{emdash}
867   \comment{The number range dash '1--9'. This is called 'rangedash' by
868     fontinst's t1.etx, but it needs to be called 'endash' to work right. The
869     '\textendash'. In a monowidth font, this might be set as
870     '\texttt{1{-}9}'.}
871 \endsetslot
872
873 \setslot{emdash}
874   \comment{The punctuation dash 'Oh---boy.' This is calle 'punctdash' by
875     fontinst's t1.etx, but needs to be called 'emdash' to work right. The
876     '\textemdash'. In a monowidth font, this might be set as

```

```

877     '\texttt{\Oh{-}{-}boy.}'}
878 \endsetslot
879
880 \setslot{compwordmark}
881   \comment{An invisible glyph, with zero width and depth, but the
882   height of lowercase letters without ascenders.
883   It is used to stop ligaturing in words like 'shelf{}ful'.}
884 \endsetslot
885
886 \setslot{perthousandzero}
887   \comment{A glyph which is placed after '\%' to produce a
888   'per-thousand', or twice to produce 'per-ten-thousand'.
889   Your guess is as good as mine as to what this glyph should look
890   like in a monowidth font.}
891 \endsetslot
892
893 \setslot{\lc{dotlessI}{dotlessi}}
894   \comment{A dotless i '\i', used to produce accented letters such as
895   '\=i'.}
896 \endsetslot
897
898 \setslot{\lc{dotlessJ}{dotlessj}}
899   \comment{A dotless j '\j', used to produce accented letters such as
900   '\=j'. Most non-\TeX\ fonts do not have this glyph.}
901 \endsetslot
902
903 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
904
905 \setslot{\lclig{FF}{ff}}
906   \ifnumber{\int{ligaturing}}>{0}\then
907     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{ffi}}
908     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{ffl}}
909     \Fi
910     \comment{The 'ff' ligature. It should be two characters wide in a
911     monowidth font.}
912 \endsetslot
913
914 \setslot{\lclig{FI}{fi}}
915   \comment{The 'fi' ligature. It should be two characters wide in a
916     monowidth font.}
917 \endsetslot
918
919 \setslot{\lclig{FL}{fl}}
920   \comment{The 'fl' ligature. It should be two characters wide in a
921     monowidth font.}
922 \endsetslot
923
924 \setslot{\lclig{FFI}{ffi}}
925   \comment{The 'ffi' ligature. It should be three characters wide in a
926     monowidth font.}
927 \endsetslot
928
929 \setslot{\lclig{FFL}{ffl}}
930   \comment{The 'ffl' ligature. It should be three characters wide in a

```

```
931     monowidth font.}
932 \endsetslot
933
934 \Fi
935
936 \setslot{visiblespace}
937   \comment{A visible space glyph ‘\textvisiblespace’.}
938 \endsetslot
939
940 \setslot{exclam}
941   \ligature{LIG}{quotyleft}{exclamdown}
942   \comment{The exclamation mark ‘!’.}
943 \endsetslot
944
945 \setslot{quotedbl}
946   \comment{The ‘neutral’ double quotation mark ‘\,\textquotedbl\,’,
947 included for use in monowidth fonts, or for setting computer
948 programs. Note that the inclusion of this glyph in this slot
949 means that \TeX\ documents which used ‘{\tt\char“}’ as an
950 input character will no longer work.}
951 \endsetslot
952
953 \setslot{numbersign}
954   \comment{The hash sign ‘#’.}
955 \endsetslot
956
957 \setslot{dollar}
958   \comment{The dollar sign ‘$’.}
959 \endsetslot
960
961 \setslot{percent}
962   \comment{The percent sign ‘%’.}
963 \endsetslot
964
965 \setslot{ampersand}
966   \comment{The ampersand sign ‘&’.}
967 \endsetslot
968
969 \setslot{quoteright}
970   \ligature{LIG}{quoteright}{quotedblright}
971   \comment{The English closing single quote mark ‘\,\textquoteright\,’.}
972 \endsetslot
973
974 \setslot{parenleft}
975   \comment{The opening parenthesis ‘(’.}
976 \endsetslot
977
978 \setslot{parenright}
979   \comment{The closing parenthesis ‘)’.}
980 \endsetslot
981
982 \setslot{asterisk}
983   \comment{The raised asterisk ‘*’.}
984 \endsetslot
```

```
985 \setslot{plus}
986     \comment{The addition sign '+'.}
987 \endsetslot
988
989 \setslot{comma}
990     \ligature[LIG]{comma}{quotedblbase}
991     \comment{The comma ','.}
992 \endsetslot
993
994 \setslot{hyphen}
995     \ligature[LIG]{hyphen}{endash}
996     \ligature[LIG]{hyphenchar}{hyphenchar}
997     \comment{The hyphen '-'.}
998 \endsetslot
999
1000 \setslot{period}
1001     \comment{The period '.'.}
1002 \endsetslot
1003
1004 \setslot{slash}
1005     \comment{The forward oblique '/'.}
1006 \endsetslot
1007
1008 \setslot{\digit{zero}}
1009     \comment{The number '0'. This (and all the other numerals) may be
1010         old style or ranging digits.}
1011 \endsetslot
1012
1013 \setslot{\digit{one}}
1014     \comment{The number '1'.}
1015 \endsetslot
1016
1017 \setslot{\digit{two}}
1018     \comment{The number '2'.}
1019 \endsetslot
1020
1021 \setslot{\digit{three}}
1022     \comment{The number '3'.}
1023 \endsetslot
1024
1025 \setslot{\digit{four}}
1026     \comment{The number '4'.}
1027 \endsetslot
1028
1029 \setslot{\digit{five}}
1030     \comment{The number '5'.}
1031 \endsetslot
1032
1033 \setslot{\digit{six}}
1034     \comment{The number '6'.}
1035 \endsetslot
1036
1037 \setslot{\digit{seven}}
```

```
1039     \comment{The number '7'.}
1040 \endsetslot
1041
1042 \setslot{\digit{eight}}
1043     \comment{The number '8'.}
1044 \endsetslot
1045
1046 \setslot{\digit{nine}}
1047     \comment{The number '9'.}
1048 \endsetslot
1049
1050 \setslot{colon}
1051     \comment{The colon punctuation mark ':' .}
1052 \endsetslot
1053
1054 \setslot{semicolon}
1055     \comment{The semi-colon punctuation mark ';' .}
1056 \endsetslot
1057
1058 \setslot{less}
1059     \ligature[LIG]{less}{guillemotleft}
1060     \comment{The less-than sign '\textless' .}
1061 \endsetslot
1062
1063 \setslot{equal}
1064     \comment{The equals sign '=' .}
1065 \endsetslot
1066
1067 \setslot{greater}
1068     \ligature[LIG]{greater}{guillemotright}
1069     \comment{The greater-than sign '\textgreater' .}
1070 \endsetslot
1071
1072 \setslot{question}
1073     \ligature[LIG]{quotefleft}{questiondown}
1074     \comment{The question mark '?' .}
1075 \endsetslot
1076
1077 \setslot{at}
1078     \comment{The at sign '@' .}
1079 \endsetslot
1080
1081 \setslot{\uc{A}{a}}
1082     \comment{The letter '{A}' .}
1083 \endsetslot
1084
1085 \setslot{\uc{B}{b}}
1086     \comment{The letter '{B}' .}
1087 \endsetslot
1088
1089 \setslot{\uc{C}{c}}
1090     \comment{The letter '{C}' .}
1091 \endsetslot
1092
```

```

1093 \setslot{\uc{D}{d}}
1094   \comment{The letter '{D}'.}
1095 \endsetslot
1096
1097 \setslot{\uc{E}{e}}
1098   \comment{The letter '{E}'.}
1099 \endsetslot
1100
1101 \setslot{\uc{F}{f}}
1102   \comment{The letter '{F}'.}
1103 \endsetslot
1104
1105 \setslot{\uc{G}{g}}
1106   \comment{The letter '{G}'.}
1107 \endsetslot
1108
1109 \setslot{\uc{H}{h}}
1110   \comment{The letter '{H}'.}
1111 \endsetslot
1112
1113 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
1114
1115 \setslot{\uc{I}{i}}
1116   \comment{The letter '{I}'.}
1117 \endsetslot
1118
1119 \Fi
1120
1121 \setslot{\uc{J}{j}}
1122   \comment{The letter '{J}'.}
1123 \endsetslot
1124
1125 \setslot{\uc{K}{k}}
1126   \comment{The letter '{K}'.}
1127 \endsetslot
1128
1129 \setslot{\uc{L}{l}}
1130   \comment{The letter '{L}'.}
1131 \endsetslot
1132
1133 \setslot{\uc{M}{m}}
1134   \comment{The letter '{M}'.}
1135 \endsetslot
1136
1137 \setslot{\uc{N}{n}}
1138   \comment{The letter '{N}'.}
1139 \endsetslot
1140
1141 \setslot{\uc{O}{o}}
1142   \comment{The letter '{O}'.}
1143 \endsetslot
1144
1145 \setslot{\uc{P}{p}}
1146   \comment{The letter '{P}'.}

```

```
1147 \endsetslot
1148
1149 \setslot{\uc{Q}{q}}
1150   \comment{The letter '{Q}'.}
1151 \endsetslot
1152
1153 \setslot{\uc{R}{r}}
1154   \comment{The letter '{R}'.}
1155 \endsetslot
1156
1157 \setslot{\uc{S}{s}}
1158   \comment{The letter '{S}'.}
1159 \endsetslot
1160
1161 \setslot{\uc{T}{t}}
1162   \comment{The letter '{T}'.}
1163 \endsetslot
1164
1165 \setslot{\uc{U}{u}}
1166   \comment{The letter '{U}'.}
1167 \endsetslot
1168
1169 \setslot{\uc{V}{v}}
1170   \comment{The letter '{V}'.}
1171 \endsetslot
1172
1173 \setslot{\uc{W}{w}}
1174   \comment{The letter '{W}'.}
1175 \endsetslot
1176
1177 \setslot{\uc{X}{x}}
1178   \comment{The letter '{X}'.}
1179 \endsetslot
1180
1181 \setslot{\uc{Y}{y}}
1182   \comment{The letter '{Y}'.}
1183 \endsetslot
1184
1185 \setslot{\uc{Z}{z}}
1186   \comment{The letter '{Z}'.}
1187 \endsetslot
1188
1189 \setslot{bracketleft}
1190   \comment{The opening square bracket '['.}
1191 \endsetslot
1192
1193 \setslot{backslash}
1194   \comment{The backwards oblique '\textbackslash'.}
1195 \endsetslot
1196
1197 \setslot{bracketright}
1198   \comment{The closing square bracket ']'.}
1199 \endsetslot
1200
```

```

1201 \setslot{asciicircum}
1202   \comment{The ASCII upward-pointing arrow head ‘\textasciicircum’.
1203     This is included for compatibility with typewriter fonts used
1204     for computer listings.}
1205 \endsetslot
1206
1207 \setslot{underscore}
1208   \comment{The ASCII underline character ‘\textunderscore’, usually
1209     set on the baseline.
1210     This is included for compatibility with typewriter fonts used
1211     for computer listings.}
1212 \endsetslot
1213
1214 \setslot{quotyleft}
1215   \ligature{LIG}{quotyleft}{quotedblleft}
1216   \comment{The English opening single quote mark ‘\,\textquotyleft\,’.}
1217 \endsetslot
1218
1219 \setslot{\lc{A}{a}}
1220   \comment{The letter ‘{a}’.}
1221 \endsetslot
1222
1223 \setslot{\lc{B}{b}}
1224   \comment{The letter ‘{b}’.}
1225 \endsetslot
1226
1227 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
1228
1229   \setslot{\lc{C}{c}}
1230     \comment{The letter ‘{c}’.}
1231 \endsetslot
1232
1233 \Fi
1234
1235 \setslot{\lc{D}{d}}
1236   \comment{The letter ‘{d}’.}
1237 \endsetslot
1238
1239 \setslot{\lc{E}{e}}
1240   \comment{The letter ‘{e}’.}
1241 \endsetslot
1242
1243 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
1244
1245   \setslot{\lc{F}{f}}
1246   \ifnumber{\int{ligaturing}}>{0}\then
1247     \ligature{LIG}{\lc{I}{i}}{\lc{lig{FI}}{fi}}
1248     \ligature{LIG}{\lc{F}{f}}{\lc{lig{FF}}{ff}}
1249     \ligature{LIG}{\lc{L}{l}}{\lc{lig{FL}}{fl}}
1250   \Fi
1251   \comment{The letter ‘{f}’.}
1252 \endsetslot
1253
1254 \Fi

```

```
1255 \setslot{\lc{G}{g}}
1256   \comment{The letter '{g}'.}
1257 \endsetslot
1258
1259 \setslot{\lc{H}{h}}
1260   \comment{The letter '{h}'.}
1261 \endsetslot
1262
1263 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
1264
1265   \setslot{\lc{I}{i}}
1266     \comment{The letter '{i}'.}
1267   \endsetslot
1268
1269 \Fi
1270
1271 \setslot{\lc{J}{j}}
1272   \comment{The letter '{j}'.}
1273 \endsetslot
1274
1275 \setslot{\lc{K}{k}}
1276   \comment{The letter '{k}'.}
1277 \endsetslot
1278
1279 \setslot{\lc{L}{l}}
1280   \comment{The letter '{l}'.}
1281 \endsetslot
1282
1283 \setslot{\lc{M}{m}}
1284   \comment{The letter '{m}'.}
1285 \endsetslot
1286
1287 \setslot{\lc{N}{n}}
1288   \comment{The letter '{n}'.}
1289 \endsetslot
1290
1291 \setslot{\lc{O}{o}}
1292   \comment{The letter '{o}'.}
1293 \endsetslot
1294
1295 \setslot{\lc{P}{p}}
1296   \comment{The letter '{p}'.}
1297 \endsetslot
1298
1299 \setslot{\lc{Q}{q}}
1300   \comment{The letter '{q}'.}
1301 \endsetslot
1302
1303 \setslot{\lc{R}{r}}
1304   \comment{The letter '{r}'.}
1305 \endsetslot
1306
1307 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
```

```

1309   \setslot{\lc{S}{s}}
1310     \comment{The letter '{s}'.}
1311   \endsetslot
1313
1314 \Fi
1315
1316 \setslot{\lc{T}{t}}
1317   \comment{The letter '{t}'.}
1318 \endsetslot
1319
1320 \setslot{\lc{U}{u}}
1321   \comment{The letter '{u}'.}
1322 \endsetslot
1323
1324 \setslot{\lc{V}{v}}
1325   \comment{The letter '{v}'.}
1326 \endsetslot
1327
1328 \setslot{\lc{W}{w}}
1329   \comment{The letter '{w}'.}
1330 \endsetslot
1331
1332 \setslot{\lc{X}{x}}
1333   \comment{The letter '{x}'.}
1334 \endsetslot
1335
1336 \setslot{\lc{Y}{y}}
1337   \comment{The letter '{y}'.}
1338 \endsetslot
1339
1340 \setslot{\lc{Z}{z}}
1341   \comment{The letter '{z}'.}
1342 \endsetslot
1343
1344 \setslot{braceleft}
1345   \comment{The opening curly brace '\textbraceleft'.}
1346 \endsetslot
1347
1348 \setslot{bar}
1349   \comment{The ASCII vertical bar '\textbar'.
1350     This is included for compatibility with typewriter fonts used
1351     for computer listings.}
1352 \endsetslot
1353
1354 \setslot{braceright}
1355   \comment{The closing curly brace '\textbraceright'.}
1356 \endsetslot
1357
1358 \setslot{asciitilde}
1359   \comment{The ASCII tilde '\textasciitilde'.
1360     This is included for compatibility with typewriter fonts used
1361     for computer listings.}
1362 \endsetslot

```

```
1363 \setslot{hyphenchar}
1364   \comment{The glyph used for hyphenation in this font, which will
1365     almost always be the same as 'hyphen'.}
1366 \endsetslot
1368
1369 \setslot{\uctop{Abreve}{abreve}}
1370   \comment{The letter '\u A'.}
1371 \endsetslot
1372
1373 \setslot{\uc{Aogonek}{aogonek}}
1374   \comment{The letter '\k A'.}
1375 \endsetslot
1376
1377 \setslot{\uctop{Cacute}{cacute}}
1378   \comment{The letter '\ C'.}
1379 \endsetslot
1380
1381 \setslot{\uctop{Ccaron}{ccaron}}
1382   \comment{The letter '\v C'.}
1383 \endsetslot
1384
1385 \setslot{\uctop{Dcaron}{dcaron}}
1386   \comment{The letter '\v D'.}
1387 \endsetslot
1388
1389 \setslot{\uctop{Ecaron}{ecaron}}
1390   \comment{The letter '\v E'.}
1391 \endsetslot
1392
1393 \setslot{\uc{Eogonek}{eogonek}}
1394   \comment{The letter '\k E'.}
1395 \endsetslot
1396
1397 \setslot{\uctop{Gbreve}{gbreve}}
1398   \comment{The letter '\u G'.}
1399 \endsetslot
1400
1401 \setslot{\uctop{Lacute}{lacute}}
1402   \comment{The letter '\ L'.}
1403 \endsetslot
1404
1405 \setslot{\uc{Lcaron}{lcaron}}
1406   \comment{The letter '\v L'.}
1407 \endsetslot
1408
1409 \setslot{\uc{Lslash}{lslash}}
1410   \comment{The letter '\L'.}
1411 \endsetslot
1412
1413 \setslot{\uctop{Nacute}{nacute}}
1414   \comment{The letter '\ N'.}
1415 \endsetslot
1416
```

```

1417 \setslot{\uctop{Ncaron}{ncaron}}
1418   \comment{The letter '\v N'.}
1419 \endsetslot
1420
1421 \setslot{\uc{Eng}{eng}}
1422   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX.}
1423   This needs to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in
1424   most cases, it seems.}
1425 \endsetslot
1426
1427 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
1428   \comment{The letter '\H O'.}
1429 \endsetslot
1430
1431 \setslot{\uctop{Racute}{racute}}
1432   \comment{The letter '\R'.}
1433 \endsetslot
1434
1435 \setslot{\uctop{Rcaron}{rcaron}}
1436   \comment{The letter '\v R'.}
1437 \endsetslot
1438
1439 \setslot{\uctop{Sacute}{sacute}}
1440   \comment{The letter '\S'.}
1441 \endsetslot
1442
1443 \setslot{\uctop{Scaron}{scaron}}
1444   \comment{The letter '\v S'.}
1445 \endsetslot
1446
1447 \setslot{\uc{Scedilla}{scedilla}}
1448   \comment{The letter '\c S'.}
1449 \endsetslot
1450
1451 \setslot{\uctop{Tcaron}{tcaron}}
1452   \comment{The letter '\v T'.}
1453 \endsetslot
1454
1455 \setslot{\uc{Tcedilla}{tcedilla}}
1456   \comment{The letter '\c T'.}
1457 \endsetslot
1458
1459 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
1460   \comment{The letter '\H U'.}
1461 \endsetslot
1462
1463 \setslot{\uctop{Uring}{uring}}
1464   \comment{The letter '\r U'.}
1465 \endsetslot
1466
1467 \setslot{\uctop{Ydieresis}{ydieresis}}
1468   \comment{The letter '\Y'.}
1469 \endsetslot
1470

```

```

1471 \setslot{\uctop{Zacute}{zacute}}
1472   \comment{The letter '\ Z'.}
1473 \endsetslot
1474
1475 \setslot{\uctop{Zcaron}{zcaron}}
1476   \comment{The letter '\v Z'.}
1477 \endsetslot
1478
1479 \setslot{\uctop{Zdotaccent}{zdotaccent}}
1480   \comment{The letter '\. Z'.}
1481 \endsetslot
1482
1483 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
1484
1485   \setslot{\uclig{IJ}{ij}}
1486     \comment{The letter 'IJ'. This is a single letter, and in a
1487       monowidth font should ideally be one letter wide.}
1488 \endsetslot
1489
1490 \Fi
1491
1492 \setslot{\uctop{Idotaccent}{idotaccent}}
1493   \comment{The letter '\. I'.}
1494 \endsetslot
1495
1496 \setslot{\lc{Dbar}{dbar}}
1497   \comment{The letter '\dj'.}
1498 \endsetslot
1499
1500 \setslot{section}
1501   \comment{The section mark '\textsection'.}
1502 \endsetslot
1503
1504 \setslot{\lctop{Abreve}{abreve}}
1505   \comment{The letter '\u a'.}
1506 \endsetslot
1507
1508 \setslot{\lc{Aogonek}{aogonek}}
1509   \comment{The letter '\k a'.}
1510 \endsetslot
1511
1512 \setslot{\lctop{Cacute}{cacute}}
1513   \comment{The letter '\ c'.}
1514 \endsetslot
1515
1516 \setslot{\lctop{Ccaron}{ccaron}}
1517   \comment{The letter '\v c'.}
1518 \endsetslot
1519
1520 \setslot{\lctop{Dcaron}{dcaron}}
1521   \comment{The letter '\v d'.}
1522 \endsetslot
1523
1524 \setslot{\lctop{Ecaron}{ecaron}}

```

```

1525     \comment{The letter '\v e'.}
1526 \endsetslot
1527
1528 \setslot{\lc{Eogonek}{eogonek}}
1529     \comment{The letter '\k e'.}
1530 \endsetslot
1531
1532 \setslot{\lctop{Gbreve}{gbreve}}
1533     \comment{The letter '\u g'.}
1534 \endsetslot
1535
1536 \setslot{\lctop{Lacute}{lacute}}
1537     \comment{The letter '\l' .}
1538 \endsetslot
1539
1540 \setslot{\lc{Lcaron}{lcaron}}
1541     \comment{The letter '\v l' .}
1542 \endsetslot
1543
1544 \setslot{\lc{Lslash}{lslash}}
1545     \comment{The letter '\l' .}
1546 \endsetslot
1547
1548 \setslot{\lctop{Nacute}{nacute}}
1549     \comment{The letter '\n' .}
1550 \endsetslot
1551
1552 \setslot{\lctop{Ncaron}{ncaron}}
1553     \comment{The letter '\v n' .}
1554 \endsetslot
1555
1556 \setslot{\lc{Eng}{eng}}
1557     \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.tex in most cases,
      it seems.}
1558 \endsetslot
1559
1560 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
1561     \comment{The letter '\H o' .}
1562 \endsetslot
1563
1564 \setslot{\lctop{Racute}{racute}}
1565     \comment{The letter '\r' .}
1566 \endsetslot
1567
1568 \setslot{\lctop{Rcaron}{rcaron}}
1569     \comment{The letter '\v r' .}
1570 \endsetslot
1571
1572 \setslot{\lctop{Sacute}{sacute}}
1573     \comment{The letter '\s' .}
1574 \endsetslot
1575
1576 \setslot{\lctop{Scaron}{scaron}}

```

```

1577     \comment{The letter '\v s'.}
1578 \endsetslot
1579
1580 \setslot{\lc{Scedilla}{scedilla}}
1581     \comment{The letter '\c s'.}
1582 \endsetslot
1583
1584 \setslot{\lctop{Tcaron}{tcaron}}
1585     \comment{The letter '\v t'.}
1586 \endsetslot
1587
1588 \setslot{\lc{Tcedilla}{tcedilla}}
1589     \comment{The letter '\c t'.}
1590 \endsetslot
1591
1592 \setslot{\lctop{Uhngarumlaut}{uhngarumlaut}}
1593     \comment{The letter '\H u'.}
1594 \endsetslot
1595
1596 \setslot{\lctop{Uring}{uring}}
1597     \comment{The letter '\r u'.}
1598 \endsetslot
1599
1600 \setslot{\lctop{Ydieresis}{ydieresis}}
1601     \comment{The letter '\y y'.}
1602 \endsetslot
1603
1604 \setslot{\lctop{Zacute}{zacute}}
1605     \comment{The letter '\z z'.}
1606 \endsetslot
1607
1608 \setslot{\lctop{Zcaron}{zcaron}}
1609     \comment{The letter '\v z'.}
1610 \endsetslot
1611
1612 \setslot{\lctop{Zdotaccent}{zdotaccent}}
1613     \comment{The letter '\. z'.}
1614 \endsetslot
1615
1616 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
1617
1618     \setslot{\lclig{IJ}{ij}}
1619         \comment{The letter 'ij'. This is a single letter, and in a
1620             monowidth font should ideally be one letter wide.}
1621     \endsetslot
1622
1623 \Fi
1624
1625 \setslot{exclamdown}
1626     \comment{The Spanish punctuation mark '!'.}
1627 \endsetslot
1628
1629 \setslot{questiondown}
1630     \comment{The Spanish punctuation mark '?'.}

```

```
1631 \endsetslot
1632
1633 \setslot{sterling}
1634     \comment{The British currency mark '\textsterling'.}
1635 \endsetslot
1636
1637 \setslot{\uctop{Agrave}{agrave}}
1638     \comment{The letter '\` A'.}
1639 \endsetslot
1640
1641 \setslot{\uctop{Aacute}{aacute}}
1642     \comment{The letter '\^ A'.}
1643 \endsetslot
1644
1645 \setslot{\uctop{Acircumflex}{acircumflex}}
1646     \comment{The letter '\~ A'.}
1647 \endsetslot
1648
1649 \setslot{\uctop{Atilde}{atilde}}
1650     \comment{The letter '\~ A'.}
1651 \endsetslot
1652
1653 \setslot{\uctop{Adieresis}{adieresis}}
1654     \comment{The letter '\u00c1'.}
1655 \endsetslot
1656
1657 \setslot{\uctop{Aring}{aring}}
1658     \comment{The letter '\r A'.}
1659 \endsetslot
1660
1661 \setslot{\uc{AE}{ae}}
1662     \comment{The letter '\AE'. This is a single letter, and should not be
1663         faked with 'AE'.}
1664 \endsetslot
1665
1666 \setslot{\uc{Ccedilla}{ccedilla}}
1667     \comment{The letter '\c C'.}
1668 \endsetslot
1669
1670 \setslot{\uctop{Egrave}{egrave}}
1671     \comment{The letter '\` E'.}
1672 \endsetslot
1673
1674 \setslot{\uctop{Eacute}{eacute}}
1675     \comment{The letter '\^ E'.}
1676 \endsetslot
1677
1678 \setslot{\uctop{Ecircumflex}{ecircumflex}}
1679     \comment{The letter '\~ E'.}
1680 \endsetslot
1681
1682 \setslot{\uctop{Edieresis}{edieresis}}
1683     \comment{The letter '\u00c3'.}
1684 \endsetslot
```

```

1685 \setslot{\uctop{Igrave}{igrave}}
1686   \comment{The letter '\` I'.}
1687 \endsetslot
1688
1689 \setslot{\uctop{Iacute}{iacute}}
1690   \comment{The letter '\^ I'.}
1691 \endsetslot
1692
1693 \setslot{\uctop{Icircumflex}{icircumflex}}
1694   \comment{The letter '\~ I'.}
1695 \endsetslot
1696
1697 \setslot{\uctop{Idieresis}{idieresis}}
1698   \comment{The letter '\u00f6 I'.}
1699 \endsetslot
1700
1701 \setslot{\uc{Eth}{eth}}
1702   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
1703       with a horizontal bar through the stem. It is unavailable
1704       in \plain\ TeX.}
1705 \endsetslot
1706
1707 \setslot{\uctop{Ntilde}{ntilde}}
1708   \comment{The letter '\u00e5 N'.}
1709 \endsetslot
1710
1711 \setslot{\uctop{Ograve}{ograve}}
1712   \comment{The letter '\` O'.}
1713 \endsetslot
1714
1715 \setslot{\uctop{Oacute}{oacute}}
1716   \comment{The letter '\^ O'.}
1717 \endsetslot
1718
1719 \setslot{\uctop{Ocircumflex}{ocircumflex}}
1720   \comment{The letter '\~ O'.}
1721 \endsetslot
1722
1723 \setslot{\uctop{Otilde}{otilde}}
1724   \comment{The letter '\u00e5 O'.}
1725 \endsetslot
1726
1727 \setslot{\uctop{Odieresis}{odieresis}}
1728   \comment{The letter '\u00f6 O'.}
1729 \endsetslot
1730
1731 \setslot{\uc{OE}{oe}}
1732   \comment{The letter '\OE'. This is a single letter, and should not be
1733       faked with 'OE'.}
1734 \endsetslot
1735
1736 \setslot{\uc{Oslash}{oslash}}
1737   \comment{The letter '\O'.}
1738

```

```
1739 \endsetslot
1740
1741 \setslot{\uctop{Ugrave}{ugrave}}
1742     \comment{The letter '\` U'.}
1743 \endsetslot
1744
1745 \setslot{\uctop{Uacute}{uacute}}
1746     \comment{The letter '\^ U'.}
1747 \endsetslot
1748
1749 \setslot{\uctop{Ucircumflex}{ucircumflex}}
1750     \comment{The letter '\~ U'.}
1751 \endsetslot
1752
1753 \setslot{\uctop{Udieresis}{udieresis}}
1754     \comment{The letter '\u00f0 U'.}
1755 \endsetslot
1756
1757 \setslot{\uctop{Yacute}{yacute}}
1758     \comment{The letter '\` Y'.}
1759 \endsetslot
1760
1761 \setslot{\uc{Thorn}{thorn}}
1762     \comment{The Icelandic capital letter Thorn, similar to a 'P'
1763         with the bowl moved down. It is unavailable in \plain\ \TeX.}
1764 \endsetslot
1765
1766 \setslot{\uclig{SS}{germandbls}}
1767     \comment{The ligature 'SS', used to give an upper case '\ss'.
1768         In a monowidth font it should be two letters wide.}
1769 \endsetslot
1770
1771 \setslot{\lctop{Agrave}{agrave}}
1772     \comment{The letter '\` a'.}
1773 \endsetslot
1774
1775 \setslot{\lctop{Aacute}{aacute}}
1776     \comment{The letter '\^ a'.}
1777 \endsetslot
1778
1779 \setslot{\lctop{Acircumflex}{acircumflex}}
1780     \comment{The letter '\~ a'.}
1781 \endsetslot
1782
1783 \setslot{\lctop{Atilde}{atilde}}
1784     \comment{The letter '\u00e1 a'.}
1785 \endsetslot
1786
1787 \setslot{\lctop{Adieresis}{adieresis}}
1788     \comment{The letter '\u00f0 a'.}
1789 \endsetslot
1790
1791 \setslot{\lctop{Aring}{aring}}
1792     \comment{The letter '\r a'.}
```

```

1793 \endsetslot
1794
1795 \setslot{\lc{AE}{ae}}
1796   \comment{The letter '\ae'. This is a single letter, and should not be
1797     faked with 'ae'.}
1798 \endsetslot
1799
1800 \setslot{\lc{Ccedilla}{ccedilla}}
1801   \comment{The letter '\c c'.}
1802 \endsetslot
1803
1804 \setslot{\lctop{Egrave}{egrave}}
1805   \comment{The letter '\` e'.}
1806 \endsetslot
1807
1808 \setslot{\lctop{Eacute}{eacute}}
1809   \comment{The letter '\^ e'.}
1810 \endsetslot
1811
1812 \setslot{\lctop{Ecircumflex}{ecircumflex}}
1813   \comment{The letter '\~ e'.}
1814 \endsetslot
1815
1816 \setslot{\lctop{Edieresis}{edieresis}}
1817   \comment{The letter '\\" e'.}
1818 \endsetslot
1819
1820 \setslot{\lctop{Igrave}{igrave}}
1821   \comment{The letter '\` i'.}
1822 \endsetslot
1823
1824 \setslot{\lctop{Iacute}{iacute}}
1825   \comment{The letter '\^ i'.}
1826 \endsetslot
1827
1828 \setslot{\lctop{Icircumflex}{icircumflex}}
1829   \comment{The letter '\~i'.}
1830 \endsetslot
1831
1832 \setslot{\lctop{Idieresis}{idieresis}}
1833   \comment{The letter '\\"i'.}
1834 \endsetslot
1835
1836 \setslot{\lc{Eth}{eth}}
1837   \comment{The Icelandic lowercase letter 'eth' similar to
1838     a '$\partial$' with an oblique bar through the stem.
1839     It is unavailable in \plain\ \TeX.}
1840 \endsetslot
1841
1842 \setslot{\lctop{Ntilde}{ntilde}}
1843   \comment{The letter '\~ n'.}
1844 \endsetslot
1845
1846 \setslot{\lctop{Ograve}{ograve}}

```

```

1847     \comment{The letter '\` o'.}
1848 \endsetslot
1849
1850 \setslot{\lctop{0acute}{oacute}}
1851     \comment{The letter '\` o'.}
1852 \endsetslot
1853
1854 \setslot{\lctop{0circumflex}{ocircumflex}}
1855     \comment{The letter '\^ o'.}
1856 \endsetslot
1857
1858 \setslot{\lctop{0tilde}{otilde}}
1859     \comment{The letter '\~ o'.}
1860 \endsetslot
1861
1862 \setslot{\lctop{0dieresis}{odieresis}}
1863     \comment{The letter '\\" o'.}
1864 \endsetslot
1865
1866 \setslot{\lc{OE}{oe}}
1867     \comment{The letter '\oe'. This is a single letter, and should not be
1868         faked with 'oe'.}
1869 \endsetslot
1870
1871 \setslot{\lc{0slash}{oslash}}
1872     \comment{The letter '\o'.}
1873 \endsetslot
1874
1875 \setslot{\lctop{Ugrave}{ugrave}}
1876     \comment{The letter '\` u'.}
1877 \endsetslot
1878
1879 \setslot{\lctop{Uacute}{uacute}}
1880     \comment{The letter '\` u'.}
1881 \endsetslot
1882
1883 \setslot{\lctop{Ucircumflex}{ucircumflex}}
1884     \comment{The letter '\^ u'.}
1885 \endsetslot
1886
1887 \setslot{\lctop{Udieresis}{udieresis}}
1888     \comment{The letter '\\" u'.}
1889 \endsetslot
1890
1891 \setslot{\lctop{Yacute}{yacute}}
1892     \comment{The letter '\` y'.}
1893 \endsetslot
1894
1895 \setslot{\lc{Thorn}{thorn}}
1896     \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
1897         with an ascender rising from the stem. It is unavailable
1898         in \plain\ \TeX.}
1899 \endsetslot
1900

```

```

1901 \setslot{\lc{SS}{germandbls}}
1902   \comment{The letter '\ss'.}
1903 \endsetslot
1904
1905 \endencoding

```

6.3.7 fontsscripts-t1-dotalt-f_f.etx

t1-dotalt-f_f (etx)

```

1906 %%
1907 %% - The commentary in the original is deleted in this version. For
1908 %% information about the T1 etc., typeset the original t1.etx
1909 %% included with fontinst.
1910 %% - Slots are altered to accommodate characters which are named
1911 %% differently. For example, this encoding uses "endash" and "emdash"
1912 %% whereas t1.etx called for "rangedash" and "punctdash".
1913 %% - The original notices at the top of that file concerning authors,
1914 %% maintenance etc. are replaced by this notice.
1915 %% - The file is renamed.
1916 %% - The encoding name is modified.
1917 %% - f_f, f_f_i and f_f_l replace ff, ffi and ffl.
1918 %% - lc, uc and accented lc, uc are set to characters named "a.alt" etc.
1919 %%
1920 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1921 \relax
1922 \encoding
1923
1924 \needsfontinstversion{1.910}
1925
1926 \setcommand\lc#1#2{\#2.alt}
1927 \setcommand\uc#1#2{\#1.alt}
1928 \setcommand\lctop#1#2{\#2.alt}
1929 \setcommand\uctop#1#2{\#1.alt}
1930 \setcommand\lclig#1#2{\#2}
1931 \ifisint{letterspacing}\then
1932   \ifnumber{\int{letterspacing}}={0}\then \Else
1933     \setcommand\uclig#1#2{\#1spaced}
1934     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
1935       you can't see it as \verb|\verb|\setcommand| commands are invisible in
1936       the typeset output.}
1937   \Fi
1938 \Fi
1939 \setcommand\uclig#1#2{\#1}
1940 \setcommand\digit#1{\#1}
1941
1942 \ifisint{monowidth}\then
1943   \setint{ligaturing}{0}
1944 \Else
1945   % The following empty line is *important* to get the formatting
1946   % right here (sigh)! (Remember that it is a \par token.)
1947
1948 \ifisint{letterspacing}\then

```

```

1949   \ifnumber{\int{letterspacing}}={0}\then \Else
1950     \setint{ligaturing}{0}
1951   \Fi
1952   \Fi
1953   \setint{ligaturing}{1}
1954 \Fi
1955
1956 \setint{italicslant}{0}
1957 \setint{quad}{1000}
1958 \setint{baselineskip}{1200}
1959
1960 \ifisglyph{x}\then
1961   \setint{xheight}{\height{x}}
1962 \Else
1963   \setint{xheight}{500}
1964 \Fi
1965
1966 \ifisglyph{space}\then
1967   \setint{interword}{\width{space}}
1968 \Else\ifisglyph{i}\then
1969   \setint{interword}{\width{i}}
1970 \Else
1971   \setint{interword}{333}
1972 \Fi\Fi
1973
1974 \ifisint{monowidth}\then
1975   \setint{stretchword}{0}
1976   \setint{shrinkword}{0}
1977   \setint{extraspace}{\int{interword}}
1978 \Else
1979   \setint{stretchword}{\scale{\int{interword}}{600}}
1980   \setint{shrinkword}{\scale{\int{interword}}{240}}
1981   \setint{extraspace}{\scale{\int{interword}}{240}}
1982 \Fi
1983
1984 \ifisglyph{X}\then
1985   \setint{capheight}{\height{X}}
1986 \Else
1987   \setint{capheight}{750}
1988 \Fi
1989
1990 \ifisglyph{d}\then
1991   \setint{ascender}{\height{d}}
1992 \Else\ifisint{capheight}\then
1993   \setint{ascender}{\int{capheight}}
1994 \Else
1995   \setint{ascender}{750}
1996 \Fi\Fi
1997
1998 \ifisglyph{Aring}\then
1999   \setint{accicapheight}{\height{Aring}}
2000 \Else
2001   \setint{accicapheight}{999}
2002 \Fi

```

```

2003
2004 \ifisint{descender_neg}\then
2005   \setint{descender}{\neg{\int{descender_neg}}}
2006 \Else\ifisglyph{p}\then
2007   \setint{descender}{\depth{p}}
2008 \Else
2009   \setint{descender}{250}
2010 \Fi\Fi
2011
2012 \ifisglyph{Aring}\then
2013   \setint{maxheight}{\height{Aring}}
2014 \Else
2015   \setint{maxheight}{1000}
2016 \Fi
2017
2018 \ifisint{maxdepth_neg}\then
2019   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
2020 \Else\ifisglyph{j}\then
2021   \setint{maxdepth}{\depth{j}}
2022 \Else
2023   \setint{maxdepth}{250}
2024 \Fi\Fi
2025
2026 \ifisglyph{six}\then
2027   \setint{digitwidth}{\width{six}}
2028 \Else
2029   \setint{digitwidth}{500}
2030 \Fi
2031
2032 \setint{capstem}{0} % not in AFM files
2033
2034 \setfontdimen{1}{italicslant}      % italic slant
2035 \setfontdimen{2}{interword}        % interword space
2036 \setfontdimen{3}{stretchword}     % interword stretch
2037 \setfontdimen{4}{shrinkword}       % interword shrink
2038 \setfontdimen{5}{xheight}         % x-height
2039 \setfontdimen{6}{quad}            % quad
2040 \setfontdimen{7}{extraspace}       % extra space after .
2041 \setfontdimen{8}{capheight}        % cap height
2042 \setfontdimen{9}{ascender}         % ascender
2043 \setfontdimen{10}{accicapheight}    % accented cap height
2044 \setfontdimen{11}{descender}        % descender's depth
2045 \setfontdimen{12}{maxheight}        % max height
2046 \setfontdimen{13}{maxdepth}         % max depth
2047 \setfontdimen{14}{digitwidth}        % digit width
2048 \setfontdimen{15}{verticalstem}      % dominant width of vertical stems
2049 \setfontdimen{16}{baselineskip}      % baselineskip
2050
2051 \ifnumber{\int{ligaturing}}<{0}\then
2052   \comment{In this case, the codingscheme can be different from the
2053   default, and therefore we refrain from setting it.}
2054 \Else
2055   \setstr{codingscheme}{EXTENDED TEX ENC - DOTALT F_F}
2056 \Fi

```

```
2057 \setslot{\lc{Grave}{grave}}
2058   \comment{The grave accent '\`{}}.
2059 \endsetslot
2060
2061 \setslot{\lc{Acute}{acute}}
2062   \comment{The acute accent '\'{}}.
2063 \endsetslot
2064
2065 \setslot{\lc{Circumflex}{circumflex}}
2066   \comment{The circumflex accent '\^{}}.
2067 \endsetslot
2068
2069 \setslot{\lc{Tilde}{tilde}}
2070   \comment{The tilde accent '\~{}'}.
2071 \endsetslot
2072
2073 \setslot{\lc{Dieresis}{dieresis}}
2074   \comment{The umlaut or dieresis accent '\\"{}'}.
2075 \endsetslot
2076
2077 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
2078   \comment{The long Hungarian umlaut '\H{}'}.
2079 \endsetslot
2080
2081 \setslot{\lc{Ring}{ring}}
2082   \comment{The ring accent '\r{}'}.
2083 \endsetslot
2084
2085 \setslot{\lc{Caron}{caron}}
2086   \comment{The caron or h\`{a}v cek accent '\v{}'}.
2087 \endsetslot
2088
2089 \setslot{\lc{Breve}{breve}}
2090   \comment{The breve accent '\u{}'}.
2091 \endsetslot
2092
2093 \setslot{\lc{Macron}{macron}}
2094   \comment{The macron accent '\={}}.
2095 \endsetslot
2096
2097 \setslot{\lc{Dotaccent}{dotaccent}}
2098   \comment{The dot accent '\.{}}.
2099 \endsetslot
2100
2101 \setslot{\lc{Cedilla}{cedilla}}
2102   \comment{The cedilla accent '\c {}'}.
2103 \endsetslot
2104
2105 \setslot{\lc{Ogonek}{ogonek}}
2106   \comment{The ogonek accent '\k {}'}.
2107 \endsetslot
2108
2109 \setslot{quotesinglbase}
```

```

2111 \comment{A German single quote mark ‘\quotesinglbase’ similar to a comma,
2112     but with different sidebearings.}
2113 \endsetslot
2114
2115 \setslot{guilsinglleft}
2116     \comment{A French single opening quote mark ‘\guilsinglleft’,
2117         unavailable in \plain\ \TeX.}
2118 \endsetslot
2119
2120 \setslot{guilsinglright}
2121     \comment{A French single closing quote mark ‘\guilsinglright’,
2122         unavailable in \plain\ \TeX.}
2123 \endsetslot
2124
2125 \setslot{quotedblleft}
2126     \comment{The English opening quote mark ‘‘,\textquotedblleft\,’.}
2127 \endsetslot
2128
2129 \setslot{quotedblright}
2130     \comment{The English closing quote mark ‘‘,\textquotedblright\,’.}
2131 \endsetslot
2132
2133 \setslot{quotedblbase}
2134     \comment{A German double quote mark ‘\quotedblbase’ similar to two commas,
2135         but with tighter letterspacing and different sidebearings.}
2136 \endsetslot
2137
2138 \setslot{guillemotleft}
2139     \comment{A French double opening quote mark ‘\guillemotleft’,
2140         unavailable in \plain\ \TeX.}
2141 \endsetslot
2142
2143 \setslot{guillemotright}
2144     \comment{A French closing opening quote mark ‘\guillemotright’,
2145         unavailable in \plain\ \TeX.}
2146 \endsetslot
2147
2148 \setslot{endash}
2149     \ligature{LIG}{hyphen}{emdash}
2150     \comment{The number range dash ‘1--9’.
2151         This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
2152         called ‘endash’ to work right.
2153         The ‘\textendash’. In a monowidth font, this might be set as
2154         ‘\texttt{1{-}9}’.}
2155 \endsetslot
2156
2157 \setslot{emdash}
2158     \comment{The punctuation dash ‘Oh---boy.’
2159         This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
2160         called ‘emdash’ to work right.
2161         The ‘\textemdash’.
2162         In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
2163 \endsetslot
2164

```

```

2165 \setslot{compwordmark}
2166   \comment{An invisible glyph, with zero width and depth, but the
2167     height of lowercase letters without ascenders.
2168     It is used to stop ligaturing in words like ‘shelf{}ful’.}
2169 \endsetslot
2170
2171 \setslot{perthousandzero}
2172   \comment{A glyph which is placed after ‘\%’ to produce a
2173     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
2174     Your guess is as good as mine as to what this glyph should look
2175     like in a monowidth font.}
2176 \endsetslot
2177
2178 \setslot{\lc{dotlessI}{dotlessi}}
2179   \comment{A dotless i ‘\i’, used to produce accented letters such as
2180     ‘\=\i’.}
2181 \endsetslot
2182
2183 \setslot{\lc{dotlessJ}{dotlessj}}
2184   \comment{A dotless j ‘\j’, used to produce accented letters such as
2185     ‘\=\j’. Most non-\TeX\ fonts do not have this glyph.}
2186 \endsetslot
2187
2188 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
2189
2190 \setslot{\lclig{FF}{f_f}}
2191   \ifnumber{\int{ligaturing}}>0\then
2192     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{f_f_i}}
2193     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{f_f_l}}
2194   \Fi
2195   \comment{The ‘ff’ ligature. It should be two characters wide in a
2196     monowidth font.}
2197 \endsetslot
2198
2199 \setslot{\lclig{FI}{fi}}
2200   \comment{The ‘fi’ ligature. It should be two characters wide in a
2201     monowidth font.}
2202 \endsetslot
2203
2204 \setslot{\lclig{FL}{f_l}}
2205   \comment{The ‘fl’ ligature. It should be two characters wide in a
2206     monowidth font.}
2207 \endsetslot
2208
2209 \setslot{\lclig{FFI}{f_f_i}}
2210   \comment{The ‘ffi’ ligature. It should be three characters wide in a
2211     monowidth font.}
2212 \endsetslot
2213
2214 \setslot{\lclig{FFL}{f_f_l}}
2215   \comment{The ‘ffl’ ligature. It should be three characters wide in a
2216     monowidth font.}
2217 \endsetslot
2218

```

```
2219 \Fi
2220
2221 \setslot{visiblespace}
2222   \comment{A visible space glyph '\textvisiblespace'.}
2223 \endsetslot
2224
2225 \setslot{exclam}
2226   \ligature[LIG]{quotyleft}{exclamdown}
2227   \comment{The exclamation mark '!'.}
2228 \endsetslot
2229
2230 \setslot{quotedbl}
2231   \comment{The 'neutral' double quotation mark '\,\textquotedbl\,',}
2232     included for use in monowidth fonts, or for setting computer
2233     programs. Note that the inclusion of this glyph in this slot
2234     means that \TeX\ documents which used '{\tt\char\"} as an
2235     input character will no longer work.}
2236 \endsetslot
2237
2238 \setslot{numbersign}
2239   \comment{The hash sign '\#'.}
2240 \endsetslot
2241
2242 \setslot{dollar}
2243   \comment{The dollar sign '\$'.}
2244 \endsetslot
2245
2246 \setslot{percent}
2247   \comment{The percent sign '\%'.}
2248 \endsetslot
2249
2250 \setslot{ampersand}
2251   \comment{The ampersand sign '\&'.}
2252 \endsetslot
2253
2254 \setslot{quoteright}
2255   \ligature[LIG]{quoteright}{quotedblright}
2256   \comment{The English closing single quote mark '\,\textquoteright\,'.}
2257 \endsetslot
2258
2259 \setslot{parenleft}
2260   \comment{The opening parenthesis '('.}
2261 \endsetslot
2262
2263 \setslot{parenright}
2264   \comment{The closing parenthesis ')'.}
2265 \endsetslot
2266
2267 \setslot{asterisk}
2268   \comment{The raised asterisk '*'.}
2269 \endsetslot
2270
2271 \setslot{plus}
2272   \comment{The addition sign '+'.}
```

