1 WinEdt and Unicode (UTF-8) encoding

WinEdt is a unicode editor with support for UTF-8 or code page-specific encoding. UTF-8 is the default format for TeX documents. This can be configured through the Unicode section of the Options interface (or through the Unicode page in Preferences dialog). Help explains the details.

If document's mode ends with submode :CPnum then the indicated code page is used to load the file in unicode format. For example: TeX:CP1251 uses Cyrillic code page.

A comment in the beginning of a TeX document:

```
% !Mode:: "TeX:UTF-8"
```

will ensure that a document is properly loaded and saved. A similar convention is used by emacs:

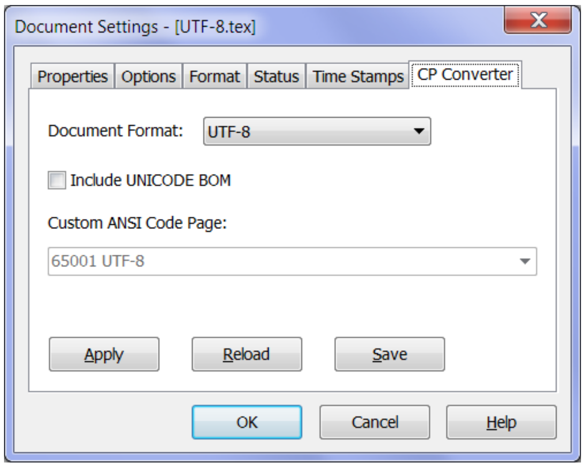
```
% -*-coding: utf-8 -*-
```

WinEdt “understands” emacs coding directive for UTF-8.

Some unicode or UTF-8 documents start with a Byte Order Mark (BOM). Unicode-aware applications can determine the coding of a document from its BOM. Windows Notepad always includes BOM in unicode or UTF documents. Unfortunately, the BOM signature also causes problems with many applications and compilers (including TeX with UTF-8 encoding) and that makes it rather useless...

Without BOM and without any convention as described above it is hard to distinguish between UTF-8 and ANSI (code page-specific) documents.

Document Settings dialog has a page CP Converter. It can be used to change document's format or reload the document in proper code page:


Document Settings - [UTF-8.tex]

Document Format: UTF-8

Include UNICODE BOM [ ]

Custom ANSI Code Page: 65001 UTF-8

Help in the dialog explains how to use this functionality.

2 WinEdt and (Sub)Modes

A document mode is initially determined from the filetype and is stored as a local attribute of a file in WinEdt's File List (Project File). This works in most cases for the main mode. However, bilingual users might want to tie certain attributes (such as dictionaries) to submodes that may not be apparent from the filetype.

Instead of setting such modes in the Document Settings dialog or adopting a practice to name your files with more than one filetype (eg. Paper.fr.tex) it is possible to enter submodes (as comments) in the first (or second) line of a document.

WinEdt modes can be specified as a comment:

```
% !Mode:: "Mode:Submode:Submode"
```

WinEdt also recognizes mode specification as used by emacs:

```
% -*- mode: TeX -*-
% -*- coding: utf-8 -*-
```

It is also possible to specify mode and submode in a single comment:

```
% -*- TeX:DE:UTF-8 -*-
```

Emacs might not recognize such specification and it is better to use WinEdt's convention `!Mode:: "TeX:DE:UTF-8"` as described above.
Furthermore, for TeX documents WinEdt also detects the language submode from Babel and UTF-8 coding from the inputenc package:

```
// Determine Language Submodes from babel:
// \usepackage[french,german,italian,spanish]{babel}

// Determine Coding (UTF-8) from the preamble:
// \usepackage[utf8]{inputenc}
```

This functionality is implemented thought the event handler macros that are executed before a document is loaded into WinEdt. Event handlers are defined in the Advanced section of the Options interface.

This ensures that WinEdt opens and treats the document properly. WinEdt's Help explains how to use modes and submodes...
The actual macro that is by default called from this event handler is

```
%b\Macros\Events\GetMode.edt
```

If for some reason mode detection (or some portion of it) from comments is unwanted for your style of work you can edit this macro and comment out unwanted portions or make any other desirable changes. However, note that this macro is executed frequently and it has to be fast or else you'll notice delays when opening documents or even when collecting data in previously un-opened documents...

