# Self-documenting authoring example

### Sebastien Mondet

Using m4...

#### 1 Some links

We will use M4

## 2 Detailled examples

### 2.1 Creating a "ToDo" tag

Here is the M4 code:

### 2.2 Using command line definitions

```
Here we have the compilation date: Mon Sep 12 12:40:52 CEST 2011 For that we just passed the source:
```

```
Here we have compilation date: {t|_todaydate}
```

through the command:

```
m4 -D_todaydate="$(date)" main.brtx > main.brtx.tmp
```

#### 2.3 Citations

Let's say we want to use BibTeX for LaTeX output and that we have a bibliography site (./biblio/<refname>.html or ./biblio.html#<refname>). We define CITATION:

```
define(CITATION, ifelse(_output_format , HTML,
[{link ./biblio/$1.html|$1}],
{bypass end}\cite{$1}{end}))dnl
```

so that

```
CITATION (mondet08bracetax)
will give us:
{bypass end}\cite{mondet08bracetax}{end}
2.4 Using include
With a simple:
{code verycomplexend}
include(./Makefile)
{verycomplexend}
we obtain:
EXAMPLE_SITE_HTML=main.html main.tex
EXAMPLE_SITE_VIM= Makefile.html main.brtx.html
EXAMPLE_SITE= $(EXAMPLE_SITE_HTML) $(EXAMPLE_SITE_VIM) main.pdf main.tex
all: $(EXAMPLE_SITE)
.PHONY: nopdf
nopdf: $(EXAMPLE_SITE_HTML) $(EXAMPLE_SITE_VIM)
# Generate the HTML page from source:
                                          brtx -html
                                                           brtx -prospro
    source bracetax + M4 ---> pure bracetax ---> HTML
                                                                         HTML
HEVEA_OR_NOT= hevea || echo NoHeveaFound
main.html: main.brtx
m4 -D_todaydate="date'" -D_output_format="HTML" main.brtx > main.brtx.tmp
\ (BRTX2HTML) -doc -title "Bracetax Example" -link-css ../$(CSS) \
    -i main.brtx.tmp -o $@
rm main.brtx.tmp
# Generate the HTML page from source:
                          m4
                                          brtx -html
                                                           brtx -prospro
#
    source bracetax + M4 ---> pure bracetax ---> HTML
                                                                         HTML
main.tex: main.brtx
m4 -D_todaydate="'date'" -D_output_format="LATEX" main.brtx > main.brtx.tmp
brtx -doc -title "Self Documenting Example" -latex -i main.brtx.tmp -o main.tex
rm main.brtx.tmp
```

```
# A PDF with pdflatex
main.pdf: main.tex
pdflatex main && pdflatex main
rm main.log main.aux main.out
# Using VIM to generate an HTML page from a source code
Makefile.html: Makefile
vim -f -R $< \setminus
-c "sy on" \
-c 'colorscheme darkblue' \setminus
-c T0html -c 'w! $0.tmp -c 'qa!' && \
sed -e 's/<title>.*<\/title>/<title>Makefile<\/title>/' \
$@.tmp > $@
rm -f $@.tmp
# Using VIM to generate an HTML page from a source code
# (with the provided - incomplete - vim plugin
main.brtx.html: main.brtx
vim -f -R $< \
-c "sy on" \
-c 'colorscheme darkblue' \
-c 'source ../../tools/bracetax_syntax.vim' \
-c TOhtml -c 'w! $0.tmp' -c 'qa!' && \
sed -e 's/<title>.*<\/title>/<title>Example - source<\/title>/' \
$@.tmp > $@
rm -f $0.tmp
```