```
2273 \endsetslot
2274
2275 \setslot{comma}
2276     \ligature{LIG}{comma}{quotedblbase}
2277     \comment{The comma ','.}
2278 \endsetslot
2279
2280 \setslot{hyphen}
2281     \ligature{LIG}{hyphen}{endash}
2282     \ligature{LIG}{hyphenchar}{hyphenchar}
2283     \comment{The hyphen '-'.}
2284 \endsetslot
2285
2286 \setslot{period}
2287     \comment{The period '.'.}
2288 \endsetslot
2289
2290 \setslot{slash}
2291     \comment{The forward oblique '/'.}
2292 \endsetslot
2293
2294 \setslot{\digit{zero}}
2295     \comment{The number '0'. This (and all the other numerals) may be
2296         old style or ranging digits.}
2297 \endsetslot
2298
2299 \setslot{\digit{one}}
2300     \comment{The number '1'.}
2301 \endsetslot
2302
2303 \setslot{\digit{two}}
2304     \comment{The number '2'.}
2305 \endsetslot
2306
2307 \setslot{\digit{three}}
2308     \comment{The number '3'.}
2309 \endsetslot
2310
2311 \setslot{\digit{four}}
2312     \comment{The number '4'.}
2313 \endsetslot
2314
2315 \setslot{\digit{five}}
2316     \comment{The number '5'.}
2317 \endsetslot
2318
2319 \setslot{\digit{six}}
2320     \comment{The number '6'.}
2321 \endsetslot
2322
2323 \setslot{\digit{seven}}
2324     \comment{The number '7'.}
2325 \endsetslot
2326
```

```
2327 \setslot{\digit{eight}}
2328   \comment{The number '8'.}
2329 \endsetslot
2330
2331 \setslot{\digit{nine}}
2332   \comment{The number '9'.}
2333 \endsetslot
2334
2335 \setslot{colon}
2336   \comment{The colon punctuation mark ':' .}
2337 \endsetslot
2338
2339 \setslot{semicolon}
2340   \comment{The semi-colon punctuation mark ';' .}
2341 \endsetslot
2342
2343 \setslot{less}
2344   \ligature[LIG]{less}{guillemotleft}
2345   \comment{The less-than sign '\textless'.}
2346 \endsetslot
2347
2348 \setslot{equal}
2349   \comment{The equals sign '=' .}
2350 \endsetslot
2351
2352 \setslot{greater}
2353   \ligature[LIG]{greater}{guillemotright}
2354   \comment{The greater-than sign '\textgreater'.}
2355 \endsetslot
2356
2357 \setslot{question}
2358   \ligature[LIG]{quotefirst}{questiondown}
2359   \comment{The question mark '?'.}
2360 \endsetslot
2361
2362 \setslot{@}
2363   \comment{The at sign '@'.}
2364 \endsetslot
2365
2366 \setslot{\uc{A}{a}}
2367   \comment{The letter '{A}'.}
2368 \endsetslot
2369
2370 \setslot{\uc{B}{b}}
2371   \comment{The letter '{B}'.}
2372 \endsetslot
2373
2374 \setslot{\uc{C}{c}}
2375   \comment{The letter '{C}'.}
2376 \endsetslot
2377
2378 \setslot{\uc{D}{d}}
2379   \comment{The letter '{D}'.}
2380 \endsetslot
```

```
2381 \setslot{\uc{E}{e}}
2382   \comment{The letter '{E}'.}
2383 \endsetslot
2385
2386 \setslot{\uc{F}{f}}
2387   \comment{The letter '{F}'.}
2388 \endsetslot
2389
2390 \setslot{\uc{G}{g}}
2391   \comment{The letter '{G}'.}
2392 \endsetslot
2393
2394 \setslot{\uc{H}{h}}
2395   \comment{The letter '{H}'.}
2396 \endsetslot
2397
2398 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2399
2400 \setslot{\uc{I}{i}}
2401   \comment{The letter '{I}'.}
2402 \endsetslot
2403
2404 \Fi
2405
2406 \setslot{\uc{J}{j}}
2407   \comment{The letter '{J}'.}
2408 \endsetslot
2409
2410 \setslot{\uc{K}{k}}
2411   \comment{The letter '{K}'.}
2412 \endsetslot
2413
2414 \setslot{\uc{L}{l}}
2415   \comment{The letter '{L}'.}
2416 \endsetslot
2417
2418 \setslot{\uc{M}{m}}
2419   \comment{The letter '{M}'.}
2420 \endsetslot
2421
2422 \setslot{\uc{N}{n}}
2423   \comment{The letter '{N}'.}
2424 \endsetslot
2425
2426 \setslot{\uc{O}{o}}
2427   \comment{The letter '{O}'.}
2428 \endsetslot
2429
2430 \setslot{\uc{P}{p}}
2431   \comment{The letter '{P}'.}
2432 \endsetslot
2433
2434 \setslot{\uc{Q}{q}}
```

```
2435     \comment{The letter '{Q}'.}
2436 \endsetslot
2437
2438 \setslot{\uc{R}{r}}
2439     \comment{The letter '{R}'.}
2440 \endsetslot
2441
2442 \setslot{\uc{S}{s}}
2443     \comment{The letter '{S}'.}
2444 \endsetslot
2445
2446 \setslot{\uc{T}{t}}
2447     \comment{The letter '{T}'.}
2448 \endsetslot
2449
2450 \setslot{\uc{U}{u}}
2451     \comment{The letter '{U}'.}
2452 \endsetslot
2453
2454 \setslot{\uc{V}{v}}
2455     \comment{The letter '{V}'.}
2456 \endsetslot
2457
2458 \setslot{\uc{W}{w}}
2459     \comment{The letter '{W}'.}
2460 \endsetslot
2461
2462 \setslot{\uc{X}{x}}
2463     \comment{The letter '{X}'.}
2464 \endsetslot
2465
2466 \setslot{\uc{Y}{y}}
2467     \comment{The letter '{Y}'.}
2468 \endsetslot
2469
2470 \setslot{\uc{Z}{z}}
2471     \comment{The letter '{Z}'.}
2472 \endsetslot
2473
2474 \setslot{bracketleft}
2475     \comment{The opening square bracket '['.}
2476 \endsetslot
2477
2478 \setslot{backslash}
2479     \comment{The backwards oblique '\textbackslash'.}
2480 \endsetslot
2481
2482 \setslot{bracketright}
2483     \comment{The closing square bracket ']'.}
2484 \endsetslot
2485
2486 \setslot{asciicircum}
2487     \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
```

2488 This is included for compatibility with typewriter fonts used

```

2489         for computer listings.}
2490 \endsetslot
2491
2492 \setslot{underscore}
2493   \comment{The ASCII underline character ‘\textunderscore’, usually
2494   set on the baseline.
2495   This is included for compatibility with typewriter fonts used
2496   for computer listings.}
2497 \endsetslot
2498
2499 \setslot{quotyleft}
2500   \ligature{LIG}{quotyleft}{quotedblleft}
2501   \comment{The English opening single quote mark ‘\,\textquotopleft\,’.}
2502 \endsetslot
2503
2504 \setslot{\lc{A}{a}}
2505   \comment{The letter ‘{a}’.}
2506 \endsetslot
2507
2508 \setslot{\lc{B}{b}}
2509   \comment{The letter ‘{b}’.}
2510 \endsetslot
2511
2512 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2513
2514   \setslot{\lc{C}{c}}
2515   \comment{The letter ‘{c}’.}
2516 \endsetslot
2517
2518 \Fi
2519
2520 \setslot{\lc{D}{d}}
2521   \comment{The letter ‘{d}’.}
2522 \endsetslot
2523
2524 \setslot{\lc{E}{e}}
2525   \comment{The letter ‘{e}’.}
2526 \endsetslot
2527
2528 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2529
2530   \setslot{\lc{F}{f}}
2531   \ifnumber{\int{ligaturing}}>{0}\then
2532     \ligature{LIG}{\lc{I}{i}}{\lc{I}{i}}
2533     \ligature{LIG}{\lc{F}{f}}{\lc{F}{f}}
2534     \ligature{LIG}{\lc{L}{l}}{\lc{L}{l}}
2535   \Fi
2536   \comment{The letter ‘{f}’.}
2537 \endsetslot
2538
2539 \Fi
2540
2541 \setslot{\lc{G}{g}}
2542   \comment{The letter ‘{g}’.}

```

```
2543 \endsetslot
2544
2545 \setslot{\lc{H}{h}}
2546   \comment{The letter '{h}'.}
2547 \endsetslot
2548
2549 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2550
2551   \setslot{\lc{I}{i}}
2552     \comment{The letter '{i}'.}
2553 \endsetslot
2554
2555 \Fi
2556
2557 \setslot{\lc{J}{j}}
2558   \comment{The letter '{j}'.}
2559 \endsetslot
2560
2561 \setslot{\lc{K}{k}}
2562   \comment{The letter '{k}'.}
2563 \endsetslot
2564
2565 \setslot{\lc{L}{l}}
2566   \comment{The letter '{l}'.}
2567 \endsetslot
2568
2569 \setslot{\lc{M}{m}}
2570   \comment{The letter '{m}'.}
2571 \endsetslot
2572
2573 \setslot{\lc{N}{n}}
2574   \comment{The letter '{n}'.}
2575 \endsetslot
2576
2577 \setslot{\lc{O}{o}}
2578   \comment{The letter '{o}'.}
2579 \endsetslot
2580
2581 \setslot{\lc{P}{p}}
2582   \comment{The letter '{p}'.}
2583 \endsetslot
2584
2585 \setslot{\lc{Q}{q}}
2586   \comment{The letter '{q}'.}
2587 \endsetslot
2588
2589 \setslot{\lc{R}{r}}
2590   \comment{The letter '{r}'.}
2591 \endsetslot
2592
2593 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2594
2595   \setslot{\lc{S}{s}}
2596     \comment{The letter '{s}'.}
```

```
2597     \endsetslot
2598
2599 \Fi
2600
2601 \setslot{\lc{T}{t}}
2602     \comment{The letter '{t}'.}
2603 \endsetslot
2604
2605 \setslot{\lc{U}{u}}
2606     \comment{The letter '{u}'.}
2607 \endsetslot
2608
2609 \setslot{\lc{V}{v}}
2610     \comment{The letter '{v}'.}
2611 \endsetslot
2612
2613 \setslot{\lc{W}{w}}
2614     \comment{The letter '{w}'.}
2615 \endsetslot
2616
2617 \setslot{\lc{X}{x}}
2618     \comment{The letter '{x}'.}
2619 \endsetslot
2620
2621 \setslot{\lc{Y}{y}}
2622     \comment{The letter '{y}'.}
2623 \endsetslot
2624
2625 \setslot{\lc{Z}{z}}
2626     \comment{The letter '{z}'.}
2627 \endsetslot
2628
2629 \setslot{braceleft}
2630     \comment{The opening curly brace '\textbraceleft'.}
2631 \endsetslot
2632
2633 \setslot{bar}
2634     \comment{The ASCII vertical bar '\textbar'.
2635         This is included for compatibility with typewriter fonts used
2636         for computer listings.}
2637 \endsetslot
2638
2639 \setslot{braceright}
2640     \comment{The closing curly brace '\textbraceright'.}
2641 \endsetslot
2642
2643 \setslot{asciitilde}
2644     \comment{The ASCII tilde '\textasciitilde'.
2645         This is included for compatibility with typewriter fonts used
2646         for computer listings.}
2647 \endsetslot
2648
2649 \setslot{hyphenchar}
2650     \comment{The glyph used for hyphenation in this font, which will
```

```
2651      almost always be the same as 'hyphen'.}
2652 \endsetslot
2653
2654 \setslot{\uctop{Abreve}{abreve}}
2655   \comment{The letter '\u0102'.}
2656 \endsetslot
2657
2658 \setslot{\uc{Aogonek}{aogonek}}
2659   \comment{The letter '\k A'.}
2660 \endsetslot
2661
2662 \setslot{\uctop{Cacute}{cacute}}
2663   \comment{The letter '\c C'.}
2664 \endsetslot
2665
2666 \setslot{\uctop{Ccaron}{ccaron}}
2667   \comment{The letter '\v C'.}
2668 \endsetslot
2669
2670 \setslot{\uctop{Dcaron}{dcaron}}
2671   \comment{The letter '\v D'.}
2672 \endsetslot
2673
2674 \setslot{\uctop{Ecaron}{ecaron}}
2675   \comment{The letter '\v E'.}
2676 \endsetslot
2677
2678 \setslot{\uc{Eogonek}{eogonek}}
2679   \comment{The letter '\k E'.}
2680 \endsetslot
2681
2682 \setslot{\uctop{Gbreve}{gbreve}}
2683   \comment{The letter '\u0103'.}
2684 \endsetslot
2685
2686 \setslot{\uctop{Lacute}{lacute}}
2687   \comment{The letter '\l L'.}
2688 \endsetslot
2689
2690 \setslot{\uc{Lcaron}{lcaron}}
2691   \comment{The letter '\v L'.}
2692 \endsetslot
2693
2694 \setslot{\uc{Lslash}{lslash}}
2695   \comment{The letter '\L'.}
2696 \endsetslot
2697
2698 \setslot{\uctop{Nacute}{nacute}}
2699   \comment{The letter '\n N'.}
2700 \endsetslot
2701
2702 \setslot{\uctop{Ncaron}{ncaron}}
2703   \comment{The letter '\v N'.}
2704 \endsetslot
```

```
2705 \setslot{\uc{Eng}{eng}}
2706   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
2707   to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
2708   seems.}
2709 \endsetslot
2710 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
2711   \comment{The letter '\H O'.}
2712 \endsetslot
2713 \setslot{\uctop{Racute}{racute}}
2714   \comment{The letter '\R'.}
2715 \endsetslot
2717 \setslot{\uctop{Rcaron}{rcaron}}
2718   \comment{The letter '\v R'.}
2719 \endsetslot
2721 \setslot{\uctop{Sacute}{sacute}}
2722   \comment{The letter '\S'.}
2723 \endsetslot
2725 \setslot{\uctop{Scaron}{scaron}}
2726   \comment{The letter '\v S'.}
2727 \endsetslot
2729 \setslot{\uc{Scedilla}{scedilla}}
2730   \comment{The letter '\c S'.}
2731 \endsetslot
2733 \setslot{\uctop{Tcaron}{tcaron}}
2734   \comment{The letter '\v T'.}
2735 \endsetslot
2737 \setslot{\uc{Tcedilla}{tcedilla}}
2738   \comment{The letter '\c T'.}
2739 \endsetslot
2741 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
2742   \comment{The letter '\H U'.}
2743 \endsetslot
2745 \setslot{\uctop{Uring}{uring}}
2746   \comment{The letter '\r U'.}
2747 \endsetslot
2749 \setslot{\uctop{Ydieresis}{ydieresis}}
2750   \comment{The letter '\Y'.}
2751 \endsetslot
2753 \setslot{\uctop{Zacute}{zacute}}
2754   \comment{The letter '\Z'.}
2755 \endsetslot
2756 \endsetslot
```

```
2757
2758 \setslot{\uctop{Zcaron}{zcaron}}
2759   \comment{The letter '\v Z'.}
2760 \endsetslot
2761
2762 \setslot{\uctop{Zdotaccent}{zdotaccent}}
2763   \comment{The letter '\. Z'.}
2764 \endsetslot
2765
2766 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
2767
2768   \setslot{\uclig{IJ}{ij}}
2769     \comment{The letter 'IJ'. This is a single letter, and in a
2770       monowidth font should ideally be one letter wide.}
2771 \endsetslot
2772
2773 \Fi
2774
2775 \setslot{\uctop{Idotaccent}{idotaccent}}
2776   \comment{The letter '\. I'.}
2777 \endsetslot
2778
2779 \setslot{\lc{Dbar}{dbar}}
2780   \comment{The letter '\dj'.}
2781 \endsetslot
2782
2783 \setslot{section}
2784   \comment{The section mark '\textsection'.}
2785 \endsetslot
2786
2787 \setslot{\lctop{Abreve}{abreve}}
2788   \comment{The letter '\u a'.}
2789 \endsetslot
2790
2791 \setslot{\lc{Aogonek}{aogonek}}
2792   \comment{The letter '\k a'.}
2793 \endsetslot
2794
2795 \setslot{\lctop{Cacute}{cacute}}
2796   \comment{The letter '\c c'.}
2797 \endsetslot
2798
2799 \setslot{\lctop{Ccaron}{ccaron}}
2800   \comment{The letter '\v c'.}
2801 \endsetslot
2802
2803 \setslot{\lctop{Dcaron}{dcaron}}
2804   \comment{The letter '\v d'.}
2805 \endsetslot
2806
2807 \setslot{\lctop{Ecaron}{ecaron}}
2808   \comment{The letter '\v e'.}
2809 \endsetslot
2810
```

```
2811 \setslot{\lc{Eogonek}{eogonek}}
2812   \comment{The letter '\k e'.}
2813 \endsetslot
2814
2815 \setslot{\lctop{Gbreve}{gbreve}}
2816   \comment{The letter '\u g'.}
2817 \endsetslot
2818
2819 \setslot{\lctop{Lacute}{lacute}}
2820   \comment{The letter '\ l'.}
2821 \endsetslot
2822
2823 \setslot{\lc{Lcaron}{lcaron}}
2824   \comment{The letter '\v l'.}
2825 \endsetslot
2826
2827 \setslot{\lc{Lslash}{lslash}}
2828   \comment{The letter '\l'.}
2829 \endsetslot
2830
2831 \setslot{\lctop{Nacute}{nacute}}
2832   \comment{The letter '\ n'.}
2833 \endsetslot
2834
2835 \setslot{\lctop{Ncaron}{ncaron}}
2836   \comment{The letter '\v n'.}
2837 \endsetslot
2838
2839 \setslot{\lc{Eng}{eng}}
2840   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
      it seems.}
2841 \endsetslot
2842
2843 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
2844   \comment{The letter '\H o'.}
2845 \endsetslot
2846
2847 \setslot{\lctop{Racute}{racute}}
2848   \comment{The letter '\ r'.}
2849 \endsetslot
2850
2851 \setslot{\lctop{Rcaron}{rcaron}}
2852   \comment{The letter '\v r'.}
2853 \endsetslot
2854
2855 \setslot{\lctop{Sacute}{sacute}}
2856   \comment{The letter '\ s'.}
2857 \endsetslot
2858
2859 \setslot{\lctop{Scaron}{scaron}}
2860   \comment{The letter '\v s'.}
2861 \endsetslot
2862
```

```

2863 \setslot{\lc{Scedilla}{scedilla}}
2864   \comment{The letter '\c s'.}
2865 \endsetslot
2866
2867 \setslot{\lctop{Tcaron}{tcaron}}
2868   \comment{The letter '\v t'.}
2869 \endsetslot
2870
2871 \setslot{\lc{Tcedilla}{tcedilla}}
2872   \comment{The letter '\c t'.}
2873 \endsetslot
2874
2875 \setslot{\lctop{Uhngarumlaut}{uhngarumlaut}}
2876   \comment{The letter '\H u'.}
2877 \endsetslot
2878
2879 \setslot{\lctop{Uring}{uring}}
2880   \comment{The letter '\r u'.}
2881 \endsetslot
2882
2883 \setslot{\lctop{Ydieresis}{ydieresis}}
2884   \comment{The letter '\y y'.}
2885 \endsetslot
2886
2887 \setslot{\lctop{Zacute}{zacute}}
2888   \comment{The letter '\z z'.}
2889 \endsetslot
2890
2891 \setslot{\lctop{Zcaron}{zcaron}}
2892   \comment{The letter '\v z'.}
2893 \endsetslot
2894
2895 \setslot{\lctop{Zdotaccent}{zdotaccent}}
2896   \comment{The letter '\. z'.}
2897 \endsetslot
2898
2899 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
2900
2901   \setslot{\lclig{IJ}{ij}}
2902     \comment{The letter 'ij'. This is a single letter, and in a
2903       monowidth font should ideally be one letter wide.}
2904 \endsetslot
2905
2906 \Fi
2907
2908 \setslot{exclamdown}
2909   \comment{The Spanish punctuation mark '!'.}
2910 \endsetslot
2911
2912 \setslot{questiondown}
2913   \comment{The Spanish punctuation mark '?'.}
2914 \endsetslot
2915
2916 \setslot{sterling}

```

```
2917     \comment{The British currency mark '\textsterling'.}
2918 \endsetslot
2919
2920 \setslot{\uctop{Agrave}{agrave}}
2921     \comment{The letter '\` A'.}
2922 \endsetslot
2923
2924 \setslot{\uctop{Aacute}{aacute}}
2925     \comment{The letter '\^ A'.}
2926 \endsetslot
2927
2928 \setslot{\uctop{Acircumflex}{acircumflex}}
2929     \comment{The letter '\~ A'.}
2930 \endsetslot
2931
2932 \setslot{\uctop{Atilde}{atilde}}
2933     \comment{The letter '\~ A'.}
2934 \endsetslot
2935
2936 \setslot{\uctop{Adieresis}{adieresis}}
2937     \comment{The letter '\\" A'.}
2938 \endsetslot
2939
2940 \setslot{\uctop{Aring}{aring}}
2941     \comment{The letter '\r A'.}
2942 \endsetslot
2943
2944 \setslot{\uc{AE}{ae}}
2945     \comment{The letter '\AE'. This is a single letter, and should not be
2946         faked with 'AE'.}
2947 \endsetslot
2948
2949 \setslot{\uc{Ccedilla}{ccedilla}}
2950     \comment{The letter '\c C'.}
2951 \endsetslot
2952
2953 \setslot{\uctop{Egrave}{egrave}}
2954     \comment{The letter '\` E'.}
2955 \endsetslot
2956
2957 \setslot{\uctop{Eacute}{eacute}}
2958     \comment{The letter '\^ E'.}
2959 \endsetslot
2960
2961 \setslot{\uctop{Ecircumflex}{ecircumflex}}
2962     \comment{The letter '\~ E'.}
2963 \endsetslot
2964
2965 \setslot{\uctop{Edieresis}{adieresis}}
2966     \comment{The letter '\\" E'.}
2967 \endsetslot
2968
2969 \setslot{\uctop{Igrave}{igrave}}
2970     \comment{The letter '\` I'.}
```

```
2971 \endsetslot
2972
2973 \setslot{\uctop{Iacute}{iacute}}
2974     \comment{The letter '\` I'.}
2975 \endsetslot
2976
2977 \setslot{\uctop{Icircumflex}{icircumflex}}
2978     \comment{The letter '\^ I'.}
2979 \endsetslot
2980
2981 \setslot{\uctop{Idieresis}{idieresis}}
2982     \comment{The letter '\\" I'.}
2983 \endsetslot
2984
2985 \setslot{\uc{Eth}{eth}}
2986     \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
2987         with a horizontal bar through the stem. It is unavailable
2988         in \plain\ \TeX.}
2989 \endsetslot
2990
2991 \setslot{\uctop{Ntilde}{ntilde}}
2992     \comment{The letter '\~ N'.}
2993 \endsetslot
2994
2995 \setslot{\uctop{Ograve}{ograve}}
2996     \comment{The letter '\` O'.}
2997 \endsetslot
2998
2999 \setslot{\uctop{Oacute}{oacute}}
3000     \comment{The letter '\` O'.}
3001 \endsetslot
3002
3003 \setslot{\uctop{Ocircumflex}{ocircumflex}}
3004     \comment{The letter '\^ O'.}
3005 \endsetslot
3006
3007 \setslot{\uctop{Otilde}{otilde}}
3008     \comment{The letter '\~ O'.}
3009 \endsetslot
3010
3011 \setslot{\uctop{Odieresis}{odieresis}}
3012     \comment{The letter '\\" O'.}
3013 \endsetslot
3014
3015 \setslot{\uc{OE}{oe}}
3016     \comment{The letter '\OE'. This is a single letter, and should not be
3017         faked with 'OE'.}
3018 \endsetslot
3019
3020 \setslot{\uc{Oslash}{oslash}}
3021     \comment{The letter '\O'.}
3022 \endsetslot
3023
3024 \setslot{\uctop{Ugrave}{ugrave}}
```

```
3025     \comment{The letter '\` U'.}
3026 \endsetslot
3027
3028 \setslot{\uctop{Uacute}{uacute}}
3029     \comment{The letter '\` U'.}
3030 \endsetslot
3031
3032 \setslot{\uctop{Ucircumflex}{ucircumflex}}
3033     \comment{The letter '\^ U'.}
3034 \endsetslot
3035
3036 \setslot{\uctop{Udieresis}{udieresis}}
3037     \comment{The letter '\u00f0 U'.}
3038 \endsetslot
3039
3040 \setslot{\uctop{Yacute}{yacute}}
3041     \comment{The letter '\` Y'.}
3042 \endsetslot
3043
3044 \setslot{\uc{Thorn}{thorn}}
3045     \comment{The Icelandic capital letter Thorn, similar to a 'P'
            with the bowl moved down. It is unavailable in \plain\ \TeX.}
3046
3047 \endsetslot
3048
3049 \setslot{\uclig{SS}{germandbls}}
3050     \comment{The ligature 'SS', used to give an upper case '\ss'.
            In a monowidth font it should be two letters wide.}
3051
3052 \endsetslot
3053
3054 \setslot{\lctop{Agrave}{agrave}}
3055     \comment{The letter '\` a'.}
3056 \endsetslot
3057
3058 \setslot{\lctop{Aacute}{aacute}}
3059     \comment{The letter '\` a'.}
3060 \endsetslot
3061
3062 \setslot{\lctop{Acircumflex}{acircumflex}}
3063     \comment{The letter '\^ a'.}
3064 \endsetslot
3065
3066 \setslot{\lctop{Atilde}{atilde}}
3067     \comment{The letter '\~ a'.}
3068 \endsetslot
3069
3070 \setslot{\lctop{Adieresis}{adieresis}}
3071     \comment{The letter '\u00f0 a'.}
3072 \endsetslot
3073
3074 \setslot{\lctop{Aring}{aring}}
3075     \comment{The letter '\r a'.}
3076 \endsetslot
3077
3078 \setslot{\lc{AE}{ae}}
```

```
3079     \comment{The letter '\ae'. This is a single letter, and should not be
3080         faked with 'ae'.}
3081 \endsetslot
3082
3083 \setslot{\lc{Ccedilla}{ccedilla}}
3084     \comment{The letter '\c c'.}
3085 \endsetslot
3086
3087 \setslot{\lctop{Egrave}{egrave}}
3088     \comment{The letter '\` e'.}
3089 \endsetslot
3090
3091 \setslot{\lctop{Eacute}{eacute}}
3092     \comment{The letter '\^ e'.}
3093 \endsetslot
3094
3095 \setslot{\lctop{Ecircumflex}{ecircumflex}}
3096     \comment{The letter '\~ e'.}
3097 \endsetslot
3098
3099 \setslot{\lctop{Edieresis}{edieresis}}
3100     \comment{The letter '\\" e'.}
3101 \endsetslot
3102
3103 \setslot{\lctop{Igrave}{igrave}}
3104     \comment{The letter '\`i'.}
3105 \endsetslot
3106
3107 \setslot{\lctop{Iacute}{iacute}}
3108     \comment{The letter '\^i'.}
3109 \endsetslot
3110
3111 \setslot{\lctop{Icircumflex}{icircumflex}}
3112     \comment{The letter '\~i'.}
3113 \endsetslot
3114
3115 \setslot{\lctop{Idieresis}{idieresis}}
3116     \comment{The letter '\\"i'.}
3117 \endsetslot
3118
3119 \setslot{\lc{Eth}{eth}}
3120     \comment{The Icelandic lowercase letter 'eth' similar to
3121         a '$\partial$' with an oblique bar through the stem.
3122         It is unavailable in \plain\ \TeX.}
3123 \endsetslot
3124
3125 \setslot{\lctop{Ntilde}{ntilde}}
3126     \comment{The letter '\~ n'.}
3127 \endsetslot
3128
3129 \setslot{\lctop{Ograve}{ograve}}
3130     \comment{The letter '\` o'.}
3131 \endsetslot
3132
3133
```

```

3133 \setslot{\lctop{0acute}{oacute}}
3134   \comment{The letter '\` o'.}
3135 \endsetslot
3136
3137 \setslot{\lctop{0circumflex}{ocircumflex}}
3138   \comment{The letter '\^ o'.}
3139 \endsetslot
3140
3141 \setslot{\lctop{0tilde}{otilde}}
3142   \comment{The letter '\~ o'.}
3143 \endsetslot
3144
3145 \setslot{\lctop{0dieresis}{odieresis}}
3146   \comment{The letter '\" o'.}
3147 \endsetslot
3148
3149 \setslot{\lc{OE}{oe}}
3150   \comment{The letter '\oe'. This is a single letter, and should not be
            faked with 'oe'.}
3152 \endsetslot
3153
3154 \setslot{\lc{0slash}{oslash}}
3155   \comment{The letter '\o'.}
3156 \endsetslot
3157
3158 \setslot{\lctop{Ugrave}{ugrave}}
3159   \comment{The letter '\` u'.}
3160 \endsetslot
3161
3162 \setslot{\lctop{Uacute}{uacute}}
3163   \comment{The letter '\` u'.}
3164 \endsetslot
3165
3166 \setslot{\lctop{Ucircumflex}{ucircumflex}}
3167   \comment{The letter '\^ u'.}
3168 \endsetslot
3169
3170 \setslot{\lctop{Udieresis}{udieresis}}
3171   \comment{The letter '\\" u'.}
3172 \endsetslot
3173
3174 \setslot{\lctop{Yacute}{yacute}}
3175   \comment{The letter '\` y'.}
3176 \endsetslot
3177
3178 \setslot{\lc{Thorn}{thorn}}
3179   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
            with an ascender rising from the stem. It is unavailable
            in \plain\ \TeX.}
3181
3182 \endsetslot
3183
3184 \setslot{\lc{SS}{germandbls}}
3185   \comment{The letter '\ss'.}
3186 \endsetslot

```

```

3187
3188 \endencoding

```

6.3.8 fontscripts-t1-dotinf.etcx

`fontscripts-t1-dotinf.etcx (etcx)`

```

3189 %%
3190 %% - The original notices at the top of that file concerning authors,
3191 %% maintenance etc. are replaced by this notice.
3192 %% - The file is renamed.
3193 %% - The encoding name is modified.
3194 %% - The file is modified to accommodate differences in glyph names.
3195 %% - The file is modified for use in encoding inferiors.
3196 %%
3197 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
3198 \relax
3199 \encoding
3200
3201 \needsfontinstversion{1.910}
3202
3203 \setcommand\lc#1#2{\#2.inferior}
3204 \setcommand\uc#1#2{\#1.inferior}
3205 \setcommand\lctop#1#2{\#2.inferior}
3206 \setcommand\uctop#1#2{\#1.inferior}
3207 \setcommand\lcclig#1#2{\#2.inferior}
3208 \ifisint{letterspacing}\then
3209   \ifnumber{\int{letterspacing}}={0}\then \Else
3210     \setcommand\ucclig#1#2{\#1spaced}
3211     \comment{Here we set \verb|\ucclig#1#2| to \verb|\ucclig#1#2|, but
3212       you can't see it as \verb|\ucclig|\ commands are invisible in
3213       the typeset output.}
3214   \Fi
3215 \Fi
3216 \setcommand\ucclig#1#2{\#1.inferior}
3217 \setcommand\digit#1{\#1.inferior}
3218
3219 \ifisint{monowidth}\then
3220   \setint{ligaturing}{0}
3221 \Else
3222   % The following empty line is *important* to get the formatting
3223   % right here (sigh)! (Remember that it is a \par token.)
3224
3225 \ifisint{letterspacing}\then
3226   \ifnumber{\int{letterspacing}}={0}\then \Else
3227     \setint{ligaturing}{0}
3228   \Fi
3229   \Fi
3230 \setint{ligaturing}{1}
3231 \Fi
3232
3233 \setint{italicslant}{0}
3234 \setint{quad}{1000}

```

```

3235 \setint{baselineskip}{1200}
3236
3237 \ifisglyph{x}\then
3238   \setint{xheight}{\height{x}}
3239 \Else
3240   \setint{xheight}{500}
3241 \Fi
3242
3243 \ifisglyph{space}\then
3244   \setint{interword}{\width{space}}
3245 \Else\ifisglyph{i}\then
3246   \setint{interword}{\width{i}}
3247 \Else
3248   \setint{interword}{333}
3249 \Fi\Fi
3250
3251 \ifisint{monowidth}\then
3252   \setint{stretchword}{0}
3253   \setint{shrinkword}{0}
3254   \setint{extraspace}{\int{interword}}
3255 \Else
3256   \setint{stretchword}{\scale{\int{interword}}{600}}
3257   \setint{shrinkword}{\scale{\int{interword}}{240}}
3258   \setint{extraspace}{\scale{\int{interword}}{240}}
3259 \Fi
3260
3261 \ifisglyph{X}\then
3262   \setint{capheight}{\height{X}}
3263 \Else
3264   \setint{capheight}{750}
3265 \Fi
3266
3267 \ifisglyph{d}\then
3268   \setint{ascender}{\height{d}}
3269 \Else\ifisint{capheight}\then
3270   \setint{ascender}{\int{capheight}}
3271 \Else
3272   \setint{ascender}{750}
3273 \Fi\Fi
3274
3275 \ifisglyph{Aring}\then
3276   \setint{acccapheight}{\height{Aring}}
3277 \Else
3278   \setint{acccapheight}{999}
3279 \Fi
3280
3281 \ifisint{descender_neg}\then
3282   \setint{descender}{\neg{\int{descender_neg}}}
3283 \Else\ifisglyph{p}\then
3284   \setint{descender}{\depth{p}}
3285 \Else
3286   \setint{descender}{250}
3287 \Fi\Fi
3288

```

```

3289 \ifisglyph{Aring}\then
3290   \setint{maxheight}{\height{Aring}}
3291 \Else
3292   \setint{maxheight}{1000}
3293 \Fi
3294
3295 \ifisint{maxdepth_neg}\then
3296   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
3297 \Else\ifisglyph{j}\then
3298   \setint{maxdepth}{\depth{j}}
3299 \Else
3300   \setint{maxdepth}{250}
3301 \Fi\Fi
3302
3303 \ifisglyph{six}\then
3304   \setint{digitwidth}{\width{six}}
3305 \Else
3306   \setint{digitwidth}{500}
3307 \Fi
3308
3309 \setint{capstem}{0} % not in AFM files
3310
3311 \setfontdimen{1}{italicslant}      % italic slant
3312 \setfontdimen{2}{interword}        % interword space
3313 \setfontdimen{3}{stretchword}      % interword stretch
3314 \setfontdimen{4}{shrinkword}       % interword shrink
3315 \setfontdimen{5}{xheight}         % x-height
3316 \setfontdimen{6}{quad}             % quad
3317 \setfontdimen{7}{extraspace}       % extra space after .
3318 \setfontdimen{8}{capheight}        % cap height
3319 \setfontdimen{9}{ascender}         % ascender
3320 \setfontdimen{10}{accapheight}      % accented cap height
3321 \setfontdimen{11}{descender}        % descender's depth
3322 \setfontdimen{12}{maxheight}        % max height
3323 \setfontdimen{13}{maxdepth}         % max depth
3324 \setfontdimen{14}{digitwidth}       % digit width
3325 \setfontdimen{15}{verticalstem}     % dominant width of vertical stems
3326 \setfontdimen{16}{baselineskip}      % baselineskip
3327
3328 \ifnumber{\int{ligaturing}}<0\then
3329   \comment{In this case, the codingscheme can be different from the
3330           default, and therefore we refrain from setting it.}
3331 \Else
3332   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTINF}
3333 \Fi
3334
3335 \setslot{\lc{Grave}{grave}}
3336   \comment{The grave accent '\{}..}
3337 \endsetslot
3338
3339 \setslot{\lc{Acute}{acute}}
3340   \comment{The acute accent '\{}..}
3341 \endsetslot
3342

```

```

3343 \setslot{\lc{Circumflex}{circumflex}}
3344   \comment{The circumflex accent '\^{}' .}
3345 \endsetslot
3346
3347 \setslot{\lc{Tilde}{tilde}}
3348   \comment{The tilde accent '\~{}' .}
3349 \endsetslot
3350
3351 \setslot{\lc{Dieresis}{dieresis}}
3352   \comment{The umlaut or dieresis accent '\\"{}' .}
3353 \endsetslot
3354
3355 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
3356   \comment{The long Hungarian umlaut '\H{}' .}
3357 \endsetslot
3358
3359 \setslot{\lc{Ring}{ring}}
3360   \comment{The ring accent '\r{}' .}
3361 \endsetslot
3362
3363 \setslot{\lc{Caron}{caron}}
3364   \comment{The caron or h\`a\v cek accent '\v{}' .}
3365 \endsetslot
3366
3367 \setslot{\lc{Breve}{breve}}
3368   \comment{The breve accent '\u{}' .}
3369 \endsetslot
3370
3371 \setslot{\lc{Macron}{macron}}
3372   \comment{The macron accent '\={}' .}
3373 \endsetslot
3374
3375 \setslot{\lc{Dotaccent}{dotaccent}}
3376   \comment{The dot accent '\.{ }' .}
3377 \endsetslot
3378
3379 \setslot{\lc{Cedilla}{cedilla}}
3380   \comment{The cedilla accent '\c {}' .}
3381 \endsetslot
3382
3383 \setslot{\lc{Ogonek}{ogonek}}
3384   \comment{The ogonek accent '\k {}' .}
3385 \endsetslot
3386
3387 \setslot{quotesinglbase.inferior}
3388   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
3389           but with different sidebearings.}
3390 \endsetslot
3391
3392 \setslot{guilsinglleft.inferior}
3393   \comment{A French single opening quote mark '\guilsinglleft',
3394           unavailable in \plain\ \TeX.}
3395 \endsetslot
3396

```

```

3397 \setslot{guilsinglright.inferior}
3398   \comment{A French single closing quote mark ‘\guilsinglright’,
3399     unavailable in \plain\ \TeX.}
3400 \endsetslot
3401
3402 \setslot{quotedblleft.inferior}
3403   \comment{The English opening quote mark ‘\textquotedblleft\,’.}
3404 \endsetslot
3405
3406 \setslot{quotedblright.inferior}
3407   \comment{The English closing quote mark ‘\textquotedblright\,’.}
3408 \endsetslot
3409
3410 \setslot{quotedblbase.inferior}
3411   \comment{A German double quote mark ‘\quotedblbase’ similar to two commas,
3412     but with tighter letterspacing and different sidebearings.}
3413 \endsetslot
3414
3415 \setslot{guillemotleft.inferior}
3416   \comment{A French double opening quote mark ‘\guillemotleft’,
3417     unavailable in \plain\ \TeX.}
3418 \endsetslot
3419
3420 \setslot{guillemotright.inferior}
3421   \comment{A French closing opening quote mark ‘\guillemotright’,
3422     unavailable in \plain\ \TeX.}
3423 \endsetslot
3424
3425 \setslot{endash.inferior}
3426   \ligature{LIG}{hyphen.inferior}{emdash.inferior}
3427   \comment{The number range dash ‘1--9’.
3428     This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
3429     called ‘endash’ to work right.
3430     The ‘\textendash’.
3431     In a monowidth font, this might be set as ‘\texttt{1{-}9}’.}
3432 \endsetslot
3433
3434 \setslot{emdash.inferior}
3435   \comment{The punctuation dash ‘Oh---boy.’
3436     This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
3437     called ‘emdash’ to work right.
3438     The ‘\textemdash’.
3439     In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
3440 \endsetslot
3441
3442 \setslot{compwordmark.inferior}
3443   \comment{An invisible glyph, with zero width and depth, but the
3444     height of lowercase letters without ascenders.
3445     It is used to stop ligaturing in words like ‘shelf{}ful’.}
3446 \endsetslot
3447
3448 \setslot{perthousandzero.inferior}
3449   \comment{A glyph which is placed after ‘\%’ to produce a
3450     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.

```

```

3451     Your guess is as good as mine as to what this glyph should look
3452     like in a monowidth font.}
3453 \endsetslot
3454
3455 \setslot{\lc{dotlessI}{dotlessi}}
3456   \comment{A dotless i ‘\i’, used to produce accented letters such as
3457   ‘\=i’.}
3458 \endsetslot
3459
3460 \setslot{\lc{dotlessJ}{dotlessj}}
3461   \comment{A dotless j ‘\j’, used to produce accented letters such as
3462   ‘\=j’. Most non-\TeX\ fonts do not have this glyph.}
3463 \endsetslot
3464
3465 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
3466
3467 \setslot{\lclig{FF}{ff}}
3468   \ifnumber{\int{ligaturing}}>{0}\then
3469     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{ffi}}
3470     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{ffl}}
3471   \Fi
3472   \comment{The ‘ff’ ligature. It should be two characters wide in a
3473   monowidth font.}
3474 \endsetslot
3475
3476 \setslot{\lclig{FI}{fi}}
3477   \comment{The ‘fi’ ligature. It should be two characters wide in a
3478   monowidth font.}
3479 \endsetslot
3480
3481 \setslot{\lclig{FL}{fl}}
3482   \comment{The ‘fl’ ligature. It should be two characters wide in a
3483   monowidth font.}
3484 \endsetslot
3485
3486 \setslot{\lclig{FFI}{ffi}}
3487   \comment{The ‘ffi’ ligature. It should be three characters wide in a
3488   monowidth font.}
3489 \endsetslot
3490
3491 \setslot{\lclig{FFL}{ffl}}
3492   \comment{The ‘ffl’ ligature. It should be three characters wide in a
3493   monowidth font.}
3494 \endsetslot
3495
3496 \Fi
3497
3498 \setslot{visiblespace.inferior}
3499   \comment{A visible space glyph ‘\textvisiblespace’.}
3500 \endsetslot
3501
3502 \setslot{exclam.inferior}
3503   \ligature{LIG}{\quotyleft.inferior}{\exclamdown.inferior}
3504   \comment{The exclamation mark ‘!’.}

```

```
3505 \endsetslot
3506
3507 \setslot{quotedbl.inferior}
3508   \comment{The ‘neutral’ double quotation mark ‘\,\textquotedbl\,’,
3509   included for use in monowidth fonts, or for setting computer
3510   programs. Note that the inclusion of this glyph in this slot
3511   means that \TeX documents which used ‘{\tt\char‘\”}’ as an
3512   input character will no longer work.}
3513 \endsetslot
3514
3515 \setslot{numbersign.inferior}
3516   \comment{The hash sign ‘\#’.}
3517 \endsetslot
3518
3519 \setslot{dollar.inferior}
3520   \comment{The dollar sign ‘\$’.}
3521 \endsetslot
3522
3523 \setslot{percent.inferior}
3524   \comment{The percent sign ‘%’.}
3525 \endsetslot
3526
3527 \setslot{ampersand.inferior}
3528   \comment{The ampersand sign ‘\&’.}
3529 \endsetslot
3530
3531 \setslot{quoteright.inferior}
3532   \ligature{LIG}{quoteright.inferior}{quotedblright.inferior}
3533   \comment{The English closing single quote mark ‘\,\textquoteright\,’.}
3534 \endsetslot
3535
3536 \setslot{parenleft.inferior}
3537   \comment{The opening parenthesis ‘(’.}
3538 \endsetslot
3539
3540 \setslot{parenright.inferior}
3541   \comment{The closing parenthesis ‘)’.}
3542 \endsetslot
3543
3544 \setslot{asterisk.inferior}
3545   \comment{The raised asterisk ‘*’.}
3546 \endsetslot
3547
3548 \setslot{plus.inferior}
3549   \comment{The addition sign ‘+’.}
3550 \endsetslot
3551
3552 \setslot{comma.inferior}
3553   \ligature{LIG}{comma.inferior}{quotedblbase.inferior}
3554   \comment{The comma ‘,’.}
3555 \endsetslot
3556
3557 \setslot{hyphen.inferior}
3558   \ligature{LIG}{hyphen.inferior}{endash.inferior}
```

```
3559     \ligature{LIG}{hyphenchar.inferior}{hyphenchar.inferior}
3560     \comment{The hyphen '-' .}
3561 \endsetslot
3562
3563 \setslot{period.inferior}
3564     \comment{The period '.' .}
3565 \endsetslot
3566
3567 \setslot{slash.inferior}
3568     \comment{The forward oblique '/' .}
3569 \endsetslot
3570
3571 \setslot{\digit{zero}}
3572     \comment{The number '0'. This (and all the other numerals) may be
3573         old style or ranging digits.}
3574 \endsetslot
3575
3576 \setslot{\digit{one}}
3577     \comment{The number '1'.}
3578 \endsetslot
3579
3580 \setslot{\digit{two}}
3581     \comment{The number '2'.}
3582 \endsetslot
3583
3584 \setslot{\digit{three}}
3585     \comment{The number '3'.}
3586 \endsetslot
3587
3588 \setslot{\digit{four}}
3589     \comment{The number '4'.}
3590 \endsetslot
3591
3592 \setslot{\digit{five}}
3593     \comment{The number '5'.}
3594 \endsetslot
3595
3596 \setslot{\digit{six}}
3597     \comment{The number '6'.}
3598 \endsetslot
3599
3600 \setslot{\digit{seven}}
3601     \comment{The number '7'.}
3602 \endsetslot
3603
3604 \setslot{\digit{eight}}
3605     \comment{The number '8'.}
3606 \endsetslot
3607
3608 \setslot{\digit{nine}}
3609     \comment{The number '9'.}
3610 \endsetslot
3611
3612 \setslot{colon.inferior}
```

```
3613     \comment{The colon punctuation mark ‘:’.}
3614     \endsetslot
3615
3616     \setslot{semicolon.inferior}
3617         \comment{The semi-colon punctuation mark ‘;’.}
3618     \endsetslot
3619
3620     \setslot{less.inferior}
3621         \ligature{LIG}{less.inferior}{guillemotleft.inferior}
3622         \comment{The less-than sign ‘\textless’.}
3623     \endsetslot
3624
3625     \setslot{equal.inferior}
3626         \comment{The equals sign ‘=’.}
3627     \endsetslot
3628
3629     \setslot{greater.inferior}
3630         \ligature{LIG}{greater.inferior}{guillemotright.inferior}
3631         \comment{The greater-than sign ‘\textgreater’.}
3632     \endsetslot
3633
3634     \setslot{question.inferior}
3635         \ligature{LIG}{quotyleft.inferior}{questiondown.inferior}
3636         \comment{The question mark ‘?’ .}
3637     \endsetslot
3638
3639     \setslot{at.inferior}
3640         \comment{The at sign ‘@’.}
3641     \endsetslot
3642
3643     \setslot{\uc{A}{a}}
3644         \comment{The letter ‘{A}’ .}
3645     \endsetslot
3646
3647     \setslot{\uc{B}{b}}
3648         \comment{The letter ‘{B}’ .}
3649     \endsetslot
3650
3651     \setslot{\uc{C}{c}}
3652         \comment{The letter ‘{C}’ .}
3653     \endsetslot
3654
3655     \setslot{\uc{D}{d}}
3656         \comment{The letter ‘{D}’ .}
3657     \endsetslot
3658
3659     \setslot{\uc{E}{e}}
3660         \comment{The letter ‘{E}’ .}
3661     \endsetslot
3662
3663     \setslot{\uc{F}{f}}
3664         \comment{The letter ‘{F}’ .}
3665     \endsetslot
3666
```

