

Emacs Configuration

Brad Mitchell

April 8, 2019

Contents

1	How to use	8
2	Add Package Repositories	8
3	Set meta key to command	8
4	Security	9
4.1	Check TLS	9
4.2	TODO Do more with local certs and check bad ssl	9
5	Automatic package installation	9
5.1	Install <code>use-package</code>	9
5.2	Trigger <code>use-package</code>	9
6	Configure Helm	9
6.1	Make everything fuzzy and also rebind functions.	9
6.2	Imenu + Helm with <code>imenu-anywhere</code>	10
6.3	Install <code>helm-system-packages</code>	10
7	Version Control	10
7.1	Enable <code>magit</code>	11
7.2	Enable <code>forge</code>	11
7.3	Add <code>git-timemachine</code>	11
8	Set personal information	11

9	Utility functions	11
9.1	Generate scratch buffer	11
9.2	Sudo the current buffer	11
9.3	Show xkcd on start	12
9.4	Replace JSON web token in buffer	12
9.5	Open all marked files in Direcd	12
9.6	Open the current file in browser.	12
9.7	XML Format function	13
9.8	Refill paragraphs to be on one line	13
9.9	Copy filename and path to clipboard	13
9.10	Align docstring	14
9.11	Rename local variable	14
9.12	Increment/decrement number at point	14
9.13	Comment a line	14
9.14	Quickly edit this config file	15
9.15	Send the current selection in an email	15
9.16	Move files more intuitively	15
9.17	Insert a filename at point	16
9.18	Insert a relative filename at point	16
9.19	Format long function parameter list into multiline	16
9.20	Eshell here	16
9.21	Show pwd relative to current project	17
9.22	Add JIRA ticket number to commit messages	17
9.23	Get my public IP	17
10	Custom key bindings	17
10.1	Quickly revert a buffer	17
10.2	Quickly evaluate a buffer or a region	18
10.3	Use the Mac Style Home/End keys	18
10.4	Quickly turn on auto-fill	18
10.5	Hungry delete forward available everywhere	18
10.6	Increment number easily	18
10.7	Comment the current line	18
11	Org-mode	18
11.1	Set environment	18
11.2	Utility functions	19
11.3	Use syntax highlighting in source blocks while editing	19
11.4	Set a dark background for source blocks	19
11.5	Setup Org Agenda	19

11.6	Setup Org Capture	19
11.7	Add more states	19
11.8	Enable <code>flyspell</code>	20
11.9	Setup <code>org-babel</code>	20
11.10	Enable <code>org-bullets</code>	20
11.11	Display images inline	20
11.12	Register more exports	20
11.13	Setup quick access to org files	20
11.14	Use <code>org-journal</code>	21
12	Register RSS feeds	21
13	Startup behavior	21
13.1	Toggle fullscreen by default	21
13.2	Disable the big fat toolbars	21
13.3	Disable the scroll bar	21
13.4	Disable splash screen	21
13.5	Empty Scratch buffer	22
13.6	Show xkcd comic of the day on start	22
14	Window behavior	22
14.1	Disable the bell	22
14.2	Adjust scrolling behavior	22
14.3	Always ask for confirmation before quitting	22
14.4	Highlight the current line	22
14.5	Use the back/forward mouse keys	23
15	Better defaults	23
15.1	Replace <code>dabbrev</code> with <code>hippie-expand</code>	23
15.2	Replace <code>isearch</code> with <code>regexp search</code>	23
15.3	Save all backup files to a common folder	23
15.4	Replace 'yes/no' by just 'y/n'	23
15.5	Auto reload tags	23
15.6	Disable warning for <code>narrow-to=region</code>	23
16	Load Cool Theme	24
17	Customize the mode-line	24
17.1	A small trim of the original	24
17.2	Load Tarsius' minions	24

18	Fonts	24
19	Terminal Configuration	25
20	Dictionary Configuration	25
21	Snippets	25
22	Code Format	26
22.1	Default tab and indetation	26
22.2	Add a new line at the end of files	26
22.3	Delete trailing white spaces on save	26
22.4	Set Unix file coding system	26
22.5	Automatically indent yanked code	26
22.6	Define comment syntax	27
22.7	Enable <code>poporg</code>	27
22.8	Enable <code>prog-fill</code>	27
23	Parenthesis Support	27
24	Package management	28
24.1	Enable <code>paradox</code>	28
25	Internal Doc Enhancement	28
25.1	Setup <code>helpful</code> for <code>prettier</code> doc	28
25.2	Setup <code>elisp-demos</code> for code example	28
26	Navigation	28
26.1	Enable <code>avy</code>	28
26.2	Enable <code>win-switch</code>	28
26.3	Enable <code>which-key</code>	29
26.4	Enable <code>winner-mode</code>	29
26.5	Enable <code>smooth-scrolling</code>	29
26.6	Enable <code>neotree</code>	29
26.7	Enable <code>ibuffer</code>	29
26.8	Enable <code>yascroll</code>	29
26.9	Enable <code>minimap</code>	30
26.10	Enable <code>rotate</code>	30
26.11	Enable <code>anzu</code>	30
26.12	Enable <code>hamburger-menu</code>	30
26.13	Enable <code>origami</code>	30

26.14	Enable eyebrowse	30
27	Edition	31
27.1	Enable multiple-cursors	31
27.2	Enable zzz-to-char	31
27.3	Enable whole-line-or-region	31
27.4	Enable viking-mode	31
27.5	Enable undo-tree	32
27.6	Enable volatile-highlights	32
27.7	Enable ciel	32
27.8	Enable fancy-narrow	32
28	General Code	33
28.1	Enable projectile	33
28.2	Enable company	33
28.3	Enable flycheck	33
28.4	Enable electric-operator	34
28.5	Enable dumb-jump	34
28.6	Enable highlight-numbers	34
29	Emacs Lisp	35
29.1	Enable eldoc	35
29.2	Enable rainbow-delimiters	35
29.3	Enable paredit	35
29.4	Enable eros	35
29.5	Enable simple-call-tree	35
29.6	Enable suggest	35
30	MySQL	36
30.1	Always make MySQL the default product	36
30.2	Enable sqlup-mode	36
30.3	Enable mysql-to-org	36
31	PHP	36
31.1	Enable php-mode	36
31.2	Enable company-php	36
31.3	Enable php-eldoc	37
31.4	Enable phpcbf	37

32 Web	37
32.1 Enable <code>web-mode</code>	37
32.2 Enable <code>emmet-mode</code>	37
33 Javascript	37
33.1 Enable <code>js2-mode</code>	37
33.2 Enable <code>js2-refactor</code>	38
33.3 Enable <code>js-doc</code>	38
33.4 Enable <code>rjsx-mode</code>	38
34 Typescript	38
34.1 Enable <code>tide</code>	38
34.2 Enable <code>tide</code> for <code>tsx</code>	38
35 Go	39
35.1 Enable <code>go-mode</code>	39
35.2 Enable <code>company-go</code>	39
35.3 Enable <code>go-stackstracer</code>	39
35.4 Enable <code>go-add-tags</code>	40
35.5 Enable <code>go-eldoc</code>	40
35.6 Enable <code>go-gopath</code>	40
35.7 Enable <code>go-direx</code>	40
35.8 Enable <code>gotest</code>	40
35.9 Integrate <code>moq</code>	40
35.10 See test coverage faster	40
36 Python	41
36.1 Setup <code>python-mode</code>	41
36.2 Enable <code>company-jedi</code>	41
36.3 Custom functions for <code>pipenv</code>	41
37 Docker	41
37.1 Setup <code>Dockerfile-mode</code>	41
38 Logs	41
38.1 Enable <code>syslog-mode</code>	41
38.2 Turn on <code>auto-revert-tail-mode</code> for log files	41
38.3 Quickly check <code>syslog</code>	42

