# ユーティリティ関数群

### Takaaki Ishikawa

#### **Table of Contents**

- 1. org バッファを評価
- 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
  - 2.2. org-buffer を dokuwiki 形式に変換し, kill-ring に格納
  - 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
  - 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
  - 2.5. 頻繁に利用するファイルを ring 形式でたどる
  - 2.6. 引数の org バッファを開く
  - 2.7. org バ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
  - 2.10. Auto-install をセットアップする
  - 2.11. 行頭に" "を挿入する
  - 2.12. 日付などを簡単に挿入する
    - 2.12.1. キーバインド
  - 2.13. XHTML を利用したガントチャート生成
  - 2.14. 定期実行関数
  - 2.15. ブラウザの設定
  - 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
  - 2.18. 日中と夜中でテーマを切り替える
  - 2.19. chomp
  - 2.20. その他
- 3. 未設定 / テスト中
  - 3.1. byte-compile の警告を抑制する
  - 3.2. [window-resizer.el] 分割したウィンドウサイズを変更する
  - 3.3. [idle-requie]
  - 3.4. [pdf-preview]
  - 3.5. [EasyPG]
  - 3.6. [eblook]
  - 3.7. [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
  - 3.9. キーバインド
- 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
 1) M-x open-current-directory
 2) Terminal will open automatically
 3) Type M-v to paste and move to a path to the current directory in Emacs"
 (interactive)
 (let ((file-path (buffer-file-name (current-buffer))))
    (unless (string= file-path nil)
      (let ((directory
             (substring file-path 0
                         (length file-path)
                         (length (buffer-name (current-buffer)))))))
        (message "%s" directory)
        (shell-command-to-string (concat "echo cd " directory " |pbcopy"))
        (shell-command-to-string
         (concat "open -a " open-current-directory-console-program))))))
```

### 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
    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
   (while lines
     (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
     (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/wgl.org"
   "~/Dropbox/org/research.org" "~/Dropbox/emacs.d/config/init.org"
   "~/Dropbox/emacs.d/config/utility.org" "~/Dropbox/org/buffer.org"
   "~/Dropbox/org/next.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

```
;;;###autoload
(defun show-org-buffer (file)
   "Show an org-file on the current buffer"
   (interactive)
   (if (get-buffer file)
        (let ((buffer (get-buffer file)))
            (switch-to-buffer buffer)
            (message "%s" file))
        (find-file (concat "~/Dropbox/org/" file))))
```

### 2.7. org バ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.

#### 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

```
(defun insert-formatted-current-date ()
"Insert a timestamp at the cursor position. C-u will add [] brackets."
```

```
(interactive)
 (insert (format-time-string "%Y-%m-%d")))
(defun insert-formatted-current-time ()
 (interactive)
 (insert (format-time-string "%H:%M")))
(defun insert-formatted-signature ()
 (interactive)
 (insert (concat (format-time-string "%Y-%m-%d") " user-full-name
                 " <" user-mail-address ">")))
(defun insert-formatted-current-date (arg)
 "Insert a timestamp at the cursor position. C-u will add [] brackets."
 (interactive "p")
 (case arg
   (4 (if (equal major-mode 'org-mode)
           (org-time-stamp-inactive)
         (insert (format-time-string "[%Y-%m-%d]"))))
   (t (insert (format-time-string "%Y-%m-%d")))))
(defun insert-formatted-current-time ()
 (interactive)
 (insert (format-time-string "%H:%M")))
(defun insert-formatted-signature ()
 (interactive)
  (insert (concat (format-time-string "%Y-%m-%d") " user-full-name
                 " <" user-mail-address ">")))
```

#### 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
```

#### 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

```
;; find ~/.emacs.d/backup -type f -name '*15-04-24 *' -print0 | while read -r
-d '' file; do echo -n " \"$file\""; done | xargs -0
(defun recursive-delete-backup-files (count)
  (if (= count 1)
      1
    (recursive-delete-backup-files (1- count)))
  (delete-backup-files count))
;;;###autoload
(defun delete-backup-files (&optional day-shift)
  "Delete backup files created in yesterday.
 > find ~/.emacs.d/backup -type f -name '*YY-MM-DD *' -print0 | xargs -0"
  (interactive)
  (unless day-shift
    (setq day-shift 1))
  (let* ((backup-dir "~/.emacs.d/backup")
         (cmd (concat "find " backup-dir " -type f -name \'*"
                       (format-time-string
                        "%y-%m-%d "
                        (time-subtract (current-time)
                                        (seconds-to-time
                       (* day-shift (* 24 3600))))
"*\'-print0 | while read -r -d \'\' file; "
                       " do echo -n \" \\\"$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)
    (setq my:cursor-color-ime-on "#91C3FF")
    (load-theme 'daylight t)
    (set-face-foreground 'vertical-border (face-background 'default))
    (set-face-background 'vertical-border (face-background 'default))
    (reset-font-size)))
;;;###autoload
(defun my:night-theme ()
  (interactive)
  (when (require 'night-theme nil t) ;; atom-one-dark-theme
         (set-face-background 'hl-line "#484c5c")
    (setq my:cursor-color-ime-on "#8599ff")
    (load-theme 'night t)
    (set-face-foreground 'vertical-border (face-background 'default))
    (set-face-background 'vertical-border (face-background 'default))
    (reset-font-size)))
```

### 2.19. chomp

改行コードを削除した文字列を返す.

#### 2.20. 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

# 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、

```
-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))
          ((= c ?h)
           (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 )

### 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

(provide 'utility)