```
3667 \setslot{\uc{G}{g}}
3668   \comment{The letter '{G}'.}
3669 \endsetslot
3670
3671 \setslot{\uc{H}{h}}
3672   \comment{The letter '{H}'.}
3673 \endsetslot
3674
3675 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3676
3677 \setslot{\uc{I}{i}}
3678   \comment{The letter '{I}'.}
3679 \endsetslot
3680
3681 \Fi
3682
3683 \setslot{\uc{J}{j}}
3684   \comment{The letter '{J}'.}
3685 \endsetslot
3686
3687 \setslot{\uc{K}{k}}
3688   \comment{The letter '{K}'.}
3689 \endsetslot
3690
3691 \setslot{\uc{L}{l}}
3692   \comment{The letter '{L}'.}
3693 \endsetslot
3694
3695 \setslot{\uc{M}{m}}
3696   \comment{The letter '{M}'.}
3697 \endsetslot
3698
3699 \setslot{\uc{N}{n}}
3700   \comment{The letter '{N}'.}
3701 \endsetslot
3702
3703 \setslot{\uc{O}{o}}
3704   \comment{The letter '{O}'.}
3705 \endsetslot
3706
3707 \setslot{\uc{P}{p}}
3708   \comment{The letter '{P}'.}
3709 \endsetslot
3710
3711 \setslot{\uc{Q}{q}}
3712   \comment{The letter '{Q}'.}
3713 \endsetslot
3714
3715 \setslot{\uc{R}{r}}
3716   \comment{The letter '{R}'.}
3717 \endsetslot
3718
3719 \setslot{\uc{S}{s}}
3720   \comment{The letter '{S}'.}
```

```
3721 \endsetslot
3722
3723 \setslot{\uc{T}{t}}
3724   \comment{The letter '{T}'.}
3725 \endsetslot
3726
3727 \setslot{\uc{U}{u}}
3728   \comment{The letter '{U}'.}
3729 \endsetslot
3730
3731 \setslot{\uc{V}{v}}
3732   \comment{The letter '{V}'.}
3733 \endsetslot
3734
3735 \setslot{\uc{W}{w}}
3736   \comment{The letter '{W}'.}
3737 \endsetslot
3738
3739 \setslot{\uc{X}{x}}
3740   \comment{The letter '{X}'.}
3741 \endsetslot
3742
3743 \setslot{\uc{Y}{y}}
3744   \comment{The letter '{Y}'.}
3745 \endsetslot
3746
3747 \setslot{\uc{Z}{z}}
3748   \comment{The letter '{Z}'.}
3749 \endsetslot
3750
3751 \setslot{bracketleft.inferior}
3752   \comment{The opening square bracket '['.}
3753 \endsetslot
3754
3755 \setslot{backslash.inferior}
3756   \comment{The backwards oblique '\textbackslash'.}
3757 \endsetslot
3758
3759 \setslot{bracketright.inferior}
3760   \comment{The closing square bracket ']'.}
3761 \endsetslot
3762
3763 \setslot{asciicircum.inferior}
3764   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.}
3765   This is included for compatibility with typewriter fonts used
3766   for computer listings.
3767 \endsetslot
3768
3769 \setslot{underscore.inferior}
3770   \comment{The ASCII underline character '\textunderline', usually
3771   set on the baseline.
3772   This is included for compatibility with typewriter fonts used
3773   for computer listings.}
3774 \endsetslot
```

```

3775 \setslot{quotyleft.inferior}
3776   \ligature{LIG}{quotyleft.inferior}{quotedblleft.inferior}
3777   \comment{The English opening single quote mark '\,\textquotleft\,'.}
3778 \endsetslot
3780
3781 \setslot{\lc{A}{a}}
3782   \comment{The letter '{a}'.}
3783 \endsetslot
3784
3785 \setslot{\lc{B}{b}}
3786   \comment{The letter '{b}'.}
3787 \endsetslot
3788
3789 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3790
3791   \setslot{\lc{C}{c}}
3792     \comment{The letter '{c}'.}
3793 \endsetslot
3794
3795 \Fi
3796
3797 \setslot{\lc{D}{d}}
3798   \comment{The letter '{d}'.}
3799 \endsetslot
3800
3801 \setslot{\lc{E}{e}}
3802   \comment{The letter '{e}'.}
3803 \endsetslot
3804
3805 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3806
3807   \setslot{\lc{F}{f}}
3808   \ifnumber{\int{ligaturing}}>{0}\then
3809     \ligature{LIG}{\lc{I}{i}}{\lclig{FI}{fi}}
3810     \ligature{LIG}{\lc{F}{f}}{\lclig{FF}{ff}}
3811     \ligature{LIG}{\lc{L}{l}}{\lclig{FL}{fl}}
3812   \Fi
3813   \comment{The letter '{f}'.}
3814 \endsetslot
3815
3816 \Fi
3817
3818 \setslot{\lc{G}{g}}
3819   \comment{The letter '{g}'.}
3820 \endsetslot
3821
3822 \setslot{\lc{H}{h}}
3823   \comment{The letter '{h}'.}
3824 \endsetslot
3825
3826 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3827
3828   \setslot{\lc{I}{i}}

```

```

3829      \comment{The letter '{i}'.}
3830      \endsetslot
3831
3832 \Fi
3833
3834 \setslot{\lc{J}{j}}
3835     \comment{The letter '{j}'.}
3836 \endsetslot
3837
3838 \setslot{\lc{K}{k}}
3839     \comment{The letter '{k}'.}
3840 \endsetslot
3841
3842 \setslot{\lc{L}{l}}
3843     \comment{The letter '{l}'.}
3844 \endsetslot
3845
3846 \setslot{\lc{M}{m}}
3847     \comment{The letter '{m}'.}
3848 \endsetslot
3849
3850 \setslot{\lc{N}{n}}
3851     \comment{The letter '{n}'.}
3852 \endsetslot
3853
3854 \setslot{\lc{O}{o}}
3855     \comment{The letter '{o}'.}
3856 \endsetslot
3857
3858 \setslot{\lc{P}{p}}
3859     \comment{The letter '{p}'.}
3860 \endsetslot
3861
3862 \setslot{\lc{Q}{q}}
3863     \comment{The letter '{q}'.}
3864 \endsetslot
3865
3866 \setslot{\lc{R}{r}}
3867     \comment{The letter '{r}'.}
3868 \endsetslot
3869
3870 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3871
3872     \setslot{\lc{S}{s}}
3873         \comment{The letter '{s}'.}
3874     \endsetslot
3875
3876 \Fi
3877
3878 \setslot{\lc{T}{t}}
3879     \comment{The letter '{t}'.}
3880 \endsetslot
3881
3882 \setslot{\lc{U}{u}}

```

```
3883     \comment{The letter '{u}'.}
3884     \endsetslot
3885
3886     \setslot{\lc{V}{v}}
3887         \comment{The letter '{v}'.}
3888     \endsetslot
3889
3890     \setslot{\lc{W}{w}}
3891         \comment{The letter '{w}'.}
3892     \endsetslot
3893
3894     \setslot{\lc{X}{x}}
3895         \comment{The letter '{x}'.}
3896     \endsetslot
3897
3898     \setslot{\lc{Y}{y}}
3899         \comment{The letter '{y}'.}
3900     \endsetslot
3901
3902     \setslot{\lc{Z}{z}}
3903         \comment{The letter '{z}'.}
3904     \endsetslot
3905
3906     \setslot{braceleft.inferior}
3907         \comment{The opening curly brace '\textbraceleft'.}
3908     \endsetslot
3909
3910     \setslot{bar.inferior}
3911         \comment{The ASCII vertical bar '\textbar'.
3912             This is included for compatibility with typewriter fonts used
3913             for computer listings.}
3914     \endsetslot
3915
3916     \setslot{braceright.inferior}
3917         \comment{The closing curly brace '\textbraceright'.}
3918     \endsetslot
3919
3920     \setslot{asciitilde.inferior}
3921         \comment{The ASCII tilde '\textasciitilde'.
3922             This is included for compatibility with typewriter fonts used
3923             for computer listings.}
3924     \endsetslot
3925
3926     \setslot{hyphenchar.inferior}
3927         \comment{The glyph used for hyphenation in this font, which will
3928             almost always be the same as 'hyphen'.}
3929     \endsetslot
3930
3931     \setslot{\uctop{Abreve}{abreve}}
3932         \comment{The letter '\u A'.}
3933     \endsetslot
3934
3935     \setslot{\uc{Aogonek}{aogonek}}
3936         \comment{The letter '\k A'.}
```

```

3937 \endsetslot
3938
3939 \setslot{\uctop{Cacute}{cacute}}
3940   \comment{The letter '\c C'.}
3941 \endsetslot
3942
3943 \setslot{\uctop{Ccaron}{ccaron}}
3944   \comment{The letter '\v C'.}
3945 \endsetslot
3946
3947 \setslot{\uctop{Dcaron}{dcaron}}
3948   \comment{The letter '\v D'.}
3949 \endsetslot
3950
3951 \setslot{\uctop{Ecaron}{ecaron}}
3952   \comment{The letter '\v E'.}
3953 \endsetslot
3954
3955 \setslot{\uc{Eogonek}{eogonek}}
3956   \comment{The letter '\k E'.}
3957 \endsetslot
3958
3959 \setslot{\uctop{Gbreve}{gbreve}}
3960   \comment{The letter '\u G'.}
3961 \endsetslot
3962
3963 \setslot{\uctop{Lacute}{lacute}}
3964   \comment{The letter '\l L'.}
3965 \endsetslot
3966
3967 \setslot{\uc{Lcaron}{lcaron}}
3968   \comment{The letter '\v L'.}
3969 \endsetslot
3970
3971 \setslot{\uc{Lslash}{lslash}}
3972   \comment{The letter '\L'.}
3973 \endsetslot
3974
3975 \setslot{\uctop{Nacute}{nacute}}
3976   \comment{The letter '\n N'.}
3977 \endsetslot
3978
3979 \setslot{\uctop{Ncaron}{ncaron}}
3980   \comment{The letter '\v N'.}
3981 \endsetslot
3982
3983 \setslot{\uc{Eng}{eng}}
3984   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
            to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
            seems.}
3985 \endsetslot
3986
3987 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
3988   \comment{The letter '\H O'.}

```

```
3989 \endsetslot
3990
3991 \setslot{\uctop{Racute}{racute}}
3992     \comment{The letter '\` R'.}
3993 \endsetslot
3994
3995 \setslot{\uctop{Rcaron}{rcaron}}
3996     \comment{The letter '\v R'.}
3997 \endsetslot
3998
3999 \setslot{\uctop{Sacute}{sacute}}
4000     \comment{The letter '\` S'.}
4001 \endsetslot
4002
4003 \setslot{\uctop{Scaron}{scaron}}
4004     \comment{The letter '\v S'.}
4005 \endsetslot
4006
4007 \setslot{\uc{Scedilla}{scedilla}}
4008     \comment{The letter '\c S'.}
4009 \endsetslot
4010
4011 \setslot{\uctop{Tcaron}{tcaron}}
4012     \comment{The letter '\v T'.}
4013 \endsetslot
4014
4015 \setslot{\uc{Tcedilla}{tcedilla}}
4016     \comment{The letter '\c T'.}
4017 \endsetslot
4018
4019 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
4020     \comment{The letter '\H U'.}
4021 \endsetslot
4022
4023 \setslot{\uctop{Uring}{uring}}
4024     \comment{The letter '\r U'.}
4025 \endsetslot
4026
4027 \setslot{\uctop{Ydieresis}{ydieresis}}
4028     \comment{The letter '\\" Y'.}
4029 \endsetslot
4030
4031 \setslot{\uctop{Zacute}{zacute}}
4032     \comment{The letter '\` Z'.}
4033 \endsetslot
4034
4035 \setslot{\uctop{Zcaron}{zcaron}}
4036     \comment{The letter '\v Z'.}
4037 \endsetslot
4038
4039 \setslot{\uctop{Zdotaccent}{zdotaccent}}
4040     \comment{The letter '\. Z'.}
4041 \endsetslot
4042
```

```
4043 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
4044
4045   \setslot{\uclig{IJ}{ij}}
4046     \comment{The letter 'IJ'. This is a single letter, and in a
4047       monowidth font should ideally be one letter wide.}
4048   \endsetslot
4049
4050 \Fi
4051
4052 \setslot{\uctop{Idotaccent}{idotaccent}}
4053   \comment{The letter '\. I'.}
4054 \endsetslot
4055
4056 \setslot{\lc{Dbar}{dbar}}
4057   \comment{The letter '\dj'.}
4058 \endsetslot
4059
4060 \setslot{section.inferior}
4061   \comment{The section mark '\textsection'.}
4062 \endsetslot
4063
4064 \setslot{\lctop{Abreve}{abreve}}
4065   \comment{The letter '\u a'.}
4066 \endsetslot
4067
4068 \setslot{\lc{Aogonek}{aogonek}}
4069   \comment{The letter '\k a'.}
4070 \endsetslot
4071
4072 \setslot{\lctop{Cacute}{cacute}}
4073   \comment{The letter '\c c'.}
4074 \endsetslot
4075
4076 \setslot{\lctop{Ccaron}{ccaron}}
4077   \comment{The letter '\v c'.}
4078 \endsetslot
4079
4080 \setslot{\lctop{Dcaron}{dcaron}}
4081   \comment{The letter '\v d'.}
4082 \endsetslot
4083
4084 \setslot{\lctop{Ecaron}{ecaron}}
4085   \comment{The letter '\v e'.}
4086 \endsetslot
4087
4088 \setslot{\lc{Eogonek}{eogonek}}
4089   \comment{The letter '\k e'.}
4090 \endsetslot
4091
4092 \setslot{\lctop{Gbreve}{gbreve}}
4093   \comment{The letter '\u g'.}
4094 \endsetslot
4095
4096 \setslot{\lctop{Lacute}{lacute}}
```

```

4097     \comment{The letter '\l'.}
4098 \endsetslot
4099
4100 \setslot{\lc{Lcaron}{lcaron}}
4101     \comment{The letter '\v l'.}
4102 \endsetslot
4103
4104 \setslot{\lc{Lslash}{lslash}}
4105     \comment{The letter '\l'.}
4106 \endsetslot
4107
4108 \setslot{\lctop{Nacute}{nacute}}
4109     \comment{The letter '\n'.}
4110 \endsetslot
4111
4112 \setslot{\lctop{Ncaron}{ncaron}}
4113     \comment{The letter '\v n'.}
4114 \endsetslot
4115
4116 \setslot{\lc{Eng}{eng}}
4117     \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
        to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
        it seems.}
4118 \endsetslot
4119
4120 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
4121     \comment{The letter '\H o'.}
4122 \endsetslot
4123
4124 \setslot{\lctop{Racute}{racute}}
4125     \comment{The letter '\r'.}
4126 \endsetslot
4127
4128 \setslot{\lctop{Rcaron}{rcaron}}
4129     \comment{The letter '\v r'.}
4130 \endsetslot
4131
4132 \setslot{\lctop{Sacute}{sacute}}
4133     \comment{The letter '\s'.}
4134 \endsetslot
4135
4136 \setslot{\lctop{Scaron}{scaron}}
4137     \comment{The letter '\v s'.}
4138 \endsetslot
4139
4140 \setslot{\lc{Scedilla}{scedilla}}
4141     \comment{The letter '\c s'.}
4142 \endsetslot
4143
4144 \setslot{\lctop{Tcaron}{tcaron}}
4145     \comment{The letter '\v t'.}
4146 \endsetslot
4147
4148 \setslot{\lc{Tcedilla}{tcedilla}}

```

```

4149     \comment{The letter '\c t'.}
4150     \endsetslot
4151
4152     \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
4153         \comment{The letter '\H u'.}
4154     \endsetslot
4155
4156     \setslot{\lctop{Uring}{uring}}
4157         \comment{The letter '\r u'.}
4158     \endsetslot
4159
4160     \setslot{\lctop{Ydieresis}{ydieresis}}
4161         \comment{The letter '\" y'.}
4162     \endsetslot
4163
4164     \setslot{\lctop{Zacute}{zacute}}
4165         \comment{The letter '\` z'.}
4166     \endsetslot
4167
4168     \setslot{\lctop{Zcaron}{zcaron}}
4169         \comment{The letter '\v z'.}
4170     \endsetslot
4171
4172     \setslot{\lctop{Zdotaccent}{zdotaccent}}
4173         \comment{The letter '\. z'.}
4174     \endsetslot
4175
4176     \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
4177
4178     \setslot{\lclig{IJ}{ij}}
4179         \comment{The letter 'ij'. This is a single letter, and in a
4180             monowidth font should ideally be one letter wide.}
4181     \endsetslot
4182
4183     \Fi
4184
4185     \setslot{exclamdown.inferior}
4186         \comment{The Spanish punctuation mark '!'.}
4187     \endsetslot
4188
4189     \setslot{questiondown.inferior}
4190         \comment{The Spanish punctuation mark '?'.}
4191     \endsetslot
4192
4193     \setslot{sterling.inferior}
4194         \comment{The British currency mark '\textsterling'.}
4195     \endsetslot
4196
4197     \setslot{\uctop{Agrave}{agrave}}
4198         \comment{The letter '\` A'.}
4199     \endsetslot
4200
4201     \setslot{\uctop{Aacute}{aacute}}
4202         \comment{The letter '\^ A'.}

```

```
4203 \endsetslot
4204
4205 \setslot{\uctop{Acircumflex}{acircumflex}}
4206   \comment{The letter '\^ A'.}
4207 \endsetslot
4208
4209 \setslot{\uctop{Atilde}{atilde}}
4210   \comment{The letter '\~ A'.}
4211 \endsetslot
4212
4213 \setslot{\uctop{Adieresis}{adieresis}}
4214   \comment{The letter '\" A'.}
4215 \endsetslot
4216
4217 \setslot{\uctop{Aring}{aring}}
4218   \comment{The letter '\r A'.}
4219 \endsetslot
4220
4221 \setslot{\uc{AE}{ae}}
4222   \comment{The letter '\AE'. This is a single letter, and should not be
4223     faked with 'AE'.}
4224 \endsetslot
4225
4226 \setslot{\uc{Ccedilla}{ccedilla}}
4227   \comment{The letter '\c C'.}
4228 \endsetslot
4229
4230 \setslot{\uctop{Egrave}{egrave}}
4231   \comment{The letter '\` E'.}
4232 \endsetslot
4233
4234 \setslot{\uctop{Eacute}{eacute}}
4235   \comment{The letter '\^ E'.}
4236 \endsetslot
4237
4238 \setslot{\uctop{Ecircumflex}{ecircumflex}}
4239   \comment{The letter '\~ E'.}
4240 \endsetslot
4241
4242 \setslot{\uctop{Edieresis}{edieresis}}
4243   \comment{The letter '\\" E'.}
4244 \endsetslot
4245
4246 \setslot{\uctop{Igrave}{igrave}}
4247   \comment{The letter '\` I'.}
4248 \endsetslot
4249
4250 \setslot{\uctop{Iacute}{iacute}}
4251   \comment{The letter '\^ I'.}
4252 \endsetslot
4253
4254 \setslot{\uctop{Icircumflex}{icircumflex}}
4255   \comment{The letter '\~ I'.}
4256 \endsetslot
```

```
4257 \setslot{\uctop{Idieresis}{idieresis}}
4258     \comment{The letter '\` I'.}
4259 \endsetslot
4260
4261 \setslot{\uc{Eth}{eth}}
4262     \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
4263         with a horizontal bar through the stem. It is unavailable
4264         in \plain\ \TeX.}
4265 \endsetslot
4266
4267 \setslot{\uctop{Ntilde}{ntilde}}
4268     \comment{The letter '\~ N'.}
4269 \endsetslot
4270
4271 \setslot{\uctop{Ograve}{ograve}}
4272     \comment{The letter '\` O'.}
4273 \endsetslot
4274
4275 \setslot{\uctop{Oacute}{oacute}}
4276     \comment{The letter '\^ O'.}
4277 \endsetslot
4278
4279 \setslot{\uctop{Ocircumflex}{ocircumflex}}
4280     \comment{The letter '\^ O'.}
4281 \endsetslot
4282
4283 \setslot{\uctop{Otilde}{otilde}}
4284     \comment{The letter '\~ O'.}
4285 \endsetslot
4286
4287 \setslot{\uctop{Odieresis}{odieresis}}
4288     \comment{The letter '\\" O'.}
4289 \endsetslot
4290
4291 \setslot{\uc{OE}{oe}}
4292     \comment{The letter '\OE'. This is a single letter, and should not be
4293         faked with 'OE'.}
4294 \endsetslot
4295
4296 \setslot{\uc{Oslash}{oslash}}
4297     \comment{The letter '\O'.}
4298 \endsetslot
4299
4300 \setslot{\uctop{Ugrave}{ugrave}}
4301     \comment{The letter '\` U'.}
4302 \endsetslot
4303
4304 \setslot{\uctop{Uacute}{uacute}}
4305     \comment{The letter '\^ U'.}
4306 \endsetslot
4307
4308 \setslot{\uctop{Ucircumflex}{ucircumflex}}
4309     \comment{The letter '\^ U'.}
4310 
```

```

4311 \endsetslot
4312
4313 \setslot{\uctop{Udieresis}{udieresis}}
4314   \comment{The letter '\u00d8'.}
4315 \endsetslot
4316
4317 \setslot{\uctop{Yacute}{yacute}}
4318   \comment{The letter '\u00c9'.}
4319 \endsetslot
4320
4321 \setslot{\uc{Thorn}{thorn}}
4322   \comment{The Icelandic capital letter Thorn, similar to a 'P'
4323       with the bowl moved down. It is unavailable in \plain\ \TeX.}
4324 \endsetslot
4325
4326 \setslot{\uclig{SS}{germandbls}}
4327   \comment{The ligature 'SS', used to give an upper case '\ss'.
4328       In a monowidth font it should be two letters wide.}
4329 \endsetslot
4330
4331 \setslot{\lctop{Agrave}{agrave}}
4332   \comment{The letter '\u00e5'.}
4333 \endsetslot
4334
4335 \setslot{\lctop{Aacute}{aacute}}
4336   \comment{The letter '\u00e1'.}
4337 \endsetslot
4338
4339 \setslot{\lctop{Acircumflex}{acircumflex}}
4340   \comment{The letter '\u00e1'.}
4341 \endsetslot
4342
4343 \setslot{\lctop{Atilde}{atilde}}
4344   \comment{The letter '\u00e3'.}
4345 \endsetslot
4346
4347 \setslot{\lctop{Adieresis}{adieresis}}
4348   \comment{The letter '\u00f8'.}
4349 \endsetslot
4350
4351 \setslot{\lctop{Aring}{aring}}
4352   \comment{The letter '\u00f6'.}
4353 \endsetslot
4354
4355 \setslot{\lc{AE}{ae}}
4356   \comment{The letter '\u00e6'. This is a single letter, and should not be
4357       faked with 'ae'.}
4358 \endsetslot
4359
4360 \setslot{\lc{Ccedilla}{ccedilla}}
4361   \comment{The letter '\u00e7'.}
4362 \endsetslot
4363
4364 \setslot{\lctop{Egrave}{egrave}}

```

```

4365     \comment{The letter '\`e'.}
4366 \endsetslot
4367
4368 \setslot{\lctop{Eacute}{eacute}}
4369     \comment{The letter '\`e'.}
4370 \endsetslot
4371
4372 \setslot{\lctop{Ecircumflex}{ecircumflex}}
4373     \comment{The letter '\^e'.}
4374 \endsetslot
4375
4376 \setslot{\lctop{Edieresis}{edieresis}}
4377     \comment{The letter '\u2014e'.}
4378 \endsetslot
4379
4380 \setslot{\lctop{Igrave}{igrave}}
4381     \comment{The letter '\i'.'}
4382 \endsetslot
4383
4384 \setslot{\lctop{Iacute}{iacute}}
4385     \comment{The letter '\i'.'}
4386 \endsetslot
4387
4388 \setslot{\lctop{Icircumflex}{icircumflex}}
4389     \comment{The letter '\^i'.'}
4390 \endsetslot
4391
4392 \setslot{\lctop{Idieresis}{idieresis}}
4393     \comment{The letter '\u2014i'.'}
4394 \endsetslot
4395
4396 \setslot{\lc{Eth}{eth}}
4397     \comment{The Icelandic lowercase letter 'eth' similar to
4398         a '$\partial$' with an oblique bar through the stem.
4399         It is unavailable in \plain\ TeX.}
4400 \endsetslot
4401
4402 \setslot{\lctop{Ntilde}{ntilde}}
4403     \comment{The letter '\~n'.'}
4404 \endsetslot
4405
4406 \setslot{\lctop{Ograve}{ograve}}
4407     \comment{The letter '\`o'.'}
4408 \endsetslot
4409
4410 \setslot{\lctop{Oacute}{oacute}}
4411     \comment{The letter '\o'.'}
4412 \endsetslot
4413
4414 \setslot{\lctop{Ocircumflex}{ocircumflex}}
4415     \comment{The letter '\^o'.'}
4416 \endsetslot
4417
4418 \setslot{\lctop{Otilde}{otilde}}

```

```

4419     \comment{The letter '\~ o'.}
4420     \endsetslot
4421
4422 \setslot{\lctop{0dieresis}{odieresis}}
4423     \comment{The letter '\~ o'.}
4424 \endsetslot
4425
4426 \setslot{\lc{OE}{oe}}
4427     \comment{The letter '\oe'. This is a single letter, and should not be
4428         faked with 'oe'.}
4429 \endsetslot
4430
4431 \setslot{\lc{0slash}{oslash}}
4432     \comment{The letter '\o'.}
4433 \endsetslot
4434
4435 \setslot{\lctop{Ugrave}{ugrave}}
4436     \comment{The letter '\` u'.}
4437 \endsetslot
4438
4439 \setslot{\lctop{Uacute}{uacute}}
4440     \comment{The letter '\u' u'.}
4441 \endsetslot
4442
4443 \setslot{\lctop{Ucircumflex}{ucircumflex}}
4444     \comment{The letter '\^ u'.}
4445 \endsetslot
4446
4447 \setslot{\lctop{Udieresis}{udieresis}}
4448     \comment{The letter '\~ u'.}
4449 \endsetslot
4450
4451 \setslot{\lctop{Yacute}{yacute}}
4452     \comment{The letter '\u' y'.}
4453 \endsetslot
4454
4455 \setslot{\lc{Thorn}{thorn}}
4456     \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
4457         with an ascender rising from the stem. It is unavailable
4458         in \plain\ TeX.}
4459 \endsetslot
4460
4461 \setslot{\lc{SS}{germandbls}}
4462     \comment{The letter '\ss'.}
4463 \endsetslot
4464
4465 \endencoding

```

6.3.9 fontsheets-t1-dotinferior.etx

cripts-t1-dotinferior.etx (etx)

```
4466 %%
```

```

4467 %% - The original notices at the top of that file concerning authors,
4468 %% maintenance etc. are replaced by this notice.
4469 %% - The file is renamed.
4470 %% - The encoding name is modified.
4471 %% - The file is modified to accommodate differences in glyph names.
4472 %% - The file is modified for use in encoding inferiors.
4473 %%
4474 %%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%%
4475 \relax
4476 \encoding
4477 \needsfontinstversion{1.910}
4479
4480 \setcommand\lc#1#2{\#2.inferior}
4481 \setcommand\uc#1#2{\#1.inferior}
4482 \setcommand\lctop#1#2{\#2.inferior}
4483 \setcommand\uctop#1#2{\#1.inferior}
4484 \setcommand\lclig#1#2{\#2.inferior}
4485 \ifisint{letterspacing}\then
4486   \ifnumber{\int{letterspacing}}={0}\then \Else
4487     \setcommand\uclig#1#2{\#1spaced}
4488     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
4489       you can't see it as \verb|\verb|\setcommand| commands are invisible in
4490       the typeset output.}
4491   \Fi
4492 \Fi
4493 \setcommand\uclig#1#2{\#1.inferior}
4494 \setcommand\digit#1{\#1.inferior}
4495
4496 \ifisint{monowidth}\then
4497   \setint{ligaturing}{0}
4498 \Else
4499   % The following empty line is *important* to get the formatting
4500   % right here (sigh)! (Remember that it is a \par token.)
4501
4502 \ifisint{letterspacing}\then
4503   \ifnumber{\int{letterspacing}}={0}\then \Else
4504     \setint{ligaturing}{0}
4505   \Fi
4506 \Fi
4507 \setint{ligaturing}{1}
4508 \Fi
4509
4510 \setint{italicslant}{0}
4511 \setint{quad}{1000}
4512 \setint{baselineskip}{1200}
4513
4514 \ifisglyph{x}\then
4515   \setint{xheight}{\height{x}}
4516 \Else
4517   \setint{xheight}{500}
4518 \Fi
4519
4520 \ifisglyph{space}\then

```

```

4521   \setint{interword}{\width{space}}
4522 \Else\ifisglyph{i}\then
4523   \setint{interword}{\width{i}}
4524 \Else
4525   \setint{interword}{333}
4526 \Fi\Fi
4527
4528 \ifisint{monowidth}\then
4529   \setint{stretchword}{0}
4530   \setint{shrinkword}{0}
4531   \setint{extraspace}{\int{interword}}
4532 \Else
4533   \setint{stretchword}{\scale{\int{interword}}{600}}
4534   \setint{shrinkword}{\scale{\int{interword}}{240}}
4535   \setint{extraspace}{\scale{\int{interword}}{240}}
4536 \Fi
4537
4538 \ifisglyph{X}\then
4539   \setint{capheight}{\height{X}}
4540 \Else
4541   \setint{capheight}{750}
4542 \Fi
4543
4544 \ifisglyph{d}\then
4545   \setint{ascender}{\height{d}}
4546 \Else\ifisint{capheight}\then
4547   \setint{ascender}{\int{capheight}}
4548 \Else
4549   \setint{ascender}{750}
4550 \Fi\Fi
4551
4552 \ifisglyph{Aring}\then
4553   \setint{acccapheight}{\height{Aring}}
4554 \Else
4555   \setint{acccapheight}{999}
4556 \Fi
4557
4558 \ifisint{descender_neg}\then
4559   \setint{descender}{\neg{\int{descender_neg}}}
4560 \Else\ifisglyph{p}\then
4561   \setint{descender}{\depth{p}}
4562 \Else
4563   \setint{descender}{250}
4564 \Fi\Fi
4565
4566 \ifisglyph{Aring}\then
4567   \setint{maxheight}{\height{Aring}}
4568 \Else
4569   \setint{maxheight}{1000}
4570 \Fi
4571
4572 \ifisint{maxdepth_neg}\then
4573   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
4574 \Else\ifisglyph{j}\then

```

```

4575   \setint{maxdepth}{\depth{j}}
4576 \Else
4577   \setint{maxdepth}{250}
4578 \Fi\Fi
4579
4580 \ifisglyph{six}\then
4581   \setint{digitwidth}{\width{six}}
4582 \Else
4583   \setint{digitwidth}{500}
4584 \Fi
4585
4586 \setint{capstem}{0} % not in AFM files
4587
4588 \setfontdimen{1}{italicslant}      % italic slant
4589 \setfontdimen{2}{interword}        % interword space
4590 \setfontdimen{3}{stretchword}      % interword stretch
4591 \setfontdimen{4}{shrinkword}       % interword shrink
4592 \setfontdimen{5}{xheight}         % x-height
4593 \setfontdimen{6}{quad}            % quad
4594 \setfontdimen{7}{extraspace}       % extra space after .
4595 \setfontdimen{8}{capheight}        % cap height
4596 \setfontdimen{9}{ascender}         % ascender
4597 \setfontdimen{10}{accicapheight}    % accented cap height
4598 \setfontdimen{11}{descender}        % descender's depth
4599 \setfontdimen{12}{maxheight}        % max height
4600 \setfontdimen{13}{maxdepth}         % max depth
4601 \setfontdimen{14}{digitwidth}       % digit width
4602 \setfontdimen{15}{verticalstem}     % dominant width of vertical stems
4603 \setfontdimen{16}{baselineskip}     % baselineskip
4604
4605 \ifnumber{\int{ligaturing}}<{0}\then
4606   \comment{In this case, the codingscheme can be different from the
4607   default, and therefore we refrain from setting it.}
4608 \Else
4609   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTINFERIOR}
4610 \Fi
4611
4612 \setslot{\lc{Grave}{grave}}
4613   \comment{The grave accent '\{}.\}
4614 \endsetslot
4615
4616 \setslot{\lc{Acute}{acute}}
4617   \comment{The acute accent '\{}.\}
4618 \endsetslot
4619
4620 \setslot{\lc{Circumflex}{circumflex}}
4621   \comment{The circumflex accent '\^{}.\}
4622 \endsetslot
4623
4624 \setslot{\lc{Tilde}{tilde}}
4625   \comment{The tilde accent '\~{}.\}
4626 \endsetslot
4627
4628 \setslot{\lc{Dieresis}{dieresis}}

```

```

4629   \comment{The umlaut or dieresis accent '\{"\}.}
4630   \endsetslot
4631
4632 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
4633   \comment{The long Hungarian umlaut '\H{}\'.}
4634 \endsetslot
4635
4636 \setslot{\lc{Ring}{ring}}
4637   \comment{The ring accent '\r{}\'.}
4638 \endsetslot
4639
4640 \setslot{\lc{Caron}{caron}}
4641   \comment{The caron or h\`a\v cek accent '\v{}\'.}
4642 \endsetslot
4643
4644 \setslot{\lc{Breve}{breve}}
4645   \comment{The breve accent '\u{}\'.}
4646 \endsetslot
4647
4648 \setslot{\lc{Macron}{macron}}
4649   \comment{The macron accent '\={}\'.}
4650 \endsetslot
4651
4652 \setslot{\lc{Dotaccent}{dotaccent}}
4653   \comment{The dot accent '\.{}\'.}
4654 \endsetslot
4655
4656 \setslot{\lc{Cedilla}{cedilla}}
4657   \comment{The cedilla accent '\c {}'.}
4658 \endsetslot
4659
4660 \setslot{\lc{Ogonek}{ogonek}}
4661   \comment{The ogonek accent '\k {}'.}
4662 \endsetslot
4663
4664 \setslot{quotesinglbase.inferior}
4665   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
4666       but with different sidebearings.}
4667 \endsetslot
4668
4669 \setslot{guilsinglleft.inferior}
4670   \comment{A French single opening quote mark '\guilsinglleft',
4671       unavailable in \plain\ \TeX.}
4672 \endsetslot
4673
4674 \setslot{guilsinglright.inferior}
4675   \comment{A French single closing quote mark '\guilsinglright',
4676       unavailable in \plain\ \TeX.}
4677 \endsetslot
4678
4679 \setslot{quotedblleft.inferior}
4680   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
4681 \endsetslot
4682

```

```

4683 \setslot{quotedblright.inferior}
4684   \comment{The English closing quote mark '\textquotedblright,'.}
4685 \endsetslot
4686
4687 \setslot{quotedblbase.inferior}
4688   \comment{A German double quote mark '\quotedblbase' similar to two commas,
4689       but with tighter letterspacing and different sidebearings.}
4690 \endsetslot
4691
4692 \setslot{guillemotleft.inferior}
4693   \comment{A French double opening quote mark '\guillemotleft',
4694       unavailable in \plain\ TeX.}
4695 \endsetslot
4696
4697 \setslot{guillemotright.inferior}
4698   \comment{A French closing opening quote mark '\guillemotright',
4699       unavailable in \plain\ TeX.}
4700 \endsetslot
4701
4702 \setslot{endash.inferior}
4703   \ligature{LIG}{hyphen.inferior}{emdash.inferior}
4704   \comment{The number range dash '1--9'.
4705       This is called 'rangedash' by fontinst's t1.etx, but it needs to be
4706       called 'endash' to work right.
4707       The '\textendash'.
4708       In a monowidth font, this might be set as '\texttt{1{-}9}'.}
4709 \endsetslot
4710
4711 \setslot{emdash.inferior}
4712   \comment{The punctuation dash 'Oh---boy.'
4713       This is calle 'punctdash' by fontinst's t1.etx, but needs to be
4714       called 'emdash' to work right.
4715       The '\textemdash'.
4716       In a monowidth font, this might be set as '\texttt{Oh{-}{-}boy.}'}
4717 \endsetslot
4718
4719 \setslot{compwordmark.inferior}
4720   \comment{An invisible glyph, with zero width and depth, but the
4721       height of lowercase letters without ascenders.
4722       It is used to stop ligaturing in words like 'shelf{}ful'.}
4723 \endsetslot
4724
4725 \setslot{perthousandzero.inferior}
4726   \comment{A glyph which is placed after '\%' to produce a
4727       'per-thousand', or twice to produce 'per-ten-thousand'.
4728       Your guess is as good as mine as to what this glyph should look
4729       like in a monowidth font.}
4730 \endsetslot
4731
4732 \setslot{\lc{dotlessI}{dotlessi}}
4733   \comment{A dotless i '\i', used to produce accented letters such as
4734       '\=\i'.}
4735 \endsetslot
4736

```

```

4737 \setslot{\lc{dotlessJ}{dotlessj}}
4738   \comment{A dotless j ‘\j’, used to produce accented letters such as
4739   ‘=\j’. Most non-\TeX\ fonts do not have this glyph.}
4740 \endsetslot
4741
4742 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
4743
4744 \setslot{\lclig{FF}{ff}}
4745   \ifnumber{\int{ligaturing}}>0\then
4746     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{ffi}}
4747     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{ffl}}
4748   \Fi
4749   \comment{The ‘ff’ ligature. It should be two characters wide in a
4750   monowidth font.}
4751 \endsetslot
4752
4753 \setslot{\lclig{FI}{fi}}
4754   \comment{The ‘fi’ ligature. It should be two characters wide in a
4755   monowidth font.}
4756 \endsetslot
4757
4758 \setslot{\lclig{FL}{fl}}
4759   \comment{The ‘fl’ ligature. It should be two characters wide in a
4760   monowidth font.}
4761 \endsetslot
4762
4763 \setslot{\lclig{FFI}{ ffi}}
4764   \comment{The ‘ffi’ ligature. It should be three characters wide in a
4765   monowidth font.}
4766 \endsetslot
4767
4768 \setslot{\lclig{FFL}{ffl}}
4769   \comment{The ‘ffl’ ligature. It should be three characters wide in a
4770   monowidth font.}
4771 \endsetslot
4772
4773 \Fi
4774
4775 \setslot{visiblespace.inferior}
4776   \comment{A visible space glyph ‘\textvisiblespace’.}
4777 \endsetslot
4778
4779 \setslot{exclam.inferior}
4780   \ligature{LIG}{quotyleft.inferior}{exclamdown.inferior}
4781   \comment{The exclamation mark ‘!’.}
4782 \endsetslot
4783
4784 \setslot{quotedbl.inferior}
4785   \comment{The ‘neutral’ double quotation mark ‘\,\textquotedbl\,’,
4786   included for use in monowidth fonts, or for setting computer
4787   programs. Note that the inclusion of this glyph in this slot
4788   means that \TeX\ documents which used ‘{\tt\char“}’ as an
4789   input character will no longer work.}
4790 \endsetslot

```

```
4791 \setslot{numbersign.inferior}
4792     \comment{The hash sign '\#'.}
4793 \endsetslot
4795
4796 \setslot{dollar.inferior}
4797     \comment{The dollar sign '\$'.}
4798 \endsetslot
4799
4800 \setslot{percent.inferior}
4801     \comment{The percent sign '\%'.}
4802 \endsetslot
4803
4804 \setslot{ampersand.inferior}
4805     \comment{The ampersand sign '\&'.}
4806 \endsetslot
4807
4808 \setslot{quoteright.inferior}
4809     \ligature{LIG}{quoteright.inferior}{quotedblright.inferior}
4810     \comment{The English closing single quote mark '\,\textquoteright\,'.}
4811 \endsetslot
4812
4813 \setslot{parenleft.inferior}
4814     \comment{The opening parenthesis '('.}
4815 \endsetslot
4816
4817 \setslot{parenright.inferior}
4818     \comment{The closing parenthesis ')'.}
4819 \endsetslot
4820
4821 \setslot{asterisk.inferior}
4822     \comment{The raised asterisk '*'.}
4823 \endsetslot
4824
4825 \setslot{plus.inferior}
4826     \comment{The addition sign '+'.}
4827 \endsetslot
4828
4829 \setslot{comma.inferior}
4830     \ligature{LIG}{comma.inferior}{quotedblbase.inferior}
4831     \comment{The comma ','.}
4832 \endsetslot
4833
4834 \setslot{hyphen.inferior}
4835     \ligature{LIG}{hyphen.inferior}{endash.inferior}
4836     \ligature{LIG}{hyphenchar.inferior}{hyphenchar.inferior}
4837     \comment{The hyphen '-'.}
4838 \endsetslot
4839
4840 \setslot{period.inferior}
4841     \comment{The period '.'.}
4842 \endsetslot
4843
4844 \setslot{slash.inferior}
```

```
4845     \comment{The forward oblique '/'.}
4846 \endsetslot
4847
4848 \setslot{\digit{zero}}
4849     \comment{The number '0'. This (and all the other numerals) may be
4850         old style or ranging digits.}
4851 \endsetslot
4852
4853 \setslot{\digit{one}}
4854     \comment{The number '1'.}
4855 \endsetslot
4856
4857 \setslot{\digit{two}}
4858     \comment{The number '2'.}
4859 \endsetslot
4860
4861 \setslot{\digit{three}}
4862     \comment{The number '3'.}
4863 \endsetslot
4864
4865 \setslot{\digit{four}}
4866     \comment{The number '4'.}
4867 \endsetslot
4868
4869 \setslot{\digit{five}}
4870     \comment{The number '5'.}
4871 \endsetslot
4872
4873 \setslot{\digit{six}}
4874     \comment{The number '6'.}
4875 \endsetslot
4876
4877 \setslot{\digit{seven}}
4878     \comment{The number '7'.}
4879 \endsetslot
4880
4881 \setslot{\digit{eight}}
4882     \comment{The number '8'.}
4883 \endsetslot
4884
4885 \setslot{\digit{nine}}
4886     \comment{The number '9'.}
4887 \endsetslot
4888
4889 \setslot{colon.inferior}
4890     \comment{The colon punctuation mark ':' .}
4891 \endsetslot
4892
4893 \setslot{semicolon.inferior}
4894     \comment{The semi-colon punctuation mark ';' .}
4895 \endsetslot
4896
4897 \setslot{less.inferior}
4898     \ligature[LIG]{less.inferior}{guillemotleft.inferior}
```

```
4899     \comment{The less-than sign ‘\textless’.}
4900 \endsetslot
4901
4902 \setslot{equal.inferior}
4903     \comment{The equals sign ‘=’.}
4904 \endsetslot
4905
4906 \setslot{greater.inferior}
4907     \ligature{LIG}{greater.inferior}{guillemotright.inferior}
4908     \comment{The greater-than sign ‘\textgreater’.}
4909 \endsetslot
4910
4911 \setslot{question.inferior}
4912     \ligature{LIG}{quotefleft.inferior}{questiondown.inferior}
4913     \comment{The question mark ‘?’ .}
4914 \endsetslot
4915
4916 \setslot{at.inferior}
4917     \comment{The at sign ‘@’.}
4918 \endsetslot
4919
4920 \setslot{\uc{A}{a}}
4921     \comment{The letter ‘{A}’ .}
4922 \endsetslot
4923
4924 \setslot{\uc{B}{b}}
4925     \comment{The letter ‘{B}’ .}
4926 \endsetslot
4927
4928 \setslot{\uc{C}{c}}
4929     \comment{The letter ‘{C}’ .}
4930 \endsetslot
4931
4932 \setslot{\uc{D}{d}}
4933     \comment{The letter ‘{D}’ .}
4934 \endsetslot
4935
4936 \setslot{\uc{E}{e}}
4937     \comment{The letter ‘{E}’ .}
4938 \endsetslot
4939
4940 \setslot{\uc{F}{f}}
4941     \comment{The letter ‘{F}’ .}
4942 \endsetslot
4943
4944 \setslot{\uc{G}{g}}
4945     \comment{The letter ‘{G}’ .}
4946 \endsetslot
4947
4948 \setslot{\uc{H}{h}}
4949     \comment{The letter ‘{H}’ .}
4950 \endsetslot
4951
4952 \ifnumber{\int{ligaturing}}<-1\then \skipslots{1}\Else
```

```
4953 \setslot{\uc{I}{i}}
4954     \comment{The letter '{I}'.}
4955 \endsetslot
4956
4957 \Fi
4958
4959 \setslot{\uc{J}{j}}
4960     \comment{The letter '{J}'.}
4961 \endsetslot
4962
4963 \setslot{\uc{K}{k}}
4964     \comment{The letter '{K}'.}
4965 \endsetslot
4966
4967 \setslot{\uc{L}{l}}
4968     \comment{The letter '{L}'.}
4969 \endsetslot
4970
4971 \setslot{\uc{M}{m}}
4972     \comment{The letter '{M}'.}
4973 \endsetslot
4974
4975 \setslot{\uc{N}{n}}
4976     \comment{The letter '{N}'.}
4977 \endsetslot
4978
4979 \setslot{\uc{O}{o}}
4980     \comment{The letter '{O}'.}
4981 \endsetslot
4982
4983 \setslot{\uc{P}{p}}
4984     \comment{The letter '{P}'.}
4985 \endsetslot
4986
4987 \setslot{\uc{Q}{q}}
4988     \comment{The letter '{Q}'.}
4989 \endsetslot
4990
4991 \setslot{\uc{R}{r}}
4992     \comment{The letter '{R}'.}
4993 \endsetslot
4994
4995 \setslot{\uc{S}{s}}
4996     \comment{The letter '{S}'.}
4997 \endsetslot
4998
4999 \setslot{\uc{T}{t}}
5000     \comment{The letter '{T}'.}
5001 \endsetslot
5002
5003 \setslot{\uc{U}{u}}
5004     \comment{The letter '{U}'.}
5005 \endsetslot
5006
```