39 Eshell	42
39.1 Configuration	42
39.2 Fancy prompt	42
39.3 Define visual commands and subcommands	43
39.4 Pager setup	43
39.5 Enable autojump	43
39.6 Aliases	43
39.7 Extra shell functions	43
39.7.1 Clear function	43
39.7.2 Git	43
39.7.3 Bargs and Sargs	43
39.7.4 Close	44
39.8 Smoother bindings	44
39.9 Close window on exit	44
40 Dired	45
40.1 Enable dired-x	45
40.2 Use human-readable sizes	45
41 YAML	45
41.1 Enable yaml-mode	45
41.2 Enable flycheck-yamllint	45
41.3 Enable indentation highlight	45
42 Restclient	45
42.1 Setup restclient	45
42.2 Enable company-restclient	45
42.3 Integrate to org-mode	46
43 PlantUML	46
43.1 Enable plantuml-mode	46
43.2 Download and hook up plantuml.jar	46
44 Redis	46
45 Extra Packages	47
46 Extra file loading	48
47 Key Frequency	48

48 Cheat Sheet	48
48.1 Setup	48
48.2 Common	48
48.3 Org	49
48.4 Projectile	50
48.5 Emacs Lisp	50
48.6 Code	51
48.7 Multiple cursors	51
48.8 Dumb Jump	51
48.9 MySQL-to-Org	52
48.10Paredit	52
48.11Origami	53
48.12Eyebrowse	53

1 How to use

The `.emacs` file in home directory should only contain

```
(load-file "~/emacs-config/bootstrap.el")
```

where the path to `bootstrap.el` is adjusted to wherever you cloned this repo. This will also automatically pull the latest version of the config on startup, unless you forbid it with

```
(setq config-no-auto-update t)
```

2 Add Package Repositories

```
(require 'package)
(add-to-list 'package-archives '("melpa" . "https://melpa.org/packages/") t)
(add-to-list 'package-archives '("org" . "http://orgmode.org/elpa/") t)
(package-initialize)
```

3 Set meta key to command

```
(setq mac-command-modifier 'meta)
(setq mac-option-modifier 'super)
```


4 Security

Inspired by ogbe.net and [Your Text Editor Is Malware](http://YourTextEditorIsMalware.com).

4.1 Check TLS

```
(setq tls-checktrust t)
(setq gnutls-verify-error t)
```

4.2 TODO Do more with local certs and check bad ssl

5 Automatic package installation

5.1 Install use-package

And its dependencies if needed.

```
(mapc
  (lambda (package)
    (if (not (package-installed-p package))
        (progn
          (package-refresh-contents)
          (package-install package))))
      '(use-package diminish bind-key))
```

5.2 Trigger use-package

And force the install of missing packages.

```
(eval-when-compile
  (require 'use-package))
(require 'diminish)
(require 'bind-key)
(setq use-package-always-ensure t)
```

6 Configure Helm

6.1 Make everything fuzzy and also rebind functions.

```
(use-package flx)
(use-package helm-flx)
(use-package helm
```

```

:demand
:diminish helm-mode
:bind (("M-x" . helm-M-x)
      ("M-y" . helm-show-kill-ring)
      ("C-x b" . helm-mini)
      ("C-x C-f" . helm-find-files)
      ("C-x r l" . helm-bookmarks)
      ("C-c s" . helm-occur)
      :map helm-find-files-map ;; I like these from Ido
      ("C-<tab>" . helm-execute-persistent-action)
      ("C-<backspace>" . helm-find-files-up-one-level))
:config
(helm-mode 1)
(helm-flx-mode +1)
(setq helm-M-x-fuzzy-match t)
(setq helm-locate-fuzzy-match t)
(setq helm-lisp-fuzzy-completion t)
(setq helm-bookmark-show-location t))

```

6.2 Imenu + Helm with imenu-anywhere

But I find pulling from other buffer confusing so I limit to current buffer

```

(defun imenu-anywhere-same-buffer-p (current other)
  (eq current other))

(use-package imenu-anywhere
  :bind (("C-c C-i" . helm-imenu-anywhere))
  :config (setq imenu-anywhere-buffer-filter-functions
                '(imenu-anywhere-same-buffer-p)))

```

6.3 Install helm-system-packages

```
(use-package helm-system-packages)
```

7 Version Control

For now it's just git, but can add more systems as necessary.

7.1 Enable magit

Best git client

```
(use-package magit
  :bind ("C-x g" . magit-status))
```

7.2 Enable forge

For interactions with github.

```
(use-package forge)
```

7.3 Add git-timemachine

```
(use-package git-timemachine)
```

8 Set personal information

```
(setq user-full-name "Brad Mitchell"
      calendar-latitude 40.232
      calendar-longitude -86.752
      calendar-location-name "Nashville, TN")
```

9 Utility functions

9.1 Generate scratch buffer

```
(defun generate-scratch-buffer ()
  "Create and switch to a temporary scratch buffer with a random
  name."
  (interactive)
  (switch-to-buffer (make-temp-name "scratch-")))
```

9.2 Sudo the current buffer

```
(defun sudo ()
  "Use TRAMP to 'sudo' the current buffer"
  (interactive)
  (when buffer-file-name
    (find-alternate-file
     (concat "/sudo:root@localhost:"))
```

```
buffer-file-name))))
```

9.3 Show xkcd on start

```
(use-package xkcd)
(defun showxkcd ()
  "Call this to show xkcd comic of the day on start"
  (require 'xkcd)
  (xkcd)
  (switch-to-buffer "*xkcd*"))
```

9.4 Replace JSON web token in buffer

This is regexp based

```
(defun replace-token (token)
  "Replace JSON web token for requests"
  (interactive "sEnter the new token: ")
  (save-excursion
    (goto-char (point-min))
    (while (re-search-forward "Bearer .*\"" nil t)
      (replace-match (concat "Bearer " token "\"")))))
```

9.5 Open all marked files in Dired

I like this better than the one in dired+

```
(eval-after-load "dired"
  '(progn
    (define-key dired-mode-map "F" 'my-dired-find-file)
    (defun my-dired-find-file (&optional arg)
      "Open each of the marked files, or the file under the point, or when prefix arg
      (interactive "P")
      (let* ((fn-list (dired-get-marked-files nil arg)))
        (mapc 'find-file fn-list)))))
```

9.6 Open the current file in browser.

Thanks to <https://github.com/purcell/emacs.d/blob/master/lisp/init-utils.el#L78>

```
(defun browse-current-file ()
  "Open the current file as a URL using 'browse-url'."
  (interactive)
  (let ((file-name (buffer-file-name)))
    (if (and (fboundp 'tramp-tramp-file-p)
              (tramp-tramp-file-p file-name))
        (error "Cannot open tramp file")
        (browse-url (concat "file://" file-name)))))
```

9.7 XML Format function

This works well on short text, too much and it can block the system

```
(use-package sgml-mode)

(defun reformat-xml ()
  (interactive)
  (save-excursion
    (sgml-pretty-print (point-min) (point-max))
    (indent-region (point-min) (point-max))))
```

9.8 Refill paragraphs to be on one line

```
(defun refill-paragraphs ()
  "fill individual paragraphs with large fill column"
  (interactive)
  (let ((fill-column 100000))
    (fill-individual-paragraphs (point-min) (point-max))))
```

9.9 Copy filename and path to clipboard

Thanks to <http://emacsredux.com/blog/2013/03/27/copy-filename-to-the-clipboard/>

```
(defun copy-filename ()
  "Copy the current buffer file name to the clipboard."
  (interactive)
  (let ((filename (if (equal major-mode 'dired-mode)
                      default-directory
                      (buffer-file-name))))
    (when filename
      (kill-new filename)
      (message "Copied buffer file name '%s' to the clipboard." filename))))
```

9.10 Align docstring

I put a double space in between what I want to align and call this:

```
(defun align-docstring ()
  "Align lines by double space"
  (interactive)
  (align-regexp (region-beginning) (region-end) "\\(\\s-*\\)" " 1 1 t"))
```

