ユーティリティ関数群

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4. provide

<u>init.el</u> に記述していた便利関数を,utility.el として分離しています.init.el では autoload を 用いて utility.el を遅延読み込みするように設定してます.このようなファイルの分離で 60[ms]ほど起動を高速化できます.

注意:コピペだけでは動かない可能性があります.

1. org バッファを評価

org-buffer を評価して Emacs の設定ファイルを生成 / 読み込みまでを自動化します.この設定では, init.org と utility.org の 2 つのバッファでのみ評価されるようになっています.

2. ユーティリティ関数

2.1. サボっていると Kyoko さんに怒られる

MacOS 用の関数です.別途,Kyoko さんの音声をインストールしておく必要があります. Mavericks だと,Otoya さんも使えます.

2.2. org-buffer を dokuwiki 形式に変換し, kill-ring に格納

外部プログラム org2dokuwiki.pl を使います.

2.3. コンソールでカレントバッファのあるディレクトリに移動する

Finder で開きたいだけならば, M-! でミニバッファに open . と打ち込むだけです.

```
(defcustom open-current-directory-console-program "iTerm2.app"
   "Specify a console program"
   :type 'string
   :group 'takaxp-mac)
;;;###autoload
(defun open-current-directory ()
   " Open Current Directory for MacOSX
   0) Put this function in your .emacs
```

2.4. ファイルに含まれるテーブルを使って定時にアラートを表示する

```
(defun my:update-alarms-from-file ()
  (when (string= "trigger.org" (buffer-name))
    (set-alarms-from-file "~/Dropbox/org/trigger.org")))
;;;###autoload
(defun set-alarms-from-file (file)
 "Make alarms from org-mode tables. If you have an org-mode file
    with tables with the following format:
    |-----|
    | Flag | Time | Content
    |-----|
          | 07:00 | Wakeup
          | Read papers
         | 12:00 | Clean up your desk |
    When it is 7:00 and 12:00, Growl notify with a message which is specified
    content column from the table. \"Read papers\" will be ignored.
    \"Clean up your desk\" will be shown by sticky mode"
     ((lines (read-line file)))
    (cancel-function-timers 'my:desktop-notify) ;; clear existing timers
     (set-alarm-from-line (decode-coding-string (car lines) 'utf-8))
     (setq lines (cdr lines)))))
;;;###autoload
(defun set-alarm-from-line (line)
 (let
     ((hour nil)
      (min nil)
      (current-hour nil)
      (current-min nil)
      (action nil))
    (when (string-match "\\([0-2]?[0-9]\\):\\([0-5][0-9]\\)" line)
     (setq hour (substring line (match-beginning 1) (match-end 1)))
     (setq min (substring line (match-beginning 2) (match-end 2)))
     (when (string-match
            "\|\\s-*\\([^\|]+[^ ]\\)\\s-*\|$" line (match-end 2))
       (setq action
             (substring line (match-beginning 1) (match-end 1)))))
    (when (and (and hour min) action)
               (message "[%s:%s] => %s" hour min action)
     (setq current-hour (format-time-string "%H" (current-time)))
```

```
(setq current-min (format-time-string "%M" (current-time)))
      (when (> (+ (* (string-to-number hour) 60)
                  (string-to-number min))
               (+ (* (string-to-number current-hour) 60)
                  (string-to-number current-min)))
        (let
            ((s nil))
          (when (string-match "^{\}|\\s-^{*}X\\s-^{*}\|" line)
           (setq s 'sticky))
          ;; (set-notify-growl hour min action s)
          (set-notify-osx-native hour min action s)
                       (set-notify-mail hour min action s)
         ))))))
;; (when (autoload-if-found
         '(todochiku-message)
;;
         "todochiku" nil t)
;;
    (eval-when-compile
;;
      (require 'todochiku nil t))
;;
    (with-eval-after-load "todochiku"
;;
      (setq todochiku-icons-directory "~/Dropbox/emacs.d/todochiku-icons")
;;
       (add-to-list 'todochiku-icons '(emacs . "emacs.png"))
;;
      (require 'cl-lib)))
;;
;;;###autoload
(defun my:desktop-notify (type title hour min action s)
 (cond
  ;; ((string= type "growl")
  ;; (todochiku-message
  ;; title (format "%s:%s %s" hour min action) "Emacs" s))
  ((string= type "osx-native")
   (terminal-notifier-notify
    title
    (format "%s:%s %s" hour min action)))
   (t nil)))
(defun set-notify-mail (hour min action s)
  (run-at-time (format "%s:%s" hour min) nil
               'my:desktop-notify
               "mail" "りまいんだ" hour min action nil))
(defun set-notify-growl (hour min action s)
 (run-at-time (format "%s:%s" hour min) nil
               'my:desktop-notify
               "growl" "== REMINDER ==" hour min action s))
(defun set-notify-osx-native (hour min action s)
 "terminal-notifier is required."
 ;; (message "%s:%s %s %s" hour min action s)
 (run-at-time (format "%s:%s" hour min) nil
               'my:desktop-notify
               "osx-native" "Emacs" hour min action nil))
(defun read-line (file)
 "Make a list from a file, which is divided by LF code"
 (with-temp-buffer
    (insert-file-contents-literally file)
    (split-string
     (buffer-string) "\n" t)))
```