```
5007 \setslot{\uc{V}{v}}
5008   \comment{The letter '{V}'.}
5009 \endsetslot
5010
5011 \setslot{\uc{W}{w}}
5012   \comment{The letter '{W}'.}
5013 \endsetslot
5014
5015 \setslot{\uc{X}{x}}
5016   \comment{The letter '{X}'.}
5017 \endsetslot
5018
5019 \setslot{\uc{Y}{y}}
5020   \comment{The letter '{Y}'.}
5021 \endsetslot
5022
5023 \setslot{\uc{Z}{z}}
5024   \comment{The letter '{Z}'.}
5025 \endsetslot
5026
5027 \setslot{bracketleft.inferior}
5028   \comment{The opening square bracket '['.}
5029 \endsetslot
5030
5031 \setslot{backslash.inferior}
5032   \comment{The backwards oblique '\textbackslash'.}
5033 \endsetslot
5034
5035 \setslot{bracketright.inferior}
5036   \comment{The closing square bracket ']'.}
5037 \endsetslot
5038
5039 \setslot{asciicircum.inferior}
5040   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
5041     This is included for compatibility with typewriter fonts used
5042       for computer listings.}
5043 \endsetslot
5044
5045 \setslot{underscore.inferior}
5046   \comment{The ASCII underline character '\textunderline', usually
5047     set on the baseline.
5048     This is included for compatibility with typewriter fonts used
5049       for computer listings.}
5050 \endsetslot
5051
5052 \setslot{quotyleft.inferior}
5053   \ligature{LIG}{quotyleft.inferior}{quotedblleft.inferior}
5054   \comment{The English opening single quote mark '\textquotyleft\,'.}
5055 \endsetslot
5056
5057 \setslot{\lc{A}{a}}
5058   \comment{The letter '{a}'.}
5059 \endsetslot
5060
```

```
5061 \setslot{\lc{B}{b}}
5062   \comment{The letter '{b}'.}
5063 \endsetslot
5064
5065 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
5066   \setslot{\lc{C}{c}}
5067   \comment{The letter '{c}'.}
5068 \endsetslot
5069
5070 \setslot{\lc{D}{d}}
5071   \comment{The letter '{d}'.}
5072 \endsetslot
5073
5074 \setslot{\lc{E}{e}}
5075   \comment{The letter '{e}'.}
5076 \endsetslot
5077
5078 \setslot{\lc{F}{f}}
5079   \comment{The letter '{f}'.}
5080 \endsetslot
5081
5082 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
5083
5084   \setslot{\lc{F}{f}}
5085   \ifnumber{\int{ligaturing}}>{0}\then
5086     \ligature{LIG}{\lc{I}{i}}{\lc{I}{i}}
5087     \ligature{LIG}{\lc{F}{f}}{\lc{F}{f}}
5088     \ligature{LIG}{\lc{L}{l}}{\lc{L}{l}}
5089   \Fi
5090   \comment{The letter '{f}'.}
5091 \endsetslot
5092
5093 \Fi
5094
5095 \setslot{\lc{G}{g}}
5096   \comment{The letter '{g}'.}
5097 \endsetslot
5098
5099 \setslot{\lc{H}{h}}
5100   \comment{The letter '{h}'.}
5101 \endsetslot
5102
5103 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
5104
5105   \setslot{\lc{I}{i}}
5106   \comment{The letter '{i}'.}
5107 \endsetslot
5108
5109 \Fi
5110
5111 \setslot{\lc{J}{j}}
5112   \comment{The letter '{j}'.}
5113 \endsetslot
5114
```

```

5115 \setslot{\lc{K}{k}}
5116   \comment{The letter '{k}'.}
5117 \endsetslot
5118
5119 \setslot{\lc{L}{l}}
5120   \comment{The letter '{l}'.}
5121 \endsetslot
5122
5123 \setslot{\lc{M}{m}}
5124   \comment{The letter '{m}'.}
5125 \endsetslot
5126
5127 \setslot{\lc{N}{n}}
5128   \comment{The letter '{n}'.}
5129 \endsetslot
5130
5131 \setslot{\lc{O}{o}}
5132   \comment{The letter '{o}'.}
5133 \endsetslot
5134
5135 \setslot{\lc{P}{p}}
5136   \comment{The letter '{p}'.}
5137 \endsetslot
5138
5139 \setslot{\lc{Q}{q}}
5140   \comment{The letter '{q}'.}
5141 \endsetslot
5142
5143 \setslot{\lc{R}{r}}
5144   \comment{The letter '{r}'.}
5145 \endsetslot
5146
5147 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
5148
5149   \setslot{\lc{S}{s}}
5150     \comment{The letter '{s}'.}
5151   \endsetslot
5152
5153 \Fi
5154
5155 \setslot{\lc{T}{t}}
5156   \comment{The letter '{t}'.}
5157 \endsetslot
5158
5159 \setslot{\lc{U}{u}}
5160   \comment{The letter '{u}'.}
5161 \endsetslot
5162
5163 \setslot{\lc{V}{v}}
5164   \comment{The letter '{v}'.}
5165 \endsetslot
5166
5167 \setslot{\lc{W}{w}}
5168   \comment{The letter '{w}'.}

```

```
5169 \endsetslot
5170
5171 \setslot{\lc{X}{x}}
5172     \comment{The letter '{x}'.}
5173 \endsetslot
5174
5175 \setslot{\lc{Y}{y}}
5176     \comment{The letter '{y}'.}
5177 \endsetslot
5178
5179 \setslot{\lc{Z}{z}}
5180     \comment{The letter '{z}'.}
5181 \endsetslot
5182
5183 \setslot{braceleft.inferior}
5184     \comment{The opening curly brace '\textbraceleft'.}
5185 \endsetslot
5186
5187 \setslot{bar.inferior}
5188     \comment{The ASCII vertical bar '\textbar'.
5189         This is included for compatibility with typewriter fonts used
5190         for computer listings.}
5191 \endsetslot
5192
5193 \setslot{braceright.inferior}
5194     \comment{The closing curly brace '\textbraceright'.}
5195 \endsetslot
5196
5197 \setslot{asciitilde.inferior}
5198     \comment{The ASCII tilde '\textasciitilde'.
5199         This is included for compatibility with typewriter fonts used
5200         for computer listings.}
5201 \endsetslot
5202
5203 \setslot{hyphenchar.inferior}
5204     \comment{The glyph used for hyphenation in this font, which will
5205         almost always be the same as 'hyphen'.}
5206 \endsetslot
5207
5208 \setslot{\uctop{Abreve}{abreve}}
5209     \comment{The letter '\u A'.}
5210 \endsetslot
5211
5212 \setslot{\uc{Aogonek}{aogonek}}
5213     \comment{The letter '\k A'.}
5214 \endsetslot
5215
5216 \setslot{\uctop{Cacute}{cacute}}
5217     \comment{The letter '\' C'.}
5218 \endsetslot
5219
5220 \setslot{\uctop{Ccaron}{ccaron}}
5221     \comment{The letter '\v C'.}
5222 \endsetslot
```

```

5223 \setslot{\uctop{Dcaron}{dcaron}}
5224   \comment{The letter '\v D'.}
5225 \endsetslot
5226
5227 \setslot{\uctop{Ecaron}{ecaron}}
5228   \comment{The letter '\v E'.}
5229 \endsetslot
5230
5231 \setslot{\uc{Eogonek}{eogonek}}
5232   \comment{The letter '\k E'.}
5233 \endsetslot
5234
5235 \setslot{\uctop{Gbreve}{gbreve}}
5236   \comment{The letter '\u G'.}
5237 \endsetslot
5238
5239 \setslot{\uctop{Lacute}{lacute}}
5240   \comment{The letter '\` L'.}
5241 \endsetslot
5242
5243 \setslot{\uc{Lcaron}{lcaron}}
5244   \comment{The letter '\v L'.}
5245 \endsetslot
5246
5247 \setslot{\uc{Lslash}{lslash}}
5248   \comment{The letter '\L'.}
5249 \endsetslot
5250
5251 \setslot{\uctop{Nacute}{nacute}}
5252   \comment{The letter '\` N'.}
5253 \endsetslot
5254
5255 \setslot{\uctop{Ncaron}{ncaron}}
5256   \comment{The letter '\v N'.}
5257 \endsetslot
5258
5259 \setslot{\uc{Eng}{eng}}
5260   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
      seems.}
5261 \endsetslot
5262
5263 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
5264   \comment{The letter '\H O'.}
5265 \endsetslot
5266
5267 \setslot{\uctop{Racute}{racute}}
5268   \comment{The letter '\` R'.}
5269 \endsetslot
5270
5271 \setslot{\uctop{Rcaron}{rcaron}}
5272   \comment{The letter '\v R'.}
5273 \endsetslot
5274

```

```

5275 \setslot{\uctop{Sacute}{sacute}}
5276   \comment{The letter '\`S'.}
5277 \endsetslot
5278
5279 \setslot{\uctop{Scaron}{scaron}}
5280   \comment{The letter '\v S'.}
5281 \endsetslot
5282
5283 \setslot{\uc{Scedilla}{scedilla}}
5284   \comment{The letter '\c S'.}
5285 \endsetslot
5286
5287 \setslot{\uctop{Tcaron}{tcaron}}
5288   \comment{The letter '\v T'.}
5289 \endsetslot
5290
5291 \setslot{\uc{Tcedilla}{tcedilla}}
5292   \comment{The letter '\c T'.}
5293 \endsetslot
5294
5295 \setslot{\uctop{Uhngarumlaut}{uhngarumlaut}}
5296   \comment{The letter '\H U'.}
5297 \endsetslot
5298
5299 \setslot{\uctop{Uring}{uring}}
5300   \comment{The letter '\r U'.}
5301 \endsetslot
5302
5303 \setslot{\uctop{Ydieresis}{ydieresis}}
5304   \comment{The letter '\^ Y'.}
5305 \endsetslot
5306
5307 \setslot{\uctop{Zacute}{zacute}}
5308   \comment{The letter '\` Z'.}
5309 \endsetslot
5310
5311 \setslot{\uctop{Zcaron}{zcaron}}
5312   \comment{The letter '\v Z'.}
5313 \endsetslot
5314
5315 \setslot{\uctop{Zdotaccent}{zdotaccent}}
5316   \comment{The letter '\. Z'.}
5317 \endsetslot
5318
5319 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
5320
5321 \setslot{\uclig{IJ}{ij}}
5322   \comment{The letter 'IJ'. This is a single letter, and in a
5323     monowidth font should ideally be one letter wide.}
5324 \endsetslot
5325
5326 \Fi
5327
5328

```

```
5329 \setslot{\uctop{Idotaccent}{idotaccent}}
5330   \comment{The letter '\. I'.}
5331 \endsetslot
5332
5333 \setslot{\lc{Dbar}{dbar}}
5334   \comment{The letter '\dj'.}
5335 \endsetslot
5336
5337 \setslot{section.inferior}
5338   \comment{The section mark '\textsection'.}
5339 \endsetslot
5340
5341 \setslot{\lctop{Abreve}{abreve}}
5342   \comment{The letter '\u a'.}
5343 \endsetslot
5344
5345 \setslot{\lc{Aogonek}{aogonek}}
5346   \comment{The letter '\k a'.}
5347 \endsetslot
5348
5349 \setslot{\lctop{Cacute}{cacute}}
5350   \comment{The letter '\c c'.}
5351 \endsetslot
5352
5353 \setslot{\lctop{Ccaron}{ccaron}}
5354   \comment{The letter '\v c'.}
5355 \endsetslot
5356
5357 \setslot{\lctop{Dcaron}{dcaron}}
5358   \comment{The letter '\v d'.}
5359 \endsetslot
5360
5361 \setslot{\lctop{Ecaron}{ecaron}}
5362   \comment{The letter '\v e'.}
5363 \endsetslot
5364
5365 \setslot{\lc{Eogonek}{eogonek}}
5366   \comment{The letter '\k e'.}
5367 \endsetslot
5368
5369 \setslot{\lctop{Gbreve}{gbreve}}
5370   \comment{The letter '\u g'.}
5371 \endsetslot
5372
5373 \setslot{\lctop{Lacute}{lacute}}
5374   \comment{The letter '\l'.}
5375 \endsetslot
5376
5377 \setslot{\lc{Lcaron}{lcaron}}
5378   \comment{The letter '\v l'.}
5379 \endsetslot
5380
5381 \setslot{\lc{Lslash}{lslash}}
5382   \comment{The letter '\l'.
```

```

5383 \endsetslot
5384
5385 \setslot{\lctop{Nacute}{nacute}}
5386   \comment{The letter '\n'.}
5387 \endsetslot
5388
5389 \setslot{\lctop{Ncaron}{ncaron}}
5390   \comment{The letter '\v n'.}
5391 \endsetslot
5392
5393 \setslot{\lc{Eng}{eng}}
5394   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.tex in most cases,
      it seems.}
5395 \endsetslot
5396
5397 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
5398   \comment{The letter '\H o'.}
5399 \endsetslot
5400
5401 \setslot{\lctop{Racute}{racute}}
5402   \comment{The letter '\r'.}
5403 \endsetslot
5404
5405 \setslot{\lctop{Rcaron}{rcaron}}
5406   \comment{The letter '\v r'.}
5407 \endsetslot
5408
5409 \setslot{\lctop{Sacute}{sacute}}
5410   \comment{The letter '\s'.}
5411 \endsetslot
5412
5413 \setslot{\lctop{Scaron}{scaron}}
5414   \comment{The letter '\v s'.}
5415 \endsetslot
5416
5417 \setslot{\lc{Scedilla}{scedilla}}
5418   \comment{The letter '\c s'.}
5419 \endsetslot
5420
5421 \setslot{\lctop{Tcaron}{tcaron}}
5422   \comment{The letter '\v t'.}
5423 \endsetslot
5424
5425 \setslot{\lc{Tcedilla}{tcedilla}}
5426   \comment{The letter '\c t'.}
5427 \endsetslot
5428
5429 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
5430   \comment{The letter '\H u'.}
5431 \endsetslot
5432
5433 \setslot{\lctop{Uring}{uring}}
5434   \comment{The letter '\r u'.}

```

```
5435 \endsetslot
5436
5437 \setslot{\lctop{Ydieresis}{ydieresis}}
5438   \comment{The letter '\` y'.}
5439 \endsetslot
5440
5441 \setslot{\lctop{Zacute}{zacute}}
5442   \comment{The letter '\` z'.}
5443 \endsetslot
5444
5445 \setslot{\lctop{Zcaron}{zcaron}}
5446   \comment{The letter '\v z'.}
5447 \endsetslot
5448
5449 \setslot{\lctop{Zdotaccent}{zdotaccent}}
5450   \comment{The letter '\. z'.}
5451 \endsetslot
5452
5453 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
5454
5455 \setslot{\lclig{IJ}{ij}}
5456   \comment{The letter 'ij'. This is a single letter, and in a
5457     monowidth font should ideally be one letter wide.}
5458 \endsetslot
5459
5460 \Fi
5461
5462 \setslot{exclamdown.inferior}
5463   \comment{The Spanish punctuation mark '!'.}
5464 \endsetslot
5465
5466 \setslot{questiondown.inferior}
5467   \comment{The Spanish punctuation mark '?'.}
5468 \endsetslot
5469
5470 \setslot{sterling.inferior}
5471   \comment{The British currency mark '\textsterling'.}
5472 \endsetslot
5473
5474 \setslot{\uctop{Agrave}{agrave}}
5475   \comment{The letter '\` A'.}
5476 \endsetslot
5477
5478 \setslot{\uctop{Aacute}{aacute}}
5479   \comment{The letter '\` A'.}
5480 \endsetslot
5481
5482 \setslot{\uctop{Acircumflex}{acircumflex}}
5483   \comment{The letter '\^ A'.}
5484 \endsetslot
5485
5486 \setslot{\uctop{Atilde}{atilde}}
5487   \comment{The letter '\~ A'.}
5488 \endsetslot
```

```
5489 \setslot{\uctop{Adieresis}{adieresis}}
5490     \comment{The letter '\u00c1'.}
5491 \endsetslot
5493
5494 \setslot{\uctop{Aring}{aring}}
5495     \comment{The letter '\u00e5'.}
5496 \endsetslot
5497
5498 \setslot{\uc{AE}{ae}}
5499     \comment{The letter '\u00c5'. This is a single letter, and should not be
5500         faked with 'AE'.}
5501 \endsetslot
5502
5503 \setslot{\uc{Ccedilla}{ccedilla}}
5504     \comment{The letter '\u00e3'.}
5505 \endsetslot
5506
5507 \setslot{\uctop{Egrave}{egrave}}
5508     \comment{The letter '\u00e6'.}
5509 \endsetslot
5510
5511 \setslot{\uctop{Eacute}{eacute}}
5512     \comment{The letter '\u00e1'.}
5513 \endsetslot
5514
5515 \setslot{\uctop{Ecircumflex}{ecircumflex}}
5516     \comment{The letter '\u00e5'.}
5517 \endsetslot
5518
5519 \setslot{\uctop{Edieresis}{edieresis}}
5520     \comment{The letter '\u00e1'.}
5521 \endsetslot
5522
5523 \setslot{\uctop{Igrave}{igrave}}
5524     \comment{The letter '\u00e6'.}
5525 \endsetslot
5526
5527 \setslot{\uctop{Iacute}{iacute}}
5528     \comment{The letter '\u00e1'.}
5529 \endsetslot
5530
5531 \setslot{\uctop{Icircumflex}{icircumflex}}
5532     \comment{The letter '\u00e5'.}
5533 \endsetslot
5534
5535 \setslot{\uctop{Idieresis}{idieresis}}
5536     \comment{The letter '\u00e1'.}
5537 \endsetslot
5538
5539 \setslot{\uc{Eth}{eth}}
5540     \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
5541         with a horizontal bar through the stem. It is unavailable
5542         in \plain\ \TeX.}
```

```
5543 \endsetslot
5544
5545 \setslot{\uctop{Ntilde}{ntilde}}
5546     \comment{The letter '\~ N'.}
5547 \endsetslot
5548
5549 \setslot{\uctop{Ograve}{ograve}}
5550     \comment{The letter '\` O'.}
5551 \endsetslot
5552
5553 \setslot{\uctop{Oacute}{oacute}}
5554     \comment{The letter '\^ O'.}
5555 \endsetslot
5556
5557 \setslot{\uctop{Ocircumflex}{ocircumflex}}
5558     \comment{The letter '\^ O'.}
5559 \endsetslot
5560
5561 \setslot{\uctop{Otilde}{otilde}}
5562     \comment{The letter '\~ O'.}
5563 \endsetslot
5564
5565 \setslot{\uctop{Odieresis}{odieresis}}
5566     \comment{The letter '\" O'.}
5567 \endsetslot
5568
5569 \setslot{\uc{OE}{oe}}
5570     \comment{The letter '\OE'. This is a single letter, and should not be
5571         faked with 'OE'.}
5572 \endsetslot
5573
5574 \setslot{\uc{Oslash}{oslash}}
5575     \comment{The letter '\O'.}
5576 \endsetslot
5577
5578 \setslot{\uctop{Ugrave}{ugrave}}
5579     \comment{The letter '\` U'.}
5580 \endsetslot
5581
5582 \setslot{\uctop{Uacute}{uacute}}
5583     \comment{The letter '\^ U'.}
5584 \endsetslot
5585
5586 \setslot{\uctop{Ucircumflex}{ucircumflex}}
5587     \comment{The letter '\^ U'.}
5588 \endsetslot
5589
5590 \setslot{\uctop{Udieresis}{udieresis}}
5591     \comment{The letter '\" U'.}
5592 \endsetslot
5593
5594 \setslot{\uctop{Yacute}{yacute}}
5595     \comment{The letter '\^ Y'.}
5596 \endsetslot
```

```
5597 \setslot{\uc{Thorn}{thorn}}
5598   \comment{The Icelandic capital letter Thorn, similar to a 'P'
5599     with the bowl moved down. It is unavailable in \plain\ \TeX.}
5600   \endsetslot
5601
5602 \setslot{\uclig{SS}{germandbls}}
5603   \comment{The ligature 'SS', used to give an upper case 'ss'.
5604     In a monowidth font it should be two letters wide.}
5605   \endsetslot
5606
5607 \setslot{\lctop{Agrave}{agrave}}
5608   \comment{The letter '\`a'.}
5609   \endsetslot
5610
5611 \setslot{\lctop{Aacute}{aacute}}
5612   \comment{The letter '\^a'.}
5613   \endsetslot
5614
5615 \setslot{\lctop{Acircumflex}{acircumflex}}
5616   \comment{The letter '\~a'.}
5617   \endsetslot
5618
5619 \setslot{\lctop{Atilde}{atilde}}
5620   \comment{The letter '\~a'.}
5621   \endsetslot
5622
5623 \setslot{\lctop{Adieresis}{adieresis}}
5624   \comment{The letter '\u00e0'.}
5625   \endsetslot
5626
5627 \setslot{\lctop{Aring}{aring}}
5628   \comment{The letter '\r a'.}
5629   \endsetslot
5630
5631 \setslot{\lc{AE}{ae}}
5632   \comment{The letter '\ae'. This is a single letter, and should not be
5633     faked with 'ae'.}
5634   \endsetslot
5635
5636 \setslot{\lc{Ccedilla}{ccedilla}}
5637   \comment{The letter '\c c'.}
5638   \endsetslot
5639
5640 \setslot{\lctop{Egrave}{egrave}}
5641   \comment{The letter '\`e'.}
5642   \endsetslot
5643
5644 \setslot{\lctop{Eacute}{eacute}}
5645   \comment{The letter '\^e'.}
5646   \endsetslot
5647
5648 \setslot{\lctop{Ecircumflex}{ecircumflex}}
5649   \comment{The letter '\~e'.}
```

```
5651 \endsetslot
5652
5653 \setslot{\lctop{Edieresis}{edieresis}}
5654     \comment{The letter '\`e'.}
5655 \endsetslot
5656
5657 \setslot{\lctop{Igrave}{igrave}}
5658     \comment{The letter '\`i'.}
5659 \endsetslot
5660
5661 \setslot{\lctop{Iacute}{iacute}}
5662     \comment{The letter '\^i'.}
5663 \endsetslot
5664
5665 \setslot{\lctop{Icircumflex}{icircumflex}}
5666     \comment{The letter '\^i'.}
5667 \endsetslot
5668
5669 \setslot{\lctop{Idieresis}{idieresis}}
5670     \comment{The letter '\\"i'.}
5671 \endsetslot
5672
5673 \setslot{\lc{Eth}{eth}}
5674     \comment{The Icelandic lowercase letter 'eth' similar to
5675         a '$\partial$' with an oblique bar through the stem.
5676         It is unavailable in \plain\ \TeX.}
5677 \endsetslot
5678
5679 \setslot{\lctop{Ntilde}{ntilde}}
5680     \comment{The letter '\~n'.}
5681 \endsetslot
5682
5683 \setslot{\lctop{Ograve}{ograve}}
5684     \comment{The letter '\`o'.}
5685 \endsetslot
5686
5687 \setslot{\lctop{Oacute}{oacute}}
5688     \comment{The letter '\^o'.}
5689 \endsetslot
5690
5691 \setslot{\lctop{Ocircumflex}{ocircumflex}}
5692     \comment{The letter '\^o'.}
5693 \endsetslot
5694
5695 \setslot{\lctop{Otilde}{otilde}}
5696     \comment{The letter '\~o'.}
5697 \endsetslot
5698
5699 \setslot{\lctop{Odieresis}{odieresis}}
5700     \comment{The letter '\\"o'.}
5701 \endsetslot
5702
5703 \setslot{\lc{OE}{oe}}
5704     \comment{The letter '\oe'. This is a single letter, and should not be}
```

```

5705      faked with 'oe'.}
5706  \endsetslot
5707
5708  \setslot{\lc{0slash}{oslash}}
5709      \comment{The letter '\o'.}
5710  \endsetslot
5711
5712  \setslot{\lctop{Ugrave}{ugrave}}
5713      \comment{The letter '\u' u'.}
5714  \endsetslot
5715
5716  \setslot{\lctop{Uacute}{uacute}}
5717      \comment{The letter '\u' u'.}
5718  \endsetslot
5719
5720  \setslot{\lctop{Ucircumflex}{ucircumflex}}
5721      \comment{The letter '\^ u'.}
5722  \endsetslot
5723
5724  \setslot{\lctop{Udieresis}{udieresis}}
5725      \comment{The letter '\u' u'.}
5726  \endsetslot
5727
5728  \setslot{\lctop{Yacute}{yacute}}
5729      \comment{The letter '\u' y'.}
5730  \endsetslot
5731
5732  \setslot{\lc{Thorn}{thorn}}
5733      \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
5734          with an ascender rising from the stem. It is unavailable
5735          in \plain\ \TeX.}
5736  \endsetslot
5737
5738  \setslot{\lc{SS}{germandbls}}
5739      \comment{The letter '\ss'.}
5740  \endsetslot
5741
5742  \endencoding

```

6.3.10 fontscripts-t1-dotsup.etx

fontscripts-t1-dotsup.etx (*etx*)

```

5743 %%
5744 %% - The original notices at the top of that file concerning authors,
5745 %% maintenance etc. are replaced by this notice.
5746 %% - The file is renamed.
5747 %% - The encoding name is modified.
5748 %% - The file is modified to accommodate differences in glyph names.
5749 %% - The file is modified for use in encoding superiors.
5750 %%
5751 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
5752 \relax

```

```

5753 \encoding
5754
5755 \needsfontinstversion{1.910}
5756
5757 \setcommand\lc#1#2{\#2.superior}
5758 \setcommand\uc#1#2{\#1.superior}
5759 \setcommand\lctop#1#2{\#2.superior}
5760 \setcommand\uctop#1#2{\#1.superior}
5761 \setcommand\lclig#1#2{\#2.superior}
5762 \ifisint{letterspacing}\then
5763   \ifnumber{\int{letterspacing}}={0}\then \Else
5764     \setcommand\uclig#1#2{\#1spaced}
5765     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
5766     you can't see it as \verb|\verb|\setcommand| commands are invisible in
5767     the typeset output.}
5768   \Fi
5769 \Fi
5770 \setcommand\uclig#1#2{\#1.superior}
5771 \setcommand\digit#1{\#1.superior}
5772
5773 \ifisint{monowidth}\then
5774   \setint{ligaturing}{0}
5775 \Else
5776   % The following empty line is *important* to get the formatting
5777   % right here (sigh)! (Remember that it is a \par token.)
5778
5779 \ifisint{letterspacing}\then
5780   \ifnumber{\int{letterspacing}}={0}\then \Else
5781     \setint{ligaturing}{0}
5782   \Fi
5783 \Fi
5784 \setint{ligaturing}{1}
5785 \Fi
5786
5787 \setint{italicslant}{0}
5788 \setint{quad}{1000}
5789 \setint{baselineskip}{1200}
5790
5791 \ifisglyph{x}\then
5792   \setint{xheight}{\height{x}}
5793 \Else
5794   \setint{xheight}{500}
5795 \Fi
5796
5797 \ifisglyph{space}\then
5798   \setint{interword}{\width{space}}
5799 \Else\ifisglyph{i}\then
5800   \setint{interword}{\width{i}}
5801 \Else
5802   \setint{interword}{333}
5803 \Fi\Fi
5804
5805 \ifisint{monowidth}\then
5806   \setint{stretchword}{0}

```

```

5807      \setint{shrinkword}{0}
5808      \setint{extraspace}{\int{interword}}
5809  \Else
5810      \setint{stretchword}{\scale{\int{interword}}{600}}
5811      \setint{shrinkword}{\scale{\int{interword}}{240}}
5812      \setint{extraspace}{\scale{\int{interword}}{240}}
5813  \Fi
5814
5815  \ifisglyph{X}\then
5816      \setint{capheight}{\height{X}}
5817  \Else
5818      \setint{capheight}{750}
5819  \Fi
5820
5821  \ifisglyph{d}\then
5822      \setint{ascender}{\height{d}}
5823  \Else\ifisint{capheight}\then
5824      \setint{ascender}{\int{capheight}}
5825  \Else
5826      \setint{ascender}{750}
5827  \Fi\Fi
5828
5829  \ifisglyph{Aring}\then
5830      \setint{acccapheight}{\height{Aring}}
5831  \Else
5832      \setint{acccapheight}{999}
5833  \Fi
5834
5835  \ifisint{descender_neg}\then
5836      \setint{descender}{\neg{\int{descender_neg}}}
5837  \Else\ifisglyph{p}\then
5838      \setint{descender}{\depth{p}}
5839  \Else
5840      \setint{descender}{250}
5841  \Fi\Fi
5842
5843  \ifisglyph{Aring}\then
5844      \setint{maxheight}{\height{Aring}}
5845  \Else
5846      \setint{maxheight}{1000}
5847  \Fi
5848
5849  \ifisint{maxdepth_neg}\then
5850      \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
5851  \Else\ifisglyph{j}\then
5852      \setint{maxdepth}{\depth{j}}
5853  \Else
5854      \setint{maxdepth}{250}
5855  \Fi\Fi
5856
5857  \ifisglyph{six}\then
5858      \setint{digitwidth}{\width{six}}
5859  \Else
5860      \setint{digitwidth}{500}

```

```

5861 \Fi
5862
5863 \setint{capstem}{0} % not in AFM files
5864
5865 \setfontdimen{1}{italicslant} % italic slant
5866 \setfontdimen{2}{interword} % interword space
5867 \setfontdimen{3}{stretchword} % interword stretch
5868 \setfontdimen{4}{shrinkword} % interword shrink
5869 \setfontdimen{5}{xheight} % x-height
5870 \setfontdimen{6}{quad} % quad
5871 \setfontdimen{7}{extraspace} % extra space after .
5872 \setfontdimen{8}{capheight} % cap height
5873 \setfontdimen{9}{ascender} % ascender
5874 \setfontdimen{10}{accicapheight} % accented cap height
5875 \setfontdimen{11}{descender} % descender's depth
5876 \setfontdimen{12}{maxheight} % max height
5877 \setfontdimen{13}{maxdepth} % max depth
5878 \setfontdimen{14}{digitwidth} % digit width
5879 \setfontdimen{15}{verticalstem} % dominant width of vertical stems
5880 \setfontdimen{16}{baselineskip} % baselineskip
5881
5882 \ifnumber{\int{ligaturing}}<{0}\then
5883   \comment{In this case, the codingscheme can be different from the
5884     default, and therefore we refrain from setting it.}
5885 \Else
5886   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTSUP}
5887 \Fi
5888
5889 \setslot{\lc{Grave}{grave}}
5890   \comment{The grave accent '\{}.'}
5891 \endsetslot
5892
5893 \setslot{\lc{Acute}{acute}}
5894   \comment{The acute accent '\{}.'}
5895 \endsetslot
5896
5897 \setslot{\lc{Circumflex}{circumflex}}
5898   \comment{The circumflex accent '\^{}.'}
5899 \endsetslot
5900
5901 \setslot{\lc{Tilde}{tilde}}
5902   \comment{The tilde accent '\~{}.'}
5903 \endsetslot
5904
5905 \setslot{\lc{Dieresis}{dieresis}}
5906   \comment{The umlaut or dieresis accent '\\"{}.'}
5907 \endsetslot
5908
5909 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
5910   \comment{The long Hungarian umlaut '\H{}.'}
5911 \endsetslot
5912
5913 \setslot{\lc{Ring}{ring}}
5914   \comment{The ring accent '\r{}.'}

```

```

5915 \endsetslot
5916
5917 \setslot{\lc{Caron}{caron}}
5918   \comment{The caron or h'a\v cek accent '\v{}'.}
5919 \endsetslot
5920
5921 \setslot{\lc{Breve}{breve}}
5922   \comment{The breve accent '\u{}'.}
5923 \endsetslot
5924
5925 \setslot{\lc{Macron}{macron}}
5926   \comment{The macron accent '\={}'.}
5927 \endsetslot
5928
5929 \setslot{\lc{Dotaccent}{dotaccent}}
5930   \comment{The dot accent '\.{}'.}
5931 \endsetslot
5932
5933 \setslot{\lc{Cedilla}{cedilla}}
5934   \comment{The cedilla accent '\c {}'.}
5935 \endsetslot
5936
5937 \setslot{\lc{Ogonek}{ogonek}}
5938   \comment{The ogonek accent '\k {}'.}
5939 \endsetslot
5940
5941 \setslot{quotesinglbase.superior}
5942   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
5943       but with different sidebearings.}
5944 \endsetslot
5945
5946 \setslot{guilsinglleft.superior}
5947   \comment{A French single opening quote mark '\guilsinglleft',
5948       unavailable in \plain\ \TeX.}
5949 \endsetslot
5950
5951 \setslot{guilsinglright.superior}
5952   \comment{A French single closing quote mark '\guilsinglright',
5953       unavailable in \plain\ \TeX.}
5954 \endsetslot
5955
5956 \setslot{quotedblleft.superior}
5957   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
5958 \endsetslot
5959
5960 \setslot{quotedblright.superior}
5961   \comment{The English closing quote mark '\,\textquotedblright\,'.}
5962 \endsetslot
5963
5964 \setslot{quotedblbase.superior}
5965   \comment{A German double quote mark '\quotedblbase' similar to two commas,
5966       but with tighter letterspacing and different sidebearings.}
5967 \endsetslot
5968

```

```

5969 \setslot{guillemotleft.superior}
5970   \comment{A French double opening quote mark ‘\guillemotleft’,
5971     unavailable in \plain\ \TeX.}
5972 \endsetslot
5973
5974 \setslot{guillemotright.superior}
5975   \comment{A French closing opening quote mark ‘\guillemotright’,
5976     unavailable in \plain\ \TeX.}
5977 \endsetslot
5978
5979 \setslot{endash.superior}
5980   \ligature[LIG]{hyphen.superior}{emdash.superior}
5981   \comment{The number range dash ‘1--9’.
5982     This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
5983     called ‘endash’ to work right.
5984     The ‘\textendash’.
5985     In a monowidth font, this might be set as ‘\texttt{1{-}9}’.}
5986 \endsetslot
5987
5988 \setslot{emdash.superior}
5989   \comment{The punctuation dash ‘Oh---boy.’
5990     This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
5991     called ‘emdash’ to work right.
5992     The ‘\textemdash’.
5993     In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
5994 \endsetslot
5995
5996 \setslot{compwordmark.superior}
5997   \comment{An invisible glyph, with zero width and depth, but the
5998     height of lowercase letters without ascenders.
5999     It is used to stop ligaturing in words like ‘shelf{}ful’.}
6000 \endsetslot
6001
6002 \setslot{perthousandzero.superior}
6003   \comment{A glyph which is placed after ‘\%’ to produce a
6004     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
6005     Your guess is as good as mine as to what this glyph should look
6006     like in a monowidth font.}
6007 \endsetslot
6008
6009 \setslot{\lc{dotlessI}{dotlessi}}
6010   \comment{A dotless i ‘\i’, used to produce accented letters such as
6011     ‘\=i’.}
6012 \endsetslot
6013
6014 \setslot{\lc{dotlessJ}{dotlessj}}
6015   \comment{A dotless j ‘\j’, used to produce accented letters such as
6016     ‘\=j’. Most non-\TeX\ fonts do not have this glyph.}
6017 \endsetslot
6018
6019 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
6020
6021 \setslot{\lc{lig{FF}{ff}}}
6022   \ifnumber{\int{ligaturing}}>0\then

```

```

6023     \ligature{LIG}{\lc{I}{i}}{\lc{lig{FFI}{ffi}}}
6024     \ligature{LIG}{\lc{L}{l}}{\lc{lig{FFL}{ffl}}}
6025     \Fi
6026     \comment{The 'ff' ligature. It should be two characters wide in a
6027     monowidth font.}
6028 \endsetslot
6029
6030 \setslot{\lc{lig{FI}{fi}}}
6031     \comment{The 'fi' ligature. It should be two characters wide in a
6032     monowidth font.}
6033 \endsetslot
6034
6035 \setslot{\lc{lig{FL}{fl}}}
6036     \comment{The 'fl' ligature. It should be two characters wide in a
6037     monowidth font.}
6038 \endsetslot
6039
6040 \setslot{\lc{lig{FFI}{ffi}}}
6041     \comment{The 'ffi' ligature. It should be three characters wide in a
6042     monowidth font.}
6043 \endsetslot
6044
6045 \setslot{\lc{lig{FFL}{ffl}}}
6046     \comment{The 'ffl' ligature. It should be three characters wide in a
6047     monowidth font.}
6048 \endsetslot
6049
6050 \Fi
6051
6052 \setslot{visiblespace.superior}
6053     \comment{A visible space glyph '\textvisiblespace'.}
6054 \endsetslot
6055
6056 \setslot{exclam.superior}
6057     \ligature{LIG}{\quoteleft.superior}{exclamdown.superior}
6058     \comment{The exclamation mark '!'.}
6059 \endsetslot
6060
6061 \setslot{quotedbl.superior}
6062     \comment{The 'neutral' double quotation mark '\textquotedbl',,
6063     included for use in monowidth fonts, or for setting computer
6064     programs. Note that the inclusion of this glyph in this slot
6065     means that \TeX documents which used '{\tt\char"} as an
6066     input character will no longer work.}
6067 \endsetslot
6068
6069 \setslot{numbersign.superior}
6070     \comment{The hash sign '#'.}
6071 \endsetslot
6072
6073 \setslot{dollar.superior}
6074     \comment{The dollar sign '$'.}
6075 \endsetslot
6076

```

```
6077 \setslot{percent.superior}
6078   \comment{The percent sign '\%'.}
6079 \endsetslot
6080
6081 \setslot{ampersand.superior}
6082   \comment{The ampersand sign '&'.}
6083 \endsetslot
6084
6085 \setslot{quoteright.superior}
6086   \ligature{LIG}{quoteright.superior}{quotedblright.superior}
6087   \comment{The English closing single quote mark '\,\textquoteright\,'.}
6088 \endsetslot
6089
6090 \setslot{parenleft.superior}
6091   \comment{The opening parenthesis '('.}
6092 \endsetslot
6093
6094 \setslot{parenright.superior}
6095   \comment{The closing parenthesis ')'.}
6096 \endsetslot
6097
6098 \setslot{asterisk.superior}
6099   \comment{The raised asterisk '*' .}
6100 \endsetslot
6101
6102 \setslot{plus.superior}
6103   \comment{The addition sign '+' .}
6104 \endsetslot
6105
6106 \setslot{comma.superior}
6107   \ligature{LIG}{comma.superior}{quotedblbase.superior}
6108   \comment{The comma ',' .}
6109 \endsetslot
6110
6111 \setslot{hyphen.superior}
6112   \ligature{LIG}{hyphen.superior}{endash.superior}
6113   \ligature{LIG}{hyphenchar.superior}{hyphenchar.superior}
6114   \comment{The hyphen '-' .}
6115 \endsetslot
6116
6117 \setslot{period.superior}
6118   \comment{The period '.' .}
6119 \endsetslot
6120
6121 \setslot{slash.superior}
6122   \comment{The forward oblique '/'.}
6123 \endsetslot
6124
6125 \setslot{\digit{zero}}
6126   \comment{The number '0'. This (and all the other numerals) may be
6127       old style or ranging digits.}
6128 \endsetslot
6129
6130 \setslot{\digit{one}}
```

```

6131     \comment{The number '1'.}
6132     \endsetslot
6133
6134     \setslot{\digit{two}}
6135         \comment{The number '2'.}
6136     \endsetslot
6137
6138     \setslot{\digit{three}}
6139         \comment{The number '3'.}
6140     \endsetslot
6141
6142     \setslot{\digit{four}}
6143         \comment{The number '4'.}
6144     \endsetslot
6145
6146     \setslot{\digit{five}}
6147         \comment{The number '5'.}
6148     \endsetslot
6149
6150     \setslot{\digit{six}}
6151         \comment{The number '6'.}
6152     \endsetslot
6153
6154     \setslot{\digit{seven}}
6155         \comment{The number '7'.}
6156     \endsetslot
6157
6158     \setslot{\digit{eight}}
6159         \comment{The number '8'.}
6160     \endsetslot
6161
6162     \setslot{\digit{nine}}
6163         \comment{The number '9'.}
6164     \endsetslot
6165
6166     \setslot{colon.superior}
6167         \comment{The colon punctuation mark ':' .}
6168     \endsetslot
6169
6170     \setslot{semicolon.superior}
6171         \comment{The semi-colon punctuation mark ';' .}
6172     \endsetslot
6173
6174     \setslot{less.superior}
6175         \ligature{LIG}{less.superior}{guillemotleft.superior}
6176         \comment{The less-than sign '\textless'.}
6177     \endsetslot
6178
6179     \setslot{equal.superior}
6180         \comment{The equals sign '=' .}
6181     \endsetslot
6182
6183     \setslot{greater.superior}
6184         \ligature{LIG}{greater.superior}{guillemotright.superior}

```

```
6185     \comment{The greater-than sign ‘\textgreater’.}
6186 \endsetslot
6187
6188 \setslot{question.superior}
6189     \ligature{LIG}{quotyleft.superior}{questiondown.superior}
6190     \comment{The question mark ‘?’ .}
6191 \endsetslot
6192
6193 \setslot{at.superior}
6194     \comment{The at sign ‘@’ .}
6195 \endsetslot
6196
6197 \setslot{\uc{A}{a}}
6198     \comment{The letter ‘{A}’ .}
6199 \endsetslot
6200
6201 \setslot{\uc{B}{b}}
6202     \comment{The letter ‘{B}’ .}
6203 \endsetslot
6204
6205 \setslot{\uc{C}{c}}
6206     \comment{The letter ‘{C}’ .}
6207 \endsetslot
6208
6209 \setslot{\uc{D}{d}}
6210     \comment{The letter ‘{D}’ .}
6211 \endsetslot
6212
6213 \setslot{\uc{E}{e}}
6214     \comment{The letter ‘{E}’ .}
6215 \endsetslot
6216
6217 \setslot{\uc{F}{f}}
6218     \comment{The letter ‘{F}’ .}
6219 \endsetslot
6220
6221 \setslot{\uc{G}{g}}
6222     \comment{The letter ‘{G}’ .}
6223 \endsetslot
6224
6225 \setslot{\uc{H}{h}}
6226     \comment{The letter ‘{H}’ .}
6227 \endsetslot
6228
6229 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6230
6231 \setslot{\uc{I}{i}}
6232     \comment{The letter ‘{I}’ .}
6233 \endsetslot
6234
6235 \Fi
6236
6237 \setslot{\uc{J}{j}}
6238     \comment{The letter ‘{J}’ .}
```

```
6239 \endsetslot
6240
6241 \setslot{\uc{K}{k}}
6242     \comment{The letter '{K}'.}
6243 \endsetslot
6244
6245 \setslot{\uc{L}{l}}
6246     \comment{The letter '{L}'.}
6247 \endsetslot
6248
6249 \setslot{\uc{M}{m}}
6250     \comment{The letter '{M}'.}
6251 \endsetslot
6252
6253 \setslot{\uc{N}{n}}
6254     \comment{The letter '{N}'.}
6255 \endsetslot
6256
6257 \setslot{\uc{O}{o}}
6258     \comment{The letter '{O}'.}
6259 \endsetslot
6260
6261 \setslot{\uc{P}{p}}
6262     \comment{The letter '{P}'.}
6263 \endsetslot
6264
6265 \setslot{\uc{Q}{q}}
6266     \comment{The letter '{Q}'.}
6267 \endsetslot
6268
6269 \setslot{\uc{R}{r}}
6270     \comment{The letter '{R}'.}
6271 \endsetslot
6272
6273 \setslot{\uc{S}{s}}
6274     \comment{The letter '{S}'.}
6275 \endsetslot
6276
6277 \setslot{\uc{T}{t}}
6278     \comment{The letter '{T}'.}
6279 \endsetslot
6280
6281 \setslot{\uc{U}{u}}
6282     \comment{The letter '{U}'.}
6283 \endsetslot
6284
6285 \setslot{\uc{V}{v}}
6286     \comment{The letter '{V}'.}
6287 \endsetslot
6288
6289 \setslot{\uc{W}{w}}
6290     \comment{The letter '{W}'.}
6291 \endsetslot
6292
```

```

6293 \setslot{\uc{X}{x}}
6294   \comment{The letter '{X}'.}
6295 \endsetslot
6296
6297 \setslot{\uc{Y}{y}}
6298   \comment{The letter '{Y}'.}
6299 \endsetslot
6300
6301 \setslot{\uc{Z}{z}}
6302   \comment{The letter '{Z}'.}
6303 \endsetslot
6304
6305 \setslot{bracketleft.superior}
6306   \comment{The opening square bracket '['.}
6307 \endsetslot
6308
6309 \setslot{backslash.superior}
6310   \comment{The backwards oblique '\textbackslash'.}
6311 \endsetslot
6312
6313 \setslot{bracketright.superior}
6314   \comment{The closing square bracket ']'.}
6315 \endsetslot
6316
6317 \setslot{asciicircum.superior}
6318   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
This is included for compatibility with typewriter fonts used
for computer listings.}
6319 \endsetslot
6320
6321 \setslot{underscore.superior}
6322   \comment{The ASCII underline character '\textunderline', usually
set on the baseline.
This is included for compatibility with typewriter fonts used
for computer listings.}
6323 \endsetslot
6324
6325 \setslot{quotyleft.superior}
6326   \ligature{LIG}{quotyleft.superior}{quotedblleft.superior}
6327   \comment{The English opening single quote mark '\textquotyleft\,'.}
6328 \endsetslot
6329
6330 \setslot{quoteright.superior}
6331   \ligature{LIG}{quoteright.superior}{quotedblright.superior}
6332   \comment{The English closing single quote mark '\textquoteright\,'.}
6333 \endsetslot
6334
6335 \setslot{\lc{A}{a}}
6336   \comment{The letter '{a}'.}
6337 \endsetslot
6338
6339 \setslot{\lc{B}{b}}
6340   \comment{The letter '{b}'.}
6341 \endsetslot
6342
6343 \ifnumber{\int{ligaturing}}<-1\then \skipslots{1}\Else
6344
6345 \setslot{\lc{C}{c}}
6346   \comment{The letter '{c}'.}

```

```
6347     \endsetslot
6348
6349 \Fi
6350
6351 \setslot{\lc{D}{d}}
6352     \comment{The letter '{d}'.}
6353 \endsetslot
6354
6355 \setslot{\lc{E}{e}}
6356     \comment{The letter '{e}'.}
6357 \endsetslot
6358
6359 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6360
6361     \setslot{\lc{F}{f}}
6362     \ifnumber{\int{ligaturing}}>{0}\then
6363         \ligature{LIG}{\lc{I}{i}}{\lc{I}{f}{i}}
6364         \ligature{LIG}{\lc{F}{f}}{\lc{F}{f}{f}}
6365         \ligature{LIG}{\lc{L}{l}}{\lc{L}{f}{l}}
6366     \Fi
6367     \comment{The letter '{f}'.}
6368 \endsetslot
6369
6370 \Fi
6371
6372 \setslot{\lc{G}{g}}
6373     \comment{The letter '{g}'.}
6374 \endsetslot
6375
6376 \setslot{\lc{H}{h}}
6377     \comment{The letter '{h}'.}
6378 \endsetslot
6379
6380 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6381
6382     \setslot{\lc{I}{i}}
6383     \comment{The letter '{i}'.}
6384 \endsetslot
6385
6386 \Fi
6387
6388 \setslot{\lc{J}{j}}
6389     \comment{The letter '{j}'.}
6390 \endsetslot
6391
6392 \setslot{\lc{K}{k}}
6393     \comment{The letter '{k}'.}
6394 \endsetslot
6395
6396 \setslot{\lc{L}{l}}
6397     \comment{The letter '{l}'.}
6398 \endsetslot
6399
6400 \setslot{\lc{M}{m}}
```