9.11 Rename local variable

```
(defun rename-local-var (name)
  (interactive "sEnter new name: ")
  (let ((var (word-at-point)))
    (mark-defun)
    (replace-string var name nil (region-beginning) (region-end))))
```

9.12 Increment/decrement number at point

I miss that from Vim

```
(defun increment-number-at-point ()
  (interactive)
  (skip-chars-backward "0-9")
  (or (looking-at "[0-9]+")
      (error "No number at point"))
  (replace-match (number-to-string (1+ (string-to-number (match-string 0))))))

(defun decrement-number-at-point ()
  (interactive)
  (skip-chars-backward "0-9")
  (or (looking-at "[0-9]+")
      (error "No number at point"))
  (replace-match (number-to-string (- (string-to-number (match-string 0)) 1)))))
```

9.13 Comment a line

Before Emacs 25.1

```
(defun comment-line ()
  (interactive)
  (save-excursion
```

```

(end-of-line)
(set-mark (point))
(beginning-of-line)
(if (comment-only-p (region-beginning) (region-end))
    (uncomment-region (region-beginning) (region-end))
    (comment-region (region-beginning) (region-end))))

```

9.14 Quickly edit this config file

```

(defun edit-config-file ()
  (interactive)
  (find-file (concat config-load-path "configuration.org")))

```

9.15 Send the current selection in an email

This uses mutt.

```

(defun email-selection ()
  (interactive)
  (copy-region-as-kill (region-beginning) (region-end))
  (let ((tmp-file (concat "/tmp/" (buffer-name (current-buffer)))))
    (recipient (read-string "Enter a recipient: "))
    (subject (read-string "Enter a subject: ")))
    (find-file tmp-file)
    (yank)
    (save-buffer)
    (kill-buffer (current-buffer))
    (shell-command (concat "mutt -s \"" subject "\" \" recipient \" < \" tmp-file))
    (shell-command (concat "rm -f \" tmp-file)))
  (message "Sent!"))

```

9.16 Move files more intuitively

```

(defun move-file ()
  "Write this file to a new location, and delete the old one."
  (interactive)
  (let ((old-location (buffer-file-name)))
    (call-interactively #'write-file)
    (when old-location
      (delete-file old-location))))

```

9.17 Insert a filename at point

```
(defun insert-filename ()
  (interactive)
  (insert (read-file-name "File:")))
```

9.18 Insert a relative filename at point

```
(defun insert-relative-filename ()
  (interactive)
  (insert (file-relative-name (read-file-name "File: "))))
```

9.19 Format long function parameter list into multiline

```
(defun format-function-parameters ()
  "Turn the list of function parameters into multiline."
  (interactive)
  (beginning-of-line)
  (search-forward "(" (line-end-position))
  (newline-and-indent)
  (while (search-forward "," (line-end-position) t)
    (newline-and-indent))
  (end-of-line)
  (c-hungry-delete-forward)
  (insert " ")
  (search-backward ")")
  (newline-and-indent))
```

9.20 Eshell here

Thanks to Howard <https://github.com/howardabrams/dot-files/blob/master/emacs-eshell.org>

```
(defun eshell-here ()
  "Opens up a new shell in the directory associated with the
   current buffer's file. The eshell is renamed to match that
   directory to make multiple eshell windows easier."
  (interactive)
  (let* ((height (/ (window-total-height) 3)))
    (split-window-vertically (- height))
    (other-window 1)
    (eshell "new")))
```



```
(insert (concat "ls"))
(eshell-send-input)))

(bind-key "C-!" 'eshell-here)
```

9.21 Show pwd relative to current project

And copy to clipboard

```
(defun relative-pwd ()
  (interactive)
  (let* ((prj (cdr (project-current)))
        (current-file buffer-file-truename)
        (prj-name (file-name-as-directory (file-name-nondirectory (directory-file-name
                                                                    (buffer-file-name))))
                  (output (concat prj-name (file-relative-name current-file prj))))
        (kill-new output)
        (message output))))
```

9.22 Add JIRA ticket number to commit messages

```
(add-hook 'git-commit-setup-hook
  '(lambda ()
    (let ((has-ticket-title (string-match "[A-Z]+-[0-9]+"
                                           (magit-get-current-branch)))
          (words (s-split-words (magit-get-current-branch))))
      (if has-ticket-title
          (insert (format "[%s-%s] " (car words) (car (cdr words))))))))
```

9.23 Get my public IP

```
(defun what-is-my-ip ()
  (interactive)
  (message "IP: %s"
    (with-current-buffer (url-retrieve-synchronously "https://api.ipify.org")
      (buffer-substring (+ 1 url-http-end-of-headers) (point-max)))))
```

10 Custom key bindings

10.1 Quickly revert a buffer

Useful if file changed on disk

```
(define-key global-map (kbd "C-c r") 'revert-buffer)
```

10.2 Quickly evaluate a buffer or a region

```
(define-key global-map (kbd "C-c x") 'eval-buffer)
(define-key global-map (kbd "C-c X") 'eval-region)
```

10.3 Use the Mac Style Home/End keys

```
(global-set-key (kbd "<home>") 'beginning-of-buffer)
(global-set-key (kbd "<end>") 'end-of-buffer)
```

10.4 Quickly turn on auto-fill

```
(global-set-key (kbd "C-c q") 'auto-fill-mode)
```

10.5 Hungry delete forward available everywhere

```
(global-set-key (kbd "C-c d") 'c-hungry-delete-forward)
```

10.6 Increment number easily

```
(global-set-key (kbd "C-c +") 'increment-number-at-point)
(global-set-key (kbd "C-c -") 'decrement-number-at-point)
```

10.7 Comment the current line

```
(global-set-key (kbd "C-x C-;") 'comment-line)
```

11 Org-mode

11.1 Set environment

```
(use-package f)
(use-package org)
(setq org-directory "~/org/")
(setq org-agendafiles '("~/org" "~/org/reference/"))
```

11.2 Utility functions

```
(defun org-file-path (filename)
  "Return the absolute address of an org file, given its relative name."
  (concat (file-name-as-directory org-directory) filename))

(defun org-find-file ()
  "Leverage Helm to quickly open any org files."
  (interactive)
  (find-file (org-file-path (helm-comp-read "Select your org file: " (directory-files org-directory)))))
```

11.3 Use syntax highlighting in source blocks while editing

```
(setq org-src-fontify-natively t)
```

11.4 Set a dark background for source blocks

```
(require 'color)
(if (display-graphic-p)
    (set-face-attribute 'org-block nil :background
                        (color-darken-name
                         (face-attribute 'default :background) 3)))
```

11.5 Setup Org Agenda

```
(define-key org-mode-map (kbd "C-c a") 'org-agenda)
```

11.6 Setup Org Capture

```
(setq org-default-notes-file (concat org-directory "/notes.org"))
(define-key global-map "\C-cc" 'org-capture)
```

11.7 Add more states

```
(setq org-todo-keywords
      '((sequence "TODO(t)" "WAIT(w@/!)" "|" "DONE(d!)" "CANCELED(c@)")))
(setq org-todo-keyword-faces
      '(("WAIT" . "yellow")
        ("CANCELED" . (:foreground "blue" :weight bold))))
```

11.8 Enable flyspell

```
(add-hook 'org-mode-hook 'flyspell-mode)
(add-hook 'text-mode-hook 'flyspell-mode)
```

11.9 Setup org-babel

Get additional languages? Load them all

```
(org-babel-do-load-languages
 (quote org-babel-load-languages)
 (quote ((emacs-lisp . t)
         (dot . t)
         (plantuml . t)
         (python . t)
         (gnuplot . t)
         (shell . t)
         (ledger . t)
         (org . t)
         (latex . t)
         (haskell . t))))
```

11.10 Enable org-bullets

Make org files a bit more readable

```
(use-package org-bullets
  :config (add-hook 'org-mode-hook (lambda () (org-bullets-mode 1))))
```

11.11 Display images inline

```
(setq org-startup-with-inline-images t)
```

11.12 Register more exports

```
(require 'ox-md)
```

11.13 Setup quick access to org files

```
(global-set-key (kbd "<f5>") 'org-find-file)
```

11.14 Use org-journal

```
(use-package org-journal
  :custom (org-journal-dir "~/org/journal" "Set journal location"))
```

12 Register RSS feeds

Uses elfeed and elfeed-org

```
(use-package elfeed
  :bind ("C-x w" . elfeed))

(use-package elfeed-org
  :config
  (setq rmh-elfeed-org-files (list (concat config-load-path "elfeed.org")))
  (elfeed-org))
```

The last line uses the elfeed.org file to register the feeds.

