EmacsCrashCourse

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May 2019

1 Introduction

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\begin{aligned} & \text{Kill Emacs} = \text{C-x C-c} \\ & \text{Undo} = \text{Ctrl} + \underline{} \\ & \text{Redo} = \text{Ctrl} + \text{g} \\ & \text{Save} = \text{Ctrl+x Ctrl+s} \\ & \text{Quit} = \text{Ctrl+x Ctrl+c} \\ & \text{Cancel} = \text{Ctrl+g} \end{aligned}
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2 Open, Save, Close File

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Open (find-file) = Ctrl+x Ctrl+f
Save (save-buffer) = Ctrl+x Ctrl+s
Close (kill-buffer) = Ctrl+x k
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3 Copy, Paste, Undo

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\label{eq:Undo} \begin{array}{l} \text{Undo (To redo)} = \text{Ctrl} + \_\\ \text{Copy,Save, (kill-ring)} = \text{Alt} + \text{w}\\ \text{Cut(kill-region)} = \text{Ctrl} + \text{w}\\ \text{Paste, yank} = \text{Ctrl} + \text{y} \end{array}
```

4 Moving the Cursor

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Move cursor left by 1 word (backward-word) = \operatorname{Ctrl} + \leftarrow or \operatorname{Alt} + \operatorname{b} Move cursor right by 1 word (forward-word) = \operatorname{Ctrl} + \rightarrow or \operatorname{Alt} + \operatorname{f} Beginning of File (beginning-of-buffer) = \operatorname{Ctrl} + \operatorname{Home} or \operatorname{Alt} + < End of document (end-of-buffer) = \operatorname{Ctrl} + \operatorname{End} or \operatorname{Alt} + > Move cursor left by 1 char (backward-char) = \operatorname{Ctrl} + \operatorname{b} Move cursor right by 1 char (forward-char) = \operatorname{Ctrl} + \operatorname{f} \operatorname{Ctrl} + \operatorname{v} = (\operatorname{scroll-up-command} \operatorname{page} \operatorname{down} \operatorname{Alt} + \operatorname{v} = \operatorname{scroll-down-command} \operatorname{page} \operatorname{up}
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5 Deleting Text

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Delete the word to the right (kill-word) = Alt + d
Delete the previous word (backward-kill-word) = Alt + Backspace
Delete all characters from the cursor to the end of the line = Ctrl + k (kill-line)
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6 Select Text

Ctrl + Space (set-mark-command) Mark the starting point for copy/cut a text (move cursor to extend selection) Select all (mark-whole-buffer) = Ctrl+x h

7 Split Window:

Split window into top/bottom (split-window-below) = Ctrl+x 2 Split window side by side (split-window-right) = Ctrl+x 3 Remove all split panes (delete-other-windows) = Ctrl+x 1 Move cursor to other panes (other-window) Ctrl+x 0

8 Searching Text

Ctrl+s search_word $Typectrl + s \rightarrow \text{ to go to word}$ Ctrl + r \rightarrow jump back

Exit search and go to original location \rightarrow ctrl + g

9 Stand Copy Paste Keys

```
Go into cua-mode = Alt + x When you are in cuamode: Cut = Ctrl + x Copy = Ctrl + c Paste = Ctrl + r Undo = Ctrl + z

// Having cua mode always on: (put in emacs init file ;;use C-x for cut C-c for copy C-v paste (cua-mode 1)
```

In emacs, every keystore is a command

To run a command,

 $type \ Alt + x \ command_name$

 $Alt + xexecute - extended - command \rightarrow$ execute command by name.

 $Alt + x \text{ keyboard_quit } [Ctrl+g] \rightarrow Create a command in progress or cancel unfinished keyboard sequence.$

10 Finding a Command's Name or Keyboard Structure:

Alt+x describe-function Alt + xdescribe - key

11 Find and Replace Commands

Alt + x query-replace or $Alt + \% \Rightarrow$ interactive find/replace on an active region, or cursor point to the end.

Alt + x query-replace-regexp [Ctrl+Alt+%] \rightarrow interactive find replace with regex on an active region or cursor point to the end.

Alt + x dired-do-query-replace-regexp

In **dired**, $[Q] \rightarrow$ interactive find and replace on marked files in dired.

When a query command asks ou for confirmation, here are the most common keys:

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y \rightarrow do the replacement.
n \to skip
\rightarrow do this and all remaining replacements without prompt
    Ctrl+g
\rightarrow to cancel
```

12 Batch Replace:

From cursor position to end of buffer or text selection Alt + x replace-regexp \rightarrow same as replace-string but with **regex**