```
6401     \comment{The letter '{m}'.}
6402 \endsetslot
6403
6404 \setslot{\lc{N}{n}}
6405     \comment{The letter '{n}'.}
6406 \endsetslot
6407
6408 \setslot{\lc{O}{o}}
6409     \comment{The letter '{o}'.}
6410 \endsetslot
6411
6412 \setslot{\lc{P}{p}}
6413     \comment{The letter '{p}'.}
6414 \endsetslot
6415
6416 \setslot{\lc{Q}{q}}
6417     \comment{The letter '{q}'.}
6418 \endsetslot
6419
6420 \setslot{\lc{R}{r}}
6421     \comment{The letter '{r}'.}
6422 \endsetslot
6423
6424 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6425
6426 \setslot{\lc{S}{s}}
6427     \comment{The letter '{s}'.}
6428 \endsetslot
6429
6430 \Fi
6431
6432 \setslot{\lc{T}{t}}
6433     \comment{The letter '{t}'.}
6434 \endsetslot
6435
6436 \setslot{\lc{U}{u}}
6437     \comment{The letter '{u}'.}
6438 \endsetslot
6439
6440 \setslot{\lc{V}{v}}
6441     \comment{The letter '{v}'.}
6442 \endsetslot
6443
6444 \setslot{\lc{W}{w}}
6445     \comment{The letter '{w}'.}
6446 \endsetslot
6447
6448 \setslot{\lc{X}{x}}
6449     \comment{The letter '{x}'.}
6450 \endsetslot
6451
6452 \setslot{\lc{Y}{y}}
6453     \comment{The letter '{y}'.}
6454 \endsetslot
```

```
6455 \setslot{\lc{Z}{z}}
6456   \comment{The letter '{z}'.}
6457 \endsetslot
6458
6459 \setslot{braceleft.superior}
6460   \comment{The opening curly brace '\textbraceleft'.}
6461 \endsetslot
6462
6463 \setslot{bar.superior}
6464   \comment{The ASCII vertical bar '\textbar'.
6465     This is included for compatibility with typewriter fonts used
6466     for computer listings.}
6467 \endsetslot
6468
6469 \setslot{braceright.superior}
6470   \comment{The closing curly brace '\textbraceright'.}
6471 \endsetslot
6472
6473 \setslot{asciitilde.superior}
6474   \comment{The ASCII tilde '\textasciitilde'.
6475     This is included for compatibility with typewriter fonts used
6476     for computer listings.}
6477 \endsetslot
6478
6479 \setslot{hyphenchar.superior}
6480   \comment{The glyph used for hyphenation in this font, which will
6481     almost always be the same as 'hyphen'.}
6482 \endsetslot
6483
6484 \setslot{\uctop{Abreve}{abreve}}
6485   \comment{The letter '\u A'.}
6486 \endsetslot
6487
6488 \setslot{\uc{Aogonek}{aogonek}}
6489   \comment{The letter '\k A'.}
6490 \endsetslot
6491
6492 \setslot{\uctop{Cacute}{cacute}}
6493   \comment{The letter '\' C'.}
6494 \endsetslot
6495
6496 \setslot{\uctop{Ccaron}{ccaron}}
6497   \comment{The letter '\v C'.}
6498 \endsetslot
6499
6500 \setslot{\uctop{Dcaron}{dcaron}}
6501   \comment{The letter '\v D'.}
6502 \endsetslot
6503
6504 \setslot{\uctop{Ecaron}{ecaron}}
6505   \comment{The letter '\v E'.}
6506 \endsetslot
6507
6508
```

```

6509 \setslot{\uc{Eogonek}{eogonek}}
6510   \comment{The letter '\k E'.}
6511 \endsetslot
6512
6513 \setslot{\uctop{Gbreve}{gbreve}}
6514   \comment{The letter '\u G'.}
6515 \endsetslot
6516
6517 \setslot{\uctop{Lacute}{lacute}}
6518   \comment{The letter '\ L'.}
6519 \endsetslot
6520
6521 \setslot{\uc{Lcaron}{lcaron}}
6522   \comment{The letter '\v L'.}
6523 \endsetslot
6524
6525 \setslot{\uc{Lslash}{lslash}}
6526   \comment{The letter '\L'.}
6527 \endsetslot
6528
6529 \setslot{\uctop{Nacute}{nacute}}
6530   \comment{The letter '\ N'.}
6531 \endsetslot
6532
6533 \setslot{\uctop{Ncaron}{ncaron}}
6534   \comment{The letter '\v N'.}
6535 \endsetslot
6536
6537 \setslot{\uc{Eng}{eng}}
6538   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
       to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
       seems.}
6539 \endsetslot
6540
6541 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
6542   \comment{The letter '\H O'.}
6543 \endsetslot
6544
6545 \setslot{\uctop{Racute}{racute}}
6546   \comment{The letter '\ R'.}
6547 \endsetslot
6548
6549 \setslot{\uctop{Rcaron}{rcaron}}
6550   \comment{The letter '\v R'.}
6551 \endsetslot
6552
6553 \setslot{\uctop{Sacute}{sacute}}
6554   \comment{The letter '\ S'.}
6555 \endsetslot
6556
6557 \setslot{\uctop{Scaron}{scaron}}
6558   \comment{The letter '\v S'.}
6559 \endsetslot
6560

```

```

6561 \setslot{\uc{Scedilla}{scedilla}}
6562   \comment{The letter '\c S'.}
6563 \endsetslot
6564
6565 \setslot{\uctop{Tcaron}{tcaron}}
6566   \comment{The letter '\v T'.}
6567 \endsetslot
6568
6569 \setslot{\uc{Tcedilla}{tcedilla}}
6570   \comment{The letter '\c T'.}
6571 \endsetslot
6572
6573 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
6574   \comment{The letter '\H U'.}
6575 \endsetslot
6576
6577 \setslot{\uctop{Uring}{uring}}
6578   \comment{The letter '\r U'.}
6579 \endsetslot
6580
6581 \setslot{\uctop{Ydieresis}{ydieresis}}
6582   \comment{The letter '\Y'.}
6583 \endsetslot
6584
6585 \setslot{\uctop{Zacute}{zacute}}
6586   \comment{The letter '\` Z'.}
6587 \endsetslot
6588
6589 \setslot{\uctop{Zcaron}{zcaron}}
6590   \comment{The letter '\v Z'.}
6591 \endsetslot
6592
6593 \setslot{\uctop{Zdotaccent}{zdotaccent}}
6594   \comment{The letter '\. Z'.}
6595 \endsetslot
6596
6597 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
6598
6599 \setslot{\uclig{IJ}{ij}}
6600   \comment{The letter 'IJ'. This is a single letter, and in a
6601     monowidth font should ideally be one letter wide.}
6602 \endsetslot
6603
6604 \Fi
6605
6606 \setslot{\uctop{Idotaccent}{idotaccent}}
6607   \comment{The letter '\. I'.}
6608 \endsetslot
6609
6610 \setslot{\lc{Dbar}{dbar}}
6611   \comment{The letter '\dj'.}
6612 \endsetslot
6613
6614 \setslot{section.superior}

```

```
6615     \comment{The section mark '\textsection'.}
6616 \endsetslot
6617
6618 \setslot{\lctop{Abreve}{abreve}}
6619     \comment{The letter '\u a'.}
6620 \endsetslot
6621
6622 \setslot{\lc{Aogonek}{aogonek}}
6623     \comment{The letter '\k a'.}
6624 \endsetslot
6625
6626 \setslot{\lctop{Cacute}{cacute}}
6627     \comment{The letter '\c c'.}
6628 \endsetslot
6629
6630 \setslot{\lctop{Ccaron}{ccaron}}
6631     \comment{The letter '\v c'.}
6632 \endsetslot
6633
6634 \setslot{\lctop{Dcaron}{dcaron}}
6635     \comment{The letter '\v d'.}
6636 \endsetslot
6637
6638 \setslot{\lctop{Ecaron}{ecaron}}
6639     \comment{The letter '\v e'.}
6640 \endsetslot
6641
6642 \setslot{\lc{Eogonek}{eogonek}}
6643     \comment{The letter '\k e'.}
6644 \endsetslot
6645
6646 \setslot{\lctop{Gbreve}{gbreve}}
6647     \comment{The letter '\u g'.}
6648 \endsetslot
6649
6650 \setslot{\lctop{Lacute}{lacute}}
6651     \comment{The letter '\l l'.}
6652 \endsetslot
6653
6654 \setslot{\lc{Lcaron}{lcaron}}
6655     \comment{The letter '\v l'.}
6656 \endsetslot
6657
6658 \setslot{\lc{Lslash}{lslash}}
6659     \comment{The letter '\l'.}
6660 \endsetslot
6661
6662 \setslot{\lctop{Nacute}{nacute}}
6663     \comment{The letter '\n n'.}
6664 \endsetslot
6665
6666 \setslot{\lctop{Ncaron}{ncaron}}
6667     \comment{The letter '\v n'.}
6668 \endsetslot
```

```
6669 \setslot{\lc{Eng}{eng}}
6670   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
6671     to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
6672     it seems.}
6673 \endsetslot
6674 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
6675   \comment{The letter '\H o'.}
6676 \endsetslot
6677 \setslot{\lctop{Racute}{racute}}
6678   \comment{The letter '\r'.}
6679 \endsetslot
6680 \setslot{\lctop{Rcaron}{rcaron}}
6681   \comment{The letter '\v r'.}
6682 \endsetslot
6683 \setslot{\lctop{Sacute}{sacute}}
6684   \comment{The letter '\s'.}
6685 \endsetslot
6686 \setslot{\lctop{Scaron}{scaron}}
6687   \comment{The letter '\v s'.}
6688 \endsetslot
6689 \setslot{\lctop{Scedilla}{scedilla}}
6690   \comment{The letter '\c s'.}
6691 \endsetslot
6692 \setslot{\lctop{Tcaron}{tcaron}}
6693   \comment{The letter '\v t'.}
6694 \endsetslot
6695 \setslot{\lctop{Tcedilla}{tcedilla}}
6696   \comment{The letter '\c t'.}
6697 \endsetslot
6698 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
6699   \comment{The letter '\H u'.}
6700 \endsetslot
6701 \setslot{\lctop{Uring}{uring}}
6702   \comment{The letter '\r u'.}
6703 \endsetslot
6704 \setslot{\lctop{Ydieresis}{ydieresis}}
6705   \comment{The letter '\y'.}
6706 \endsetslot
6707 \setslot{\lctop{Zacute}{zacute}}
6708   \comment{The letter '\z'.}
6709 \endsetslot
6710 \setslot{\lctop{Zcaron}{zcaron}}
6711   \comment{The letter '\v z'.}
6712 \endsetslot
6713 \setslot{\lctop{Zcedilla}{zcedilla}}
6714   \comment{The letter '\c z'.}
6715 \endsetslot
6716 \setslot{\lctop{Zhungarumlaut}{zungarumlaut}}
6717   \comment{The letter '\H z'.}
6718 \endsetslot
6719 \setslot{\lctop{Zsacute}{zsacute}}
6720   \comment{The letter '\H z'.}
6721 \endsetslot
```

```
6721 \setslot{\lctop{Zcaron}{zcaron}}
6722   \comment{The letter '\v z'.}
6723 \endsetslot
6725
6726 \setslot{\lctop{Zdotaccent}{zdotaccent}}
6727   \comment{The letter '\. z'.}
6728 \endsetslot
6729
6730 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
6731
6732   \setslot{\lclig{IJ}{ij}}
6733     \comment{The letter 'ij'. This is a single letter, and in a
6734       monowidth font should ideally be one letter wide.}
6735 \endsetslot
6736
6737 \Fi
6738
6739 \setslot{exclamdown.superior}
6740   \comment{The Spanish punctuation mark '!'.}
6741 \endsetslot
6742
6743 \setslot{questiondown.superior}
6744   \comment{The Spanish punctuation mark '?'.}
6745 \endsetslot
6746
6747 \setslot{sterling.superior}
6748   \comment{The British currency mark '\textsterling'.}
6749 \endsetslot
6750
6751 \setslot{\uctop{Agrave}{agrave}}
6752   \comment{The letter '\` A'.}
6753 \endsetslot
6754
6755 \setslot{\uctop{Aacute}{aacute}}
6756   \comment{The letter '\^ A'.}
6757 \endsetslot
6758
6759 \setslot{\uctop{Acircumflex}{acircumflex}}
6760   \comment{The letter '\^ A'.}
6761 \endsetslot
6762
6763 \setslot{\uctop{Atilde}{atilde}}
6764   \comment{The letter '\~ A'.}
6765 \endsetslot
6766
6767 \setslot{\uctop{Adieresis}{adieresis}}
6768   \comment{The letter '\u00c4 A'.}
6769 \endsetslot
6770
6771 \setslot{\uctop{Aring}{aring}}
6772   \comment{The letter '\r A'.}
6773 \endsetslot
6774
```

```

6775 \setslot{\uc{AE}{ae}}
6776   \comment{The letter '\AE'. This is a single letter, and should not be
6777     faked with 'AE'.}
6778 \endsetslot
6779
6780 \setslot{\uc{Ccedilla}{ccedilla}}
6781   \comment{The letter '\c C'.}
6782 \endsetslot
6783
6784 \setslot{\uctop{Egrave}{egrave}}
6785   \comment{The letter '\` E'.}
6786 \endsetslot
6787
6788 \setslot{\uctop{Eacute}{eacute}}
6789   \comment{The letter '\^ E'.}
6790 \endsetslot
6791
6792 \setslot{\uctop{Ecircumflex}{ecircumflex}}
6793   \comment{The letter '\~ E'.}
6794 \endsetslot
6795
6796 \setslot{\uctop{Edieresis}{edieresis}}
6797   \comment{The letter '\" E'.}
6798 \endsetslot
6799
6800 \setslot{\uctop{Igrave}{igrave}}
6801   \comment{The letter '\` I'.}
6802 \endsetslot
6803
6804 \setslot{\uctop{Iacute}{iacute}}
6805   \comment{The letter '\^ I'.}
6806 \endsetslot
6807
6808 \setslot{\uctop{Icircumflex}{icircumflex}}
6809   \comment{The letter '\~ I'.}
6810 \endsetslot
6811
6812 \setslot{\uctop{Idieresis}{idieresis}}
6813   \comment{The letter '\" I'.}
6814 \endsetslot
6815
6816 \setslot{\uc{Eth}{eth}}
6817   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D',
6818     with a horizontal bar through the stem. It is unavailable
6819     in \plain\ TeX.}
6820 \endsetslot
6821
6822 \setslot{\uctop{Ntilde}{ntilde}}
6823   \comment{The letter '\~ N'.}
6824 \endsetslot
6825
6826 \setslot{\uctop{Ograve}{ograve}}
6827   \comment{The letter '\` O'.}
6828 \endsetslot

```

```
6829 \setslot{\uctop{0acute}{oacute}}
6830   \comment{The letter '\`O'.}
6831 \endsetslot
6833
6834 \setslot{\uctop{0circumflex}{ocircumflex}}
6835   \comment{The letter '\^O'.}
6836 \endsetslot
6837
6838 \setslot{\uctop{0tilde}{otilde}}
6839   \comment{The letter '\~O'.}
6840 \endsetslot
6841
6842 \setslot{\uctop{0dieresis}{odieresis}}
6843   \comment{The letter '\\"O'.}
6844 \endsetslot
6845
6846 \setslot{\uc{OE}{oe}}
6847   \comment{The letter '\OE'. This is a single letter, and should not be
faked with 'OE'.}
6849 \endsetslot
6850
6851 \setslot{\uc{0slash}{oslash}}
6852   \comment{The letter '\0'.}
6853 \endsetslot
6854
6855 \setslot{\uctop{Ugrave}{ugrave}}
6856   \comment{The letter '\`U'.}
6857 \endsetslot
6858
6859 \setslot{\uctop{Uacute}{uacute}}
6860   \comment{The letter '\`U'.}
6861 \endsetslot
6862
6863 \setslot{\uctop{Ucircumflex}{ucircumflex}}
6864   \comment{The letter '\^U'.}
6865 \endsetslot
6866
6867 \setslot{\uctop{Udieresis}{udieresis}}
6868   \comment{The letter '\\"U'.}
6869 \endsetslot
6870
6871 \setslot{\uctop{Yacute}{yacute}}
6872   \comment{The letter '\`Y'.}
6873 \endsetslot
6874
6875 \setslot{\uc{Thorn}{thorn}}
6876   \comment{The Icelandic capital letter Thorn, similar to a 'P'
with the bowl moved down. It is unavailable in \plain\ \TeX.}
6877
6878 \endsetslot
6879
6880 \setslot{\uclig{SS}{germandbls}}
6881   \comment{The ligature 'SS', used to give an upper case '\ss'.
In a monowidth font it should be two letters wide.}
```

```
6883 \endsetslot
6884
6885 \setslot{\lctop{Agrave}{agrave}}
6886     \comment{The letter '\` a'.}
6887 \endsetslot
6888
6889 \setslot{\lctop{Aacute}{aacute}}
6890     \comment{The letter '\^ a'.}
6891 \endsetslot
6892
6893 \setslot{\lctop{Acircumflex}{acircumflex}}
6894     \comment{The letter '\~ a'.}
6895 \endsetslot
6896
6897 \setslot{\lctop{Atilde}{atilde}}
6898     \comment{The letter '\~ a'.}
6899 \endsetslot
6900
6901 \setslot{\lctop{Adieresis}{adieresis}}
6902     \comment{The letter '\\" a'.}
6903 \endsetslot
6904
6905 \setslot{\lctop{Aring}{aring}}
6906     \comment{The letter '\r a'.}
6907 \endsetslot
6908
6909 \setslot{\lc{AE}{ae}}
6910     \comment{The letter '\ae'. This is a single letter, and should not be
6911         faked with 'ae'.}
6912 \endsetslot
6913
6914 \setslot{\lc{Ccedilla}{ccedilla}}
6915     \comment{The letter '\c c'.}
6916 \endsetslot
6917
6918 \setslot{\lctop{Egrave}{egrave}}
6919     \comment{The letter '\` e'.}
6920 \endsetslot
6921
6922 \setslot{\lctop{Eacute}{eacute}}
6923     \comment{The letter '\^ e'.}
6924 \endsetslot
6925
6926 \setslot{\lctop{Ecircumflex}{ecircumflex}}
6927     \comment{The letter '\~ e'.}
6928 \endsetslot
6929
6930 \setslot{\lctop{Edieresis}{adieresis}}
6931     \comment{The letter '\\" e'.}
6932 \endsetslot
6933
6934 \setslot{\lctop{Igrave}{igrave}}
6935     \comment{The letter '\` i'.}
6936 \endsetslot
```

```
6937
6938 \setslot{\lctop{Iacute}{iacute}}
6939   \comment{The letter '\i'.}
6940 \endsetslot
6941
6942 \setslot{\lctop{Icircumflex}{icircumflex}}
6943   \comment{The letter '\^i'.}
6944 \endsetslot
6945
6946 \setslot{\lctop{Idieresis}{idieresis}}
6947   \comment{The letter '\"i'.}
6948 \endsetslot
6949
6950 \setslot{\lc{Eth}{eth}}
6951   \comment{The Icelandic lowercase letter 'eth' similar to
6952     a '$\partial$' with an oblique bar through the stem.
6953     It is unavailable in \plain\ TeX.}
6954 \endsetslot
6955
6956 \setslot{\lctop{Ntilde}{ntilde}}
6957   \comment{The letter '\~n'.}
6958 \endsetslot
6959
6960 \setslot{\lctop{Ograve}{ograve}}
6961   \comment{The letter '\`o'.}
6962 \endsetslot
6963
6964 \setslot{\lctop{Oacute}{oacute}}
6965   \comment{The letter '\o'.}
6966 \endsetslot
6967
6968 \setslot{\lctop{Ocircumflex}{ocircumflex}}
6969   \comment{The letter '\^o'.}
6970 \endsetslot
6971
6972 \setslot{\lctop{Otilde}{otilde}}
6973   \comment{The letter '\~o'.}
6974 \endsetslot
6975
6976 \setslot{\lctop{Odieresis}{odieresis}}
6977   \comment{The letter '\"o'.}
6978 \endsetslot
6979
6980 \setslot{\lc{OE}{oe}}
6981   \comment{The letter '\oe'. This is a single letter, and should not be
6982     faked with 'oe'.}
6983 \endsetslot
6984
6985 \setslot{\lc{Oslash}{oslash}}
6986   \comment{The letter '\o'.}
6987 \endsetslot
6988
6989 \setslot{\lctop{Ugrave}{ugrave}}
6990   \comment{The letter '\`u'.}
```

```

6991 \endsetslot
6992
6993 \setslot{\lctop{Uacute}{uacute}}
6994   \comment{The letter '\u00f1'.}
6995 \endsetslot
6996
6997 \setslot{\lctop{Ucircumflex}{ucircumflex}}
6998   \comment{The letter '\u00f3'.}
6999 \endsetslot
7000
7001 \setslot{\lctop{Udieresis}{udieresis}}
7002   \comment{The letter '\u00f4'.}
7003 \endsetslot
7004
7005 \setslot{\lctop{Yacute}{yacute}}
7006   \comment{The letter '\u00fay'.}
7007 \endsetslot
7008
7009 \setslot{\lc{Thorn}{thorn}}
7010   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
7011     with an ascender rising from the stem. It is unavailable
7012     in \plain\ TeX.}
7013 \endsetslot
7014
7015 \setslot{\lc{SS}{germandbls}}
7016   \comment{The letter '\u00f6'.}
7017 \endsetslot
7018
7019 \endencoding

```

6.3.11 fontschemas-t1-dotsuperior.etx

scripts-t1-dotsuperior.etx (etx)

```

7020 %%
7021 %% - The original notices at the top of that file concerning authors,
7022 %% maintenance etc. are replaced by this notice.
7023 %% - The file is renamed.
7024 %% - The encoding name is modified.
7025 %% - The file is modified to accommodate differences in glyph names.
7026 %% - The file is modified for use in encoding superiors.
7027 %%
7028 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
7029 \relax
7030 \encoding
7031
7032 \needsfontinstversion{1.910}
7033
7034 \setcommand\lc#1#2{\#2.superior}
7035 \setcommand\uc#1#2{\#1.superior}
7036 \setcommand\lctop#1#2{\#2.superior}
7037 \setcommand\uctop#1#2{\#1.superior}
7038 \setcommand\lclig#1#2{\#2.superior}

```

```

7039 \ifisint{letterspacing}\then
7040   \ifnumber{\int{letterspacing}}={0}\then \Else
7041     \setcommand\uclig#1#2{\#1spaced}
7042     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
7043     you can't see it as \verb|\verb|\setcommand| commands are invisible in
7044     the typeset output.}
7045   \Fi
7046 \Fi
7047 \setcommand\uclig#1#2{\#1.superior}
7048 \setcommand\digit#1{\#1.superior}
7049
7050 \ifisint{monowidth}\then
7051   \setint{ligaturing}{0}
7052 \Else
7053   % The following empty line is *important* to get the formatting
7054   % right here (sigh)! (Remember that it is a \par token.)
7055
7056 \ifisint{letterspacing}\then
7057   \ifnumber{\int{letterspacing}}={0}\then \Else
7058     \setint{ligaturing}{0}
7059   \Fi
7060 \Fi
7061 \setint{ligaturing}{1}
7062 \Fi
7063
7064 \setint{italicslant}{0}
7065 \setint{quad}{1000}
7066 \setint{baselineskip}{1200}
7067
7068 \ifisglyph{x}\then
7069   \setint{xheight}{\height{x}}
7070 \Else
7071   \setint{xheight}{500}
7072 \Fi
7073
7074 \ifisglyph{space}\then
7075   \setint{interword}{\width{space}}
7076 \Else\ifisglyph{i}\then
7077   \setint{interword}{\width{i}}
7078 \Else
7079   \setint{interword}{333}
7080 \Fi\Fi
7081
7082 \ifisint{monowidth}\then
7083   \setint{stretchword}{0}
7084   \setint{shrinkword}{0}
7085   \setint{extraspace}{\int{interword}}
7086 \Else
7087   \setint{stretchword}{\scale{\int{interword}}{600}}
7088   \setint{shrinkword}{\scale{\int{interword}}{240}}
7089   \setint{extraspace}{\scale{\int{interword}}{240}}
7090 \Fi
7091
7092 \ifisglyph{X}\then

```

```

7093   \setint{capheight}{\height{X}}
7094   \Else
7095     \setint{capheight}{750}
7096   \Fi
7097
7098 \ifisglyph{d}\then
7099   \setint{ascender}{\height{d}}
7100 \Else\ifisint{capheight}\then
7101   \setint{ascender}{\int{capheight}}
7102 \Else
7103   \setint{ascender}{750}
7104 \Fi\Fi
7105
7106 \ifisglyph{Aring}\then
7107   \setint{acccapheight}{\height{Aring}}
7108 \Else
7109   \setint{acccapheight}{999}
7110 \Fi
7111
7112 \ifisint{descender_neg}\then
7113   \setint{descender}{\neg{\int{descender_neg}}}
7114 \Else\ifisglyph{p}\then
7115   \setint{descender}{\depth{p}}
7116 \Else
7117   \setint{descender}{250}
7118 \Fi\Fi
7119
7120 \ifisglyph{Aring}\then
7121   \setint{maxheight}{\height{Aring}}
7122 \Else
7123   \setint{maxheight}{1000}
7124 \Fi
7125
7126 \ifisint{maxdepth_neg}\then
7127   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
7128 \Else\ifisglyph{j}\then
7129   \setint{maxdepth}{\depth{j}}
7130 \Else
7131   \setint{maxdepth}{250}
7132 \Fi\Fi
7133
7134 \ifisglyph{six}\then
7135   \setint{digitwidth}{\width{six}}
7136 \Else
7137   \setint{digitwidth}{500}
7138 \Fi
7139
7140 \setint{capstem}{0} % not in AFM files
7141
7142 \setfontdimen{1}{italicslant}      % italic slant
7143 \setfontdimen{2}{interword}        % interword space
7144 \setfontdimen{3}{stretchword}      % interword stretch
7145 \setfontdimen{4}{shrinkword}       % interword shrink
7146 \setfontdimen{5}{xheight}         % x-height

```

```

7147 \setfontdimen{6}{quad} % quad
7148 \setfontdimen{7}{extraspace} % extra space after .
7149 \setfontdimen{8}{capheight} % cap height
7150 \setfontdimen{9}{ascender} % ascender
7151 \setfontdimen{10}{accapheight} % accented cap height
7152 \setfontdimen{11}{descender} % descender's depth
7153 \setfontdimen{12}{maxheight} % max height
7154 \setfontdimen{13}{maxdepth} % max depth
7155 \setfontdimen{14}{digitwidth} % digit width
7156 \setfontdimen{15}{verticalstem} % dominant width of vertical stems
7157 \setfontdimen{16}{baselineskip} % baselineskip
7158
7159 \ifnumber{\int{ligaturing}}<0\then
7160   \comment{In this case, the codingscheme can be different from the
7161     default, and therefore we refrain from setting it.}
7162 \Else
7163   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTSUPERIOR}
7164 \Fi
7165
7166 \setslot{\lc{Grave}{grave}}
7167   \comment{The grave accent '\{}.'}
7168 \endsetslot
7169
7170 \setslot{\lc{Acute}{acute}}
7171   \comment{The acute accent '\{}.'}
7172 \endsetslot
7173
7174 \setslot{\lc{Circumflex}{circumflex}}
7175   \comment{The circumflex accent '\^{ }.'}
7176 \endsetslot
7177
7178 \setslot{\lc{Tilde}{tilde}}
7179   \comment{The tilde accent '\~{}.'}
7180 \endsetslot
7181
7182 \setslot{\lc{Dieresis}{dieresis}}
7183   \comment{The umlaut or dieresis accent '\\"{}.'}
7184 \endsetslot
7185
7186 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
7187   \comment{The long Hungarian umlaut '\H{}.'}
7188 \endsetslot
7189
7190 \setslot{\lc{Ring}{ring}}
7191   \comment{The ring accent '\r{}.'}
7192 \endsetslot
7193
7194 \setslot{\lc{Caron}{caron}}
7195   \comment{The caron or h\'{a}\v{c}ek accent '\v{}.'}
7196 \endsetslot
7197
7198 \setslot{\lc{Breve}{breve}}
7199   \comment{The breve accent '\u{}.'}
7200 \endsetslot

```

```

7201 \setslot{\lc{Macron}{macron}}
7202   \comment{The macron accent '\={}'.}
7203 \endsetslot
7205
7206 \setslot{\lc{Dotaccent}{dotaccent}}
7207   \comment{The dot accent '\.{ }'.}
7208 \endsetslot
7209
7210 \setslot{\lc{Cedilla}{cedilla}}
7211   \comment{The cedilla accent '\c {}'.}
7212 \endsetslot
7213
7214 \setslot{\lc{Ogonek}{ogonek}}
7215   \comment{The ogonek accent '\k {}'.}
7216 \endsetslot
7217
7218 \setslot{quotesinglbase.superior}
7219   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
7220       but with different sidebearings.}
7221 \endsetslot
7222
7223 \setslot{guilsinglleft.superior}
7224   \comment{A French single opening quote mark '\guilsinglleft',
7225       unavailable in \plain\ \TeX.}
7226 \endsetslot
7227
7228 \setslot{guilsinglright.superior}
7229   \comment{A French single closing quote mark '\guilsinglright',
7230       unavailable in \plain\ \TeX.}
7231 \endsetslot
7232
7233 \setslot{quotedblleft.superior}
7234   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
7235 \endsetslot
7236
7237 \setslot{quotedblrigh.superior}
7238   \comment{The English closing quote mark '\,\textquotedblrigh\,'.}
7239 \endsetslot
7240
7241 \setslot{quotedblbase.superior}
7242   \comment{A German double quote mark '\quotedblbase' similar to two commas,
7243       but with tighter letterspacing and different sidebearings.}
7244 \endsetslot
7245
7246 \setslot{guillemotleft.superior}
7247   \comment{A French double opening quote mark '\guillemotleft',
7248       unavailable in \plain\ \TeX.}
7249 \endsetslot
7250
7251 \setslot{guillemotright.superior}
7252   \comment{A French closing opening quote mark '\guillemotright',
7253       unavailable in \plain\ \TeX.}
7254 \endsetslot

```

```

7255 \setslot{endash.superior}
7256   \ligature{LIG}{hyphen.superior}{emdash.superior}
7257   \comment{The number range dash ‘1--9’.
7258     This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
7259     called ‘endash’ to work right.
7260     The ‘\textendash’. In a monowidth font, this might be set as
7261     ‘\textttt{1{-}9}’.}
7262 \endsetslot
7263
7264
7265 \setslot{emdash.superior}
7266   \comment{The punctuation dash ‘Oh---boy.’
7267     This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be called
7268     ‘emdash’ to work right.
7269     The ‘\textemdash’. In a monowidth font, this might be set as
7270     ‘\textttt{Oh{-}{-}boy.}’}
7271 \endsetslot
7272
7273 \setslot{compwordmark.superior}
7274   \comment{An invisible glyph, with zero width and depth, but the
7275     height of lowercase letters without ascenders.
7276     It is used to stop ligaturing in words like ‘shelf{}ful’.}
7277 \endsetslot
7278
7279 \setslot{perthousandzero.superior}
7280   \comment{A glyph which is placed after ‘\%’ to produce a
7281     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
7282     Your guess is as good as mine as to what this glyph should look
7283     like in a monowidth font.}
7284 \endsetslot
7285
7286 \setslot{\lc{dotlessI}{dotlessi}}
7287   \comment{A dotless i ‘\i’, used to produce accented letters such as
7288     ‘\=i’.}
7289 \endsetslot
7290
7291 \setslot{\lc{dotlessJ}{dotlessj}}
7292   \comment{A dotless j ‘\j’, used to produce accented letters such as
7293     ‘\=j’. Most non-\TeX\ fonts do not have this glyph.}
7294 \endsetslot
7295
7296 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
7297
7298 \setslot{\lc{lig{FF}{ff}}}
7299   \ifnumber{\int{ligaturing}}>0\then
7300     \ligature{LIG}{\lc{I}{i}}{\lc{lig{FFI}{ffi}}}
7301     \ligature{LIG}{\lc{L}{l}}{\lc{lig{FFL}{ffl}}}
7302   \Fi
7303   \comment{The ‘ff’ ligature. It should be two characters wide in a
7304     monowidth font.}
7305 \endsetslot
7306
7307 \setslot{\lc{lig{FI}{fi}}}
7308   \comment{The ‘fi’ ligature. It should be two characters wide in a

```

```

7309     monowidth font.}
7310 \endsetslot
7311
7312 \setslot{\lclig{FL}{f1}}
7313   \comment{The 'fl' ligature. It should be two characters wide in a
7314     monowidth font.}
7315 \endsetslot
7316
7317 \setslot{\lclig{FFI}{ffi}}
7318   \comment{The 'ffi' ligature. It should be three characters wide in a
7319     monowidth font.}
7320 \endsetslot
7321
7322 \setslot{\lclig{FFL}{ffl}}
7323   \comment{The 'ffl' ligature. It should be three characters wide in a
7324     monowidth font.}
7325 \endsetslot
7326
7327 \Fi
7328
7329 \setslot{visiblespace.superior}
7330   \comment{A visible space glyph '\textvisiblespace'.}
7331 \endsetslot
7332
7333 \setslot{exclam.superior}
7334   \ligature{LIG}{quotelleft.superior}{exclamdown.superior}
7335   \comment{The exclamation mark '!'.}
7336 \endsetslot
7337
7338 \setslot{quotedbl.superior}
7339   \comment{The 'neutral' double quotation mark '\textquotedbl',,
7340     included for use in monowidth fonts, or for setting computer
7341     programs. Note that the inclusion of this glyph in this slot
7342     means that \TeX documents which used '{\tt\char"} as an
7343     input character will no longer work.}
7344 \endsetslot
7345
7346 \setslot{numbersign.superior}
7347   \comment{The hash sign '#'.}
7348 \endsetslot
7349
7350 \setslot{dollar.superior}
7351   \comment{The dollar sign '$'.}
7352 \endsetslot
7353
7354 \setslot{percent.superior}
7355   \comment{The percent sign '%'.}
7356 \endsetslot
7357
7358 \setslot{ampersand.superior}
7359   \comment{The ampersand sign '&'.}
7360 \endsetslot
7361
7362 \setslot{quoteright.superior}

```

```
7363     \ligature{LIG}{quoteright.superior}{quotedblright.superior}
7364     \comment{The English closing single quote mark '\textquoteright,'.}
7365 \endsetslot
7366
7367 \setslot{parenleft.superior}
7368     \comment{The opening parenthesis '('.}
7369 \endsetslot
7370
7371 \setslot{parenright.superior}
7372     \comment{The closing parenthesis ')'.}
7373 \endsetslot
7374
7375 \setslot{asterisk.superior}
7376     \comment{The raised asterisk '*'..}
7377 \endsetslot
7378
7379 \setslot{plus.superior}
7380     \comment{The addition sign '+'.}
7381 \endsetslot
7382
7383 \setslot{comma.superior}
7384     \ligature{LIG}{comma.superior}{quotedblbase.superior}
7385     \comment{The comma ','.}
7386 \endsetslot
7387
7388 \setslot{hyphen.superior}
7389     \ligature{LIG}{hyphen.superior}{endash.superior}
7390     \ligature{LIG}{hyphenchar.superior}{hyphenchar.superior}
7391     \comment{The hyphen '-'.}
7392 \endsetslot
7393
7394 \setslot{period.superior}
7395     \comment{The period '.'.}
7396 \endsetslot
7397
7398 \setslot{slash.superior}
7399     \comment{The forward oblique '/'.}
7400 \endsetslot
7401
7402 \setslot{\digit{zero}}
7403     \comment{The number '0'. This (and all the other numerals) may be
7404         old style or ranging digits.}
7405 \endsetslot
7406
7407 \setslot{\digit{one}}
7408     \comment{The number '1'.}
7409 \endsetslot
7410
7411 \setslot{\digit{two}}
7412     \comment{The number '2'.}
7413 \endsetslot
7414
7415 \setslot{\digit{three}}
7416     \comment{The number '3'.}
```

```
7417 \endsetslot
7418
7419 \setslot{\digit{four}}
7420     \comment{The number '4'.}
7421 \endsetslot
7422
7423 \setslot{\digit{five}}
7424     \comment{The number '5'.}
7425 \endsetslot
7426
7427 \setslot{\digit{six}}
7428     \comment{The number '6'.}
7429 \endsetslot
7430
7431 \setslot{\digit{seven}}
7432     \comment{The number '7'.}
7433 \endsetslot
7434
7435 \setslot{\digit{eight}}
7436     \comment{The number '8'.}
7437 \endsetslot
7438
7439 \setslot{\digit{nine}}
7440     \comment{The number '9'.}
7441 \endsetslot
7442
7443 \setslot{colon.superior}
7444     \comment{The colon punctuation mark ':' .}
7445 \endsetslot
7446
7447 \setslot{semicolon.superior}
7448     \comment{The semi-colon punctuation mark ';' .}
7449 \endsetslot
7450
7451 \setslot{less.superior}
7452     \ligature{LIG}{less.superior}{guillemotleft.superior}
7453     \comment{The less-than sign '\textless' .}
7454 \endsetslot
7455
7456 \setslot{equal.superior}
7457     \comment{The equals sign '=' .}
7458 \endsetslot
7459
7460 \setslot{greater.superior}
7461     \ligature{LIG}{greater.superior}{guillemotright.superior}
7462     \comment{The greater-than sign '\textgreater' .}
7463 \endsetslot
7464
7465 \setslot{question.superior}
7466     \ligature{LIG}{quotyleft.superior}{questiondown.superior}
7467     \comment{The question mark '?' .}
7468 \endsetslot
7469
7470 \setslot{at.superior}
```

```
7471     \comment{The at sign '@'.}
7472 \endsetslot
7473
7474 \setslot{\uc{A}{a}}
7475     \comment{The letter '{A}'.}
7476 \endsetslot
7477
7478 \setslot{\uc{B}{b}}
7479     \comment{The letter '{B}'.}
7480 \endsetslot
7481
7482 \setslot{\uc{C}{c}}
7483     \comment{The letter '{C}'.}
7484 \endsetslot
7485
7486 \setslot{\uc{D}{d}}
7487     \comment{The letter '{D}'.}
7488 \endsetslot
7489
7490 \setslot{\uc{E}{e}}
7491     \comment{The letter '{E}'.}
7492 \endsetslot
7493
7494 \setslot{\uc{F}{f}}
7495     \comment{The letter '{F}'.}
7496 \endsetslot
7497
7498 \setslot{\uc{G}{g}}
7499     \comment{The letter '{G}'.}
7500 \endsetslot
7501
7502 \setslot{\uc{H}{h}}
7503     \comment{The letter '{H}'.}
7504 \endsetslot
7505
7506 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7507
7508 \setslot{\uc{I}{i}}
7509     \comment{The letter '{I}'.}
7510 \endsetslot
7511
7512 \Fi
7513
7514 \setslot{\uc{J}{j}}
7515     \comment{The letter '{J}'.}
7516 \endsetslot
7517
7518 \setslot{\uc{K}{k}}
7519     \comment{The letter '{K}'.}
7520 \endsetslot
7521
7522 \setslot{\uc{L}{l}}
7523     \comment{The letter '{L}'.}
7524 \endsetslot
```

```
7525 \setslot{\uc{M}{m}}
7526   \comment{The letter '{M}'.}
7527 \endsetslot
7528
7529 \setslot{\uc{N}{n}}
7530   \comment{The letter '{N}'.}
7531 \endsetslot
7532
7533 \setslot{\uc{O}{o}}
7534   \comment{The letter '{O}'.}
7535 \endsetslot
7536
7537 \setslot{\uc{P}{p}}
7538   \comment{The letter '{P}'.}
7539 \endsetslot
7540
7541 \setslot{\uc{Q}{q}}
7542   \comment{The letter '{Q}'.}
7543 \endsetslot
7544
7545 \setslot{\uc{R}{r}}
7546   \comment{The letter '{R}'.}
7547 \endsetslot
7548
7549 \setslot{\uc{S}{s}}
7550   \comment{The letter '{S}'.}
7551 \endsetslot
7552
7553 \setslot{\uc{T}{t}}
7554   \comment{The letter '{T}'.}
7555 \endsetslot
7556
7557 \setslot{\uc{U}{u}}
7558   \comment{The letter '{U}'.}
7559 \endsetslot
7560
7561 \setslot{\uc{V}{v}}
7562   \comment{The letter '{V}'.}
7563 \endsetslot
7564
7565 \setslot{\uc{W}{w}}
7566   \comment{The letter '{W}'.}
7567 \endsetslot
7568
7569 \setslot{\uc{X}{x}}
7570   \comment{The letter '{X}'.}
7571 \endsetslot
7572
7573 \setslot{\uc{Y}{y}}
7574   \comment{The letter '{Y}'.}
7575 \endsetslot
7576
7577 \setslot{\uc{Z}{z}}
```

```

7579     \comment{The letter '{Z}'.}
7580     \endsetslot
7581
7582 \setslot{bracketleft.superior}
7583     \comment{The opening square bracket '['.}
7584 \endsetslot
7585
7586 \setslot{backslash.superior}
7587     \comment{The backwards oblique '\textbackslash'.}
7588 \endsetslot
7589
7590 \setslot{bracketright.superior}
7591     \comment{The closing square bracket ']'.}
7592 \endsetslot
7593
7594 \setslot{asciicircum.superior}
7595     \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
7596         This is included for compatibility with typewriter fonts used
7597         for computer listings.}
7598 \endsetslot
7599
7600 \setslot{underscore.superior}
7601     \comment{The ASCII underline character '\textunderline', usually
7602         set on the baseline.
7603         This is included for compatibility with typewriter fonts used
7604         for computer listings.}
7605 \endsetslot
7606
7607 \setslot{quotyleft.superior}
7608     \ligature{LIG}{quotyleft.superior}{quotedblleft.superior}
7609     \comment{The English opening single quote mark '\textquotyleft\,'.}
7610 \endsetslot
7611
7612 \setslot{\lc{A}{a}}
7613     \comment{The letter '{a}'.}
7614 \endsetslot
7615
7616 \setslot{\lc{B}{b}}
7617     \comment{The letter '{b}'.}
7618 \endsetslot
7619
7620 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7621
7622     \setslot{\lc{C}{c}}
7623     \comment{The letter '{c}'.}
7624 \endsetslot
7625
7626 \Fi
7627
7628 \setslot{\lc{D}{d}}
7629     \comment{The letter '{d}'.}
7630 \endsetslot
7631
7632 \setslot{\lc{E}{e}}

```

```
7633     \comment{The letter '{e}'.}
7634     \endsetslot
7635
7636 \ifnumber{\int{ligaturing}}<-1\then \skipslots{1}\Else
7637
7638     \setslot{\lc{F}{f}}
7639     \ifnumber{\int{ligaturing}}>0\then
7640         \ligature{LIG}{\lc{I}{i}}{\lclig{FI}{fi}}
7641         \ligature{LIG}{\lc{F}{f}}{\lclig{FF}{ff}}
7642         \ligature{LIG}{\lc{L}{l}}{\lclig{FL}{fl}}
7643         \Fi
7644         \comment{The letter '{f}'.}
7645     \endsetslot
7646
7647 \Fi
7648
7649 \setslot{\lc{G}{g}}
7650     \comment{The letter '{g}'.}
7651 \endsetslot
7652
7653 \setslot{\lc{H}{h}}
7654     \comment{The letter '{h}'.}
7655 \endsetslot
7656
7657 \ifnumber{\int{ligaturing}}<-1\then \skipslots{1}\Else
7658
7659     \setslot{\lc{I}{i}}
7660     \comment{The letter '{i}'.}
7661 \endsetslot
7662
7663 \Fi
7664
7665 \setslot{\lc{J}{j}}
7666     \comment{The letter '{j}'.}
7667 \endsetslot
7668
7669 \setslot{\lc{K}{k}}
7670     \comment{The letter '{k}'.}
7671 \endsetslot
7672
7673 \setslot{\lc{L}{l}}
7674     \comment{The letter '{l}'.}
7675 \endsetslot
7676
7677 \setslot{\lc{M}{m}}
7678     \comment{The letter '{m}'.}
7679 \endsetslot
7680
7681 \setslot{\lc{N}{n}}
7682     \comment{The letter '{n}'.}
7683 \endsetslot
7684
7685 \setslot{\lc{O}{o}}
7686     \comment{The letter '{o}'.}
```

```
7687 \endsetslot
7688
7689 \setslot{\lc{P}{p}}
7690   \comment{The letter '{p}'.}
7691 \endsetslot
7692
7693 \setslot{\lc{Q}{q}}
7694   \comment{The letter '{q}'.}
7695 \endsetslot
7696
7697 \setslot{\lc{R}{r}}
7698   \comment{The letter '{r}'.}
7699 \endsetslot
7700
7701 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7702
7703   \setslot{\lc{S}{s}}
7704     \comment{The letter '{s}'.}
7705 \endsetslot
7706
7707 \Fi
7708
7709 \setslot{\lc{T}{t}}
7710   \comment{The letter '{t}'.}
7711 \endsetslot
7712
7713 \setslot{\lc{U}{u}}
7714   \comment{The letter '{u}'.}
7715 \endsetslot
7716
7717 \setslot{\lc{V}{v}}
7718   \comment{The letter '{v}'.}
7719 \endsetslot
7720
7721 \setslot{\lc{W}{w}}
7722   \comment{The letter '{w}'.}
7723 \endsetslot
7724
7725 \setslot{\lc{X}{x}}
7726   \comment{The letter '{x}'.}
7727 \endsetslot
7728
7729 \setslot{\lc{Y}{y}}
7730   \comment{The letter '{y}'.}
7731 \endsetslot
7732
7733 \setslot{\lc{Z}{z}}
7734   \comment{The letter '{z}'.}
7735 \endsetslot
7736
7737 \setslot{braceleft.superior}
7738   \comment{The opening curly brace '\textbraceleft'.}
7739 \endsetslot
7740
```

```
7741 \setslot{bar.superior}
7742   \comment{The ASCII vertical bar ‘\textbar’.
7743     This is included for compatibility with typewriter fonts used
7744     for computer listings.}
7745 \endsetslot
7746
7747 \setslot{braceright.superior}
7748   \comment{The closing curly brace ‘\textbraceright’.}
7749 \endsetslot
7750
7751 \setslot{asciitilde.superior}
7752   \comment{The ASCII tilde ‘\textasciitilde’.
7753     This is included for compatibility with typewriter fonts used
7754     for computer listings.}
7755 \endsetslot
7756
7757 \setslot{hyphenchar.superior}
7758   \comment{The glyph used for hyphenation in this font, which will
7759     almost always be the same as ‘hyphen’.}
7760 \endsetslot
7761
7762 \setslot{\uctop{Abreve}{abreve}}
7763   \comment{The letter ‘\u A’.}
7764 \endsetslot
7765
7766 \setslot{\uc{Aogonek}{aogonek}}
7767   \comment{The letter ‘\k A’.}
7768 \endsetslot
7769
7770 \setslot{\uctop{Cacute}{cacute}}
7771   \comment{The letter ‘\’ C’.}
7772 \endsetslot
7773
7774 \setslot{\uctop{Ccaron}{ccaron}}
7775   \comment{The letter ‘\v C’.}
7776 \endsetslot
7777
7778 \setslot{\uctop{Dcaron}{dcaron}}
7779   \comment{The letter ‘\v D’.}
7780 \endsetslot
7781
7782 \setslot{\uctop{Ecaron}{ecaron}}
7783   \comment{The letter ‘\v E’.}
7784 \endsetslot
7785
7786 \setslot{\uc{Eogonek}{eogonek}}
7787   \comment{The letter ‘\k E’.}
7788 \endsetslot
7789
7790 \setslot{\uctop{Gbreve}{gbreve}}
7791   \comment{The letter ‘\u G’.}
7792 \endsetslot
7793
7794 \setslot{\uctop{Lacute}{lacute}}
```