13 Startup behavior

13.1 Toggle fullscreen by default

```
(toggle-frame-maximized)
```

13.2 Disable the big fat toolbars

```
(tool-bar-mode -1)
(menu-bar-mode -1)
```

13.3 Disable the scroll bar

```
(scroll-bar-mode -1)
```

13.4 Disable splash screen

And set it in emacs-lisp mode

```
(setq inhibit-startup-message t)
(setq initial-major-mode 'emacs-lisp-mode)
```

13.5 Empty Scratch buffer

```
(setq initial-scratch-message nil)
```

13.6 Show xkcd comic of the day on start

Only on mac or Linux as windows support isn't there yet. Disabled for now because too slow on start.

```
(cond
  ((string-equal system-type "darwin") ; Mac OS X
   (progn
    (showxkcd)))
  ((string-equal system-type "gnu/linux") ; linux
   (progn
    (showxkcd))))
```

14 Window behavior

14.1 Disable the bell

Awful atrocious noise on Windows

```
(setq visible-bell 1)
```

14.2 Adjust scrolling behavior

```
(setq mouse-wheel-scroll-amount '(1 ((shift) . 1))) ;; one line at a time
(setq mouse-wheel-progressive-speed nil) ;; don't accelerate scrolling
(setq auto-window-vscroll nil)
```

14.3 Always ask for confirmation before quitting

```
(setq confirm-kill-emacs 'y-or-n-p)
```

14.4 Highlight the current line

```
(when window-system
  (global-hl-line-mode))
```

14.5 Use the back/forward mouse keys

```
(global-set-key [mouse-8] 'switch-to-prev-buffer)
(global-set-key [mouse-9] 'switch-to-next-buffer)
```

15 Better defaults

Inspired from <https://github.com/technomancy/better-defaults>

15.1 Replace dabbrev with hippie-expand

```
(use-package dabbrev
  :diminish abbrev-mode)
(global-set-key (kbd "M-/") 'hippie-expand)
```

15.2 Replace isearch with regexp search

```
(global-set-key (kbd "C-s") 'isearch-forward-regexp)
(global-set-key (kbd "C-r") 'isearch-backward-regexp)
(global-set-key (kbd "C-M-s") 'isearch-forward)
(global-set-key (kbd "C-M-r") 'isearch-backward)
```

15.3 Save all backup files to a common folder

```
(setq backup-directory-alist `(("." . ,(concat user-emacs-directory
                                                "backups"))))
```

15.4 Replace 'yes/no' by just 'y/n

```
(fset 'yes-or-no-p 'y-or-n-p)
```

15.5 Auto reload tags

```
(setq tags-revert-without-query 1)
```

15.6 Disable warning for narrow-to-region

```
(put 'narrow-to-region 'disabled nil)
```

16 Load Cool Theme

```
(use-package dracula-theme
  :config (load-theme 'dracula t)
  (set-face-background 'mode-line "#510370")
  (set-face-background 'mode-line-inactive "#212020"))
```

17 Customize the mode-line

17.1 A small trim of the original

```
(setq-default mode-line-format '("%e"
                                mode-line-front-space
                                " "
                                mode-line-modified
                                " "
                                "%[" mode-line-buffer-identification "%]"
                                " "
                                "L%l"
                                " "
                                mode-line-modes
                                mode-line-misc-info
                                projectile-mode-line
                                " "
                                (:property " " display ((space :align-to (- right 1)
                                                                (vc-mode vc-mode)
                                                                mode-line-end-spaces)))
```

17.2 Load Tarsius' minions

```
(use-package minions
  :config (minions-mode 1))
```

18 Fonts

Use the Hack font from chrissimpkins

```
(if (condition-case nil
      (x-list-fonts "Hack")
      (error nil))
```



```
(progn
  (add-to-list 'default-frame-alist '(font . "Hack-10"))
  (set-face-attribute 'default nil :font "Hack-10")))
```

19 Terminal Configuration

Trying to make it adapt to the OS. There is surely a better way to do this.

```
(if (eq system-type 'windows-nt)
  (progn
    (setenv "PATH" (concat "C:\\cygwin64\\bin\\"
                          path-separator
                          (getenv "PATH")))
  )
  (progn
    (use-package exec-path-from-shell
      :config (exec-path-from-shell-copy-env "PATH"))
  )
)
```

20 Dictionary Configuration

Because Windows sucks I have to do this to use flyspell

```
(if (eq system-type 'windows-nt)
  (progn
    (add-to-list 'exec-path "C:/Aspell/bin/")
    (setq ispell-program-name "aspell")
    (require 'ispell)
  )
)
```

21 Snippets

I use yasnippet a lot.

```
(use-package yasnippet
  :diminish yas-minor-mode
  :config (yas-global-mode 1))
```

And also my package `org-sync-snippets` to keep my snippets into a single file under version control

```
(use-package org-sync-snippets
  :config (setq org-sync-snippets-org-snippets-file
                (concat (file-name-as-directory config-load-path) "snippets.org")))
```

22 Code Format

22.1 Default tab and indetation

```
(setq-default indent-tabs-mode nil)
(setq-default tab-width 4)
(setq tab-width 4)
```

22.2 Add a new line at the end of files

```
(setq require-final-newline t)
```

22.3 Delete trailing white spaces on save

```
(add-hook 'before-save-hook 'delete-trailing-whitespace)
```

22.4 Set Unix file coding system

```
(setq-default buffer-file-coding-system 'utf-8-unix)
(setq-default default-buffer-file-coding-system 'utf-8-unix)
(set-default-coding-systems 'utf-8-unix)
(prefer-coding-system 'utf-8-unix)
```

22.5 Automatically indent yanked code

Thanks to magnars

```
(defvar yank-indent-modes '(php-mode js2-mode)
  "Modes in which to indent regions that are yanked (or yank-popped)")

(defvar yank-advised-indent-threshold 1000
  "Threshold (# chars) over which indentation does not automatically occur.")

(defun yank-advised-indent-function (beg end)
  "Do indentation, as long as the region isn't too large."
```

```

(if (<= (- end beg) yank-advised-indent-threshold)
    (indent-region beg end nil)))

(defadvice yank (after yank-indent activate)
  "If current mode is one of 'yank-indent-modes, indent yanked text (with prefix arg d
  (if (and (not (ad-get-arg 0))
          (--any? (derived-mode-p it) yank-indent-modes))
      (let ((transient-mark-mode nil))
        (yank-advised-indent-function (region-beginning) (region-end)))))

(defadvice yank-pop (after yank-pop-indent activate)
  "If current mode is one of 'yank-indent-modes, indent yanked text (with prefix arg d
  (if (and (not (ad-get-arg 0))
          (member major-mode yank-indent-modes))
      (let ((transient-mark-mode nil))
        (yank-advised-indent-function (region-beginning) (region-end)))))

(defun yank-unindented ()
  (interactive)
  (yank 1))

```

22.6 Define comment syntax

```
(setq comment-start "#")
```

22.7 Enable poporg

So I can comment code from an org-mode buffer

```
(use-package poporg
  :bind (("C-c \\"" . poporg-dwim)))
```