2.5. 頻繁に利用するファイルを ring 形式でたどる

http://d.hatena.ne.jp/rubikitch/20111120/elispbook

```
(defvar my:file-ring nil)
;;;###autoload
(defun takaxp:make-file-ring (files)
 (setq my:file-ring (copy-sequence files)))
     (setf (cdr (last my:file-ring)) my:file-ring))
(takaxp:make-file-ring
 '("~/Dropbox/org/work.org" "~/Dropbox/org/daily.org" "~/Dropbox/org/wg1.org"
  "~/Dropbox/org/research.org" "~/Dropbox/emacs.d/config/init.org"))
;;;###autoload
(defun takaxp:open-file-ring ()
 (interactive)
 (find-file (car my:file-ring))
 (setq my:file-ring
        (append (cdr my:file-ring)
                (list (car my:file-ring)))))
      (setq my:file-ring (cdr my:file-ring)))
```

2.6. 引数の org バッファを開く

2.7. org パッファにいつものヘッダを追加する

2.8. 議事録ひな形を書き入れる

2.9. ランダムの文字列を取得する

引数で桁数を渡すと,ランダムな数値の文字列を取得できます.org-mode で適当なタイトルのツリーを生成したい時に使っています.

```
(defun get-random-string (length)
 "Get a string contain the length digit number with random selection"
 (interactive)
 (random t)
 (cond ((> length 0)
         (let
             ((count length)
              (string nil)
              (tmp nil))
           (while (< 0 count)
             (setg count (1- count))
             (setq tmp string)
             (setq string
                   (concat tmp (number-to-string (random 10)))))
           (message "%s" string)))
        (t "0")))
```

2.10. Auto-install をセットアップする

いつも auto-install を使うわけではないので,必要時に init-auto-install を実行して パラメータを設定してから auto-install でパッケージを取得するようにしています. cask+pallet 環境に移行してからは使っていません.

2.11. 行頭に" - "を挿入する

2.12. 日付などを簡単に挿入する

http://www.fan.gr.jp/~ring/doc/elisp 20/elisp 38.html#SEC608

2.12.1. キーバインド

```
(global-set-key (kbd "C-0") 'insert-formatted-current-date) (global-set-key (kbd "C-9") 'insert-formatted-current-time)
```

2.13. XHTML を利用したガントチャート生成

最近使っていません.

```
(defcustom my:auto-install-batch-list-el-url nil
  "URL of a auto-install-batch-list.el"
  :type 'string
  :group 'takaxp-utility)
```

```
;; Publish an xml file to show a Gantt Chart
(defcustom default-timeline-csv-file nil
 "source.csv"
 :type 'string
 :group 'takaxp-utility)
(defcustom default-timeline-xml-business-file nil
 "XML file for business schedule"
 :type 'string
 :group 'takaxp-utility)
(defcustom default-timeline-xml-private-file nil
 "XML file for private schedule"
 :type 'string
 :group 'takaxp-utility)
(defcustom default-timeline nil
 "a template index.html"
 :type 'string
  :group 'takaxp-utility)
(with-eval-after-load "org"
  (defun export-timeline-business ()
   "Export schedule table as an XML source to create an web page"
    (interactive)
    (when (and default-timeline
               (and default-timeline-csv-file
                    default-timeline-xml-business-file))
      (shell-command-to-string (concat "rm -f " default-timeline-csv-file))
      (org-table-export default-timeline-csv-file "orgtbl-to-csv")
      (shell-command-to-string (concat "org2gantt.pl > "
                                       default-timeline-xml-business-file))
      (shell-command-to-string (concat "open " default-timeline)))))
(defun export-timeline-private ()
 "Export schedule table as an XML source to create an web page"
  (interactive)
  (when (and default-timeline
             (and default-timeline-csv-file
                  default-timeline-xml-private-file))
    (shell-command-to-string (concat "rm -f " default-timeline-csv-file))
    (org-table-export default-timeline-csv-file "orgtbl-to-csv")
    (shell-command-to-string (concat "org2gantt.pl > "
                                     default-timeline-xml-private-file))
    (shell-command-to-string (concat "open " default-timeline))))
```

2.14. 定期実行関数

org バッファからカレンダーを生成し,外部サーバに投げます.また,MobileOrg に最新情報を流しています.