```

7795   \comment{The letter '\ L'.}
7796   \endsetslot
7797
7798 \setslot{\uc{Lcaron}{lcaron}}
7799   \comment{The letter '\v L'.}
7800 \endsetslot
7801
7802 \setslot{\uc{Lslash}{lslash}}
7803   \comment{The letter '\L'.}
7804 \endsetslot
7805
7806 \setslot{\uctop{Nacute}{nacute}}
7807   \comment{The letter '\ N'.}
7808 \endsetslot
7809
7810 \setslot{\uctop{Ncaron}{ncaron}}
7811   \comment{The letter '\v N'.}
7812 \endsetslot
7813
7814 \setslot{\uc{Eng}{eng}}
7815   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
    to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
    seems.}
7816 \endsetslot
7817
7818 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
7819   \comment{The letter '\H O'.}
7820 \endsetslot
7821
7822 \setslot{\uctop{Racute}{racute}}
7823   \comment{The letter '\ R'.}
7824 \endsetslot
7825
7826 \setslot{\uctop{Rcaron}{rcaron}}
7827   \comment{The letter '\v R'.}
7828 \endsetslot
7829
7830 \setslot{\uctop{Sacute}{sacute}}
7831   \comment{The letter '\ S'.}
7832 \endsetslot
7833
7834 \setslot{\uctop{Scaron}{scaron}}
7835   \comment{The letter '\v S'.}
7836 \endsetslot
7837
7838 \setslot{\uc{Scedilla}{scedilla}}
7839   \comment{The letter '\c S'.}
7840 \endsetslot
7841
7842 \setslot{\uctop{Tcaron}{tcaron}}
7843   \comment{The letter '\v T'.}
7844 \endsetslot
7845
7846 \setslot{\uc{Tcedilla}{tcedilla}}

```

```

7847     \comment{The letter '\c T'.}
7848 \endsetslot
7849
7850 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
7851     \comment{The letter '\H U'.}
7852 \endsetslot
7853
7854 \setslot{\uctop{Uring}{uring}}
7855     \comment{The letter '\r U'.}
7856 \endsetslot
7857
7858 \setslot{\uctop{Ydieresis}{ydieresis}}
7859     \comment{The letter '\Y' .}
7860 \endsetslot
7861
7862 \setslot{\uctop{Zacute}{zacute}}
7863     \comment{The letter '\` Z'.}
7864 \endsetslot
7865
7866 \setslot{\uctop{Zcaron}{zcaron}}
7867     \comment{The letter '\v Z'.}
7868 \endsetslot
7869
7870 \setslot{\uctop{Zdotaccent}{zdotaccent}}
7871     \comment{The letter '\. Z'.}
7872 \endsetslot
7873
7874 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
7875
7876     \setslot{\uclig{IJ}{ij}}
7877         \comment{The letter 'IJ'. This is a single letter, and in a
7878             monowidth font should ideally be one letter wide.}
7879 \endsetslot
7880
7881 \Fi
7882
7883 \setslot{\uctop{Idotaccent}{idotaccent}}
7884     \comment{The letter '\. I'.}
7885 \endsetslot
7886
7887 \setslot{\lc{Dbar}{dbar}}
7888     \comment{The letter '\dj'.}
7889 \endsetslot
7890
7891 \setslot{section.superior}
7892     \comment{The section mark '\textsection'.}
7893 \endsetslot
7894
7895 \setslot{\lctop{Abreve}{abreve}}
7896     \comment{The letter '\u a'.}
7897 \endsetslot
7898
7899 \setslot{\lc{Aogonek}{aogonek}}
7900     \comment{The letter '\k a'.}

```

```

7901 \endsetslot
7902
7903 \setslot{\lctop{Cacute}{cacute}}
7904   \comment{The letter '\c'.}
7905 \endsetslot
7906
7907 \setslot{\lctop{Ccaron}{ccaron}}
7908   \comment{The letter '\v c'.}
7909 \endsetslot
7910
7911 \setslot{\lctop{Dcaron}{dcaron}}
7912   \comment{The letter '\v d'.}
7913 \endsetslot
7914
7915 \setslot{\lctop{Ecaron}{ecaron}}
7916   \comment{The letter '\v e'.}
7917 \endsetslot
7918
7919 \setslot{\lc{Eogonek}{eogonek}}
7920   \comment{The letter '\k e'.}
7921 \endsetslot
7922
7923 \setslot{\lctop{Gbreve}{gbreve}}
7924   \comment{The letter '\u g'.}
7925 \endsetslot
7926
7927 \setslot{\lctop{Lacute}{lacute}}
7928   \comment{The letter '\l'.}
7929 \endsetslot
7930
7931 \setslot{\lc{Lcaron}{lcaron}}
7932   \comment{The letter '\v l'.}
7933 \endsetslot
7934
7935 \setslot{\lc{Lslash}{lslash}}
7936   \comment{The letter '\l'.}
7937 \endsetslot
7938
7939 \setslot{\lctop{Nacute}{nacute}}
7940   \comment{The letter '\n'.}
7941 \endsetslot
7942
7943 \setslot{\lctop{Ncaron}{ncaron}}
7944   \comment{The letter '\v n'.}
7945 \endsetslot
7946
7947 \setslot{\lc{Eng}{eng}}
7948   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
    to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
    it seems.}
7949 \endsetslot
7950
7951 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
7952   \comment{The letter '\H o'.}

```

```
7953 \endsetslot
7954
7955 \setslot{\lctop{Racute}{racute}}
7956     \comment{The letter '\r'.}
7957 \endsetslot
7958
7959 \setslot{\lctop{Rcaron}{rcaron}}
7960     \comment{The letter '\v r'.}
7961 \endsetslot
7962
7963 \setslot{\lctop{Sacute}{sacute}}
7964     \comment{The letter '\s'.}
7965 \endsetslot
7966
7967 \setslot{\lctop{Scaron}{scaron}}
7968     \comment{The letter '\v s'.}
7969 \endsetslot
7970
7971 \setslot{\lc{Scedilla}{scedilla}}
7972     \comment{The letter '\c s'.}
7973 \endsetslot
7974
7975 \setslot{\lctop{Tcaron}{tcaron}}
7976     \comment{The letter '\v t'.}
7977 \endsetslot
7978
7979 \setslot{\lc{Tcedilla}{tcedilla}}
7980     \comment{The letter '\c t'.}
7981 \endsetslot
7982
7983 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
7984     \comment{The letter '\H u'.}
7985 \endsetslot
7986
7987 \setslot{\lctop{Uring}{uring}}
7988     \comment{The letter '\r u'.}
7989 \endsetslot
7990
7991 \setslot{\lctop{Ydieresis}{ydieresis}}
7992     \comment{The letter '\y'.}
7993 \endsetslot
7994
7995 \setslot{\lctop{Zacute}{zacute}}
7996     \comment{The letter '\z'.}
7997 \endsetslot
7998
7999 \setslot{\lctop{Zcaron}{zcaron}}
8000     \comment{The letter '\v z'.}
8001 \endsetslot
8002
8003 \setslot{\lctop{Zdotaccent}{zdotaccent}}
8004     \comment{The letter '\. z'.}
8005 \endsetslot
8006
```

```
8007 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
8008
8009   \setslot{\lclig{IJ}{ij}}
8010     \comment{The letter 'ij'. This is a single letter, and in a
8011       monowidth font should ideally be one letter wide.}
8012   \endsetslot
8013
8014 \Fi
8015
8016 \setslot{exclamdown.superior}
8017   \comment{The Spanish punctuation mark '!'.}
8018 \endsetslot
8019
8020 \setslot{questiondown.superior}
8021   \comment{The Spanish punctuation mark '?'.}
8022 \endsetslot
8023
8024 \setslot{sterling.superior}
8025   \comment{The British currency mark '\textsterling'.}
8026 \endsetslot
8027
8028 \setslot{\uctop{Agrave}{agrave}}
8029   \comment{The letter '\` A'.}
8030 \endsetslot
8031
8032 \setslot{\uctop{Aacute}{aacute}}
8033   \comment{The letter '\^ A'.}
8034 \endsetslot
8035
8036 \setslot{\uctop{Acircumflex}{acircumflex}}
8037   \comment{The letter '\~ A'.}
8038 \endsetslot
8039
8040 \setslot{\uctop{Atilde}{atilde}}
8041   \comment{The letter '\~ A'.}
8042 \endsetslot
8043
8044 \setslot{\uctop{Adieresis}{adieresis}}
8045   \comment{The letter '\u00e4 A'.}
8046 \endsetslot
8047
8048 \setslot{\uctop{Aring}{aring}}
8049   \comment{The letter '\r A'.}
8050 \endsetslot
8051
8052 \setslot{\uc{AE}{ae}}
8053   \comment{The letter '\AE'. This is a single letter, and should not be
8054     faked with 'AE'.}
8055 \endsetslot
8056
8057 \setslot{\uc{Ccedilla}{ccedilla}}
8058   \comment{The letter '\c C'.}
8059 \endsetslot
8060
```

```
8061 \setslot{\uctop{Egrave}{egrave}}
8062   \comment{The letter '\` E'.}
8063 \endsetslot
8064
8065 \setslot{\uctop{Eacute}{eacute}}
8066   \comment{The letter '\^ E'.}
8067 \endsetslot
8068
8069 \setslot{\uctop{Ecircumflex}{ecircumflex}}
8070   \comment{The letter '\~ E'.}
8071 \endsetslot
8072
8073 \setslot{\uctop{Edieresis}{edieresis}}
8074   \comment{The letter '\" E'.}
8075 \endsetslot
8076
8077 \setslot{\uctop{Igrave}{igrave}}
8078   \comment{The letter '\` I'.}
8079 \endsetslot
8080
8081 \setslot{\uctop{Iacute}{iacute}}
8082   \comment{The letter '\^ I'.}
8083 \endsetslot
8084
8085 \setslot{\uctop{Icircumflex}{icircumflex}}
8086   \comment{The letter '\~ I'.}
8087 \endsetslot
8088
8089 \setslot{\uctop{Idieresis}{idieresis}}
8090   \comment{The letter '\" I'.}
8091 \endsetslot
8092
8093 \setslot{\uc{Eth}{eth}}
8094   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
8095     with a horizontal bar through the stem. It is unavailable
8096     in \plain\ \TeX.}
8097 \endsetslot
8098
8099 \setslot{\uctop{Ntilde}{ntilde}}
8100   \comment{The letter '\~ N'.}
8101 \endsetslot
8102
8103 \setslot{\uctop{Ograve}{ograve}}
8104   \comment{The letter '\` O'.}
8105 \endsetslot
8106
8107 \setslot{\uctop{Oacute}{oacute}}
8108   \comment{The letter '\^ O'.}
8109 \endsetslot
8110
8111 \setslot{\uctop{Ocircumflex}{ocircumflex}}
8112   \comment{The letter '\~ O'.}
8113 \endsetslot
8114
```

```

8115 \setslot{\uctop{Otilde}{otilde}}
8116   \comment{The letter '\~ O'.}
8117 \endsetslot
8118
8119 \setslot{\uctop{Odieresis}{odieresis}}
8120   \comment{The letter '\" O'.}
8121 \endsetslot
8122
8123 \setslot{\uc{OE}{oe}}
8124   \comment{The letter '\OE'. This is a single letter, and should not be
8125     faked with 'OE'.}
8126 \endsetslot
8127
8128 \setslot{\uc{0slash}{oslash}}
8129   \comment{The letter '\0'.}
8130 \endsetslot
8131
8132 \setslot{\uctop{Ugrave}{ugrave}}
8133   \comment{The letter '\` U'.}
8134 \endsetslot
8135
8136 \setslot{\uctop{Uacute}{uacute}}
8137   \comment{The letter '\^ U'.}
8138 \endsetslot
8139
8140 \setslot{\uctop{Ucircumflex}{ucircumflex}}
8141   \comment{The letter '\^ U'.}
8142 \endsetslot
8143
8144 \setslot{\uctop{Udieresis}{udieresis}}
8145   \comment{The letter '\" U'.}
8146 \endsetslot
8147
8148 \setslot{\uctop{Yacute}{yacute}}
8149   \comment{The letter '\` Y'.}
8150 \endsetslot
8151
8152 \setslot{\uc{Thorn}{thorn}}
8153   \comment{The Icelandic capital letter Thorn, similar to a 'P'
8154     with the bowl moved down. It is unavailable in \plain\ \TeX.}
8155 \endsetslot
8156
8157 \setslot{\uclig{SS}{germandbls}}
8158   \comment{The ligature 'SS', used to give an upper case '\ss'.
8159     In a monowidth font it should be two letters wide.}
8160 \endsetslot
8161
8162 \setslot{\lctop{Agrave}{agrave}}
8163   \comment{The letter '\` a'.}
8164 \endsetslot
8165
8166 \setslot{\lctop{Aacute}{aacute}}
8167   \comment{The letter '\^ a'.}
8168 \endsetslot

```

```
8169 \setslot{\lctop{Acircumflex}{acircumflex}}
8170   \comment{The letter '\^ a'.}
8171 \endsetslot
8173
8174 \setslot{\lctop{Atilde}{atilde}}
8175   \comment{The letter '\~ a'.}
8176 \endsetslot
8177
8178 \setslot{\lctop{Adieresis}{adieresis}}
8179   \comment{The letter '\" a'.}
8180 \endsetslot
8181
8182 \setslot{\lctop{Aring}{aring}}
8183   \comment{The letter '\r a'.}
8184 \endsetslot
8185
8186 \setslot{\lc{AE}{ae}}
8187   \comment{The letter '\ae'. This is a single letter, and should not be
8188     faked with 'ae'.}
8189 \endsetslot
8190
8191 \setslot{\lc{Ccedilla}{ccedilla}}
8192   \comment{The letter '\c c'.}
8193 \endsetslot
8194
8195 \setslot{\lctop{Egrave}{egrave}}
8196   \comment{The letter '\` e'.}
8197 \endsetslot
8198
8199 \setslot{\lctop{Eacute}{eacute}}
8200   \comment{The letter '\' e'.}
8201 \endsetslot
8202
8203 \setslot{\lctop{Ecircumflex}{ecircumflex}}
8204   \comment{The letter '\^ e'.}
8205 \endsetslot
8206
8207 \setslot{\lctop{Edieresis}{edieresis}}
8208   \comment{The letter '\\" e'.}
8209 \endsetslot
8210
8211 \setslot{\lctop{Igrave}{igrave}}
8212   \comment{The letter '\`i'.}
8213 \endsetslot
8214
8215 \setslot{\lctop{Iacute}{iacute}}
8216   \comment{The letter '\'i'.}
8217 \endsetslot
8218
8219 \setslot{\lctop{Icircumflex}{icircumflex}}
8220   \comment{The letter '\^i'.}
8221 \endsetslot
8222
```

```
8223 \setslot{\lctop{Idieresis}{idieresis}}
8224   \comment{The letter '\i'.}
8225 \endsetslot
8226
8227 \setslot{\lc{Eth}{eth}}
8228   \comment{The Icelandic lowercase letter 'eth' similar to
8229     a '$\partial$' with an oblique bar through the stem.
8230     It is unavailable in \plain\ TeX.}
8231 \endsetslot
8232
8233 \setslot{\lctop{Ntilde}{ntilde}}
8234   \comment{The letter '\~n'.}
8235 \endsetslot
8236
8237 \setslot{\lctop{Ograve}{ograve}}
8238   \comment{The letter '\`o'.}
8239 \endsetslot
8240
8241 \setslot{\lctop{Oacute}{oacute}}
8242   \comment{The letter '\^o'.}
8243 \endsetslot
8244
8245 \setslot{\lctop{Ocircumflex}{ocircumflex}}
8246   \comment{The letter '\^o'.}
8247 \endsetslot
8248
8249 \setslot{\lctop{Otilde}{otilde}}
8250   \comment{The letter '\~o'.}
8251 \endsetslot
8252
8253 \setslot{\lctop{Odieresis}{odieresis}}
8254   \comment{The letter '\o'.}
8255 \endsetslot
8256
8257 \setslot{\lc{OE}{oe}}
8258   \comment{The letter '\oe'. This is a single letter, and should not be
8259     faked with 'oe'.}
8260 \endsetslot
8261
8262 \setslot{\lc{Oslash}{oslash}}
8263   \comment{The letter '\o'.}
8264 \endsetslot
8265
8266 \setslot{\lctop{Ugrave}{ugrave}}
8267   \comment{The letter '\`u'.}
8268 \endsetslot
8269
8270 \setslot{\lctop{Uacute}{uacute}}
8271   \comment{The letter '\^u'.}
8272 \endsetslot
8273
8274 \setslot{\lctop{Ucircumflex}{ucircumflex}}
8275   \comment{The letter '\^u'.}
8276 \endsetslot
```

```

8277 \setslot{\lctop{Udieresis}{udieresis}}
8278   \comment{The letter '\u0100'.}
8279 \endsetslot
8280
8281 \setslot{\lctop{Yacute}{yacute}}
8282   \comment{The letter '\u017d'.}
8283 \endsetslot
8284
8285 \setslot{\lc{Thorn}{thorn}}
8286   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
8287     with an ascender rising from the stem. It is unavailable
8288     in \plain\ \TeX.}
8289 \endsetslot
8290
8291 \setslot{\lc{SS}{germandbls}}
8292   \comment{The letter '\u00d6'.}
8293 \endsetslot
8294
8295 \endencoding

```

6.3.12 fontsheets-t1-f_f.etx

fontsheets-t1-f_f.etx (etx)

```

8297 %%
8298 %% - The commentary in the original is deleted in this version. For
8299 %% information about the T1 etc., typeset the original t1.etx
8300 %% included with fontinst.
8301 %% - Slots are altered to accommodate characters which are named
8302 %% differently. For example, this encoding uses "endash" and "emdash"
8303 %% whereas t1.etx called for "rangedash" and "punctdash".
8304 %% - The original notices at the top of that file concerning authors,
8305 %% maintenance etc. are replaced by this notice.
8306 %% - The file is renamed.
8307 %% - The encoding name is modified.
8308 %% - f_f, f_f_i and f_f_l replace ff, ffi and ffl.
8309 %%
8310 %%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%
8311 \relax
8312 \encoding
8313
8314 \needsfontinstversion{1.910}
8315
8316 \setcommand{\lc#1#2}{\#2}
8317 \setcommand{\uc#1#2}{\#1}
8318 \setcommand{\lctop#1#2}{\#2}
8319 \setcommand{\uctop#1#2}{\#1}
8320 \setcommand{\lclig#1#2}{\#2}
8321 \ifisint{letterspacing}\then
8322   \ifnumber{\int{letterspacing}}={0}\then \Else
8323     \setcommand{\uclig#1#2}{\#1spaced}
8324     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but

```

```

8325      you can't see it as \verb|\setcommand| commands are invisible in
8326      the typeset output.}
8327      \Fi
8328      \Fi
8329      \setcommand\uclig#1#2{#1}
8330      \setcommand\digit#1{#1}
8331
8332      \ifisint{monowidth}\then
8333          \setint{ligaturing}{0}
8334      \Else
8335          % The following empty line is *important* to get the formatting
8336          % right here (sigh)! (Remember that it is a \par token.)
8337
8338      \ifisint{letterspacing}\then
8339          \ifnumber{\int{letterspacing}}={0}\then \Else
8340              \setint{ligaturing}{0}
8341          \Fi
8342          \Fi
8343      \setint{ligaturing}{1}
8344      \Fi
8345
8346      \setint{italicslant}{0}
8347      \setint{quad}{1000}
8348      \setint{baselineskip}{1200}
8349
8350      \ifisglyph{x}\then
8351          \setint{xheight}{\height{x}}
8352      \Else
8353          \setint{xheight}{500}
8354      \Fi
8355
8356      \ifisglyph{space}\then
8357          \setint{interword}{\width{space}}
8358      \Else\ifisglyph{i}\then
8359          \setint{interword}{\width{i}}
8360      \Else
8361          \setint{interword}{333}
8362      \Fi\Fi
8363
8364      \ifisint{monowidth}\then
8365          \setint{stretchword}{0}
8366          \setint{shrinkword}{0}
8367          \setint{extraspace}{\int{interword}}
8368      \Else
8369          \setint{stretchword}{\scale{\int{interword}}{600}}
8370          \setint{shrinkword}{\scale{\int{interword}}{240}}
8371          \setint{extraspace}{\scale{\int{interword}}{240}}
8372      \Fi
8373
8374      \ifisglyph{X}\then
8375          \setint{capheight}{\height{X}}
8376      \Else
8377          \setint{capheight}{750}
8378      \Fi

```

```

8379 \ifisglyph{d}\then
8380   \setint{ascender}{\height{d}}
8381 \Else\ifisint{capheight}\then
8382   \setint{ascender}{\int{capheight}}
8383 \Else
8384   \setint{ascender}{750}
8385 \Fi\Fi
8387
8388 \ifisglyph{Aring}\then
8389   \setint{acccapheight}{\height{Aring}}
8390 \Else
8391   \setint{acccapheight}{999}
8392 \Fi
8393
8394 \ifisint{descender_neg}\then
8395   \setint{descender}{\neg{\int{descender_neg}}}
8396 \Else\ifisglyph{p}\then
8397   \setint{descender}{\depth{p}}
8398 \Else
8399   \setint{descender}{250}
8400 \Fi\Fi
8401
8402 \ifisglyph{Aring}\then
8403   \setint{maxheight}{\height{Aring}}
8404 \Else
8405   \setint{maxheight}{1000}
8406 \Fi
8407
8408 \ifisint{maxdepth_neg}\then
8409   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
8410 \Else\ifisglyph{j}\then
8411   \setint{maxdepth}{\depth{j}}
8412 \Else
8413   \setint{maxdepth}{250}
8414 \Fi\Fi
8415
8416 \ifisglyph{six}\then
8417   \setint{digitwidth}{\width{six}}
8418 \Else
8419   \setint{digitwidth}{500}
8420 \Fi
8421
8422 \setint{capstem}{0} % not in AFM files
8423
8424 \setfontdimen{1}{italicslant}      % italic slant
8425 \setfontdimen{2}{interword}        % interword space
8426 \setfontdimen{3}{stretchword}      % interword stretch
8427 \setfontdimen{4}{shrinkword}       % interword shrink
8428 \setfontdimen{5}{xheight}         % x-height
8429 \setfontdimen{6}{quad}             % quad
8430 \setfontdimen{7}{extraspace}       % extra space after .
8431 \setfontdimen{8}{capheight}        % cap height
8432 \setfontdimen{9}{ascender}         % ascender

```

```

8433 \setfontdimen{10}{accapheight} % accented cap height
8434 \setfontdimen{11}{descender} % descender's depth
8435 \setfontdimen{12}{maxheight} % max height
8436 \setfontdimen{13}{maxdepth} % max depth
8437 \setfontdimen{14}{digitwidth} % digit width
8438 \setfontdimen{15}{verticalstem} % dominant width of vertical stems
8439 \setfontdimen{16}{baselineskip} % baselineskip
8440
8441 \ifnumber{\int{ligaturing}}<0\then
8442   \comment{In this case, the codingscheme can be different from the
8443   default, and therefore we refrain from setting it.}
8444 \Else
8445   \setstr{codingscheme}{EXTENDED TEX ENC - F_F}
8446 \Fi
8447
8448 \setslot{\lc{Grave}{grave}}
8449   \comment{The grave accent '\{}.'}
8450 \endsetslot
8451
8452 \setslot{\lc{Acute}{acute}}
8453   \comment{The acute accent '\{}.'}
8454 \endsetslot
8455
8456 \setslot{\lc{Circumflex}{circumflex}}
8457   \comment{The circumflex accent '\^{}.'}
8458 \endsetslot
8459
8460 \setslot{\lc{Tilde}{tilde}}
8461   \comment{The tilde accent '\~{}.'}
8462 \endsetslot
8463
8464 \setslot{\lc{Dieresis}{dieresis}}
8465   \comment{The umlaut or dieresis accent '\\"{}.'}
8466 \endsetslot
8467
8468 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
8469   \comment{The long Hungarian umlaut '\H{}.'}
8470 \endsetslot
8471
8472 \setslot{\lc{Ring}{ring}}
8473   \comment{The ring accent '\r{}.'}
8474 \endsetslot
8475
8476 \setslot{\lc{Caron}{caron}}
8477   \comment{The caron or h'á\v cek accent '\v{}.'}
8478 \endsetslot
8479
8480 \setslot{\lc{Breve}{breve}}
8481   \comment{The breve accent '\u{}.'}
8482 \endsetslot
8483
8484 \setslot{\lc{Macron}{macron}}
8485   \comment{The macron accent '\={}.'}
8486 \endsetslot

```

```

8487
8488 \setslot{\lc{Dotaccent}{dotaccent}}
8489   \comment{The dot accent '\.{ }'.}
8490 \endsetslot
8491
8492 \setslot{\lc{Cedilla}{cedilla}}
8493   \comment{The cedilla accent '\c { }'.}
8494 \endsetslot
8495
8496 \setslot{\lc{Ogonek}{ogonek}}
8497   \comment{The ogonek accent '\k { }'.}
8498 \endsetslot
8499
8500 \setslot{quotesinglbase}
8501   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
8502       but with different sidebearings.}
8503 \endsetslot
8504
8505 \setslot{guilsinglleft}
8506   \comment{A French single opening quote mark '\guilsinglleft',
8507       unavailable in \plain\ \TeX.}
8508 \endsetslot
8509
8510 \setslot{guilsinglright}
8511   \comment{A French single closing quote mark '\guilsinglright',
8512       unavailable in \plain\ \TeX.}
8513 \endsetslot
8514
8515 \setslot{quotedblleft}
8516   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
8517 \endsetslot
8518
8519 \setslot{quotedblright}
8520   \comment{The English closing quote mark '\,\textquotedblright\,'.}
8521 \endsetslot
8522
8523 \setslot{quotedblbase}
8524   \comment{A German double quote mark '\quotedblbase' similar to two commas,
8525       but with tighter letterspacing and different sidebearings.}
8526 \endsetslot
8527
8528 \setslot{guillemotleft}
8529   \comment{A French double opening quote mark '\guillemotleft',
8530       unavailable in \plain\ \TeX.}
8531 \endsetslot
8532
8533 \setslot{guillemotright}
8534   \comment{A French closing opening quote mark '\guillemotright',
8535       unavailable in \plain\ \TeX.}
8536 \endsetslot
8537
8538 \setslot{endash}
8539   \ligature{LIG}{hyphen}{emdash}
8540   \comment{The number range dash '1--9'.

```

```

8541      This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
8542      called ‘endash’ to work right.
8543      The ‘\textendash’. In a monowidth font, this might be set as
8544      ‘\texttt{1{-}9}{.}’
8545  \endsetslot
8546
8547  \setslot{emdash}
8548      \comment{The punctuation dash ‘Oh---boy.’
8549      This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
8550      called ‘emdash’ to work right.
8551      The ‘\textemdash’.
8552      In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy}{.}’}
8553  \endsetslot
8554
8555  \setslot{compwordmark}
8556      \comment{An invisible glyph, with zero width and depth, but the
8557      height of lowercase letters without ascenders.
8558      It is used to stop ligaturing in words like ‘shelf{}ful’.}
8559  \endsetslot
8560
8561  \setslot{perthousandzero}
8562      \comment{A glyph which is placed after ‘\%’ to produce a
8563      ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
8564      Your guess is as good as mine as to what this glyph should look
8565      like in a monowidth font.}
8566  \endsetslot
8567
8568  \setslot{\lc{dotlessI}{dotlessi}}
8569      \comment{A dotless i ‘\i’, used to produce accented letters such as
8570      ‘\=\i’.}
8571  \endsetslot
8572
8573  \setslot{\lc{dotlessJ}{dotlessj}}
8574      \comment{A dotless j ‘\j’, used to produce accented letters such as
8575      ‘\=\j’. Most non-\TeX\ fonts do not have this glyph.}
8576  \endsetslot
8577
8578  \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
8579
8580  \setslot{\lc{f_f}{ff}}
8581      \ifnumber{\int{ligaturing}}>{0}\then
8582          \ligature{LIG}{\lc{I}{i}}{\lc{f_f}{ff_i}}
8583          \ligature{LIG}{\lc{L}{l}}{\lc{f_f}{ff_l}}
8584          \Fi
8585          \comment{The ‘ff’ ligature. It should be two characters wide in a
8586          monowidth font.}
8587  \endsetslot
8588
8589  \setslot{\lc{fi}{ff_i}}
8590      \comment{The ‘fi’ ligature. It should be two characters wide in a
8591          monowidth font.}
8592  \endsetslot
8593
8594  \setslot{\lc{f1}{ff_l}}

```

```
8595     \comment{The 'fl' ligature. It should be two characters wide in a
8596         monowidth font.}
8597 \endsetslot
8598
8599 \setslot{\lclig{FFI}{f_f_i}}
8600     \comment{The 'ffi' ligature. It should be three characters wide in a
8601         monowidth font.}
8602 \endsetslot
8603
8604 \setslot{\lclig{FFL}{f_f_l}}
8605     \comment{The 'ffl' ligature. It should be three characters wide in a
8606         monowidth font.}
8607 \endsetslot
8608
8609 \Fi
8610
8611 \setslot{visiblespace}
8612     \comment{A visible space glyph '\textvisiblespace'.}
8613 \endsetslot
8614
8615 \setslot{exclam}
8616     \ligature{LIG}{quotelleft}{exclamdown}
8617     \comment{The exclamation mark '!'.}
8618 \endsetslot
8619
8620 \setslot{quotedbl}
8621     \comment{The 'neutral' double quotation mark '\textquotedbl', included for use in monowidth fonts, or for setting computer programs. Note that the inclusion of this glyph in this slot means that \TeX documents which used '{\tt\char"} as an input character will no longer work.}
8622
8623 \endsetslot
8624
8625 \setslot{numbersign}
8626     \comment{The hash sign '#'.}
8627 \endsetslot
8628
8629 \setslot{dollar}
8630     \comment{The dollar sign '$'.}
8631 \endsetslot
8632
8633 \setslot{percent}
8634     \comment{The percent sign '%'.}
8635 \endsetslot
8636
8637 \setslot{ampersand}
8638     \comment{The ampersand sign '&'.}
8639 \endsetslot
8640
8641 \setslot{quoteright}
8642     \ligature{LIG}{quoteright}{quotedblright}
8643     \comment{The English closing single quote mark '\textquoteright,'.}
8644 \endsetslot
8645
8646 \setslot{quoteright}
8647     \ligature{LIG}{quoteright}{quotedblright}
8648     \comment{The English closing single quote mark '\textquoteright,'.}
8649 \endsetslot
```

```
8649 \setslot{parenleft}
8650     \comment{The opening parenthesis '(').}
8651 \endsetslot
8652
8653 \setslot{parenright}
8654     \comment{The closing parenthesis ')'.}
8655 \endsetslot
8656
8657 \setslot{asterisk}
8658     \comment{The raised asterisk '*' .}
8659 \endsetslot
8660
8661 \setslot{plus}
8662     \comment{The addition sign '+' .}
8663 \endsetslot
8664
8665 \setslot{comma}
8666     \ligature{LIG}{comma}{quotedblbase}
8667     \comment{The comma ',' .}
8668 \endsetslot
8669
8670 \setslot{hyphen}
8671     \ligature{LIG}{hyphen}{endash}
8672     \ligature{LIG}{hyphenchar}{hyphenchar}
8673     \comment{The hyphen '-' .}
8674 \endsetslot
8675
8676 \setslot{period}
8677     \comment{The period '.' .}
8678 \endsetslot
8679
8680 \setslot{slash}
8681     \comment{The forward oblique '/'.}
8682 \endsetslot
8683
8684 \setslot{\digit{zero}}
8685     \comment{The number '0'. This (and all the other numerals) may be}
8686     old style or ranging digits.}
8687 \endsetslot
8688
8689 \setslot{\digit{one}}
8690     \comment{The number '1' .}
8691 \endsetslot
8692
8693 \setslot{\digit{two}}
8694     \comment{The number '2' .}
8695 \endsetslot
8696
8697 \setslot{\digit{three}}
8698     \comment{The number '3' .}
8699 \endsetslot
8700
8701 \setslot{\digit{four}}
8702     \comment{The number '4' .}
```

```
8703 \endsetslot
8704
8705 \setslot{\digit{five}}
8706     \comment{The number '5'.}
8707 \endsetslot
8708
8709 \setslot{\digit{six}}
8710     \comment{The number '6'.}
8711 \endsetslot
8712
8713 \setslot{\digit{seven}}
8714     \comment{The number '7'.}
8715 \endsetslot
8716
8717 \setslot{\digit{eight}}
8718     \comment{The number '8'.}
8719 \endsetslot
8720
8721 \setslot{\digit{nine}}
8722     \comment{The number '9'.}
8723 \endsetslot
8724
8725 \setslot{colon}
8726     \comment{The colon punctuation mark ':' .}
8727 \endsetslot
8728
8729 \setslot{semicolon}
8730     \comment{The semi-colon punctuation mark ';' .}
8731 \endsetslot
8732
8733 \setslot{less}
8734     \ligature[LIG]{less}{guillemotleft}
8735     \comment{The less-than sign '\textless' .}
8736 \endsetslot
8737
8738 \setslot{equal}
8739     \comment{The equals sign '=' .}
8740 \endsetslot
8741
8742 \setslot{greater}
8743     \ligature[LIG]{greater}{guillemotright}
8744     \comment{The greater-than sign '\textgreater' .}
8745 \endsetslot
8746
8747 \setslot{question}
8748     \ligature[LIG]{quotelleft}{questiondown}
8749     \comment{The question mark '?' .}
8750 \endsetslot
8751
8752 \setslot{at}
8753     \comment{The at sign '@' .}
8754 \endsetslot
8755
8756 \setslot{\uc{A}{a}}
```

```
8757     \comment{The letter '{A}'.}
8758 \endsetslot
8759
8760 \setslot{\uc{B}{b}}
8761     \comment{The letter '{B}'.}
8762 \endsetslot
8763
8764 \setslot{\uc{C}{c}}
8765     \comment{The letter '{C}'.}
8766 \endsetslot
8767
8768 \setslot{\uc{D}{d}}
8769     \comment{The letter '{D}'.}
8770 \endsetslot
8771
8772 \setslot{\uc{E}{e}}
8773     \comment{The letter '{E}'.}
8774 \endsetslot
8775
8776 \setslot{\uc{F}{f}}
8777     \comment{The letter '{F}'.}
8778 \endsetslot
8779
8780 \setslot{\uc{G}{g}}
8781     \comment{The letter '{G}'.}
8782 \endsetslot
8783
8784 \setslot{\uc{H}{h}}
8785     \comment{The letter '{H}'.}
8786 \endsetslot
8787
8788 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8789
8790 \setslot{\uc{I}{i}}
8791     \comment{The letter '{I}'.}
8792 \endsetslot
8793
8794 \Fi
8795
8796 \setslot{\uc{J}{j}}
8797     \comment{The letter '{J}'.}
8798 \endsetslot
8799
8800 \setslot{\uc{K}{k}}
8801     \comment{The letter '{K}'.}
8802 \endsetslot
8803
8804 \setslot{\uc{L}{l}}
8805     \comment{The letter '{L}'.}
8806 \endsetslot
8807
8808 \setslot{\uc{M}{m}}
8809     \comment{The letter '{M}'.}
8810 \endsetslot
```

```
8811 \setslot{\uc{N}{n}}
8812   \comment{The letter '{N}'.}
8813 \endsetslot
8814
8815 \setslot{\uc{O}{o}}
8816   \comment{The letter '{O}'.}
8817 \endsetslot
8818
8819 \setslot{\uc{P}{p}}
8820   \comment{The letter '{P}'.}
8821 \endsetslot
8822
8823 \setslot{\uc{Q}{q}}
8824   \comment{The letter '{Q}'.}
8825 \endsetslot
8826
8827 \setslot{\uc{R}{r}}
8828   \comment{The letter '{R}'.}
8829 \endsetslot
8830
8831 \setslot{\uc{S}{s}}
8832   \comment{The letter '{S}'.}
8833 \endsetslot
8834
8835 \setslot{\uc{T}{t}}
8836   \comment{The letter '{T}'.}
8837 \endsetslot
8838
8839 \setslot{\uc{U}{u}}
8840   \comment{The letter '{U}'.}
8841 \endsetslot
8842
8843 \setslot{\uc{V}{v}}
8844   \comment{The letter '{V}'.}
8845 \endsetslot
8846
8847 \setslot{\uc{W}{w}}
8848   \comment{The letter '{W}'.}
8849 \endsetslot
8850
8851 \setslot{\uc{X}{x}}
8852   \comment{The letter '{X}'.}
8853 \endsetslot
8854
8855 \setslot{\uc{Y}{y}}
8856   \comment{The letter '{Y}'.}
8857 \endsetslot
8858
8859 \setslot{\uc{Z}{z}}
8860   \comment{The letter '{Z}'.}
8861 \endsetslot
8862
8863 \setslot{bracketleft}
```

```

8865   \comment{The opening square bracket '['.}
8866   \endsetslot
8867
8868   \setslot{backslash}
8869     \comment{The backwards oblique '\textbackslash'.}
8870   \endsetslot
8871
8872   \setslot{bracketright}
8873     \comment{The closing square bracket ']' .}
8874   \endsetslot
8875
8876   \setslot{asciicircum}
8877     \comment{The ASCII upward-pointing arrow head '\textasciicircum' .}
8878     This is included for compatibility with typewriter fonts used
8879     for computer listings.}
8880   \endsetslot
8881
8882   \setslot{underscore}
8883     \comment{The ASCII underline character '\textunderline', usually
8884     set on the baseline.}
8885     This is included for compatibility with typewriter fonts used
8886     for computer listings.}
8887   \endsetslot
8888
8889   \setslot{quotyleft}
8890     \ligature{LIG}{quotyleft}{quotedblleft}
8891     \comment{The English opening single quote mark '\textquotopleft\,' .}
8892   \endsetslot
8893
8894   \setslot{\lc{A}{a}}
8895     \comment{The letter '{a}' .}
8896   \endsetslot
8897
8898   \setslot{\lc{B}{b}}
8899     \comment{The letter '{b}' .}
8900   \endsetslot
8901
8902 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8903
8904   \setslot{\lc{C}{c}}
8905     \comment{The letter '{c}' .}
8906   \endsetslot
8907
8908 \Fi
8909
8910 \setslot{\lc{D}{d}}
8911     \comment{The letter '{d}' .}
8912 \endsetslot
8913
8914 \setslot{\lc{E}{e}}
8915     \comment{The letter '{e}' .}
8916 \endsetslot
8917
8918 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else

```

```

8919 \setslot{\lc{F}{f}}
8920   \ifnumber{\int{ligaturing}}>{0}\then
8921     \ligature{LIG}{\lc{I}{i}}{\lc{lig{FI}}{fi}}
8922     \ligature{LIG}{\lc{F}{f}}{\lc{lig{FF}}{f_f}}
8923     \ligature{LIG}{\lc{L}{l}}{\lc{lig{FL}}{fl}}
8924   \Fi
8925   \comment{The letter '{f}'.}
8926 \endsetslot
8928
8929 \Fi
8930
8931 \setslot{\lc{G}{g}}
8932   \comment{The letter '{g}'.}
8933 \endsetslot
8934
8935 \setslot{\lc{H}{h}}
8936   \comment{The letter '{h}'.}
8937 \endsetslot
8938
8939 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8940
8941   \setslot{\lc{I}{i}}
8942   \comment{The letter '{i}'.}
8943 \endsetslot
8944
8945 \Fi
8946
8947 \setslot{\lc{J}{j}}
8948   \comment{The letter '{j}'.}
8949 \endsetslot
8950
8951 \setslot{\lc{K}{k}}
8952   \comment{The letter '{k}'.}
8953 \endsetslot
8954
8955 \setslot{\lc{L}{l}}
8956   \comment{The letter '{l}'.}
8957 \endsetslot
8958
8959 \setslot{\lc{M}{m}}
8960   \comment{The letter '{m}'.}
8961 \endsetslot
8962
8963 \setslot{\lc{N}{n}}
8964   \comment{The letter '{n}'.}
8965 \endsetslot
8966
8967 \setslot{\lc{O}{o}}
8968   \comment{The letter '{o}'.}
8969 \endsetslot
8970
8971 \setslot{\lc{P}{p}}
8972   \comment{The letter '{p}'.}

```

```
8973 \endsetslot
8974
8975 \setslot{\lc{Q}{q}}
8976     \comment{The letter '{q}'.}
8977 \endsetslot
8978
8979 \setslot{\lc{R}{r}}
8980     \comment{The letter '{r}'.}
8981 \endsetslot
8982
8983 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8984
8985 \setslot{\lc{S}{s}}
8986     \comment{The letter '{s}'.}
8987 \endsetslot
8988
8989 \Fi
8990
8991 \setslot{\lc{T}{t}}
8992     \comment{The letter '{t}'.}
8993 \endsetslot
8994
8995 \setslot{\lc{U}{u}}
8996     \comment{The letter '{u}'.}
8997 \endsetslot
8998
8999 \setslot{\lc{V}{v}}
9000     \comment{The letter '{v}'.}
9001 \endsetslot
9002
9003 \setslot{\lc{W}{w}}
9004     \comment{The letter '{w}'.}
9005 \endsetslot
9006
9007 \setslot{\lc{X}{x}}
9008     \comment{The letter '{x}'.}
9009 \endsetslot
9010
9011 \setslot{\lc{Y}{y}}
9012     \comment{The letter '{y}'.}
9013 \endsetslot
9014
9015 \setslot{\lc{Z}{z}}
9016     \comment{The letter '{z}'.}
9017 \endsetslot
9018
9019 \setslot{braceleft}
9020     \comment{The opening curly brace '\textbraceleft'.}
9021 \endsetslot
9022
9023 \setslot{bar}
9024     \comment{The ASCII vertical bar '\textbar'.
9025     This is included for compatibility with typewriter fonts used
9026     for computer listings.}
```

```
9027 \endsetslot
9028
9029 \setslot{braceright}
9030     \comment{The closing curly brace '\textbraceright'.}
9031 \endsetslot
9032
9033 \setslot{asciitilde}
9034     \comment{The ASCII tilde '\textasciitilde'.
9035         This is included for compatibility with typewriter fonts used
9036         for computer listings.}
9037 \endsetslot
9038
9039 \setslot{hyphenchar}
9040     \comment{The glyph used for hyphenation in this font, which will
9041         almost always be the same as 'hyphen'.}
9042 \endsetslot
9043
9044 \setslot{\uctop{Abreve}{abreve}}
9045     \comment{The letter '\u A'.}
9046 \endsetslot
9047
9048 \setslot{\uc{Aogonek}{aogonek}}
9049     \comment{The letter '\k A'.}
9050 \endsetslot
9051
9052 \setslot{\uctop{Cacute}{cacute}}
9053     \comment{The letter '\c C'.}
9054 \endsetslot
9055
9056 \setslot{\uctop{Ccaron}{ccaron}}
9057     \comment{The letter '\v C'.}
9058 \endsetslot
9059
9060 \setslot{\uctop{Dcaron}{dcaron}}
9061     \comment{The letter '\v D'.}
9062 \endsetslot
9063
9064 \setslot{\uctop{Ecaron}{ecaron}}
9065     \comment{The letter '\v E'.}
9066 \endsetslot
9067
9068 \setslot{\uc{Eogonek}{eogonek}}
9069     \comment{The letter '\k E'.}
9070 \endsetslot
9071
9072 \setslot{\uctop{Gbreve}{gbreve}}
9073     \comment{The letter '\u G'.}
9074 \endsetslot
9075
9076 \setslot{\uctop{Lacute}{lacute}}
9077     \comment{The letter '\l L'.}
9078 \endsetslot
9079
9080 \setslot{\uc{Lcaron}{lcaron}}
```

```

9081     \comment{The letter '\v L'.}
9082 \endsetslot
9083
9084 \setslot{\uc{Lslash}{lslash}}
9085     \comment{The letter '\L'.}
9086 \endsetslot
9087
9088 \setslot{\uctop{Nacute}{nacute}}
9089     \comment{The letter '\N'.}
9090 \endsetslot
9091
9092 \setslot{\uctop{Ncaron}{ncaron}}
9093     \comment{The letter '\v N'.}
9094 \endsetslot
9095
9096 \setslot{\uc{Eng}{eng}}
9097     \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
         to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
         seems.}
9098 \endsetslot
9099
9100 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
9101     \comment{The letter '\H O'.}
9102 \endsetslot
9103
9104 \setslot{\uctop{Racute}{racute}}
9105     \comment{The letter '\R'.}
9106 \endsetslot
9107
9108 \setslot{\uctop{Rcaron}{rcaron}}
9109     \comment{The letter '\v R'.}
9110 \endsetslot
9111
9112 \setslot{\uctop{Sacute}{sacute}}
9113     \comment{The letter '\S'.}
9114 \endsetslot
9115
9116 \setslot{\uctop{Scaron}{scaron}}
9117     \comment{The letter '\v S'.}
9118 \endsetslot
9119
9120 \setslot{\uc{Scedilla}{scedilla}}
9121     \comment{The letter '\c S'.}
9122 \endsetslot
9123
9124 \setslot{\uctop{Tcaron}{tcaron}}
9125     \comment{The letter '\v T'.}
9126 \endsetslot
9127
9128 \setslot{\uc{Tcedilla}{tcedilla}}
9129     \comment{The letter '\c T'.}
9130 \endsetslot
9131
9132 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}

```

```

9133     \comment{The letter '\H U'.}
9134     \endsetslot
9135
9136     \setslot{\uctop{Uring}{uring}}
9137         \comment{The letter '\r U'.}
9138     \endsetslot
9139
9140     \setslot{\uctop{Ydieresis}{ydieresis}}
9141         \comment{The letter '\" Y'.}
9142     \endsetslot
9143
9144     \setslot{\uctop{Zacute}{zacute}}
9145         \comment{The letter '\` Z'.}
9146     \endsetslot
9147
9148     \setslot{\uctop{Zcaron}{zcaron}}
9149         \comment{The letter '\v Z'.}
9150     \endsetslot
9151
9152     \setslot{\uctop{Zdotaccent}{zdotaccent}}
9153         \comment{The letter '\. Z'.}
9154     \endsetslot
9155
9156     \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
9157
9158     \setslot{\uclig{IJ}{ij}}
9159         \comment{The letter 'IJ'. This is a single letter, and in a
9160             monowidth font should ideally be one letter wide.}
9161     \endsetslot
9162
9163     \Fi
9164
9165     \setslot{\uctop{Idotaccent}{idotaccent}}
9166         \comment{The letter '\. I'.}
9167     \endsetslot
9168
9169     \setslot{\lc{Dbar}{dbar}}
9170         \comment{The letter '\dj'.}
9171     \endsetslot
9172
9173     \setslot{section}
9174         \comment{The section mark '\textsection'.}
9175     \endsetslot
9176
9177     \setslot{\lctop{Abreve}{abreve}}
9178         \comment{The letter '\u a'.}
9179     \endsetslot
9180
9181     \setslot{\lc{Aogonek}{aogonek}}
9182         \comment{The letter '\k a'.}
9183     \endsetslot
9184
9185     \setslot{\lctop{Cacute}{cacute}}
9186         \comment{The letter '\c c'.}

```