22.8 Enable prog-fill

```
(use-package prog-fill
  :bind (("M-q" . prog-fill)))
```

23 Parenthesis Support

```
(show-paren-mode 1)
(electric-pair-mode 1)
```

24 Package management

24.1 Enable paradox

```
(use-package paradox
  :custom
  (paradox-execute-asynchronously t)
  :config
  (paradox-enable))
```

25 Internal Doc Enhancement

25.1 Setup helpful for prettier doc

```
(use-package helpful
  :bind (("C-h f" . helpful-callable)
        ("C-h v" . helpful-variable)
        ("C-h k" . helpful-key)
        ("C-h F" . helpful-function)
        ("C-h C" . helpful-command)))
```

25.2 Setup elisp-demos for code example

```
(use-package elisp-demos
  :config (advice-add 'helpful-update
                    :after #'elisp-demos-advice-helpful-update))
```

26 Navigation

26.1 Enable avy

```
(use-package avy
  :bind (("C-c SPC" . avy-goto-char-2)
        ("M-g f" . avy-goto-line)
        ("M-g w" . avy-goto-word-1)))
```

26.2 Enable win-switch

Super nice to switch between frames and buffers

```
(use-package win-switch
  :bind ("C-x o" . win-switch-dispatch))
```

```
:config
(setq win-switch-provide-visual-feedback t)
(setq win-switch-feedback-background-color "purple")
(setq win-switch-feedback-foreground-color "white")
(win-switch-setup-keys-default))
```

26.3 Enable which-key

Very nice if you don't have a cheat sheet at hand

```
(use-package which-key
  :diminish which-key-mode
  :config (which-key-mode 1))
```

26.4 Enable winner-mode

```
(winner-mode 1)
```

26.5 Enable smooth-scrolling

But with a margin of 5

```
(use-package smooth-scrolling
  :config
  (smooth-scrolling-mode 1)
  (setq smooth-scroll-margin 5))
```

26.6 Enable neotree

```
(use-package neotree)
```

26.7 Enable ibuffer

```
(use-package ibuffer-vc)
(use-package ibuffer-git)
(define-key global-map (kbd "C-x C-b") 'ibuffer)
```

26.8 Enable yascroll

So much better than the default scroll bar

```
(use-package yascroll
  :config (global-yascroll-bar-mode 1))
```

26.9 Enable minimap

Not all the time, but handy.

```
(use-package minimap
  :config
  (setq minimap-window-location "right")
  (setq minimap-major-modes '(prog-mode org-mode)))
```

26.10 Enable rotate

```
(use-package rotate
  :config (global-set-key (kbd "C-|") 'rotate-layout))
```

26.11 Enable anzu

```
(use-package anzu
  :config (global-anzu-mode +1)
          (setq anzu-mode-lighter ""))
```

26.12 Enable hamburger-menu

```
(use-package hamburger-menu
  :config (setq mode-line-front-space 'hamburger-menu-mode-line))
```

26.13 Enable origami

Great to fold text

```
(use-package origami
  :config
  (global-set-key (kbd "C-c n o") 'origami-open-node)
  (global-set-key (kbd "C-c n c") 'origami-close-node)
  (global-set-key (kbd "C-c n a") 'origami-open-all-nodes)
  (global-set-key (kbd "C-c n u") 'origami-undo)
  (global-set-key (kbd "C-c n n") 'origami-show-only-node)
  (global-set-key (kbd "C-c n TAB") 'origami-recursively-toggle-node))
```

26.14 Enable eyebrowse

To manage window configuration

```
(use-package eyebrowse
  :config (eyebrowse-mode t))
```

27 Edition

27.1 Enable multiple-cursors

Useful to edit multiple similar lines

```
(use-package multiple-cursors
  :bind (("C-S-c C-S-c" . mc/edit-lines)
        ("C->" . mc/mark-next-like-this)
        ("C-<" . mc/mark-previous-like-this)
        ("C-c C-<" . mc/mark-all-like-this)
        ("C-S-<mouse-1>" . mc/add-cursor-on-click)))
```

27.2 Enable zzz-to-char

```
(use-package zzz-to-char
  :bind ("M-z" . zzz-up-to-char))
```

27.3 Enable whole-line-or-region

```
(use-package whole-line-or-region
  :diminish whole-line-or-region-global-mode
  :config (whole-line-or-region-global-mode t))
```

27.4 Enable viking-mode

And add my personal twist to it.

```
(use-package viking-mode
  :diminish viking-mode
  :config
  (viking-global-mode)
  (setq viking-greedy-kill nil)
  (setq viking-enable-region-kill t)
  (setq viking-kill-functions (list '(lambda()
                                       (if (region-active-p)
                                           (kill-region (region-beginning) (region-end)
                                                         (delete-char 1 t)))
                                       '(lambda()
                                          (insert (pop kill-ring)) ;; insert the char back
                                          (kill-new "") ;; start a new entry in the kill-ring
                                          (viking-kill-word))
```

```

      (kill-append " " nil)) ;; append the extra space
'viking-kill-line-from-point
'viking-kill-line
'viking-kill-paragraph
'viking-kill-buffer)))

```

27.5 Enable undo-tree

```

(use-package undo-tree
  :diminish undo-tree-mode
  :config
  (global-undo-tree-mode t)
  (setq undo-tree-visualizer-diff t))

```

27.6 Enable volatile-highlights

Sweet minor mode for providing visual feedback

```

(use-package volatile-highlights
  :diminish volatile-highlights-mode
  :config
  (vhl/define-extension 'undo-tree 'undo-tree-yank 'undo-tree-move)
  (vhl/install-extension 'undo-tree)
  (volatile-highlights-mode t))

```

27.7 Enable ciel

```

(use-package ciel
  :bind (("C-c i" . ciel-ci)
        ("C-c o" . ciel-co)))

```

27.8 Enable fancy-narrow

And use it to replace normal narrowing functions

```

(use-package fancy-narrow
  :diminish fancy-narrow-mode)

```


28 General Code

28.1 Enable projectile

And get a shorter modeline, thanks to <https://github.com/purcell/emacs.d/blob/master/lisp/init-projectile.el#L10>

```
(use-package ag)
(use-package helm-ag)
(setq projectile-go-function nil) ;; temporary workaround
(use-package projectile
  :config
  (projectile-mode)
  (setq-default projectile-mode-line
    '(:eval
      (if (file-remote-p default-directory)
          " Proj"
          (format " Proj[%s]" (projectile-project-name))))))
(add-to-list 'projectile-globally-ignored-directories "node_modules"))
```

With a twist of helm

```
(use-package helm-projectile
  :bind (("C-c v" . helm-projectile)
         ("C-c C-v" . helm-projectile-ag)
         ("C-c w" . helm-projectile-switch-project)))
```

28.2 Enable company

```
(use-package company
  :diminish company-mode
  :config
  (add-hook 'after-init-hook 'global-company-mode)
  (setq company-minimum-prefix-length 2)
  (setq company-dabbrev-downcase nil))
(use-package company-go)
```

28.3 Enable flycheck

```
(use-package flycheck
  :diminish flycheck-mode
  :config (flycheck-mode 1))
```

```
(setq flycheck-phpcs-standard "PSR2")
(add-hook 'python-mode-hook 'flycheck-mode)
(add-hook 'emacs-lisp-mode-hook 'flycheck-mode)
(add-hook 'json-mode-hook 'flycheck-mode)
(add-hook 'rjsx-mode-hook 'flycheck-mode))
```

Add a little helm twist to it

```
(use-package helm-flycheck
  :bind ("C-c f" . helm-flycheck))
```