2.15. ブラウザの設定

```
;; http://stackoverflow.com/questions/4506249/how-to-make-emacs-org-mode-open-
links-to-sites-in-google-chrome
;; http://www.koders.com/lisp/fidD53E4053393F9CD578FA7D2AA58BD12FDDD8EB89.aspx?
s="skim
(when (autoload-if-found
       '(browse-url)
       "browse-url" nil t)
  (with-eval-after-load "browse-url"
    (cond
     ((eq window-system 'ns)
      (setq browse-url-generic-program 'google-chrome))
     ((eq window-system 'mac)
      (setq browse-url-browser-function 'browse-url-generic)
      (setq browse-url-generic-program "/Applications/Google
Chrome.app/Contents/MacOS/Google Chrome"))
     (t
      nil))))
;; (setq browse-url-browser-function 'browse-url-default-macosx-browser)
;; (setq browse-url-browser-function 'browse-url-default-windows-browser)
;; (setq browse-url-browser-function 'browse-url-chrome)
```

2.16. ミニバッファに日時を表示

2.17. バックアップファイルの削除

```
"Delete backup files created in yesterday.
> find ~/.emacs.d/backup -type f -name '*YY-MM-DD *' -print0 | xargs -0"
(interactive)
(unless day-shift
  (setq day-shift 1))
(let* ((backup-dir "~/.emacs.d/backup")
       (cmd (concat "find " backup-dir "
                                         -type f -name \'*"
                    (format-time-string
                     "%y-%m-%d "
                     (time-subtract (current-time)
                                     (seconds-to-time
                                     (* day-shift (* 24 3600)))))
                    "*\' -print0 | while read -r -d \'\' file; "
                    " do echo -n \" \\\"file\\\"\"; done | xargs -0"))
       (files (shell-command-to-string cmd)))
         (message "%s" cmd)
  (unless (string= files "")
    (message "%s" files)
    (shell-command-to-string (concat "rm -r " files)))))
```

2.18. 日中と夜中でテーマを切り替える

```
;;;###autoload
(defun my:daylight-theme ()
  (interactive)
  (when (require 'daylight-theme nil t)
        (mapc 'disable-theme custom-enabled-themes)
        (load-theme 'daylight t)
        (moom-reset-font-size)))

;;;###autoload
(defun my:night-theme ()
    (interactive)
  (when (require 'night-theme nil t) ;; atom-one-dark-theme
        (mapc 'disable-theme custom-enabled-themes)
        (load-theme 'night t)
        (moom-reset-font-size)))
```

2.19. chomp

改行コードを削除した文字列を返す.

2.20. iTerm2.app を呼び出す関数

```
;;;###autoload
(defun my:cmd-to-open-iterm2 ()
  (interactive)
  (shell-command-to-string "open -a iTerm2.app"))
```

2.21. lingr にログインする

```
(defun my:lingr-login ()
  (when (string= "Sat" (format-time-string "%a"))
    (lingr-login)))
```

2.22. 特定のファイルを Dropbox 以下にバックアップする

```
(defun my:backup (files &optional dropbox)
 "Backup a file to `Dropbox/backup' directory. If `dropbox' option is provided
then the value is uased as a root directory."
 (interactive "P")
  (let ((system (system-name))
        (rootdir (or dropbox "~/Dropbox")))
    (if (and system
             (stringp rootdir)
             (file-directory-p (or rootdir (expand-file-name rootdir))))
        (mapc
         (lambda (file)
           (if (and (stringp file)
                    (file-readable-p (or file (expand-file-name file))))
               (shell-command-to-string
                (concat "cp -f " file " " rootdir "/backup/" system "/"))
             (message (format "--- backup failure: %s" file))))
         (if (listp files)
             files
           (list files)))
      (message (format "--- backup-dir does not exist: %s" rootdir)))))
```

2.23. その他

```
;;; Test function from GNU Emacs (O'REILLY, P.328)
;;;###autoload
(defun count-words-buffer ()
 "Count the number of words in the current buffer"
  (interactive)
  (save-excursion
    (let ((count 0))
      (goto-char (point-min))
      (while (< (point) (point-max))</pre>
        (forward-word 1)
        (setq count (1+ count)))
      (message "buffer contains %d words." count))))
   ;;; Test function for AppleScript
    ;;; Cite: http://sakito.jp/emacs/emacsobjectivec.html
(defun do-test-applescript ()
 (interactive)
 (do-applescript
   (format
    (concat
     "display dialog \"Hello world!\" \r"))))
;;;###autoload
(defun describe-timer ()
 "see http://masutaka.net/chalow/2009-12-05-1.html"
 (interactive)
 (let ((tl timer-list) time
        (timer nil))
```

```
(pop-to-buffer (get-buffer-create "*timer*"))
(erase-buffer)
(insert
"TIME
               FUNCTION\n"
(while tl
 (setq timer (car tl))
 (insert
  (concat
    (format-time-string "%m/%d %T"
                         (list (aref timer 1)
                               (aref timer 2)
                               (aref timer 3)))
   11 11
    (symbol-name (aref timer 5))
   "\n"))
  (setq tl (cdr tl)))
(read-only-mode 1)))
```