```

9187 \endsetslot
9188
9189 \setslot{\lctop{Ccaron}{ccaron}}
9190   \comment{The letter '\v c'.}
9191 \endsetslot
9192
9193 \setslot{\lctop{Dcaron}{dcaron}}
9194   \comment{The letter '\v d'.}
9195 \endsetslot
9196
9197 \setslot{\lctop{Ecaron}{ecaron}}
9198   \comment{The letter '\v e'.}
9199 \endsetslot
9200
9201 \setslot{\lc{Eogonek}{eogonek}}
9202   \comment{The letter '\k e'.}
9203 \endsetslot
9204
9205 \setslot{\lctop{Gbreve}{gbreve}}
9206   \comment{The letter '\u g'.}
9207 \endsetslot
9208
9209 \setslot{\lctop{Lacute}{lacute}}
9210   \comment{The letter '\` l'.}
9211 \endsetslot
9212
9213 \setslot{\lc{Lcaron}{lcaron}}
9214   \comment{The letter '\v l'.}
9215 \endsetslot
9216
9217 \setslot{\lc{Lslash}{lslash}}
9218   \comment{The letter '\l'.}
9219 \endsetslot
9220
9221 \setslot{\lctop{Nacute}{nacute}}
9222   \comment{The letter '\` n'.}
9223 \endsetslot
9224
9225 \setslot{\lctop{Ncaron}{ncaron}}
9226   \comment{The letter '\v n'.}
9227 \endsetslot
9228
9229 \setslot{\lc{Eng}{eng}}
9230   \comment{The Sami letter '\ng'.
9231     It is unavailable in \plain\ \TeX.
9232     This needs to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in
9233     t1.etx in most cases, it seems.}
9234 \endsetslot
9235
9236 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
9237   \comment{The letter '\H o'.}
9238 \endsetslot
9239
9240 \setslot{\lctop{Racute}{racute}}

```

```

9241     \comment{The letter '\ r'.}
9242     \endsetslot
9243
9244 \setslot{\lctop{Rcaron}{rcaron}}
9245     \comment{The letter '\ v r'.}
9246 \endsetslot
9247
9248 \setslot{\lctop{Sacute}{sacute}}
9249     \comment{The letter '\ s'.}
9250 \endsetslot
9251
9252 \setslot{\lctop{Scaron}{scaron}}
9253     \comment{The letter '\ v s'.}
9254 \endsetslot
9255
9256 \setslot{\lc{Scedilla}{scedilla}}
9257     \comment{The letter '\c s'.}
9258 \endsetslot
9259
9260 \setslot{\lctop{Tcaron}{tcaron}}
9261     \comment{The letter '\v t'.}
9262 \endsetslot
9263
9264 \setslot{\lc{Tcedilla}{tcedilla}}
9265     \comment{The letter '\c t'.}
9266 \endsetslot
9267
9268 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
9269     \comment{The letter '\H u'.}
9270 \endsetslot
9271
9272 \setslot{\lctop{Uring}{uring}}
9273     \comment{The letter '\r u'.}
9274 \endsetslot
9275
9276 \setslot{\lctop{Ydieresis}{ydieresis}}
9277     \comment{The letter '\y y'.}
9278 \endsetslot
9279
9280 \setslot{\lctop{Zacute}{zacute}}
9281     \comment{The letter '\ z'.}
9282 \endsetslot
9283
9284 \setslot{\lctop{Zcaron}{zcaron}}
9285     \comment{The letter '\v z'.}
9286 \endsetslot
9287
9288 \setslot{\lctop{Zdotaccent}{zdotaccent}}
9289     \comment{The letter '\. z'.}
9290 \endsetslot
9291
9292 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
9293
9294 \setslot{\lclig{IJ}{ij}}

```

```
9295     \comment{The letter 'ij'. This is a single letter, and in a
9296         monowidth font should ideally be one letter wide.}
9297     \endsetslot
9298
9299 \Fi
9300
9301 \setslot{exclamdown}
9302     \comment{The Spanish punctuation mark '!'.}
9303 \endsetslot
9304
9305 \setslot{questiondown}
9306     \comment{The Spanish punctuation mark '?'.}
9307 \endsetslot
9308
9309 \setslot{sterling}
9310     \comment{The British currency mark '\textsterling'.}
9311 \endsetslot
9312
9313 \setslot{\uctop{Agrave}{agrave}}
9314     \comment{The letter '\` A'.}
9315 \endsetslot
9316
9317 \setslot{\uctop{Aacute}{aacute}}
9318     \comment{The letter '\^ A'.}
9319 \endsetslot
9320
9321 \setslot{\uctop{Acircumflex}{acircumflex}}
9322     \comment{The letter '\~ A'.}
9323 \endsetslot
9324
9325 \setslot{\uctop{Atilde}{atilde}}
9326     \comment{The letter '\~ A'.}
9327 \endsetslot
9328
9329 \setslot{\uctop{Adieresis}{adieresis}}
9330     \comment{The letter '\u00c4 A'.}
9331 \endsetslot
9332
9333 \setslot{\uctop{Aring}{aring}}
9334     \comment{The letter '\r A'.}
9335 \endsetslot
9336
9337 \setslot{\uc{AE}{ae}}
9338     \comment{The letter '\AE'. This is a single letter, and should not be
9339         faked with 'AE'.}
9340 \endsetslot
9341
9342 \setslot{\uc{Ccedilla}{ccedilla}}
9343     \comment{The letter '\c C'.}
9344 \endsetslot
9345
9346 \setslot{\uctop{Egrave}{egrave}}
9347     \comment{The letter '\` E'.}
9348 \endsetslot
```

```
9349 \setslot{\uctop{Eacute}{eacute}}
9350   \comment{The letter '\` E'.}
9351 \endsetslot
9353
9354 \setslot{\uctop{Ecircumflex}{ecircumflex}}
9355   \comment{The letter '\^ E'.}
9356 \endsetslot
9357
9358 \setslot{\uctop{Edieresis}{edieresis}}
9359   \comment{The letter '\" E'.}
9360 \endsetslot
9361
9362 \setslot{\uctop{Igrave}{igrave}}
9363   \comment{The letter '\` I'.}
9364 \endsetslot
9365
9366 \setslot{\uctop{Iacute}{iacute}}
9367   \comment{The letter '\` I'.}
9368 \endsetslot
9369
9370 \setslot{\uctop{Icircumflex}{icircumflex}}
9371   \comment{The letter '\^ I'.}
9372 \endsetslot
9373
9374 \setslot{\uctop{Idieresis}{idieresis}}
9375   \comment{The letter '\" I'.}
9376 \endsetslot
9377
9378 \setslot{\uc{Eth}{eth}}
9379   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
9380     with a horizontal bar through the stem. It is unavailable
9381     in \plain\ \TeX.}
9382 \endsetslot
9383
9384 \setslot{\uctop{Ntilde}{ntilde}}
9385   \comment{The letter '\~ N'.}
9386 \endsetslot
9387
9388 \setslot{\uctop{Ograve}{ograve}}
9389   \comment{The letter '\` O'.}
9390 \endsetslot
9391
9392 \setslot{\uctop{Oacute}{oacute}}
9393   \comment{The letter '\` O'.}
9394 \endsetslot
9395
9396 \setslot{\uctop{Ocircumflex}{ocircumflex}}
9397   \comment{The letter '\^ O'.}
9398 \endsetslot
9399
9400 \setslot{\uctop{Otilde}{otilde}}
9401   \comment{The letter '\~ O'.}
9402 \endsetslot
```

```

9403 \setslot{\uctop{Odieresis}{odieresis}}
9404   \comment{The letter '\u00f8'.}
9405 \endsetslot
9406
9407 \setslot{\uc{OE}{oe}}
9408   \comment{The letter '\u00d8'. This is a single letter, and should not be
9409     faked with 'OE'.}
9410 \endsetslot
9411
9412 \setslot{\uc{0slash}{oslash}}
9413   \comment{The letter '\u00d8'.}
9414 \endsetslot
9415
9416 \setslot{\uctop{Ugrave}{ugrave}}
9417   \comment{The letter '\u00c9'.}
9418 \endsetslot
9419
9420 \setslot{\uctop{Uacute}{uacute}}
9421   \comment{The letter '\u00c1'.}
9422 \endsetslot
9423
9424 \setslot{\uctop{Ucircumflex}{ucircumflex}}
9425   \comment{The letter '\u00c3'.}
9426 \endsetslot
9427
9428 \setslot{\uctop{Udieresis}{udieresis}}
9429   \comment{The letter '\u00c4'.}
9430 \endsetslot
9431
9432 \setslot{\uctop{Yacute}{yacute}}
9433   \comment{The letter '\u00c9'.}
9434 \endsetslot
9435
9436 \setslot{\uc{Thorn}{thorn}}
9437   \comment{The Icelandic capital letter Thorn, similar to a 'P'
9438     with the bowl moved down. It is unavailable in \plain\ \TeX.}
9439 \endsetslot
9440
9441 \setslot{\uclig{SS}{germandbls}}
9442   \comment{The ligature 'SS', used to give an upper case '\ss'.
9443     In a monowidth font it should be two letters wide.}
9444 \endsetslot
9445
9446 \setslot{\lctop{Agrave}{agrade}}
9447   \comment{The letter '\u00e5'.}
9448 \endsetslot
9449
9450 \setslot{\lctop{Aacute}{aacute}}
9451   \comment{The letter '\u00e1'.}
9452 \endsetslot
9453
9454 \setslot{\lctop{Acircumflex}{acircumflex}}
9455   \comment{The letter '\u00e3'.}
9456

```

```
9457 \endsetslot
9458
9459 \setslot{\lctop{Atilde}{atilde}}
9460   \comment{The letter '\~ a'.}
9461 \endsetslot
9462
9463 \setslot{\lctop{Adieresis}{adieresis}}
9464   \comment{The letter '\" a'.}
9465 \endsetslot
9466
9467 \setslot{\lctop{Aring}{aring}}
9468   \comment{The letter '\r a'.}
9469 \endsetslot
9470
9471 \setslot{\lc{AE}{ae}}
9472   \comment{The letter '\ae'. This is a single letter, and should not be
9473     faked with 'ae'.}
9474 \endsetslot
9475
9476 \setslot{\lc{Ccedilla}{ccedilla}}
9477   \comment{The letter '\c c'.}
9478 \endsetslot
9479
9480 \setslot{\lctop{Egrave}{egrave}}
9481   \comment{The letter '\` e'.}
9482 \endsetslot
9483
9484 \setslot{\lctop{Eacute}{eacute}}
9485   \comment{The letter '\^ e'.}
9486 \endsetslot
9487
9488 \setslot{\lctop{Ecircumflex}{ecircumflex}}
9489   \comment{The letter '\^ e'.}
9490 \endsetslot
9491
9492 \setslot{\lctop{Edieresis}{edieresis}}
9493   \comment{The letter '\\" e'.}
9494 \endsetslot
9495
9496 \setslot{\lctop{Igrave}{igrave}}
9497   \comment{The letter '\` i'.}
9498 \endsetslot
9499
9500 \setslot{\lctop{Iacute}{iacute}}
9501   \comment{The letter '\^ i'.}
9502 \endsetslot
9503
9504 \setslot{\lctop{Icircumflex}{icircumflex}}
9505   \comment{The letter '\^ i'.}
9506 \endsetslot
9507
9508 \setslot{\lctop{Idieresis}{idieresis}}
9509   \comment{The letter '\\" i'.}
9510 \endsetslot
```

```
9511 \setslot{\lc{Eth}{eth}}
9512   \comment{The Icelandic lowercase letter ‘eth’ similar to
9513     a ‘$\partial$’ with an oblique bar through the stem.
9514     It is unavailable in \plain\ TeX.}
9515 \endsetslot
9516
9517 \setslot{\lctop{Ntilde}{ntilde}}
9518   \comment{The letter ‘‘n’.}
9519 \endsetslot
9520
9521 \setslot{\lctop{Ograve}{ograve}}
9522   \comment{The letter ‘‘o’.}
9523 \endsetslot
9524
9525 \setslot{\lctop{Oacute}{oacute}}
9526   \comment{The letter ‘‘o’.}
9527 \endsetslot
9528
9529 \setslot{\lctop{Ocircumflex}{ocircumflex}}
9530   \comment{The letter ‘‘o’.}
9531 \endsetslot
9532
9533 \setslot{\lctop{Otilde}{otilde}}
9534   \comment{The letter ‘‘o’.}
9535 \endsetslot
9536
9537 \setslot{\lctop{Odieresis}{odieresis}}
9538   \comment{The letter ‘‘o’.}
9539 \endsetslot
9540
9541 \setslot{\lc{OE}{oe}}
9542   \comment{The letter ‘oe’. This is a single letter, and should not be
9543     faked with ‘oe’.}
9544 \endsetslot
9545
9546 \setslot{\lc{Oslash}{oslash}}
9547   \comment{The letter ‘o’.}
9548 \endsetslot
9549
9550 \setslot{\lctop{Ugrave}{ugrave}}
9551   \comment{The letter ‘‘u’.}
9552 \endsetslot
9553
9554 \setslot{\lctop{Uacute}{uacute}}
9555   \comment{The letter ‘‘u’.}
9556 \endsetslot
9557
9558 \setslot{\lctop{Ucircumflex}{ucircumflex}}
9559   \comment{The letter ‘‘u’.}
9560 \endsetslot
9561
9562 \setslot{\lctop{Udieresis}{udieresis}}
9563   \comment{The letter ‘‘u’.}
9564 \endsetslot
```

```

9565 \endsetslot
9566
9567 \setslot{\lctop{Yacute}{yacute}}
9568   \comment{The letter '\`y'.}
9569 \endsetslot
9570
9571 \setslot{\lc{Thorn}{thorn}}
9572   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
9573     with an ascender rising from the stem. It is unavailable
9574     in \plain\ \TeX.}
9575 \endsetslot
9576
9577 \setslot{\lc{SS}{germandbls}}
9578   \comment{The letter '\ss'.}
9579 \endsetslot
9580
9581 \endencoding

```

6.3.13 fontsheets-t1j-f_f.etx

fontsheets-t1j-f_f.etx (etx)

```

9582 \relax
9583

```

fontsheets-t1j-f_f.etx – install a T1-encoded roman font with oldstyle and f-ligatures named *f_f* etc.

We do not need to distinguish between roman and italic in T1, hence we simply call *fontsheets-t1-f_f.etx* with oldstyle parameters.

```

9584
9585 \encoding
9586
9587 \setcommand\lc#1#2{#2}
9588 \setcommand\uc#1#2{#1}
9589 \setcommand\lctop#1#2{#2}
9590 \setcommand\uctop#1#2{#1}
9591 \setcommand\lclig#1#2{#2}
9592 \setcommand\uclig#1#2{#1}
9593 \setcommand\digit#1{#1oldstyle}
9594
9595 \inputetx{t1-f_f}
9596
9597 \endencoding

```

6.3.14 fontsheets-ts1-dotinf.etx

fontsheets-ts1-dotinf.etx (etx)

```

9598 %%
9599 %% - The commentary in the original is deleted in this version. For
9600 %% information about the TS1 etc., typeset the original ts1.etx
9601 %% included with fontinst.

```

```
9602 %% - The original notices at the top of that file concerning authors,
9603 %% maintenance etc. are replaced by this notice.
9604 %% - The file is renamed.
9605 %% - The encoding name is modified.
9606 %% - The file is modified to accommodate differences in glyph names.
9607 %% - The file may be modified for use in encoding other characters.
9608 %%
9609 %%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/
9610 \relax
9611
9612 \encoding
9613
9614 \setstr{codingscheme}{TEX TEXT COMPANION 1---TS1 DOTINF}
9615
9616 \ifisglyph{x}\then
9617     \setint{xheight}{\height{x}}
9618 \else
9619     \setint{xheight}{500}
9620 \fi
9621
9622 \ifisglyph{space}\then
9623     \setint{interword}{\width{space}}
9624 \else\ifisglyph{i}\then
9625     \setint{interword}{\width{i}}
9626 \else
9627     \setint{interword}{333}
9628 \fi\fi
9629
9630 \setint{italicslant}{0}
9631
9632
9633 \setint{fontdimen(1)}{\int{italicslant}}          % italic slant
9634 \setint{fontdimen(2)}{\int{interword}}            % interword space
9635 \setint{fontdimen(3)}{0}                          % interword stretch
9636 \setint{fontdimen(4)}{0}                          % interword shrink
9637 \setint{fontdimen(5)}{\int{xheight}}             % x-height
9638 \setint{fontdimen(6)}{1000}                      % quad
9639 \setint{fontdimen(7)}{\int{interword}}           % extra space after .
9640
9641 \nextslot{0}
9642 \setslot{capitalgrave.inferior}
9643     \comment{The grave accent '\capitalgrave{}', intended for use with
9644         capital letters.}
9645 \endsetslot
9646
9647 \setslot{capitalacute.inferior}
9648     \comment{The acute accent '\capitalacute{}', intended for use with
9649         capital letters.}
9650 \endsetslot
9651
9652 \setslot{capitalcircumflex.inferior}
9653     \comment{The circumflex accent '\capitalcircumflex{}', intended for
9654         use with capital letters.}
9655 \endsetslot
```

```
9656 \setslot{capitaltilde.inferior}
9657   \comment{The tilde accent '\capitaltilde{}', intended for use with
9658     capital letters.}
9659 \endsetslot
9660
9661 \setslot{capitaldieresis.inferior}
9662   \comment{The umlaut or dieresis accent '\capitaldieresis{}',
9663     intended for use with capital letters.}
9664 \endsetslot
9665
9666 \setslot{capitalhungarumlaut.inferior}
9667   \comment{The long Hungarian umlaut '\capitalhungarumlaut{}',
9668     intended for use with capital letters.}
9669 \endsetslot
9670
9671 \setslot{capitalring.inferior}
9672   \comment{The ring accent '\capitalring{}', intended for use with
9673     capital letters.}
9674 \endsetslot
9675
9676 \setslot{capitalcaron.inferior}
9677   \comment{The caron or h'á\v cek accent '\capitalcaron{}', intended
9678     for use with capital letters.}
9679 \endsetslot
9680
9681 \setslot{capitalbreve.inferior}
9682   \comment{The breve accent '\capitalbreve{}', intended for use with
9683     capital letters.}
9684 \endsetslot
9685
9686 \setslot{capitalmacron.inferior}
9687   \comment{The macron accent '\capitalmacron{}', intended for use with
9688     capital letters.}
9689 \endsetslot
9690
9691 \setslot{capitaldotaccent.inferior}
9692   \comment{The dot accent '\capitaldotaccent{}', intended for use with
9693     capital letters.}
9694 \endsetslot
9695
9696 \setslot{cedilla.inferior}
9697   \comment{The cedilla accent '\capitalcedilla{}', intended for use
9698     with capital letters.}
9699 \endsetslot
9700
9701 \setslot{ogonek.inferior}
9702   \comment{The ogonek accent '\capitalogonek{}', intended for use with
9703     capital letters.}
9704 \endsetslot
9705
9706 \nextslot{13}
9707 \setslot{quotesinglbase.inferior}
9708   \comment{A straight single quote mark on the baseline,
```

```

9710      '\textquotestraightbase'.}
9711  \endsetslot
9712
9713  \nextslot{18}
9714  \setslot{quotedblbase.inferior}
9715      \comment{A straight double quote mark on the baseline,
9716          '\textquotestraightdblbase'.}
9717  \endsetslot
9718
9719  \nextslot{21}
9720  \setslot{twelveudash.inferior}
9721      \comment{A 2/3~em dash, '\texttwelveudash'.}
9722  \endsetslot
9723
9724  \setslot{threequartersemdash.inferior}
9725      \comment{A 3/4~em dash, '\textthreequartersemdash'.}
9726  \endsetslot
9727
9728  \nextslot{23}
9729  \setslot{capitalcompwordmark.inferior}
9730      \comment{An invisible glyph, with zero width and depth, but the
9731          height of capital letters.
9732          It is used to stop ligaturing in words like 'shelf{}ful'.}
9733  \endsetslot
9734
9735  \nextslot{24}
9736  \setslot{arrowleft.inferior}
9737      \comment{A left pointing arrow, '\textleftarrow', unavailable in
9738          most PostScript fonts.}
9739  \endsetslot
9740
9741  \setslot{arrowright.inferior}
9742      \comment{A right pointing arrow, '\rightarrow', unavailable in
9743          most PostScript fonts.}
9744  \endsetslot
9745
9746  \nextslot{26}
9747  \setslot{tieaccentlowercase.inferior}
9748      \comment{The original tie accent '\t{}', intended for use with
9749          lowercase letters.}
9750  \endsetslot
9751
9752  \setslot{tieaccentscapital.inferior}
9753      \comment{The tie accent '\capitaltie{}', intended for use with
9754          capital letters.}
9755  \endsetslot
9756
9757  \setslot{newtieaccentlowercase.inferior}
9758      \comment{A new tie accent '\newtie{}', intended for use with
9759          lowercase letters.}
9760  \endsetslot
9761
9762  \setslot{newtieaccentscapital.inferior}
9763      \comment{A new tie accent '\capitalnewtie{}', intended for use

```

```
9764     with capital letters.}
9765 \endsetslot
9766
9767 \nextslot{31}
9768 \setslot{ascendercompwordmark.inferior}
9769     \comment{An invisible glyph, with zero width and depth, but the
9770         height of lowercase letters with ascenders.
9771         It is used to stop ligaturing in words like 'shelf{}ful'.}
9772 \endsetslot
9773
9774 \nextslot{32}
9775 \setslot{blank.inferior}
9776     \comment{The blank indicator '\textblank', similar to the letter 'b',
9777         with an oblique bar through the stem.}
9778 \endsetslot
9779
9780 \nextslot{36}
9781 \setslot{dollar.inferior}
9782     \comment{The dollar sign '\textdollar'.}
9783 \endsetslot
9784
9785 \nextslot{39}
9786 \setslot{quotesingle.inferior}
9787     \comment{A straight single quote mark, '\textquotesingle'.}
9788 \endsetslot
9789
9790 \nextslot{42}
9791 \setslot{asteriskcentered.inferior}
9792     \comment{The centered asterisk, '\textasteriskcentered'.}
9793 \endsetslot
9794
9795 \nextslot{44}
9796 \setslot{comma.inferior}
9797     \comment{The decimal comma ','.}
9798 \endsetslot
9799
9800 \nextslot{45}
9801 \setslot{hyphendbl.inferior}
9802     \comment{An alternate double hyphen, '\textdblhyphen'.}
9803 \endsetslot
9804
9805 \nextslot{46}
9806 \setslot{period.inferior}
9807     \comment{The decimal point '.'.}
9808 \endsetslot
9809
9810 \nextslot{47}
9811 \setslot{fraction.inferior}
9812     \comment{The fraction slash '\textfractionsolidus'.}
9813 \endsetslot
9814
9815 \nextslot{48}
9816 \setslot{zerooldstyle.inferior}
9817     \comment{The oldstyle number '\oldstylenums{0}'.}
```

```
9818 \endsetslot
9819
9820 \setslot{oneoldstyle.inferior}
9821   \comment{The oldstyle number '\oldstylenums{1}'.}
9822 \endsetslot
9823
9824 \setslot{twooldstyle.inferior}
9825   \comment{The oldstyle number '\oldstylenums{2}'.}
9826 \endsetslot
9827
9828 \setslot{threeoldstyle.inferior}
9829   \comment{The oldstyle number '\oldstylenums{3}'.}
9830 \endsetslot
9831
9832 \setslot{fouroldstyle.inferior}
9833   \comment{The oldstyle number '\oldstylenums{4}'.}
9834 \endsetslot
9835
9836 \setslot{fiveoldstyle.inferior}
9837   \comment{The oldstyle number '\oldstylenums{5}'.}
9838 \endsetslot
9839
9840 \setslot{sixoldstyle.inferior}
9841   \comment{The oldstyle number '\oldstylenums{6}'.}
9842 \endsetslot
9843
9844 \setslot{sevenoldstyle.inferior}
9845   \comment{The oldstyle number '\oldstylenums{7}'.}
9846 \endsetslot
9847
9848 \setslot{eightoldstyle.inferior}
9849   \comment{The oldstyle number '\oldstylenums{8}'.}
9850 \endsetslot
9851
9852 \setslot{nineoldstyle.inferior}
9853   \comment{The oldstyle number '\oldstylenums{9}'.}
9854 \endsetslot
9855
9856 \nextslot{60}
9857 \setslot{angbracketleft.inferior}
9858   \comment{The opening angle bracket '\textlangle', unavailable in
9859     most PostScript fonts.}
9860 \endsetslot
9861
9862 \nextslot{61}
9863 \setslot{minus.inferior}
9864   \comment{The subtraction sign '\textminus'.}
9865 \endsetslot
9866
9867 \nextslot{62}
9868 \setslot{angbracketright.inferior}
9869   \comment{The closing angle bracket '\textrangle', unavailable in
9870     most PostScript fonts.}
9871 \endsetslot
```

```
9872 \nextslot{77}
9873 \setslot{Omegainv.inferior}
9874     \comment{The inverted Ohm sign ‘\textmho’, unavailable in most fonts.}
9875 \endsetslot
9877
9878 \nextslot{79}
9879     \comment{A circle ‘\textbigcircle’, big enough to enclose a letter
9880         as in ‘\textcopyright’ or ‘\textregistered’.}
9881 \setslot{bigcircle.inferior}
9882 \endsetslot
9883
9884 \nextslot{87}
9885 \setslot{Omega.inferior}
9886     \comment{The upright Ohm sign ‘\textohm’, unavailable in most fonts.
9887         Even if it is available in Mac-encoded fonts, it isn’t directly
9888         accessible in the 8r or 8y encodings.}
9889 \endsetslot
9890
9891 \nextslot{91}
9892 \setslot{openbracketleft.inferior}
9893     \comment{The opening double square bracket ‘\textlbrackdbl’,
9894         unavailable in most PostScript fonts.}
9895 \endsetslot
9896
9897 \nextslot{93}
9898 \setslot{openbracketright.inferior}
9899     \comment{The closing double square bracket ‘\textrbrackdbl’,
9900         unavailable in most PostScript fonts.}
9901 \endsetslot
9902
9903 \nextslot{94}
9904 \setslot{arrowup.inferior}
9905     \comment{An upwards pointing arrow ‘\textuparrow’, unavailable in
9906         most PostScript fonts.}
9907 \endsetslot
9908
9909 \nextslot{95}
9910 \setslot{arrowdown.inferior}
9911     \comment{An downwards pointing arrow ‘\textdownarrow’, unavailable
9912         in most PostScript fonts.}
9913 \endsetslot
9914
9915 \nextslot{96}
9916 \setslot{asciigrave.inferior}
9917     \comment{An ASCII-style grave ‘\textasciigrave’. This is supposed
9918         to be a character by itself rather than a combining accents.}
9919 \endsetslot
9920
9921 \nextslot{98}
9922 \setslot{born.inferior}
9923     \comment{The born symbol ‘\textborn’, unavailable in most PostScript
9924         fonts.}
9925 \endsetslot
```

```
9926 \nextslot{99}
9927 \setslot{divorced.inferior}
9928   \comment{The divorced symbol ‘\textdivorced’, unavailable in most
9929     PostScript fonts.}
9930 \endsetslot
9931
9932 \nextslot{100}
9933 \setslot{died.inferior}
9934   \comment{The died symbol ‘\textdied’, unavailable in most PostScript
9935     fonts.}
9936 \endsetslot
9937
9938 \nextslot{108}
9939 \setslot{leaf.inferior}
9940   \comment{The leaf symbol ‘\textleaf’, unavailable in most PostScript
9941     fonts.}
9942 \endsetslot
9943
9944 \nextslot{109}
9945 \setslot{married.inferior}
9946   \comment{The married symbol ‘\textmarried’, unavailable in most
9947     PostScript fonts.}
9948 \endsetslot
9949
9950 \nextslot{110}
9951 \setslot{musicalnote.inferior}
9952   \comment{A musical note symbol ‘\textmusicalnote’, unavailable in
9953     most PostScript fonts.}
9954 \endsetslot
9955
9956 \nextslot{126}
9957 \setslot{tildelow.inferior}
9958   \comment{A lowered tilde ‘\texttildelow’. In most PostScript fonts
9959     it can be substituted by ‘ascitilde’, while ‘\textasciitilde’
9960     is supposed to be a raised ‘tilde’.}
9961 \endsetslot
9962
9963 \nextslot{127}
9964 \setslot{hyphendblchar.inferior}
9965   \comment{The glyph used for hyphenation in this font, which will
9966     almost always be the same as ‘hyphendbl’.}
9967 \endsetslot
9968
9969 \nextslot{128}
9970 \setslot{asciibreve.inferior}
9971   \comment{An ASCII-style breve ‘\textasciibreve’. This is supposed
9972     to be a character by itself rather than a combining accents.}
9973 \endsetslot
9974
9975 \setslot{asciicaron.inferior}
9976   \comment{An ASCII-style caron ‘\textasciicaron’. This is supposed
9977     to be a character by itself rather than a combining accents.}
9978 \endsetslot
9979
```

```
9980 \setslot{asciiacutedbl.inferior}
9981   \comment{An ASCII-style double tick mark, '\textacutedbl'.}
9982 \endsetslot
9983
9984 \setslot{asciigravedbl.inferior}
9985   \comment{An ASCII-style double backtick mark, '\textgravedbl'.}
9986 \endsetslot
9987
9988 \setslot{dagger.inferior}
9989   \comment{The single dagger '\textdagger'.}
9990 \endsetslot
9991
9992 \setslot{daggerdbl.inferior}
9993   \comment{The double dagger '\textdaggerdbl'.}
9994 \endsetslot
9995
9996 \setslot{bardbl.inferior}
9997   \comment{The double vertical bar '\textbardbl'.}
9998 \endsetslot
9999
10000 \setslot{perthousand.inferior}
10001   \comment{The perthousand sign '\textperthousand'.}
10002 \endsetslot
10003
10004 \setslot{bullet.inferior}
10005   \comment{The centered bullet '\textbullet'.}
10006 \endsetslot
10007
10008 \setslot{centigrade.inferior}
10009   \comment{The degree centigrade symbol '\textcelsius'.}
10010 \endsetslot
10011
10012 \setslot{dollaroldstyle.inferior}
10013   \comment{An oldstyle dollar sign '\textdollaroldstyle'.}
10014 \endsetslot
10015
10016 \setslot{centoldstyle.inferior}
10017   \comment{An oldstyle cent sign '\textcentoldstyle'.}
10018 \endsetslot
10019
10020 \setslot{florin.inferior}
10021   \comment{The florin sign '\textflorin'.}
10022 \endsetslot
10023
10024 \setslot{colonmonetary.inferior}
10025   \comment{The Colon currency sign '\textcolonmonetary', similar to
10026     a capital 'C' with a vertical bar through the middle.}
10027 \endsetslot
10028
10029 \setslot{won.inferior}
10030   \comment{The Won currency sign '\textwon', similar to a capital 'W'
10031     with two horizontal bars.}
10032 \endsetslot
10033
```

```
10034 \setslot{naira.inferior}
10035   \comment{The Naira currency sign ‘\textnaira’, similar to a
10036     capital ‘N’ with two horizontal bars.}
10037 \endsetslot
10038
10039 \setslot{guarani.inferior}
10040   \comment{The Guarani currency sign ‘\textguarani’, similar to
10041     a capital ‘G’ with a vertical bar through the middle.}
10042 \endsetslot
10043
10044 \setslot{peso.inferior}
10045   \comment{The Peso currency sign ‘\textpeso’, similar to a capital ‘P’
10046     with a horizontal bar through the bowl or below the bowl.}
10047 \endsetslot
10048
10049 \setslot{lira.inferior}
10050   \comment{The Lira currency sign ‘\textlira’, similar to a sterlign
10051     sign ‘\textsterling’ with two horizontal bars.}
10052 \endsetslot
10053
10054 \setslot{recipe.inferior}
10055   \comment{The recipe symbol ‘\textrecipe’, similar to a capital ‘R’
10056     with an oblique bar through the tail.}
10057 \endsetslot
10058
10059 \setslot{interrobang.inferior}
10060   \comment{The interrobang symbol ‘\textinterrobang’, similar to
10061     a combination of an exclamation mark and a question mark.}
10062 \endsetslot
10063
10064 \setslot{interrobangdown.inferior}
10065   \comment{The inverted interrobang symbol ‘\textinterrobangdown’,
10066     similar to a combination of an inverted exclamation mark
10067     and an inverted question mark.}
10068 \endsetslot
10069
10070 \setslot{dong.inferior}
10071   \comment{The Dong currency sign ‘\textdong’, similar to a lowercase
10072     ‘d’ with a horizontal bar through the stem and another bar below
10073     the letter.}
10074 \endsetslot
10075
10076 \setslot{trademark.inferior}
10077   \comment{The trademark sign ‘\texttrademark’, similar to the raised
10078     letters ‘TM’.}
10079 \endsetslot
10080
10081 \setslot{pertenthousand.inferior}
10082   \comment{The pertenthousand sign ‘\textpertenthousand’, unavailable
10083     in most PostScript fonts.}
10084 \endsetslot
10085
10086 \setslot{pilcrow.inferior}
```

```
10088     \comment{The pilcrow mark ‘\textpilcrow’, similar to a paragraph
10089         mark ‘\textparagraph’ with a single stem.}
10090 \endsetslot
10091
10092 \setslot{baht.inferior}
10093     \comment{The Baht currency sign ‘\textbaht’, similar to a capital ‘B’
10094         with a vertical bar through the middle.}
10095 \endsetslot
10096
10097 \setslot{numero.inferior}
10098     \comment{The numero sign ‘\textnumero’, similar to the letter ‘N’
10099         with a raised ‘o’, unavailable in most PostScript fonts.}
10100 \endsetslot
10101
10102 \setslot{discount.inferior}
10103     \comment{The discount sign ‘\textdiscount’, similar to a stylized
10104         percent sign, unavailable in most PostScript fonts.}
10105 \endsetslot
10106
10107 \setslot{estimated.inferior}
10108     \comment{The estimated sign ‘\textestimated’, similar to an enlarged
10109         lowercase ‘e’, unavailable in most PostScript fonts.}
10110 \endsetslot
10111
10112 \setslot{openbullet.inferior}
10113     \comment{The centered open bullet ‘\textopenbullet’, unavailable
10114         in most PostScript fonts.}
10115 \endsetslot
10116
10117 \setslot{servicemark.inferior}
10118     \comment{The service mark sign ‘\textservicemark’, similar to the
10119         raised letters ‘SM’, unavailable in most PostScript fonts.}
10120 \endsetslot
10121
10122 \nextslot{160}
10123 \setslot{quillbracketleft.inferior}
10124     \comment{The opening quill bracket ‘\textlquill’, unavailable in
10125         most PostScript fonts.}
10126 \endsetslot
10127
10128 \setslot{quillbracketright.inferior}
10129     \comment{The closing quill bracket ‘\textrquill’, unavailable in
10130         most PostScript fonts.}
10131 \endsetslot
10132
10133 \setslot{cent.inferior}
10134     \comment{The cent sign ‘\textcent’.}
10135 \endsetslot
10136
10137 \setslot{sterling.inferior}
10138     \comment{The British currency sign, ‘\textsterling’.}
10139 \endsetslot
10140
10141 \setslot{currency.inferior}
```

```
10142     \comment{The international currency sign, '\textcurrency'.}
10143     \endsetslot
10144
10145     \setslot{yen.inferior}
10146         \comment{The Japanese currency sign, '\textyen'.}
10147     \endsetslot
10148
10149     \setslot{brokenbar.inferior}
10150         \comment{A broken vertical bar, '\textbrokenbar', similar to
10151             '\textbar' with a gap through the middle.}
10152     \endsetslot
10153
10154     \setslot{section.inferior}
10155         \comment{The section mark '\textsection'.}
10156     \endsetslot
10157
10158     \setslot{asciidieresis.inferior}
10159         \comment{An ASCII-style dieresis '\textasciidieresis'. This is
10160             supposed to be character by itself rather than an accents.}
10161     \endsetslot
10162
10163     \setslot{copyright.inferior}
10164         \comment{The copyright sign '\textcopyright', similar to a small
10165             letter 'C' enclosed by a circle.}
10166     \endsetslot
10167
10168     \setslot{ordfeminine.inferior}
10169         \comment{The raised letter '\textordfeminine'.}
10170     \endsetslot
10171
10172     \setslot{copyleft.inferior}
10173         \comment{The reversed copyright sign '\textcopyleft', similar to
10174             a small reversed 'C' enclosed by a circle.}
10175     \endsetslot
10176
10177     \setslot{logicalnot.inferior}
10178         \comment{The logical not sign '\textlnot'.}
10179     \endsetslot
10180
10181     \setslot{circledP.inferior}
10182         \comment{A small letter 'P' enclosed by a circle, '\textcircledP',
10183             unavailable in most fonts.}
10184     \endsetslot
10185
10186     \setslot{registered.inferior}
10187         \comment{The registered trademark sign '\textregistered', similar to
10188             a small letter 'R' enclosed by a circle.}
10189     \endsetslot
10190
10191     \setslot{asciimacron.inferior}
10192         \comment{An ASCII-style macron '\textasciimacron'. This is supposed
10193             to be a character by itself rather than a combining accents.}
10194     \endsetslot
10195
```

```
10196 \setslot{degree.inferior}
10197   \comment{The degree sign ‘\textdegree’.}
10198 \endsetslot
10199
10200 \setslot{plusminus.inferior}
10201   \comment{The plus or minus sign ‘\textpm’.}
10202 \endsetslot
10203
10204 \setslot{two.superior}
10205   \comment{The raised digit ‘\texttwosuperior’.}
10206 \endsetslot
10207
10208 \setslot{three.superior}
10209   \comment{The raised digit ‘\textthreesuperior’.}
10210 \endsetslot
10211
10212 \setslot{asciiacute.inferior}
10213   \comment{An ASCII-style acute ‘\textasciiacute’. This is supposed
10214       to be a character by itself rather than a combining accents.}
10215 \endsetslot
10216
10217 \setslot{mu.inferior}
10218   \comment{The lowercase Greek letter ‘\textmu’, intended for use as
10219       a prefix ‘micro’ in physical units.}
10220 \endsetslot
10221
10222 \setslot{paragraph.inferior}
10223   \comment{The paragraph mark ‘\textparagraph’.}
10224 \endsetslot
10225
10226 \setslot{periodcentered.inferior}
10227   \comment{The centered period ‘\textperiodcentered’.}
10228 \endsetslot
10229
10230 \setslot{referencemark.inferior}
10231   \comment{The reference mark ‘\textreferencemark’, similar to
10232       a combination of the ‘multiply’ and ‘divide’ symbols.}
10233 \endsetslot
10234
10235 \setslot{one.superior}
10236   \comment{The raised digit ‘\textonesuperior’.}
10237 \endsetslot
10238
10239 \setslot{ordmasculine.inferior}
10240   \comment{The raised letter ‘\textordmasculine’.}
10241 \endsetslot
10242
10243 \setslot{radical.inferior}
10244   \comment{The radical sign ‘\textsurd’, unavailable in most fonts.
10245       Even if it is available in Mac-encoded fonts, it isn’t directly
10246       accessible in the 8r or 8y encodings.}
10247 \endsetslot
10248
10249 \setslot{onequarter.inferior}
```

```

10250     \comment{The fraction '\textonequarter'.}
10251     \endsetslot
10252
10253     \setslot{onehalf.inferior}
10254         \comment{The fraction '\textonehalf'.}
10255     \endsetslot
10256
10257     \setslot{threequarters.inferior}
10258         \comment{The fraction '\textthreequarters'.}
10259     \endsetslot
10260
10261     \setslot{Euro.inferior}
10262         \comment{The European currency sign, similar to '\texteuro'.}
10263     \endsetslot
10264
10265
10266     \nextslot{214}
10267     \setslot{multiply.inferior}
10268         \comment{The multiplication sign '\texttimes'.

```

6.3.15 fontscripts-ts1-dotsup.etx

fontscripts-ts1-dotsup.etx (*etx*)

```

10284 %%
10285 %% - The commentary in the original is deleted in this version. For
10286 %% information about the TS1 etc., typeset the original ts1.etx
10287 %% included with fontinst.
10288 %% - The original notices at the top of that file concerning authors,
10289 %% maintenance etc. are replaced by this notice.
10290 %% - The file is renamed.
10291 %% - The encoding name is modified.
10292 %% - The file is modified to accommodate differences in glyph names.
10293 %% - The file may be modified for use in encoding other characters.
10294 %%
10295 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
10296 \relax
10297

```

```

10298 \encoding
10299
10300 \setstr{codingscheme}{TEX TEXT COMPANION 1---TS1 DOTSUP}
10301
10302 \ifisglyph{x}\then
10303   \setint{xheight}{\height{x}}
10304 \else
10305   \setint{xheight}{500}
10306 \fi
10307
10308 \ifisglyph{space}\then
10309   \setint{interword}{\width{space}}
10310 \else\ifisglyph{i}\then
10311   \setint{interword}{\width{i}}
10312 \else
10313   \setint{interword}{333}
10314 \fi\fi
10315
10316 \setint{italicslant}{0}
10317
10318
10319 \setint{fontdimen(1)}{\int{italicslant}} % italic slant
10320 \setint{fontdimen(2)}{\int{interword}} % interword space
10321 \setint{fontdimen(3)}{0} % interword stretch
10322 \setint{fontdimen(4)}{0} % interword shrink
10323 \setint{fontdimen(5)}{\int{xheight}} % x-height
10324 \setint{fontdimen(6)}{1000} % quad
10325 \setint{fontdimen(7)}{\int{interword}} % extra space after .
10326
10327 \nextslot{0}
10328 \setslot{capitalgrave.superior}
10329   \comment{The grave accent ‘\capitalgrave{}’, intended for use with
10330     capital letters.}
10331 \endsetslot
10332
10333 \setslot{capitalacute.superior}
10334   \comment{The acute accent ‘\capitalacute{}’, intended for use with
10335     capital letters.}
10336 \endsetslot
10337
10338 \setslot{capitalcircumflex.superior}
10339   \comment{The circumflex accent ‘\capitalcircumflex{}’, intended for
10340     use with capital letters.}
10341 \endsetslot
10342
10343 \setslot{capitaltilde.superior}
10344   \comment{The tilde accent ‘\capitaltilde{}’, intended for use with
10345     capital letters.}
10346 \endsetslot
10347
10348 \setslot{capitaldieresis.superior}
10349   \comment{The umlaut or dieresis accent ‘\capitaldieresis{}’,
10350     intended for use with capital letters.}
10351 \endsetslot

```

```
10352 \setslot{capitalhungarumlaut.superior}
10353   \comment{The long Hungarian umlaut '\capitalhungarumlaut{}', 
10354     intended for use with capital letters.}
10355 \endsetslot
10357
10358 \setslot{capitalring.superior}
10359   \comment{The ring accent '\capitalring{}', intended for use with 
10360     capital letters.}
10361 \endsetslot
10362
10363 \setslot{capitalcaron.superior}
10364   \comment{The caron or h\`a\v cek accent '\capitalcaron{}', intended 
10365     for use with capital letters.}
10366 \endsetslot
10367
10368 \setslot{capitalbreve.superior}
10369   \comment{The breve accent '\capitalbreve{}', intended for use with 
10370     capital letters.}
10371 \endsetslot
10372
10373 \setslot{capitalmacron.superior}
10374   \comment{The macron accent '\capitalmacron{}', intended for use with 
10375     capital letters.}
10376 \endsetslot
10377
10378 \setslot{capitaldotaccent.superior}
10379   \comment{The dot accent '\capitaldotaccent{}', intended for use with 
10380     capital letters.}
10381 \endsetslot
10382
10383 \setslot{cedilla.superior}
10384   \comment{The cedilla accent '\capitalcedilla{}', intended for use 
10385     with capital letters.}
10386 \endsetslot
10387
10388 \setslot{ogonek.superior}
10389   \comment{The ogonek accent '\capitalogonek{}', intended for use with 
10390     capital letters.}
10391 \endsetslot
10392
10393 \nextslot{13}
10394 \setslot{quotesinglbase.superior}
10395   \comment{A straight single quote mark on the baseline,
10396     '\textquotestraightbase'.}
10397 \endsetslot
10398
10399 \nextslot{18}
10400 \setslot{quotedblbase.superior}
10401   \comment{A straight double quote mark on the baseline,
10402     '\textquotestraightdblbase'.}
10403 \endsetslot
10404
10405 \nextslot{21}
```

```
10406 \setslot{twelveudash.superior}
10407   \comment{A 2/3~em dash, '\texttwelveudash'.}
10408 \endsetslot
10409
10410 \setslot{threequartersemdash.superior}
10411   \comment{A 3/4~em dash, '\textthreequartersemdash'.}
10412 \endsetslot
10413
10414 \nextslot{23}
10415 \setslot{capitalcompwordmark.superior}
10416   \comment{An invisible glyph, with zero width and depth, but the
10417     height of capital letters.
10418     It is used to stop ligaturing in words like 'shelf{}ful'.}
10419 \endsetslot
10420
10421 \nextslot{24}
10422 \setslot{arrowleft.superior}
10423   \comment{A left pointing arrow, '\textleftarrow', unavailable in
10424     most PostScript fonts.}
10425 \endsetslot
10426
10427 \setslot{arrowright.superior}
10428   \comment{A right pointing arrow, '\rightarrow', unavailable in
10429     most PostScript fonts.}
10430 \endsetslot
10431
10432 \nextslot{26}
10433 \setslot{tieaccentlowercase.superior}
10434   \comment{The original tie accent '\t{}', intended for use with
10435     lowercase letters.}
10436 \endsetslot
10437
10438 \setslot{tieaccentcapital.superior}
10439   \comment{The tie accent '\capitaltie{}', intended for use with
10440     capital letters.}
10441 \endsetslot
10442
10443 \setslot{newtieaccentlowercase.superior}
10444   \comment{A new tie accent '\newtie{}', intended for use with
10445     lowercase letters.}
10446 \endsetslot
10447
10448 \setslot{newtieaccentcapital.superior}
10449   \comment{A new tie accent '\capitalnewtie{}', intended for use
10450     with capital letters.}
10451 \endsetslot
10452
10453 \nextslot{31}
10454 \setslot{ascendercompwordmark.superior}
10455   \comment{An invisible glyph, with zero width and depth, but the
10456     height of lowercase letters with ascenders.
10457     It is used to stop ligaturing in words like 'shelf{}ful'.}
10458 \endsetslot
10459
```