28.4 Enable electric-operator

And add a couple of rules for PHP and JS

```
(use-package electric-operator
  :config
  (electric-operator-add-rules-for-mode 'php-mode
    (cons " - >" "->"))
  (electric-operator-add-rules-for-mode 'php-mode
    (cons " / /" "// "))
  (electric-operator-add-rules-for-mode 'php-mode
    (cons " = > " " => "))
  (electric-operator-add-rules-for-mode 'php-mode
    (cons " < ?" "<?"))
  (electric-operator-add-rules-for-mode 'js2-mode
    (cons " = > " " => "))
  (electric-operator-add-rules-for-mode 'js2-jsx-mode
    (cons " = > " " => "))
  (electric-operator-add-rules-for-mode 'rjsx-mode
    (cons " = > " " => )))
```

28.5 Enable dumb-jump

Great package to jump to definition

```
(use-package dumb-jump
  :config (setq dumb-jump-aggressive nil))
```

28.6 Enable highlight-numbers

Make numbers in source code more noticeable

```
(use-package highlight-numbers
  :config (add-hook 'prog-mode-hook 'highlight-numbers-mode))
```

29 Emacs Lisp

29.1 Enable eldoc

```
(use-package eldoc
  :diminish eldoc-mode
  :config (add-hook 'emacs-lisp-mode-hook 'eldoc-mode))
```

29.2 Enable rainbow-delimiters

But only for emacs-lisp

```
(use-package rainbow-delimiters
  :config
  (add-hook 'emacs-lisp-mode-hook 'rainbow-delimiters-mode))
```

29.3 Enable paredit

```
(use-package paredit
  :config
  (add-hook 'emacs-lisp-mode-hook 'paredit-mode))
```

29.4 Enable eros

```
(use-package eros
  :config (add-hook 'emacs-lisp-mode-hook 'eros-mode))
```

29.5 Enable simple-call-tree

```
(use-package simple-call-tree)
```

29.6 Enable suggest

```
(use-package suggest)
```

30 MySQL

30.1 Always make MySQL the default product

```
(require 'sql)
(sql-set-product "mysql")
```

30.2 Enable sqlup-mode

```
(use-package sqlup-mode
  :config (add-hook 'sql-mode-hook 'sqlup-mode))
```

30.3 Enable mysql-to-org

I love this package

```
(use-package mysql-to-org
  :config
  (add-hook 'sql-mode-hook 'mysql-to-org-mode))
```

31 PHP

31.1 Enable php-mode

And a bunch of hooks with it And set PSR-2 as coding style

```
(use-package php-mode
  :config
  (add-hook 'php-mode-hook 'flycheck-mode)
  (add-hook 'php-mode-hook 'electric-operator-mode)
  (add-hook 'php-mode-hook 'dumb-jump-mode)
  (add-hook 'php-mode-hook 'php-enable-psr2-coding-style))
```

31.2 Enable company-php

```
(use-package company-php
  :config
  (add-hook 'php-mode-hook 'company-mode)
  (add-hook 'php-mode-hook '(lambda ()
                              (if (not (member 'php-mode company-dabbrev-code-modes))
                                  (add-to-list 'company-dabbrev-code-modes 'php-mode)))))
```

31.3 Enable php-eldoc

```
(setq auto-complete-mode nil) ;; Hack while my PR is pending
(use-package php-eldoc
  :diminish eldoc-mode
  :config (add-hook 'php-mode-hook 'php-eldoc-enable))
```

31.4 Enable phpcbf

```
(use-package phpcbf
  :config (setq phpcbf-standard "PSR2"))
```

32 Web

32.1 Enable web-mode

So much better than html-mode

```
(use-package web-mode
  :mode "\\\\.phtml\\\\"
  :mode "\\\\.volt\\\\"
  :mode "\\\\.html\\\\"')
```

32.2 Enable emmet-mode

Adding the necessary hooks

```
(use-package emmet-mode
  :config
  (add-hook 'sgml-mode-hook 'emmet-mode) ;; Auto-start on any markup modes
  (add-hook 'css-mode-hook 'emmet-mode) ;; enable Emmet's css abbreviation.
)
```

33 Javascript

33.1 Enable js2-mode

```
(use-package js2-mode
  :mode "\\\\.js\\\\"
  :config
  (add-hook 'js2-mode-hook 'electric-operator-mode)
  (add-hook 'js2-mode-hook 'flycheck-mode)
  (setq js2-basic-offset 2))
```

33.2 Enable js2-refactor

```
(use-package js2-refactor
  :diminish js2-refactor-mode
  :defer t
  :config
  (add-hook 'js2-mode-hook #'js2-refactor-mode)
  (js2r-add-keybindings-with-prefix "C-c C-m"))
```

33.3 Enable js-doc

```
(use-package js-doc)
```

33.4 Enable rjsx-mode

Useful for React

```
(use-package rjsx-mode)
```

34 Typescript

34.1 Enable tide

```
(use-package tide)
```

```
(defun setup-tide-mode ()
  (interactive)
  (tide-setup)
  (flycheck-mode +1)
  (setq flycheck-check-syntax-automatically '(save mode-enabled))
  (eldoc-mode +1)
  (tide-hl-identifier-mode +1)
  (company-mode +1))
```

;; formats the buffer before saving

```
(add-hook 'before-save-hook 'tide-format-before-save)
```

```
(add-hook 'typescript-mode-hook #'setup-tide-mode)
```

34.2 Enable tide for tsx

```
(use-package web-mode)
```

```
(add-to-list 'auto-mode-alist '("\\.tsx\\'" . web-mode))
(add-hook 'web-mode-hook
  (lambda ()
    (when (string-equal "tsx" (file-name-extension buffer-file-name))
      (setup-tide-mode))))
;; enable typescript-tslint checker
(flycheck-add-mode 'typescript-tslint 'web-mode)
```

35 Go

A lot of the config is based on gocode, godef, goimports and gotags packages that you should install separately.

```
go get -u github.com/nsf/gocode
go get -u github.com/rogppe/godef
go get -u golang.org/x/tools/cmd/goimports
go get -u github.com/jstemmer/gotags
go get github.com/matryer/moq
```

35.1 Enable go-mode

Absolutely necessary if working in Go

```
(use-package go-mode
  :config
  (add-hook 'before-save-hook #'gofmt-before-save)
  (add-hook 'go-mode-hook 'flycheck-mode)
  (add-hook 'go-mode-hook 'dumb-jump-mode)
  (setq go-packages-function 'go-packages-go-list))
```

35.2 Enable company-go

```
(use-package company-go
  :config
  (add-hook 'go-mode-hook 'company-mode)
  (add-to-list 'company-backends 'company-go))
```

35.3 Enable go-stacktracer

```
(use-package go-stacktracer)
```

35.4 Enable go-add-tags

```
(use-package go-add-tags)
```

35.5 Enable go-eldoc

```
(use-package go-eldoc
  :diminish eldoc-mode
  :config (add-hook 'go-mode-hook 'go-eldoc-setup))
```

35.6 Enable go-gopath

```
(use-package go-gopath)
```

35.7 Enable go-direx

```
(use-package go-direx)
```

35.8 Enable gotest

```
(use-package gotest)
```

35.9 Integrate moq

Quick custom function to integrate with the moq tool to generate quick mocks

```
(defun moq ()
  (interactive)
  (let ((interface (word-at-point))
        (test-file (concat (downcase (word-at-point)) "_test.go"))))
    (shell-command
     (concat "moq -out " test-file " . " interface))
    (find-file test-file)))
```

35.10 See test coverage faster

Simple function to see the test coverage of the current open buffer

```
(defun go-coverage-here ()
  (interactive)
  (shell-command "go test . -coverprofile=cover.out")
  (go-coverage "cover.out")
  (rotate:even-horizontal))
```


36 Python

36.1 Setup python-mode

Need to install IPython first with `pip install ipython`. Assuming that it would be at least IPython 5 so ask for `simple-prompt`.

```
(add-hook 'python-mode-hook 'electric-operator-mode)
(setq python-shell-interpreter "ipython"
      python-shell-interpreter-args "--simple-prompt -i")
```