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Alt + x replace-string \rightarrow find and replace in one shot, without prompt
       Inserting a Literal Tab/New Line
\begin{array}{c} {\rm Insert\ a\ literal\ tab:} \\ {\rm Ctrl\ } + {\rm\ q\ Ctrl\ } + {\rm\ Tab} \end{array}
Default Case Sensitivity
If your search string contains a capital letter:
search is case sensitive:
otherwise, it is not case-sensitive
Example 1:
For example, if our search string is here
The replacement string is Dragon
Emacs will look for here, Here, HERE
if emacs finds here:
replacement := dragon
if emacs finds Here:
replacement := Dragon
if emacs finds HERE:
replacement := DRAGON
To set replacement to the case of search string:
Set variable case-replace = nil
Alt + x set-variable
To turn off Smart Case Sensitivity:
Alt + x toggle-case-fold-search
Suppose we want to force a case change on matched text in Regex Match:
Suppose:
     Once upon a time 
      There is a dragon 
      Princess Tana is still waiting 
   First Letter after p
\Rightarrow p
 ([a-z]). \end{verbatim}
To make captured pattern uppercase: give replacement string this expression:
\begin{verbatim}  \, (upcase \1).\end{verbatim}
//
Find and replace text in a directory.
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//
Select Target Directory:
Alt + x dired-type \<directory-path\>
\^ - to go up a directory
(Note: Cursor should be on a given directory)
\section{Select Some Files}
Find/Replace only some files ending in .html or .js
\textbf{\underline{You will need to mark them}}
//
If there are marked files:
emacs will find and replace only the marked files.
When there are no marked files, emacs will find/replace on directories that the cursor is already on.
\section{Marking Directories:}
m - mark directory under cursor
//
u - unmark directory
//
U - unmark all marked \underline{directories}
\section{Mark by Regular Expression}
Alt + x dired-mark-files-regexp \%m \<regexp\_pattern\>
//
E.g. mark all files ending in .html
\%m \.html\$
//
\section{On The Spot Find and Replace}
Alt + x dired-do-query-replace-regexp [Q]
//
(e.g. Type queen \Enter princess.)
\underline{Top Pane} = File where a match is found
\underline{Bottom Pane} = Shows a list of files where a match is found.
//
(Buffer name is xref).
Type y to replace current highlighted occurence. (emacs will jump to the next occurence).
Type n to skip
Type Ctrl+g to abrot whole find/replace scenario.
Type \! to replace all occurrences in current file without any more \textbf{prompts}
Type N to skip all possible replacements for the rest of the file.
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Type Y to do replacement on all files without asking.
\underline{Cancel out without saving:}
//
Ctrl + g + exit emacs
Move cursor to the \"xref\" pane:
//
Enter $\Rightarrow$ display reference on current line
n or . $\Rightarrow$ move to the next ref and display in other window (xref-next-line).
p or , $\Rightarrow$ Move to the previous reference and display it in the other window (xref-prev-line).
Ctrl + o $\Rightarrow$ Display the reference on the current line in the other window. (xref-show-location-at-
r $\Rightarrow$ Prompt to find replace with regex (xref-query-replace-in-results)
q $\Rightarrow$ Quit the window showing buffer \"xref\" (quit-window)
In the \underline{xref-buffer:}
Alt + x describe-mode $\Rightarrow$ See documents
\section{Save Changed Files:}
Alt + x ibuffer $\Rightarrow$ list all opened files
//
S = save all marked files
//
D = close all files
//
Alt + x save-some-buffers [Ctrl+x s]
emacs will display each unsaved file and ask if you want it saved.
//
\underline{Dired Operations:}
$\rightarrow$ dired
Enter (dired-find-file) = open directory
[q](quit-window) = Done. Display last buffer (kill-buffer)
[C] - (dired-do-copy) - Copy File
[R] - (dired-do-rename) - Rename/move file
[D] (dired-do-delete] - Delete directory
//
[t] - (dired-create-directory) $\Rightarrow$ create new directory
[z] (dired-do-compress) $\Rightarrow$ compress/decompress the file with gzip.
```

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\section{More Dired Navigation Commands:}
[g](revert-buffer) $\rightarrow$ refresh directory listing
[\^](dired-up-directory) $\Rightarrow$ go to parent directory
[$>$] dired-next-dirline $\Rightarrow$ move cursor to next subdirectory
[$<$] dired-prev-dirline $\Rightarrow$ Move cursor to previous subdirectory
\section{Complete List of Directory Commands:}
While in \textbf{dired mode}:
//
Alt + x describe-mode
//
\section{Emacs(Shell):}
Alt + x shell $\Rightarrow$ summon shell.
To run a previous command $\Rightarrow$ Ctrl + $\uparrow$
\underline{SSH in Emacs:}
//
Alt + x term (new term for each command call).
//
To exit: Ctrl + d
While in term-mode:
Alt + x describe-mode [Ctrl + h m] = view full list of hotkeys available.
\underline{Call a shell command once:}
//
Alt + x shell-command [Alt + \!]
to run just 1 shell command.
//
Alt + x shell-command ls
\underline{How to send current text selection to a shell command:}
Select a region, then Alt + x shell-command-on-region [Alt + |].
E.g. Select a Region
Type [Alt + \ wc -l Enter].
//
$\Rightarrow$ Prints Line count of the region
You can replace selected region with the result.
Alt + x universal-argument [Ctrl + u]
\section{Common trick to use unix shell commands on windows}
Alt + x eshell
//
\underline{Dired Viewer Customization:}
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M-x dired-hide-details mode
In \underline{dired}, Alt + x dired-hide-details-mode
//
Key $\Rightarrow$ (
//
If \underline{hide-details always on:}
//
\includegraphics[width=\linewidth] {hide-details.png}
\includegraphics[width=\linewidth]{delete-directory.png}
In \underline{dired},
//
Alt + x dired-do-delete [D] - delete directory
\section{Copy from one dired dir to the next dired dir shown in a split window:}
Put in \underline{emacs init:}
\begin{verbatim} (setq dired-dwim-target t)\end{verbatim}
//
\^\^ eval or restart emacs
Now in \underline{dired}: Alt + x split-window-below, go to another dired dir
When you press C to copy: the other dir in the split pane will be the default destination.
Same for dired-do-rename [R], etc...
//
Make dired use same buffer for viewing directory:
In dired, Alt + x dired-find-alternate-file [a] $\Rightarrow$ open file without creating a new buffer.
If you want Enter or \^ to use some buffer $\Rightarrow$ put in emacs init.
\includegraphics[width=\linewidth]{samebuffer.png}
\section{Hide Files:}
Alt + x dired-do-kill-lines [k] = hide marked files
\section{Major Modes}
Always in a major mode
\section{Get a List of Major Modes:}
Alt + x apropos-command
//
then, type -mode
Alt + x describe-variable
//
then type auto-mode-alist
What is the current major mode or how to find the value?
Alt + x describe-variable
//
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then type major-mode
\underline{Color Themes:}
Alt + x customize-themes $\Rightarrow$ set color theme.
//
Alt + x load-theme,
//
then press Tab to show available themes
To clear theme: Alt + x disable-theme
//
Press Tab for Completion:
//
\underline{To Find themes:}
//
Alt+x describe-variable
then type custom-enabled-themes
set theme permissions in emacs init:
(load-theme 'misterioso)
//
\includegraphics[width=\linewidth]{installpackages.png}
\section{Dired Navigation:}
Enter Dired for local directory:
//
C-x d(dired)
//
Use M-x dired to go into dired mode
n/C-n/SPC = Will move down to the next line.
p/C-p/Del = Will move up to the previous line.
//
j = goto a file (dired-goto-file).
//
M-s f C-s (dired-isearch-filenames) = forward incremental search in dired buffer.
M-s f M-C-s (dired-isearch-filenames-regexp) = same as above but for reg exp.
//
d = Flag this file for deletion (dired-flag-file-deletion).
//
u = Remove deletion flag (dired-unmark).
//
$<DEL>$ = Move point to previous line and remove the deletion flag on that line. (dired-unmark-backward).
x = delete flags flagged for deletion (dired-do-flagged-delete).
//
\Program{%
   \CodeComment{//Dired is on a sort of \underline{safe mode}}
   //
   \> Try out ...
   \> dired-recursive-deletes $\rightarrow$ non-nil.
```