3. 未設定 / テスト中

3.1. byte-compile の警告を抑制する

```
;; Avoid warning (for sense-region)
;; Warning: 'mapcar' called for effect; use 'mapc' or 'dolist' insted
(setq byte-compile-warnings
    '(free-vars unresolved callargs redefine obsolete noruntime
    cl-functions interactive-only make-local))
```

3.2. [window-resizer.el] 分割したウィンドウサイズを変更する

http://d.hatena.ne.jp/khiker/20100119/window resize

以下の警告を参考に書き換えた、

```
In my:window-resizer:
utility.el:333:23:Warning: `last-command-char' is an obsolete variable (as of
   Emacs at least 19.34); use `last-command-event' instead.
;;;###autoload
(defun takaxp:window-resizer ()
  "Control separated window size and position.
  Type {j,k,l,m} to adjust windows size."
  (interactive)
  (let ((window-obj (selected-window))
        (current-width (window-width))
        (current-height (window-height))
        (dx (if (= (nth 0 (window-edges)) 0) 1
              -1))
        (dy (if (= (nth 1 (window-edges)) 0) 1
              -1))
        action c)
    (catch 'end-flag
      (while t
        (setq action
              (read-key-sequence-vector (format "size[%dx%d]"
```

```
(window-width)
                                          (window-height))))
(setq c (aref action 0))
(cond ((= c ?1)
       (enlarge-window-horizontally dx))
       (shrink-window-horizontally dx))
      ((= c ?j)
       (enlarge-window dy))
      ((= c ?k)
       (shrink-window dy))
      ;; otherwise
      (t
       (let ((last-command-event (aref action 0))
             (command (key-binding action)))
         (when command
           (call-interactively command)))
       (message "Quit")
       (throw 'end-flag t)))))))
```

3.3. [idle-requie]

```
(require 'idle-require)
(idle-require-mode 1)
```

3.4. [pdf-preview]

```
(require 'pdf-preview)
```

3.5. [EasyPG]

```
(when (require 'epa-setup nil t)
  (epa-file-enable))
```

3.6. [eblook]

```
;; eblook
(when (require 'eblook nil t)
  (autoload 'edict-search-english "edic"
    "Search for a translation of an English word" t)
  (autoload 'edict-search-kanji "edict"
    "Search for a translation of a Kanji sequence" t)
  (setq *edict-files* '("/Users/taka/Dropbox/Dic/LDOCE4"))
  (setq *edict-files* '("/Users/taka/Downloads/edict/edict")))
```

3.7. [iBuffer]

iBuffer で list-buffers をオーバーライド (C-x C-b で表示)

```
(defalias 'list-buffers 'ibuffer)
```

3.8. UUID をファイル名にして所定のディレクトリにコピー / 移動

• すでに org-attach が存在するので用途が微妙に . . .

```
(defvar org-att-global-directory "~/Dropbox/org/attachment/")
(defun copy-file-with-uuid (input)
 (interactive "FFile name: ")
 (if (file-exists-p input)
      (let* ((id (org-id-uuid))
             (filename (expand-file-name input))
             (directory (file-name-directory filename))
             (extension (file-name-extension filename))
             (output (concat org-att-global-directory id "." extension)))
        (copy-file filename output)
        (message "--- Copied as %s " output)
       output)
    (message "--- %s does NOT exist." input)
   nil))
(defun rename-file-with-uuid (input)
 (interactive "FFile name: ")
 (if (file-exists-p input)
      (let* ((id (org-id-uuid))
             (filename (expand-file-name input))
             (directory (file-name-directory filename))
             (extension (file-name-extension filename))
             (output (concat directory id "." extension)))
        (rename-file filename output)
        (message "--- Renamed as %s " output)
       output)
    (message "--- %s does NOT exist." input)
   nil))
(defun org-link-uuid (input &optional overwrite)
 (interactive "FFile name: ")
  (let ((output
         (if overwrite
             (rename-file-with-uuid input)
           (copy-file-with-uuid input))))
    (when output
      (insert (concat "[[file+sys:" output
                      "][" (file-name-base input) "]]\n"))))
```

3.9. キーバインド

```
;; Multiple combination
; Editing with a rectangle region
(global-set-key (kbd "C-x r C-SPC") 'rm-set-mark)
(global-set-key (kbd "C-x r C-x") 'rm-exchange-point-and-mark)
(global-set-key (kbd "C-x r C-w") 'rm-kill-region)
(global-set-key (kbd "C-x r M-w") 'rm-kill-ring-save)
```

4. provide

以上です.