

Customizing T_EX_{MACS}

Nicolas Ratier

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1. The T_EX_{MACS} Keyboard

- 5 modifier keys (SChEMA)
- Edit → Preferences → Keyboard → Caps-lock key → Map to H modifier



- | | | | |
|---|-----------|------------------------------|---|
| → | S- | (Shift key combinations) | For writing upper letters (as usual) |
| → | C- | (Control key combinations) | For frequently used editing commands |
| → | H- | (Hyper key combinations) | For producing special symbols |
| → | M- | (Meta key combinations) | For general purpose commands which can be used in all modes |
| → | A- | (Alternate key combinations) | For commands which depend on the mode that you are in |

2. How $\text{T}_{\text{E}}\text{X}_{\text{M}}\text{A}^{\text{C}}\text{S}$ defined its own menus

- The main menu is defined in the file:

`$TEXMACS_PATH/progs/menus/menu-main.scm`

```
(menu-bind texmacs-menu
  (=> "File" (link file-menu))
  (=> "Edit" (link edit-menu))
  (if (not (in-graphics?)) (=> "Insert" (link insert-menu)))
  (if (in-source?) (=> "Source" (link source-menu)))
  (if (in-text?) (=> "Text" (link text-menu)))
  (if (in-math?) (=> "Mathematics" (link mathematics-menu)))
  (if (in-io?) (=> "Session" (link session-main-menu)))
  (if (in-graphics?) (=> "Graphics" (link graphics-menu)))
  (if (in-table?) (=> "Table" (link table-menu)))
  (link texmacs-extra-menu)
  (if (not (in-graphics?)) (=> "Format" (link format-menu)))
  (=> "Document" (link document-menu))
  (if (project-attached?) (=> "Project" (link project-menu)))
  (=> "View" (link view-menu))
  (=> "Go" (link go-menu))
  (=> "Tools" (link tools-menu))
  (=> "Help" (link help-menu)))
```

- The constructor `(menu-bind)` is used to define (or modify) a menu
- The constructor `(link)` is used to link a submenu (defined elsewhere)

- The "File" submenu is defined in the file

\$TEXMACS_PATH/progs/menus/menu-file.scm

```
(menu-bind file-menu
  ("New"                (new-buffer))
  ("Load" ...          (choose-file "Load file" "" 'load-buffer))
  ("Save"               (save-buffer))
  ("Save as" ...       (choose-file "Save TeXmacs file" "texmacs" 'save-buffer))
  ("Revert"            (revert-buffer))
  ---
  (-> "Page setup"     (link page-setup-menu))
  (-> "Print"           (link print-menu))
  (-> "Import"         (promise (import-menu-promise #f)))
  (-> "Export"         (promise (export-menu-promise #f)))
  ---
  ("Pdf" ...           (choose-file "Save pdf file" "pdf" 'print-to-file))
  ("PostScript" ...    (choose-file "Save postscript file" "postscript" 'print-to-file))
  ---
  ("Close buffer"      (safely-kill-buffer))
  ("Close TeXmacs"    (safely-quit-TeXmacs)))
```

3. How to create its own menus

- You must use your personal initialization file:

`$TEMACS_HOME_PATH/progs/my-init-texmacs.scm`

```
(menu-bind texmacs-extra-menu
  (=> "AAA" (link aaa-menu))
  (=> "BBB" (link aaa-menu)))

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;; The AAA menu
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

(menu-bind aaa-menu
  ("AAA 111" (insert "Menu: aaa 111"))
  ("AAA 222" (insert "Menu: aaa 222"))
  ---
  (-> "AAA 333" (link file-menu))
  (-> "AAA 444" (link file-menu)))
```

- The constructor `=>` is used to create pulldown menu
- The constructor `->` is used to create pullright menu
- The constructor `...` is used to separate items of a menu

4. How to create its own keyboard shortcuts

```
;; Keyboard shortcuts only valid in text-mode
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
(kbd-map
  (:mode in-text?)
  ("M-A-w" (insert "Welcome in RMLL 2005"))
  ("e q u ." (begin (insert "Eq. (") (make 'reference) (insert "equ:"))))
  ("f i g ." (begin (insert "Fig. ") (make 'reference) (insert "fig:"))))
  ("t a b ." (begin (insert "Table ") (make 'reference) (insert "tab:"))))
  ("r e f ." (begin (make 'cite) (insert "bib:"))))

;; Keyboard shortcuts only valid in math-mode
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
(kbd-map
  (:mode in-math?)
  ("g r a d ." (insert "<nabla>"))
  ("d i v ." (insert "<nabla><cdot>"))
  ("r o t ." (insert "<nabla><times>")))

(kbd-map
  (:mode in-math?)
  ("e q u ." (begin (make 'label) (insert "equ:"))))
```