36.2 Enable company-jedi

```
(use-package company-jedi
  :config (add-to-list 'company-backends 'company-jedi))
```

36.3 Custom functions for pipenv

```
(defun pipenv-activate ()
  (interactive)
  (pythonic-activate (shell-command-to-string "pipenv --venv")))

(defun pipenv-deactivate ()
  (interactive)
  (pythonic-deactivate))
```

37 Docker

37.1 Setup Dockerfile-mode

```
(use-package dockerfile-mode
  :mode "Dockerfile\\'")
```

38 Logs

38.1 Enable syslog-mode

```
;; (use-package syslog-mode)
```

38.2 Turn on auto-revert-tail-mode for log files

```
(add-to-list 'auto-mode-alist '("\\.log\\'" . auto-revert-tail-mode))
```

38.3 Quickly check syslog

```
(defun open-syslog ()
  (interactive)
  (find-file "/var/log/syslog")
  ;; (syslog-mode)
  (goto-char (point-max)))
```

39 Eshell

39.1 Configuration

```
(use-package eshell
  :init
  (setq eshell-scroll-to-bottom-on-input 'all
        eshell-error-if-no-glob t
        eshell-hist-ignoredups t
        eshell-save-history-on-exit t
        eshell-prefer-lisp-functions nil
        eshell-destroy-buffer-when-process-dies t))
```

39.2 Fancy prompt

Modified from https://www.reddit.com/r/emacs/comments/6f0rkz/my_fancy_eshell_prompt/

```
(setq eshell-prompt-function
  (lambda ()
    (concat
      (propertize "[" 'face '(:foreground "green"))
      (propertize (user-login-name) 'face '(:foreground "red"))
      (propertize "@" 'face '(:foreground "green"))
      (propertize (system-name) 'face '(:foreground "lightblue"))
      (propertize "]" 'face '(:foreground "green"))
      (propertize (format-time-string "%H:%M" (current-time)) 'face '(:foreground "green"))
      (propertize "]" 'face '(:foreground "green"))
      (propertize (concat (eshell/pwd)) 'face '(:foreground "white"))
      (propertize "\n" 'face '(:foreground "green"))
      (propertize ">" 'face '(:foreground "green"))
      (propertize (if (= (user-uid) 0) " # " " $ ") 'face '(:foreground "green"))
    )))
```

39.3 Define visual commands and subcommands

```
(setq eshell-visual-commands '("htop" "vi" "screen" "top" "less"
                                "more" "lynx" "ncftp" "pine" "tin" "trn" "elm"
                                "vim"))

(setq eshell-visual-subcommands '("git" "log" "diff" "show" "ssh"))
```

39.4 Pager setup

```
(setenv "PAGER" "cat")
```

39.5 Enable autojump

```
(use-package eshell-autojump)
```

39.6 Aliases

```
(defalias 'ff 'find-file)
(defalias 'd 'dired)
```

39.7 Extra shell functions

39.7.1 Clear function

```
(defun eshell/clear ()
  (let ((inhibit-read-only t))
    (erase-buffer)))
```

39.7.2 Git

```
(defun eshell/gst (&rest args)
  (magit-status (pop args) nil)
  (eshell/echo)) ;; The echo command suppresses output
```

39.7.3 Bargs and Sargs

Thanks to <http://www.howardism.org/Technical/Emacs/eshell-present.html>

```
(defun eshell/-buffer-as-args (buffer separator command)
  "Takes the contents of BUFFER, and splits it on SEPARATOR, and
runs the COMMAND with the contents as arguments. Use an argument
```

'%' to substitute the contents at a particular point, otherwise, they are appended."

```
(let* ((lines (with-current-buffer buffer
                (split-string
                 (buffer-substring-no-properties (point-min) (point-max))
                 separator)))
      (subcmd (if (-contains? command "%")
                  (-flatten (-replace "%" lines command))
                  (-concat command lines)))
      (cmd-str (string-join subcmd " ")))
  (message cmd-str)
  (eshell-command-result cmd-str)))

(defun eshell/bargs (buffer &rest command)
  "Passes the lines from BUFFER as arguments to COMMAND."
  (eshell/-buffer-as-args buffer "\n" command))

(defun eshell/sargs (buffer &rest command)
  "Passes the words from BUFFER as arguments to COMMAND."
  (eshell/-buffer-as-args buffer nil command))
```

39.7.4 Close

```
(defun eshell/close ()
  (delete-window))
```

39.8 Smoother bindings

```
(add-hook 'eshell-mode-hook
  (lambda ()
    (define-key eshell-mode-map (kbd "C-M-a") 'eshell-previous-prompt)
    (define-key eshell-mode-map (kbd "C-M-e") 'eshell-next-prompt)
    (define-key eshell-mode-map (kbd "M-r") 'helm-eshell-history)))
```

39.9 Close window on exit

```
(defun eshell-pop--kill-and-delete-window ()
  (unless (one-window-p)
    (delete-window)))

(add-hook 'eshell-exit-hook 'eshell-pop--kill-and-delete-window)
```

40 Dired

40.1 Enable dired-x

```
(require 'dired-x)
```

40.2 Use human-readable sizes

```
(setq dired-listing-switches "-alh")
```

41 YAML

41.1 Enable yaml-mode

```
(use-package yaml-mode
  :config
  (add-hook 'yaml-mode-hook 'flycheck-mode)
  (add-hook 'yaml-mode-hook 'flyspell-mode))
```

41.2 Enable flycheck-yamllint

```
(use-package flycheck-yamllint)
```

41.3 Enable indentation highlight

```
(use-package highlight-indentation
  :config
  (set-face-background 'highlight-indentation-face "#8B6090")
  (add-hook 'yaml-mode-hook 'highlight-indentation-mode))
```

42 RestClient

42.1 Setup restclient

```
(use-package restclient
  :mode ("\\.restclient\\\\" . restclient-mode))
```

42.2 Enable company-restclient

```
(use-package company-restclient
  :config (add-to-list 'company-backends 'company-restclient))
```

42.3 Integrate to org-mode

```
(use-package ob-restclient)
```

43 PlantUML

43.1 Enable plantuml-mode

```
(use-package plantuml-mode)
```

43.2 Download and hook up plantuml.jar

```
(let ((plantuml-directory (concat config-load-path "extra/"))
      (plantuml-link "https://superb-dca2.dl.sourceforge.net/project/plantuml/plantuml.jar"))
  (let ((plantuml-target (concat plantuml-directory "plantuml.jar")))
    (if (not (f-exists? plantuml-target))
        (progn (message "Downloading plantuml.jar")
                (shell-command
                 (mapconcat 'identity (list "wget" plantuml-link "-O" plantuml-target) " ")
                 (kill-buffer "*Shell Command Output*"))))
      (setq org-plantuml-jar-path plantuml-target)))
```

44 Redis

A few utility functions for my local Redis.

```
(defun redis--command (cmd)
  "Format command for the redis-cli."
```

```
  CMD is the redis command."
  (format "echo \"%s\" | redis-cli" cmd))
```

```
(defun redis--select-key ()
  "Return all redis keys as list."
  (let* ((command (redis--command "KEYS *"))
         (keys (split-string (shell-command-to-string command) "\n")))
    (completing-read "Redis key: " keys)))
```

```
(defun redis-set-key (key value)
  "Set a key value pair in redis."
```

```

KEY is the key.
VALUE is the value."
  (interactive "sKey: \nsValue: ")
  (shell-command (redis--command (format "SET %s %s" key value))))

(defun redis-get-key ()
  "Get the value for a key in redis."
  (interactive)
  (let ((key (redis--select-key)))
    (message
     "Value: %s"
     (replace-regexp-in-string "\n" "" (shell-command-to-string (redis--command (format
(defun redis-delete-key ()
  "Delete a key from local redis instance."
  (interactive)
  (let ((key (redis--select-key)))
    (shell-command (redis--command (format "DEL %s" key)))
    (message "Key %s deleted." key)))