3 TeX and International Characters (UTF-8)

Putting

```
\usepackage[utf8]{inputenc}
```

enables you to use UTF-8 (unicode) coding in LaTeX documents. As long as you open the document in WinEdt in UTF-8 mode you see the same characters in WinEdt as in your compiled document (as is the case with this UTF-8 document):

À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö Ø Œ Ù Ú Û Ü Ý Ÿ Š ß ¡
à á â ã ä å æ ç è é ê ë ì í î ï ñ ò ó ô õ ö ø œ ù ú û ü ý ÿ š € ¿
† ‡ § ¶ © ® Č Š Ž č š ž

À Á Â Ã Ä Å Æ Ç È É Ê Ë Ì Í Î Ï Ñ Ò Ó Ô Õ Ö Ø Œ Ù Ú Û Ü Ý Ÿ Š ß ¡
à á â ã ä å æ ç è é ê ë ì í î ï ñ ò ó ô õ ö ø œ ù ú û ü ý ÿ š € ¿
† ‡ § ¶ © ® Č Š Ž č š ž

Not all UTF-8 characters are currently supported by LaTeX unless you load extra packages. For example the € (€) symbol requires:

```
\usepackage{textcomp} % required for \texteuro
\usepackage{eurosym}  % required for \euro
% get a "nicer" looking euro symbol:
%\let\texteuro\euro   % if you want \texteuro=\euro
```

Note the difference between the shape of the `\euro` (€) and `\texteuro` (€) symbols. Such issues are non-WinEdt related and you will have to consult TeX's documentation or, if needed, seek help on the appropriate forum (such as TeX Newsgroup where LaTeX related topics are discussed).

Our preamble contains:

```
\catcode`\⋈=13
\def⋈{$\bowtie$}
```

This allows TeX to process an "empty" tabular environment from WinEdt's Insert menu. Bullets are represented by ⋈:

⋈	⋈	⋈	⋈	⋈
⋈	⋈	⋈	⋈	⋈
⋈	⋈	⋈	⋈	⋈
⋈	⋈	⋈	⋈	⋈

In WinEdt you can use Ctrl+Space (Tools menu -> Next Bullet) to move through placeholders and fill-in the actual data.

4 Translation Tables

If you prefer your documents to contain plain TeX notation for international characters (eg. ``\`{A}`` stands for `À`) then you should consider applying WinEdt's read and write translation tables. This will make working with WinEdt more comfortable and it is required if you want to take advantage of WinEdt's spell checking ability with international dictionaries.

WinEdt can convert certain strings into their unicode equivalents when the file is being read and then translate these characters back to the original strings representing international characters in TeX notation.

Suitable translation tables for TeX mode are already defined (but not enabled) in the default settings: see Options interface. The help in this interface provides the details.

For example, the default `TeX_Read` and `TeX_Write` translation table contain definitions like:

```
"{\ss}" -> "ß"              "ß" -> "{\ss}"
"{\AA}" -> "Å"              "Å" -> "{\AA}"
"{\AE}" -> "Æ"              "Æ" -> "{\AE}"
"{\aa}" -> "å"              "å" -> "{\aa}"
"{\ae}" -> "æ"              "æ" -> "{\ae}"
"{\OE}" -> "Œ"              "Œ" -> "{\OE}"
"{\oe}" -> "œ"              "œ" -> "{\oe}"
"{\O}" -> "Ø"               "Ø" -> "{\O}"
"{\o}" -> "ø"               "ø" -> "{\o}"
"\c{C}" -> "Ç"              "Ç" -> "\c{C}"
"\c{c}" -> "ç"              "ç" -> "\c{c}"
"\^{A}" -> "Â"              "Â" -> "\^{A}"
"\~{A}" -> "Ã"              "Ã" -> "\~{A}"
"\""{A}" -> "Ä"             "Ä" -> "\""{A}"

etc...
```

Note that the last item is not a "typo"! To specify double quotes inside a double-quoted string they have to be repeated twice! Failing to observe this convention may completely corrupt WinEdt's translation table.

The read translation table supports two notations (eg. `\^{A}` and `{\^A}`). The write translation table `TeX_Write` is the inverse of the read translation table (except that it uses the first, preferable, notation where applicable). You should use translation tables with some care: make a backup copy of your documents until you verify that the tables are set up correctly. Careless application of translation tables may irreversibly corrupt your documents (just like a global replace)!!!