- Example

Welcome in RMLL 2005

grad, div, rot: $\nabla \nabla \cdot \nabla \times$

5. How to create its own icons menu

```

;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;
;; User defined icons
;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;

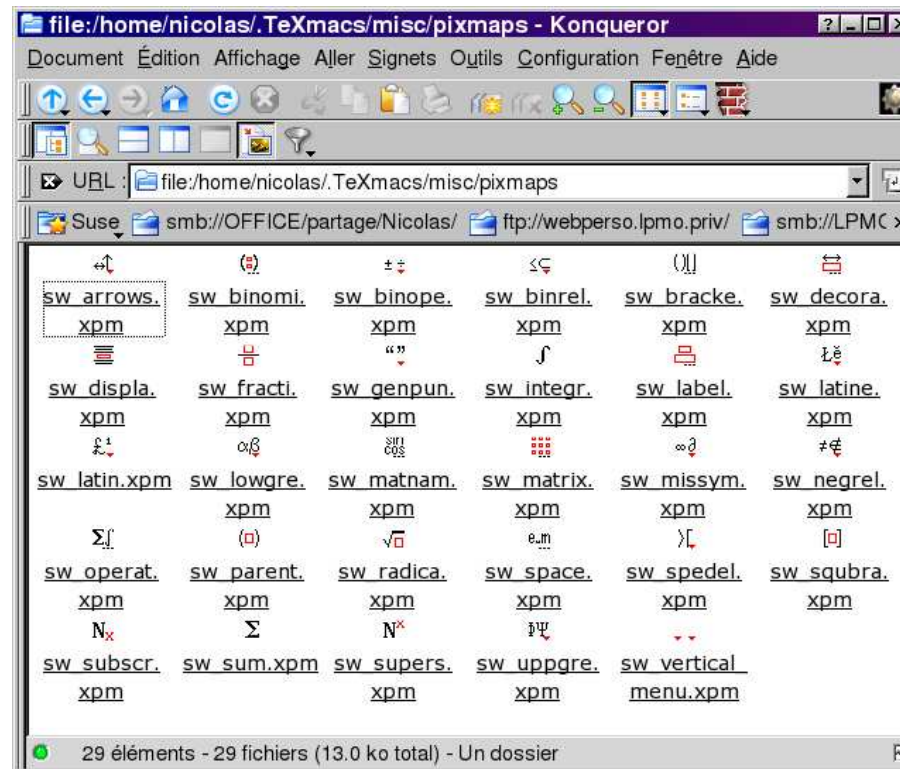
(menu-bind texmacs-extra-icons
  (=> (balloon (icon "sw_lowgre.xpm") "Lowercase Greek")
      (tile 4 (link sciword-lowercase-greek))))
  (=> (balloon (icon "sw_uppgre.xpm") "Uppercase Greek")
      (tile 2 (link sciword-uppercase-greek))))
  |
  (=> (balloon (icon "sw_binope.xpm") "Binary Operations")
      (tile 5 (link sciword-binary-operations))))
  (=> (balloon (icon "sw_binrel.xpm") "Binary Relations")
      (tile 7 (link sciword-binary-relations))))
  (=> (balloon (icon "sw_negrel.xpm") "Negated Relations")
      (tile 5 (link sciword-negated-relations))))
  |
  (=> (balloon (icon "sw_arrows.xpm") "Arrows")
      (tile 5 (link sciword-arrows))))
  (=> (balloon (icon "sw_missym.xpm") "Miscellaneous Symbols")
      (tile 5 (link sciword-miscellaneous-symbols))))
  (=> (balloon (icon "sw_spedel.xpm") "Specials Delimiters")
      (tile 2 (link sciword-specials-delimiters))))

```

- The constructor | is used to separate icons of a menu

```
;;-----  
;; Lowercase Greek  
;;-----  
  
(menu-bind sciword-lowercase-greek  
  (symbol "<alpha>")    (symbol "<beta>")      (symbol "<gamma>")    (symbol "<delta>")  
  (symbol "<epsilon>")  (symbol "<varepsilon>") (symbol "<zeta>")      (symbol "<eta>")  
  (symbol "<theta>")    (symbol "<vartheta>")  (symbol "<iota>")      (symbol "<kappa>")  
  (symbol "<lambda>")  (symbol "<mu>")        (symbol "<nu>")        (symbol "<xi>")  
  (symbol "<pi>")       (symbol "<varpi>")    (symbol "<rho>")       (symbol "<sigma>")  
  (symbol "<varsigma>") (symbol "<tau>")       (symbol "<upsilon>")  (symbol "<phi>")  
  (symbol "<varphi>")  (symbol "<chi>")       (symbol "<psi>")       (symbol "<omega>")  
  (symbol "<varkappa>") (symbol "<varrho>"))  
  
;;-----  
;; Uppercase Greek  
;;-----  
  
(menu-bind sciword-uppercase-greek  
  (symbol "<Gamma>") (symbol "<Delta>")  
  (symbol "<Theta>") (symbol "<Lambda>")  
  (symbol "<Xi>")    (symbol "<Pi>")  
  (symbol "<Sigma>") (symbol "<Upsilon>")  
  (symbol "<Phi>")   (symbol "<Psi>")  
  (symbol "<Omega>") (symbol "<digamma>"))  
...  
)
```


- The icons in *.xpm format must be put in the directory
 $\$TEXMACS_HOME_PATH/misc/pixmaps$



- The user's icons must be made visible:
 View → User provided icons