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\> delete-by-moving-to-trash $\rightarrow$ t.
}
\underline{Flagging many files at once:}
\# = Flag all auto-save files (files ending with \#) for deletion.
- = Flag all backup(files with -) for deletion.
//
. (Period) = Flag all excess numeric backup files for deletion.
Oldest/newest backup files are exempt but everything in the middle is flagged.
$\% &\$ = flag for deletion all files with certain kinds of names which suggest you could easily create those f
$% d regexp <RET> $ = flag for deletion all files whose names match regexp.
//
\underline{Visiting Files in Dired:}
f = visit file described on current line (C-x C-f $<fileName>$) (dired-find-file).
$<RET>$
e = equivalent to f.
//
o = Like f, but creates a new window to display file-buffer (dired-find-file-other-window).
v = View file described on the current line, with view mode (dired-view-fie) (read only).
//
$^$ = Visit the parent directory of (dired-up-directory).
//
Instead of flagging a file with "D": you can mark the file (usually with *)
//
Most Dired commands to operate on files are marked with a *
The \underline{Only} command to operate on flagged files is x = to delete them.
m = mark a file
//
* m = Mark the current file with a *
If the region is active, mark all files in the region instead.
If n = int, mark next n files (-n means to go back to previous n files).
//
If subdirectory is marked, all files in subdirectories are \underline{marked}.
//
* * = Mark all executable files with * (dired-mark-executables) (With a numeric argument, unmark all files).
* @ = Mark all symbolic links with * (dired-mark-symlinks) (with a num arg, unmark all files).
* $/$ = Mark with * all directories except . and .. (dired-mark-directories) (With a num arg, unmark all file
* s = Mark all files in current subdirectory, besides ., .. (dired-mark-subdir-files).
//
* U = Remove any mark on this line (dired-unmark) If region is active, unmark all files in the region instead
* $<DEL>$ = Move point to previous line and remove any mark on that line. (dired-unmark-backward). If the reg
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