```

45 Extra Packages

No need to configure, just handy to have.

```

(use-package 2048-game)
(use-package isend-mode)
(use-package lorem-ipsuam)
(use-package markdown-mode)
(use-package pdf-tools
  :defer t)
(use-package refine)
(use-package request)
(use-package csv-mode)
;; (use-package csharp-mode)
(use-package keychain-environment)
(use-package prodigy)
(use-package vlf)
(use-package helm-flyspell)
(use-package kubel)
(use-package kubernetes-helm)

```

```
(use-package htmlize)
```

46 Extra file loading

If I am working on a separate library, I like to have it loaded on start. Just need to place it in the extra folder.

```
(use-package load-dir
  :config (setq load-dirs (concat config-load-path "extra/")))
```

47 Key Frequency

Trying the `keyfreq` package to monitor my command usage

```
(use-package keyfreq
  :config
  (keyfreq-mode 1)
  (keyfreq-autosave-mode 1))
```

48 Cheat Sheet

Thanks to the `cheatsheet` package, I can quickly see what are my favorite keys bindings

48.1 Setup

```
(use-package cheatsheet
  :config
  (setq cheatsheet--group-face '(:foreground "spring green"))
  (setq cheatsheet--key-face '(:foreground "orchid")))
```

48.2 Common

```
(cheatsheet-add :group 'Common
  :key "C-c r"
  :description "Revert buffer")
(cheatsheet-add :group 'Common
  :key "C-c q"
  :description "Turn on/off autofill mode")
(cheatsheet-add :group 'Common
```



```

      :key "C-x u"
      :description "Show the undo-tree")
(cheatsheet-add :group 'Common
      :key "M-y"
      :description "Show the kill-ring")
(cheatsheet-add :group 'Common
      :key "C-x r l"
      :description "Show the bookmarks")
(cheatsheet-add :group 'Common
      :key "C-c s"
      :description "Swoop search through buffer")
(cheatsheet-add :group 'Common
      :key "C-x w"
      :description "Read news and RSS feeds")
(cheatsheet-add :group 'Common
      :key "C-c SPC"
      :description "Jump to char")
(cheatsheet-add :group 'Common
      :key "C-c C-d"
      :description "Hungry delete")
(cheatsheet-add :group 'Common
      :key "C-c i"
      :description "Ciel kill")
(cheatsheet-add :group 'Common
      :key "C-M-h"
      :description "Select region")
(cheatsheet-add :group 'Common
      :key "C-c +"
      :description "Increment number at point")
(cheatsheet-add :group 'Common
      :key "C-c -"
      :description "Decrement number at point")

```

48.3 Org

```

(cheatsheet-add :group 'Org
      :key "C-c c"
      :description "Org Capture")
(cheatsheet-add :group 'Org
      :key "C-c ^"

```

```

: description "Org sort")
(cheatsheet-add :group 'Org
: key "C-c C-t"
: description "Org cycle todo")
(cheatsheet-add :group 'Org
: key "C-c '"
: description "Edit code block")
(cheatsheet-add :group 'Org
: key "C-c C-c"
: description "Evaluate source block")
(cheatsheet-add :group 'Org
: key "C-c C-o"
: description "Show source block eval result")

```

48.4 Projectile

```

(cheatsheet-add :group 'Projectile
: key "C-c v"
: description "Find file in project")
(cheatsheet-add :group 'Projectile
: key "C-c C-v"
: description "Find word in project")
(cheatsheet-add :group 'Projectile
: key "C-c C-v C-w"
: description "Find word under cursor in project")
(cheatsheet-add :group 'Projectile
: key "C-c w"
: description "Switch project")

```

48.5 Emacs Lisp

```

(cheatsheet-add :group 'Emacs-Lisp
: key "C-x C-e"
: description "Evaluate sexp")
(cheatsheet-add :group 'Emacs-Lisp
: key "C-c x"
: description "Evaluate buffer")
(cheatsheet-add :group 'Emacs-Lisp
: key "C-c X"
: description "Evaluate region")

```

```
(cheatsheet-add :group 'Emacs-Lisp
                :key "C-h f"
                :description "Describe function")
(cheatsheet-add :group 'Emacs-Lisp
                :key "C-h v"
                :description "Describe variable")
```

48.6 Code

```
(cheatsheet-add :group 'Code
                :key "C-c C-i"
                :description "List classes and functions in buffer via imenu")
(cheatsheet-add :group 'Code
                :key "C-x g"
                :description "Summon Magit")
(cheatsheet-add :group 'Code
                :key "C-c f"
                :description "Flycheck the buffer")
(cheatsheet-add :group 'Code
                :key "C-x C-;"
                :description "Comment out current line")
```

48.7 Multiple cursors

```
(cheatsheet-add :group 'Multiple-Cursors
                :key "C->"
                :description "Mark next like this")
(cheatsheet-add :group 'Multiple-Cursors
                :key "C-<"
                :description "Mark previous like this")
(cheatsheet-add :group 'Multiple-Cursors
                :key "C-c C-<"
                :description "Mark all like this")
(cheatsheet-add :group 'Multiple-Cursors
                :key "C-S-<mouse-1>"
                :description "Add cursor on click")
```

48.8 Dumb Jump

```
(cheatsheet-add :group 'Dumb-Jump
                :key "C-M-g")
```

```

: description "Jump to function definition")
(cheatsheet-add :group 'Dumb-Jump
: key "C-M-p"
: description "Jump back to original location")
(cheatsheet-add :group 'Dumb-Jump
: key "C-M-q"
: description "Show tooltip")

```

48.9 MySQL-to-Org

```

(cheatsheet-add :group 'MySQL-to-Org
: key "C-c C-m e"
: description "Evaluate query in region")
(cheatsheet-add :group 'MySQL-to-Org
: key "C-c C-m p"
: description "Evaluate the string at point")
(cheatsheet-add :group 'MySQL-to-Org
: key "C-c C-m s"
: description "Open scratch buffer")

```

48.10 Paredit

```

(cheatsheet-add :group 'Paredit
: key "C-("
: description "Slurp left")
(cheatsheet-add :group 'Paredit
: key "C-)"
: description "Slurp right")
(cheatsheet-add :group 'Paredit
: key "C-{"
: description "Barf left")
(cheatsheet-add :group 'Paredit
: key "C-}"
: description "Barf right")
(cheatsheet-add :group 'Paredit
: key "M-("
: description "Wrap sexp in ()")
(cheatsheet-add :group 'Paredit
: key "M-)"
: description "Wrap sexp in ()")

```

```
(cheatsheet-add :group 'Paredit
                :key "M-s"
                :description "Splice sexp out of ()")
```

48.11 Origami

```
(cheatsheet-add :group 'Origami
                :key "C-c n o"
                :description "Open node")
(cheatsheet-add :group 'Origami
                :key "C-c n c"
                :description "Close node")
(cheatsheet-add :group 'Origami
                :key "C-c n a"
                :description "Open all nodes")
(cheatsheet-add :group 'Origami
                :key "C-c n u"
                :description "Undo folding")
(cheatsheet-add :group 'Origami
                :key "C-c n n"
                :description "Fold all nodes but current one")
(cheatsheet-add :group 'Origami
                :key "C-c n TAB"
                :description "Toggle node")
```

48.12 Eyebrowse

```
(cheatsheet-add :group 'Eyebrowse
                :key "C-c C-w 1"
                :description "Switch to workspace 1")
(cheatsheet-add :group 'Eyebrowse
                :key "C-c C-w 2"
                :description "Switch to workspace 2")
(cheatsheet-add :group 'Eyebrowse
                :key "C-c C-w '"
                :description "Switch to previous workspace")
(cheatsheet-add :group 'Eyebrowse
                :key "C-c C-w \"\"
                :description "Close current workspace")
```