```
10460 \nextslot{32}
10461 \setslot{blank.superior}
10462   \comment{The blank indicator ‘\textblank’, similar to the letter ‘b’
10463       with an oblique bar through the stem.}
10464 \endsetslot
10465
10466 \nextslot{36}
10467 \setslot{dollar.superior}
10468   \comment{The dollar sign ‘\textdollar’.}
10469 \endsetslot
10470
10471 \nextslot{39}
10472 \setslot{quotesingle.superior}
10473   \comment{A straight single quote mark, ‘\textquotesingle’.}
10474 \endsetslot
10475
10476 \nextslot{42}
10477 \setslot{asteriskcentered.superior}
10478   \comment{The centered asterisk, ‘\textasteriskcentered’.}
10479 \endsetslot
10480
10481 \nextslot{44}
10482 \setslot{comma.superior}
10483   \comment{The decimal comma ‘,’.}
10484 \endsetslot
10485
10486 \nextslot{45}
10487 \setslot{hyphendbl.superior}
10488   \comment{An alternate double hyphen, ‘\textdblhyphen’.}
10489 \endsetslot
10490
10491 \nextslot{46}
10492 \setslot{period.superior}
10493   \comment{The decimal point ‘.’.}
10494 \endsetslot
10495
10496 \nextslot{47}
10497 \setslot{fraction.superior}
10498   \comment{The fraction slash ‘\textfractionsolidus’.}
10499 \endsetslot
10500
10501 \nextslot{48}
10502 \setslot{zerooldstyle.superior}
10503   \comment{The oldstyle number ‘\oldstylenums{0}’.}
10504 \endsetslot
10505
10506 \setslot{oneoldstyle.superior}
10507   \comment{The oldstyle number ‘\oldstylenums{1}’.}
10508 \endsetslot
10509
10510 \setslot{twooldstyle.superior}
10511   \comment{The oldstyle number ‘\oldstylenums{2}’.}
10512 \endsetslot
10513
```

```
10514 \setslot{threeoldstyle.superior}
10515   \comment{The oldstyle number '\oldstylenums{3}' .}
10516 \endsetslot
10517
10518 \setslot{fouroldstyle.superior}
10519   \comment{The oldstyle number '\oldstylenums{4}' .}
10520 \endsetslot
10521
10522 \setslot{fiveoldstyle.superior}
10523   \comment{The oldstyle number '\oldstylenums{5}' .}
10524 \endsetslot
10525
10526 \setslot{sixoldstyle.superior}
10527   \comment{The oldstyle number '\oldstylenums{6}' .}
10528 \endsetslot
10529
10530 \setslot{sevenoldstyle.superior}
10531   \comment{The oldstyle number '\oldstylenums{7}' .}
10532 \endsetslot
10533
10534 \setslot{eightoldstyle.superior}
10535   \comment{The oldstyle number '\oldstylenums{8}' .}
10536 \endsetslot
10537
10538 \setslot{nineoldstyle.superior}
10539   \comment{The oldstyle number '\oldstylenums{9}' .}
10540 \endsetslot
10541
10542 \nextslot{60}
10543 \setslot{angbracketleft.superior}
10544   \comment{The opening angle bracket '\textlangle', unavailable in
10545   most PostScript fonts.}
10546 \endsetslot
10547
10548 \nextslot{61}
10549 \setslot{minus.superior}
10550   \comment{The subtraction sign '\textminus'.}
10551 \endsetslot
10552
10553 \nextslot{62}
10554 \setslot{angbracketright.superior}
10555   \comment{The closing angle bracket '\textrangle', unavailable in
10556   most PostScript fonts.}
10557 \endsetslot
10558
10559 \nextslot{77}
10560 \setslot{Omegainv.superior}
10561   \comment{The inverted Ohm sign '\textmho', unavailable in most fonts.}
10562 \endsetslot
10563
10564 \nextslot{79}
10565   \comment{A circle '\textbigcircle', big enough to enclose a letter
10566   as in '\textcopyright' or '\textregistered'.}
10567 \setslot{bigcircle.superior}
```

```
10568 \endsetslot
10569
10570 \nextslot{87}
10571 \setslot{Omega.superior}
10572   \comment{The upright Ohm sign ‘\textohm’, unavailable in most fonts.
10573     Even if it is available in Mac-encoded fonts, it isn’t directly
10574     accessible in the 8r or 8y encodings.}
10575 \endsetslot
10576
10577 \nextslot{91}
10578 \setslot{openbracketleft.superior}
10579   \comment{The opening double square bracket ‘\textlbrackdbl’,
10580     unavailable in most PostScript fonts.}
10581 \endsetslot
10582
10583 \nextslot{93}
10584 \setslot{openbracketright.superior}
10585   \comment{The closing double square bracket ‘\textrbrackdbl’,
10586     unavailable in most PostScript fonts.}
10587 \endsetslot
10588
10589 \nextslot{94}
10590 \setslot{arrowup.superior}
10591   \comment{An upwards pointing arrow ‘\textuparrowarrow’, unavailable in
10592     most PostScript fonts.}
10593 \endsetslot
10594
10595 \nextslot{95}
10596 \setslot{arrowdown.superior}
10597   \comment{An downwards pointing arrow ‘\textdownarrowarrow’, unavailable
10598     in most PostScript fonts.}
10599 \endsetslot
10600
10601 \nextslot{96}
10602 \setslot{asciigrave.superior}
10603   \comment{An ASCII-style grave ‘\textasciigrave’. This is supposed
10604     to be a character by itself rather than a combining accents.}
10605 \endsetslot
10606
10607 \nextslot{98}
10608 \setslot{born.superior}
10609   \comment{The born symbol ‘\textborn’, unavailable in most PostScript
10610     fonts.}
10611 \endsetslot
10612
10613 \nextslot{99}
10614 \setslot{divorced.superior}
10615   \comment{The divorced symbol ‘\textdivorced’, unavailable in most
10616     PostScript fonts.}
10617 \endsetslot
10618
10619 \nextslot{100}
10620 \setslot{died.superior}
10621   \comment{The died symbol ‘\textdied’, unavailable in most PostScript
```

```
10622     fonts.}
10623 \endsetslot
10624
10625 \nextslot{108}
10626 \setslot{leaf.superior}
10627   \comment{The leaf symbol '\textleaf', unavailable in most PostScript
10628   fonts.}
10629 \endsetslot
10630
10631 \nextslot{109}
10632 \setslot{married.superior}
10633   \comment{The married symbol '\textmarried', unavailable in most
10634   PostScript fonts.}
10635 \endsetslot
10636
10637 \nextslot{110}
10638 \setslot{musicalnote.superior}
10639   \comment{A musical note symbol '\textmusicalnote', unavailable in
10640   most PostScript fonts.}
10641 \endsetslot
10642
10643 \nextslot{126}
10644 \setslot{tildelow.superior}
10645   \comment{A lowered tilde '\texttildelow'. In most PostScript fonts
10646   it can be substituted by 'asciitilde', while '\textasciitilde'
10647   is supposed to be a raised 'tilde'.}
10648 \endsetslot
10649
10650 \nextslot{127}
10651 \setslot{hyphendblchar.superior}
10652   \comment{The glyph used for hyphenation in this font, which will
10653   almost always be the same as 'hyphendbl'.}
10654 \endsetslot
10655
10656 \nextslot{128}
10657 \setslot{asciibreve.superior}
10658   \comment{An ASCII-style breve '\textasciibreve'. This is supposed
10659   to be a character by itself rather than a combining accents.}
10660 \endsetslot
10661
10662 \setslot{asciicaron.superior}
10663   \comment{An ASCII-style caron '\textasciicaron'. This is supposed
10664   to be a character by itself rather than a combining accents.}
10665 \endsetslot
10666
10667 \setslot{asciiacutedbl.superior}
10668   \comment{An ASCII-style double tick mark, '\textacutedbl'.}
10669 \endsetslot
10670
10671 \setslot{asciigravedbl.superior}
10672   \comment{An ASCII-style double backtick mark, '\textgravedbl'.}
10673 \endsetslot
10674
10675 \setslot{dagger.superior}
```

```
10676     \comment{The single dagger ‘\textdagger’.}
10677     \endsetslot
10678
10679 \setslot{daggerdbl.superior}
10680     \comment{The double dagger ‘\textdaggerdbl’.}
10681 \endsetslot
10682
10683 \setslot{bardbl.superior}
10684     \comment{The double vertical bar ‘\textbardbl’.}
10685 \endsetslot
10686
10687 \setslot{perthousand.superior}
10688     \comment{The perthousand sign ‘\textperthousand’.}
10689 \endsetslot
10690
10691 \setslot{bullet.superior}
10692     \comment{The centered bullet ‘\textbullet’.}
10693 \endsetslot
10694
10695 \setslot{centigrade.superior}
10696     \comment{The degree centigrade symbol ‘\textcelsius’.}
10697 \endsetslot
10698
10699 \setslot{dollaroldstyle.superior}
10700     \comment{An oldstyle dollar sign ‘\textdollaroldstyle’.}
10701 \endsetslot
10702
10703 \setslot{centoldstyle.superior}
10704     \comment{An oldstyle cent sign ‘\textcentoldstyle’.}
10705 \endsetslot
10706
10707 \setslot{florin.superior}
10708     \comment{The florin sign ‘\textflorin’.}
10709 \endsetslot
10710
10711 \setslot{colonmonetary.superior}
10712     \comment{The Colon currency sign ‘\textcolonmonetary’, similar to
10713         a capital ‘C’ with a vertical bar through the middle.}
10714 \endsetslot
10715
10716 \setslot{won.superior}
10717     \comment{The Won currency sign ‘\textwon’, similar to a capital ‘W’
10718         with two horizontal bars.}
10719 \endsetslot
10720
10721 \setslot{naira.superior}
10722     \comment{The Naira currency sign ‘\textnaira’, similar to a
10723         capital ‘N’ with two horizontal bars.}
10724 \endsetslot
10725
10726 \setslot{guarani.superior}
10727     \comment{The Guarani currency sign ‘\textguarani’, similar to
10728         a capital ‘G’ with a vertical bar through the middle.}
10729 \endsetslot
```

```
10730 \setslot{peso.superior}
10731   \comment{The Peso currency sign ‘\textpeso’, similar to a capital ‘P’
10732       with a horizontal bar through the bowl or below the bowl.}
10733 \endsetslot
10735
10736 \setslot{lira.superior}
10737   \comment{The Lira currency sign ‘\textlira’, similar to a sterling
10738       sign ‘\textsterling’ with two horizontal bars.}
10739 \endsetslot
10740
10741 \setslot{recipe.superior}
10742   \comment{The recipe symbol ‘\textrecipe’, similar to a capital ‘R’
10743       with an oblique bar through the tail.}
10744 \endsetslot
10745
10746 \setslot{interrobang.superior}
10747   \comment{The interrobang symbol ‘\textinterrobang’, similar to
10748       a combination of an exclamation mark and a question mark.}
10749 \endsetslot
10750
10751 \setslot{interrobangdown.superior}
10752   \comment{The inverted interrobang symbol ‘\textinterrobangdown’,
10753       similar to a combination of an inverted exclamation mark
10754       and an inverted question mark.}
10755 \endsetslot
10756
10757 \setslot{dong.superior}
10758   \comment{The Dong currency sign ‘\textdong’, similar to a lowercase
10759       ‘d’ with a horizontal bar through the stem and another bar below
10760       the letter.}
10761 \endsetslot
10762
10763 \setslot{trademark.superior}
10764   \comment{The trademark sign ‘\texttrademark’, similar to the raised
10765       letters ‘TM’.}
10766 \endsetslot
10767
10768 \setslot{pertenthousand.superior}
10769   \comment{The pertenthousand sign ‘\textpertenthousand’, unavailable
10770       in most PostScript fonts.}
10771 \endsetslot
10772
10773 \setslot{pilcrow.superior}
10774   \comment{The pilcrow mark ‘\textpilcrow’, similar to a paragraph
10775       mark ‘\textparagraph’ with a single stem.}
10776 \endsetslot
10777
10778 \setslot{baht.superior}
10779   \comment{The Baht currency sign ‘\textbaht’, similar to a capital ‘B’
10780       with a vertical bar through the middle.}
10781 \endsetslot
10782
10783 \setslot{numero.superior}
```

```
10784     \comment{The numero sign ‘\textnumero’, similar to the letter ‘N’
10785         with a raised ‘o’, unavailable in most PostScript fonts.}
10786 \endsetslot
10787
10788 \setslot{discount.superior}
10789     \comment{The discount sign ‘\textdiscount’, similar to a stylized
10790         percent sign, unavailable in most PostScript fonts.}
10791 \endsetslot
10792
10793 \setslot{estimated.superior}
10794     \comment{The estimated sign ‘\textestimated’, similar to an enlarged
10795         lowercase ‘e’, unavailable in most PostScript fonts.}
10796 \endsetslot
10797
10798 \setslot{openbullet.superior}
10799     \comment{The centered open bullet ‘\textopenbullet’, unavailable
10800         in most PostScript fonts.}
10801 \endsetslot
10802
10803 \setslot{servicemark.superior}
10804     \comment{The service mark sign ‘\textservicemark’, similar to the
10805         raised letters ‘SM’, unavailable in most PostScript fonts.}
10806 \endsetslot
10807
10808 \nextslot{160}
10809 \setslot{quillbracketleft.superior}
10810     \comment{The opening quill bracket ‘\textlquill’, unavailable in
10811         most PostScript fonts.}
10812 \endsetslot
10813
10814 \setslot{quillbracketright.superior}
10815     \comment{The closing quill bracket ‘\textrquill’, unavailable in
10816         most PostScript fonts.}
10817 \endsetslot
10818
10819 \setslot{cent.superior}
10820     \comment{The cent sign ‘\textcent’.}
10821 \endsetslot
10822
10823 \setslot{sterling.superior}
10824     \comment{The British currency sign, ‘\textsterling’.}
10825 \endsetslot
10826
10827 \setslot{currency.superior}
10828     \comment{The international currency sign, ‘\textcurrency’.}
10829 \endsetslot
10830
10831 \setslot{yen.superior}
10832     \comment{The Japanese currency sign, ‘\textyen’.}
10833 \endsetslot
10834
10835 \setslot{brokenbar.superior}
10836     \comment{A broken vertical bar, ‘\textbrokenbar’, similar to
10837         ‘\textbar’ with a gap through the middle.}
```

```
10838 \endsetslot
10839
10840 \setslot{section.superior}
10841   \comment{The section mark ‘\textsection’.}
10842 \endsetslot
10843
10844 \setslot{asciidieresis.superior}
10845   \comment{An ASCII-style dieresis ‘\textasciidieresis’. This is
10846     supposed to be character by itself rather than an accents.}
10847 \endsetslot
10848
10849 \setslot{copyright.superior}
10850   \comment{The copyright sign ‘\textcopyright’, similar to a small
10851     letter ‘C’ enclosed by a circle.}
10852 \endsetslot
10853
10854 \setslot{ordfeminine.superior}
10855   \comment{The raised letter ‘\textordfeminine’.}
10856 \endsetslot
10857
10858 \setslot{copyleft.superior}
10859   \comment{The reversed copyright sign ‘\textcopyleft’, similar to
10860     a small reversed ‘C’ enclosed by a circle.}
10861 \endsetslot
10862
10863 \setslot{logicalnot.superior}
10864   \comment{The logical not sign ‘\textlnot’.}
10865 \endsetslot
10866
10867 \setslot{circledP.superior}
10868   \comment{A small letter ‘P’ enclosed by a circle, ‘\textcircledP’,
10869     unavailable in most fonts.}
10870 \endsetslot
10871
10872 \setslot{registered.superior}
10873   \comment{The registered trademark sign ‘\textregistered’, similar to
10874     a small letter ‘R’ enclosed by a circle.}
10875 \endsetslot
10876
10877 \setslot{asciimacron.superior}
10878   \comment{An ASCII-style macron ‘\textasciimacron’. This is supposed
10879     to be a character by itself rather than a combining accents.}
10880 \endsetslot
10881
10882 \setslot{degree.superior}
10883   \comment{The degree sign ‘\textdegree’.}
10884 \endsetslot
10885
10886 \setslot{plusminus.superior}
10887   \comment{The plus or minus sign ‘\textpm’.}
10888 \endsetslot
10889
10890 \setslot{two.superior}
10891   \comment{The raised digit ‘\texttwosuperior’.}
```

```
10892 \endsetslot
10893
10894 \setslot{three.superior}
10895   \comment{The raised digit '\textthreesuperior'.}
10896 \endsetslot
10897
10898 \setslot{asciiacute.superior}
10899   \comment{An ASCII-style acute '\textasciiacute'. This is supposed
10900     to be a character by itself rather than a combining accents.}
10901 \endsetslot
10902
10903 \setslot{mu.superior}
10904   \comment{The lowercase Greek letter '\textmu', intended for use as
10905     a prefix 'micro' in physical units.}
10906 \endsetslot
10907
10908 \setslot{paragraph.superior}
10909   \comment{The paragraph mark '\textparagraph'.}
10910 \endsetslot
10911
10912 \setslot{periodcentered.superior}
10913   \comment{The centered period '\textperiodcentered'.}
10914 \endsetslot
10915
10916 \setslot{referencemark.superior}
10917   \comment{The reference mark '\textreferencemark', similar to
10918     a combination of the 'multiply' and 'divide' symbols.}
10919 \endsetslot
10920
10921 \setslot{one.superior}
10922   \comment{The raised digit '\textonesuperior'.}
10923 \endsetslot
10924
10925 \setslot{ordmasculine.superior}
10926   \comment{The raised letter '\textordmasculine'.}
10927 \endsetslot
10928
10929 \setslot{radical.superior}
10930   \comment{The radical sign '\textsurd', unavailable in most fonts.
10931     Even if it is available in Mac-encoded fonts, it isn't directly
10932     accessible in the 8r or 8y encodings.}
10933 \endsetslot
10934
10935 \setslot{onequarter.superior}
10936   \comment{The fraction '\textonequarter'.}
10937 \endsetslot
10938
10939 \setslot{onehalf.superior}
10940   \comment{The fraction '\textonehalf'.}
10941 \endsetslot
10942
10943 \setslot{threequarters.superior}
10944   \comment{The fraction '\textthreequarters'.}
10945 \endsetslot
```

```

10946 \setslot{Euro.superior}
10947   \comment{The European currency sign, similar to '\texteuro'.}
10948 \endsetslot
10950
10951 \nextslot{214}
10952 \setslot{multiply.superior}
10953   \comment{The multiplication sign '\texttimes'.
10954     This symbol was originally intended to be put into slot~215,
10955     but ended up in this slot by mistake, at which time it was
10956     considered too late to change it.}
10957 \endsetslot
10958 \nextslot{246}
10959 \setslot{divide.superior}
10960   \comment{The division sign '\textdiv'.
10961     This symbol was originally intended to be put into slot~247,
10962     but ended up in this slot by mistake, at which time it was
10963     considered too late to change it.}
10964 \endsetslot
10965 \endencoding
10966
10967
10968
10969

```

6.3.16 fontscripts-ts1-euro.etx

fontscripts-ts1-euro.etx (*etx*)

```

10970 %%
10971 %% - The original notices at the top of that file concerning authors,
10972 %% maintenance etc. are replaced by this notice.
10973 %% - The file is renamed.
10974 %% - The encoding is modified to accommodate euro/Euro.%
10975 %%
10976 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
10977 \relax
10978 \encoding
10979
10980 \setstr{codingscheme}{TEX TEXT COMPANION 1---TS1 - EURO}
10981
10982 \ifisglyph{x}\then
10983   \setint{xheight}{\height{x}}
10984 \else
10985   \setint{xheight}{500}
10986 \fi
10987
10988 \ifisglyph{space}\then
10989   \setint{interword}{\width{space}}
10990 \else\ifisglyph{i}\then
10991   \setint{interword}{\width{i}}
10992 \else
10993   \setint{interword}{333}

```

```
10994 \fi\fi
10995
10996
10997 \setint{italicslant}{0}
10998
10999
11000 \setint{fontdimen(1)}{\int{italicslant}} % italic slant
11001 \setint{fontdimen(2)}{\int{interword}} % interword space
11002 \setint{fontdimen(3)}{0} % interword stretch
11003 \setint{fontdimen(4)}{0} % interword shrink
11004 \setint{fontdimen(5)}{\int{xheight}} % x-height
11005 \setint{fontdimen(6)}{1000} % quad
11006 \setint{fontdimen(7)}{\int{interword}} % extra space after .
11007
11008
11009 \nextslot{0}
11010 \setslot{capitalgrave}
11011   \comment{The grave accent '\capitalgrave{}', intended for use with
11012     capital letters.}
11013 \endsetslot
11014
11015 \setslot{capitalacute}
11016   \comment{The acute accent '\capitalacute{}', intended for use with
11017     capital letters.}
11018 \endsetslot
11019
11020 \setslot{capitalcircumflex}
11021   \comment{The circumflex accent '\capitalcircumflex{}', intended for
11022     use with capital letters.}
11023 \endsetslot
11024
11025 \setslot{capitaltilde}
11026   \comment{The tilde accent '\capitaltilde{}', intended for use with
11027     capital letters.}
11028 \endsetslot
11029
11030 \setslot{capitaldieresis}
11031   \comment{The umlaut or dieresis accent '\capitaldieresis{}',
11032     intended for use with capital letters.}
11033 \endsetslot
11034
11035 \setslot{capitalhungarumlaut}
11036   \comment{The long Hungarian umlaut '\capitalhungarumlaut{}',
11037     intended for use with capital letters.}
11038 \endsetslot
11039
11040 \setslot{capitalring}
11041   \comment{The ring accent '\capitalring{}', intended for use with
11042     capital letters.}
11043 \endsetslot
11044
11045 \setslot{capitalcaron}
11046   \comment{The caron or h'áv cek accent '\capitalcaron{}', intended
11047     for use with capital letters.}
```

```
11048 \endsetslot
11049
11050 \setslot{capitalbreve}
11051     \comment{The breve accent ‘\capitalbreve{}’, intended for use with
11052         capital letters.}
11053 \endsetslot
11054
11055 \setslot{capitalmacron}
11056     \comment{The macron accent ‘\capitalmacron{}’, intended for use with
11057         capital letters.}
11058 \endsetslot
11059
11060 \setslot{capitaldotaccent}
11061     \comment{The dot accent ‘\capitaldotaccent{}’, intended for use with
11062         capital letters.}
11063 \endsetslot
11064
11065 \setslot{cedilla}
11066     \comment{The cedilla accent ‘\capitalcedilla{}’, intended for use
11067         with capital letters.}
11068 \endsetslot
11069
11070 \setslot{ogonek}
11071     \comment{The ogonek accent ‘\capitalogonek{}’, intended for use with
11072         capital letters.}
11073 \endsetslot
11074
11075 \nextslot{13}
11076 \setslot{quotesinglbase}
11077     \comment{A straight single quote mark on the baseline,
11078         ‘\textquotestraightbase’.}
11079 \endsetslot
11080
11081 \nextslot{18}
11082 \setslot{quotedblbase}
11083     \comment{A straight double quote mark on the baseline,
11084         ‘\textquotestraightdblbase’.}
11085 \endsetslot
11086
11087 \nextslot{21}
11088 \setslot{twelveudash}
11089     \comment{A 2/3~em dash, ‘\texttwelveudash’.}
11090 \endsetslot
11091
11092 \setslot{threequartersemdash}
11093     \comment{A 3/4~em dash, ‘\textthreequartersemdash’.}
11094 \endsetslot
11095
11096 \nextslot{23}
11097 \setslot{capitalcompwordmark}
11098     \comment{An invisible glyph, with zero width and depth, but the
11099         height of capital letters.
11100         It is used to stop ligaturing in words like ‘shelf{}ful’.}
11101 \endsetslot
```

```
11102 \nextslot{24}
11103 \setslot{arrowleft}
11104     \comment{A left pointing arrow, '\textleftarrow', unavailable in
11105         most PostScript fonts.}
11106 \endsetslot
11108
11109 \setslot{arrowright}
11110     \comment{A right pointing arrow, '\rightarrow', unavailable in
11111         most PostScript fonts.}
11112 \endsetslot
11113
11114 \nextslot{26}
11115 \setslot{tieaccentlowercase}
11116     \comment{The original tie accent '\t{}', intended for use with
11117         lowercase letters.}
11118 \endsetslot
11119
11120 \setslot{tieaccentcapital}
11121     \comment{The tie accent '\capitaltie{}', intended for use with
11122         capital letters.}
11123 \endsetslot
11124
11125 \setslot{newtieaccentlowercase}
11126     \comment{A new tie accent '\newtie{}', intended for use with
11127         lowercase letters.}
11128 \endsetslot
11129
11130 \setslot{newtieaccentcapital}
11131     \comment{A new tie accent '\capitalnewtie{}', intended for use
11132         with capital letters.}
11133 \endsetslot
11134
11135 \nextslot{31}
11136 \setslot{ascendercompwordmark}
11137     \comment{An invisible glyph, with zero width and depth, but the
11138         height of lowercase letters with ascenders.
11139         It is used to stop ligaturing in words like 'shelf{}ful'.}
11140 \endsetslot
11141
11142 \nextslot{32}
11143 \setslot{blank}
11144     \comment{The blank indicator '\textblank', similar to the letter 'b'
11145         with an oblique bar through the stem.}
11146 \endsetslot
11147
11148 \nextslot{36}
11149 \setslot{dollar}
11150     \comment{The dollar sign '\textdollar'.}
11151 \endsetslot
11152
11153 \nextslot{39}
11154 \setslot{quotesingle}
11155     \comment{A straight single quote mark, '\textquotesingle'.}
```

```
11156 \endsetslot
11157
11158 \nextslot{42}
11159 \setslot{asteriskcentered}
11160     \comment{The centered asterisk, '\textasteriskcentered'.}
11161 \endsetslot
11162
11163 \nextslot{44}
11164 \setslot{comma}
11165     \comment{The decimal comma ','.}
11166 \endsetslot
11167
11168 \nextslot{45}
11169 \setslot{hyphendbl}
11170     \comment{An alternate double hyphen, '\textdblhyphen'.}
11171 \endsetslot
11172
11173 \nextslot{46}
11174 \setslot{period}
11175     \comment{The decimal point '.'.}
11176 \endsetslot
11177
11178 \nextslot{47}
11179 \setslot{fraction}
11180     \comment{The fraction slash '\textfractionsolidus'.}
11181 \endsetslot
11182
11183 \nextslot{48}
11184 \setslot{zerooldstyle}
11185     \comment{The oldstyle number '\oldstylenums{0}'.}
11186 \endsetslot
11187
11188 \setslot{oneoldstyle}
11189     \comment{The oldstyle number '\oldstylenums{1}'.}
11190 \endsetslot
11191
11192 \setslot{twooldstyle}
11193     \comment{The oldstyle number '\oldstylenums{2}'.}
11194 \endsetslot
11195
11196 \setslot{threeoldstyle}
11197     \comment{The oldstyle number '\oldstylenums{3}'.}
11198 \endsetslot
11199
11200 \setslot{fouroldstyle}
11201     \comment{The oldstyle number '\oldstylenums{4}'.}
11202 \endsetslot
11203
11204 \setslot{fiveoldstyle}
11205     \comment{The oldstyle number '\oldstylenums{5}'.}
11206 \endsetslot
11207
11208 \setslot{sixoldstyle}
11209     \comment{The oldstyle number '\oldstylenums{6}'.}
```

```

11210 \endsetslot
11211
11212 \setslot{sevenoldstyle}
11213   \comment{The oldstyle number ‘\oldstylenums{7}’.}
11214 \endsetslot
11215
11216 \setslot{eightoldstyle}
11217   \comment{The oldstyle number ‘\oldstylenums{8}’.}
11218 \endsetslot
11219
11220 \setslot{nineoldstyle}
11221   \comment{The oldstyle number ‘\oldstylenums{9}’.}
11222 \endsetslot
11223
11224 \nextslot{60}
11225 \setslot{angbracketleft}
11226   \comment{The opening angle bracket ‘\textlangle’, unavailable in
11227     most PostScript fonts.}
11228 \endsetslot
11229
11230 \nextslot{61}
11231 \setslot{minus}
11232   \comment{The subtraction sign ‘\textminus’.}
11233 \endsetslot
11234
11235 \nextslot{62}
11236 \setslot{angbracketright}
11237   \comment{The closing angle bracket ‘\textrangle’, unavailable in
11238     most PostScript fonts.}
11239 \endsetslot
11240
11241 \nextslot{77}
11242 \setslot{Omegainv}
11243   \comment{The inverted Ohm sign ‘\textmho’, unavailable in most fonts.}
11244 \endsetslot
11245
11246 \nextslot{79}
11247   \comment{A circle ‘\textbigcircle’, big enough to enclose a letter
11248     as in ‘\textcopyright’ or ‘\textregistered’.}
11249 \setslot{bigcircle}
11250 \endsetslot
11251
11252 \nextslot{87}
11253 \setslot{Omega}
11254   \comment{The upright Ohm sign ‘\textohm’, unavailable in most fonts.
11255     Even if it is available in Mac-encoded fonts, it isn’t directly
11256     accessible in the 8r or 8y encodings.}
11257 \endsetslot
11258
11259 \nextslot{91}
11260 \setslot{openbracketleft}
11261   \comment{The opening double square bracket ‘\textlbrackdbl’,
11262     unavailable in most PostScript fonts.}
11263 \endsetslot

```

```
11264 \nextslot{93}
11265 \setsheet{openbracketright}
11266     \comment{The closing double square bracket ‘\textrbrackdbl’,
11267         unavailable in most PostScript fonts.}
11268 \endsetsheet
11269
11270 \nextslot{94}
11271 \setsheet{arrowup}
11272     \comment{An upwards pointing arrow ‘\textuparrow’, unavailable in
11273         most PostScript fonts.}
11274 \endsetsheet
11275
11276 \nextslot{95}
11277 \setsheet{arrowdown}
11278     \comment{An downwards pointing arrow ‘\textdownarrow’, unavailable
11279         in most PostScript fonts.}
11280 \endsetsheet
11281
11282 \nextslot{96}
11283 \setsheet{asciigrave}
11284     \comment{An ASCII-style grave ‘\textasciigrave’. This is supposed
11285         to be a character by itself rather than a combining accents.}
11286 \endsetsheet
11287
11288 \nextslot{98}
11289 \setsheet{born}
11290     \comment{The born symbol ‘\textborn’, unavailable in most PostScript
11291         fonts.}
11292 \endsetsheet
11293
11294 \nextslot{99}
11295 \setsheet{divorced}
11296     \comment{The divorced symbol ‘\textdivorced’, unavailable in most
11297         PostScript fonts.}
11298 \endsetsheet
11299
11300 \nextslot{100}
11301 \setsheet{died}
11302     \comment{The died symbol ‘\textdied’, unavailable in most PostScript
11303         fonts.}
11304 \endsetsheet
11305
11306 \nextslot{108}
11307 \setsheet{leaf}
11308     \comment{The leaf symbol ‘\textleaf’, unavailable in most PostScript
11309         fonts.}
11310 \endsetsheet
11311
11312 \nextslot{109}
11313 \setsheet{married}
11314     \comment{The married symbol ‘\textmarried’, unavailable in most
11315         PostScript fonts.}
11316 \endsetsheet
11317
```

```
11318 \nextslot{110}
11319 \setslot{musicalnote}
11320   \comment{A musical note symbol ‘\textmusicalnote’, unavailable in
11321       most PostScript fonts.}
11322 \endsetslot
11324
11325 \nextslot{126}
11326 \setslot{tildelow}
11327   \comment{A lowered tilde ‘\texttildelow’. In most PostScript fonts
11328       it can be substituted by ‘asciitilde’, while ‘\textasciitilde’
11329       is supposed to be a raised ‘tilde’.}
11330 \endsetslot
11331
11332 \nextslot{127}
11333 \setslot{hyphdblchar}
11334   \comment{The glyph used for hyphenation in this font, which will
11335       almost always be the same as ‘hyphendbl’.}
11336 \endsetslot
11337
11338 \nextslot{128}
11339 \setslot{asciibreve}
11340   \comment{An ASCII-style breve ‘\textasciibreve’. This is supposed
11341       to be a character by itself rather than a combining accents.}
11342 \endsetslot
11343
11344 \setslot{asciicaron}
11345   \comment{An ASCII-style caron ‘\textasciicaron’. This is supposed
11346       to be a character by itself rather than a combining accents.}
11347 \endsetslot
11348
11349 \setslot{asciacutedbl}
11350   \comment{An ASCII-style double tick mark, ‘\textacutedbl’.}
11351 \endsetslot
11352
11353 \setslot{asciigravedbl}
11354   \comment{An ASCII-style double backtick mark, ‘\textgravedbl’.}
11355 \endsetslot
11356
11357 \setslot{dagger}
11358   \comment{The single dagger ‘\textdagger’.}
11359 \endsetslot
11360
11361 \setslot{daggerdbl}
11362   \comment{The double dagger ‘\textdaggerdbl’.}
11363 \endsetslot
11364
11365 \setslot{bardbl}
11366   \comment{The double vertical bar ‘\textbardbl’.}
11367 \endsetslot
11368
11369 \setslot{perthousand}
11370   \comment{The perthousand sign ‘\textperthousand’.}
11371 \endsetslot
```

```
11372 \setslot{bullet}
11373   \comment{The centered bullet ‘\textbullet’.}
11374 \endsetslot
11376
11377 \setslot{centigrade}
11378   \comment{The degree centigrade symbol ‘\textcelsius’.}
11379 \endsetslot
11380
11381 \setslot{dollaroldstyle}
11382   \comment{An oldstyle dollar sign ‘\textdollaroldstyle’.}
11383 \endsetslot
11384
11385 \setslot{centoldstyle}
11386   \comment{An oldstyle cent sign ‘\textcentoldstyle’.}
11387 \endsetslot
11388
11389 \setslot{florin}
11390   \comment{The florin sign ‘\textflorin’.}
11391 \endsetslot
11392
11393 \setslot{colonmonetary}
11394   \comment{The Colon currency sign ‘\textcolonmonetary’, similar to
11395     a capital ‘C’ with a vertical bar through the middle.}
11396 \endsetslot
11397
11398 \setslot{won}
11399   \comment{The Won currency sign ‘\textwon’, similar to a capital ‘W’
11400     with two horizontal bars.}
11401 \endsetslot
11402
11403 \setslot{naira}
11404   \comment{The Naira currency sign ‘\textnaira’, similar to a
11405     capital ‘N’ with two horizontal bars.}
11406 \endsetslot
11407
11408 \setslot{guarani}
11409   \comment{The Guarani currency sign ‘\textguarani’, similar to
11410     a capital ‘G’ with a vertical bar through the middle.}
11411 \endsetslot
11412
11413 \setslot{peso}
11414   \comment{The Peso currency sign ‘\textpeso’, similar to a capital ‘P’
11415     with a horizontal bar through the bowl or below the bowl.}
11416 \endsetslot
11417
11418 \setslot{lira}
11419   \comment{The Lira currency sign ‘\textlira’, similar to a sterling
11420     sign ‘\textsterling’ with two horizontal bars.}
11421 \endsetslot
11422
11423 \setslot{recipe}
11424   \comment{The recipe symbol ‘\textrecipe’, similar to a capital ‘R’
11425     with an oblique bar through the tail.}
```

```
11426 \endsetslot
11427
11428 \setslot{interrobang}
11429   \comment{The interrobang symbol ‘\textinterrobang’, similar to
11430     a combination of an exclamation mark and a question mark.}
11431 \endsetslot
11432
11433 \setslot{interrobangdown}
11434   \comment{The inverted interrobang symbol ‘\textinterrobangdown’,
11435     similar to a combination of an inverted exclamation mark
11436     and an inverted question mark.}
11437 \endsetslot
11438
11439 \setslot{dong}
11440   \comment{The Dong currency sign ‘\textdong’, similar to a lowercase
11441     ‘d’ with a horizontal bar through the stem and another bar below
11442     the letter.}
11443 \endsetslot
11444
11445 \setslot{trademark}
11446   \comment{The trademark sign ‘\texttrademark’, similar to the raised
11447     letters ‘TM’.}
11448 \endsetslot
11449
11450 \setslot{pertenthousand}
11451   \comment{The pertenthousand sign ‘\textpertenthousand’, unavailable
11452     in most PostScript fonts.}
11453 \endsetslot
11454
11455 \setslot{pilcrow}
11456   \comment{The pilcrow mark ‘\textpilcrow’, similar to a paragraph
11457     mark ‘\textparagraph’ with a single stem.}
11458 \endsetslot
11459
11460 \setslot{baht}
11461   \comment{The Baht currency sign ‘\textbaht’, similar to a capital ‘B’
11462     with a vertical bar through the middle.}
11463 \endsetslot
11464
11465 \setslot{numero}
11466   \comment{The numero sign ‘\textnumero’, similar to the letter ‘N’
11467     with a raised ‘o’, unavailable in most PostScript fonts.}
11468 \endsetslot
11469
11470 \setslot{discount}
11471   \comment{The discount sign ‘\textdiscount’, similar to a stylized
11472     percent sign, unavailable in most PostScript fonts.}
11473 \endsetslot
11474
11475 \setslot{estimated}
11476   \comment{The estimated sign ‘\textestimated’, similar to an enlarged
11477     lowercase ‘e’, unavailable in most PostScript fonts.}
11478 \endsetslot
11479
```

```
11480 \setslot{openbullet}
11481   \comment{The centered open bullet ‘\textopenbullet’, unavailable
11482     in most PostScript fonts.}
11483 \endsetslot
11484
11485 \setslot{servicemark}
11486   \comment{The service mark sign ‘\textservicemark’, similar to the
11487     raised letters ‘SM’, unavailable in most PostScript fonts.}
11488 \endsetslot
11489
11490 \nextslot{160}
11491 \setslot{quillbracketleft}
11492   \comment{The opening quill bracket ‘\textlquill’, unavailable in
11493     most PostScript fonts.}
11494 \endsetslot
11495
11496 \setslot{quillbracketright}
11497   \comment{The closing quill bracket ‘\textrquill’, unavailable in
11498     most PostScript fonts.}
11499 \endsetslot
11500
11501 \setslot{cent}
11502   \comment{The cent sign ‘\textcent’.}
11503 \endsetslot
11504
11505 \setslot{sterling}
11506   \comment{The British currency sign, ‘\textsterling’.}
11507 \endsetslot
11508
11509 \setslot{currency}
11510   \comment{The international currency sign, ‘\textcurrency’.}
11511 \endsetslot
11512
11513 \setslot{yen}
11514   \comment{The Japanese currency sign, ‘\textyen’.}
11515 \endsetslot
11516
11517 \setslot{brokenbar}
11518   \comment{A broken vertical bar, ‘\textbrokenbar’, similar to
11519     ‘\textbar’ with a gap through the middle.}
11520 \endsetslot
11521
11522 \setslot{section}
11523   \comment{The section mark ‘\textsection’.}
11524 \endsetslot
11525
11526 \setslot{asciidieresis}
11527   \comment{An ASCII-style dieresis ‘\textasciidieresis’. This is
11528     supposed to be character by itself rather than an accents.}
11529 \endsetslot
11530
11531 \setslot{copyright}
11532   \comment{The copyright sign ‘\textcopyright’, similar to a small
11533     letter ‘C’ enclosed by a circle.}
```

```
11534 \endsetslot
11535
11536 \setslot{ordfeminine}
11537     \comment{The raised letter ‘\textordfeminine’.}
11538 \endsetslot
11539
11540 \setslot{copyleft}
11541     \comment{The reversed copyright sign ‘\textcopyleft’, similar to
11542         a small reversed ‘C’ enclosed by a circle.}
11543 \endsetslot
11544
11545 \setslot{logicalnot}
11546     \comment{The logical not sign ‘\textlnot’.}
11547 \endsetslot
11548
11549 \setslot{circledP}
11550     \comment{A small letter ‘P’ enclosed by a circle, ‘\textcircledP’,
11551         unavailable in most fonts.}
11552 \endsetslot
11553
11554 \setslot{registered}
11555     \comment{The registered trademark sign ‘\textregistered’, similar to
11556         a small letter ‘R’ enclosed by a circle.}
11557 \endsetslot
11558
11559 \setslot{asciimacron}
11560     \comment{An ASCII-style macron ‘\textasciimacron’. This is supposed
11561         to be a character by itself rather than a combining accents.}
11562 \endsetslot
11563
11564 \setslot{degree}
11565     \comment{The degree sign ‘\textdegree’.}
11566 \endsetslot
11567
11568 \setslot{plusminus}
11569     \comment{The plus or minus sign ‘\textpm’.}
11570 \endsetslot
11571
11572 \setslot{twosuperior}
11573     \comment{The raised digit ‘\texttwosuperior’.}
11574 \endsetslot
11575
11576 \setslot{threesuperior}
11577     \comment{The raised digit ‘\textthreesuperior’.}
11578 \endsetslot
11579
11580 \setslot{asciacute}
11581     \comment{An ASCII-style acute ‘\textasciacute’. This is supposed
11582         to be a character by itself rather than a combining accents.}
11583 \endsetslot
11584
11585 \setslot{mu}
11586     \comment{The lowercase Greek letter ‘\textmu’, intended for use as
11587         a prefix ‘micro’ in physical units.}
```

```
11588 \endsetslot
11589
11590 \setslot{paragraph}
11591     \comment{The paragraph mark ‘\textparagraph’.}
11592 \endsetslot
11593
11594 \setslot{periodcentered}
11595     \comment{The centered period ‘\textperiodcentered’.}
11596 \endsetslot
11597
11598 \setslot{referencemark}
11599     \comment{The reference mark ‘\textreferencemark’, similar to
11600         a combination of the ‘multiply’ and ‘divide’ symbols.}
11601 \endsetslot
11602
11603 \setslot{onesuperior}
11604     \comment{The raised digit ‘\textonesuperior’.}
11605 \endsetslot
11606
11607 \setslot{ordmasculine}
11608     \comment{The raised letter ‘\textordmasculine’.}
11609 \endsetslot
11610
11611 \setslot{radical}
11612     \comment{The radical sign ‘\textsurd’, unavailable in most fonts.
11613         Even if it is available in Mac-encoded fonts, it isn’t directly
11614         accessible in the 8r or 8y encodings.}
11615 \endsetslot
11616
11617 \setslot{onequarter}
11618     \comment{The fraction ‘\textonequarter’.}
11619 \endsetslot
11620
11621 \setslot{onehalf}
11622     \comment{The fraction ‘\textonehalf’.}
11623 \endsetslot
11624
11625 \setslot{threequarters}
11626     \comment{The fraction ‘\textthreequarters’.}
11627 \endsetslot
11628
11629 \ifisglyph{euro}\then
11630     \setslot{euro}
11631     \comment{The European currency sign, similar to ‘\texteuro’.}
11632 \endsetslot
11633 \Else
11634     \setslot{Euro}
11635     \comment{The European currency sign, similar to ‘\texteuro’.}
11636 \endsetslot
11637 \Fi
11638
11639 \setslot{Euro}
11640     \comment{This just makes sure that any glyph labelled ‘Euro’ in the font gets
encoded.
```

```

11641   The TS1 encoding will use the previous slot when the font is actually used by
11642   tex.
11643   At least, I think so.
11644   That is, since we've got spare slots in this encoding, we can use them to enable
11645   'either... or...' encoding options both for reencoding the fonts for fontinst and
11646   for the tex encodings. (?!)
11647   \endsetslot
11648
11649   \setslot{euro}
11650   \comment{This just makes sure that any glyph labelled 'euro' in the font gets
11651   encoded.}
11652
11653   The TS1 encoding will use the previous slot when the font is actually used by
11654   tex.
11655   At least, I think so.
11656   That is, since we've got spare slots in this encoding, we can use them to enable
11657   'either... or...' encoding options both for reencoding the fonts for fontinst and
11658   for the tex encodings. (?!)
11659   \endsetslot
11660
11661   \nextslot{214}
11662   \setslot{multiply}
11663   \comment{The multiplication sign '\texttimes'.
11664   This symbol was originally intended to be put into slot~215,
11665   but ended up in this slot by mistake, at which time it was
11666   considered too late to change it.}
11667   \endsetslot
11668
11669   \endencoding
11670
11671

```

6.3.17 fontscripts-ucdotalt.etx

fontscripts-ucdotalt.etx (etx)

```

11672   \relax
11673   \encoding
11674
11675   \setcommand\uc#1#2{\#1.alt}
11676   \setcommand\uctop#1#2{\#1.alt}
11677   \ifisint{letterspacing}\then
11678     \ifnumber{\int{letterspacing}}={0}\then \Else
11679       \setcommand\uclig#1#2{\#1.altspaced}
11680       \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1.altspaced|, but
11681       you can't see it as \verb|\verb|\setcommand| commands are invisible in

```

```

11682     the typeset output.}
11683     \Fi
11684   \Fi
11685   \setcommand{uclig}{\#1\#2{\#1.alt}}
11686
11687 \endencoding

```

Change History

0.3

General: Include warning re. use of subset declarations in .fd files.
[GitHub #1669](#) 13

v0.0

fontsheets-dotoldstyle.etcx:	
Filename prefix for Karl.	70
fontsheets-dotsc2.etcx:	
Filename prefix for Karl.	70
fontsheets-dotscbuild.mtx:	
Filename prefix for Karl.	62
fontsheets-dotscmisc.mtx:	
Filename prefix for Karl.	67
fontsheets-dottaboldstyle.etcx:	
Filename prefix for Karl.	70
fontsheets-lining.etcx:	
Filename prefix for Karl.	70
fontsheets-newlatin-dotsc.mtx:	
Filename prefix for Karl.	65
fontsheets-oldstyle.etcx:	
Filename prefix for Karl.	71
fontsheets-t1-cfr.etcx:	
Filename prefix for Karl.	71
fontsheets-t1-dotinf.etcx:	
Filename prefix for Karl.	119
fontsheets-t1-dotinferior.etcx:	
Filename prefix for Karl.	142
fontsheets-t1-dotsup.etcx:	
Filename prefix for Karl.	166
fontsheets-t1-dotsuperior.etcx:	
Filename prefix for Karl.	190
fontsheets-t1-f_f.etcx:	
Filename prefix for Karl.	214
fontsheets-t1j-f_f.etcx:	
Filename prefix for Karl.	238
fontsheets-ts1-dotinf.etcx:	
Filename prefix for Karl.	238
fontsheets-ts1-dotsup.etcx:	
Filename prefix for Karl.	251
fontsheets-ts1-euro.etcx:	
Filename prefix for Karl.	264

fontsheets-ucdotalt.etcx:	Filename prefix for Karl.	277
fontsheets-unfakable.mtx:	Filename prefix for Karl.	69
t1-dotalt-f_f:	Filename prefix for Karl.	95
v0.1	General: First public release.	1
v0.2	General: fnttarg may now be ‘sandboxed’. The default build recipes (based on fontinst and afm2tfm) are configured to do this and fnt.buildsearch is disabled by default. At present, isolation only affects TeX-based build tools. FontForge and GNU make are unaffected, for example.	4
fontinst.lua renamed to fntbuild.lua .		4
Default templates. Simplified template configuration and search.	15	
Disable checksearch by default.	7	
New function: fnt.afm2tfm() .	4	
New function: fnt.build_fnt() .	5	
New function: fnt.buildinit() .	4	
New function:		
fnt.buildinit_hook() .	5	
New function:		
fnt.fntsubsetter() .	7	
New function: fnt.lsrdir() .	7	
New variable: fnt.afmtotfm .	9	
New variable: fnt.buildeps .	12	
New variable: fnt.buildfiles .	12	
New variable: fnt.buildsearch .	9	
New variable:		
fnt.buildsuppfiles_sys .	12	
New variable:		
fnt.checksuppfiles_add .	12	
New variable:		
fnt.checksuppfiles_sys .	12	

New variable: <code>fnt.fntdir</code>	<u>12</u>
New variable: <code>fnt.mapfiles_add</code> . . .	<u>12</u>
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