## File Management

File Management			
<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
File Handling See also:	Emacs provides a large set of commands to open files (Emacs documentation uses the term "finding" files for that), saving files searching for files or content, displaying directory content, etc These are listed in this table.		
See also.  ■ <u>S Dired</u> ■ <u>S Customize</u>	<ul> <li>The directory editing (dired) commands are mainly listed in the Dired table.</li> <li>There are also several Emacs internal and external packages that provide useful commands. PEL supports several of them, listed below.</li> <li>Use Emacs customize system to modify their values to activate, deactivate and modify the behaviour of these packages.</li> <li>PEL <f11> f key prefix followed by either <f2> to access PEL activation group and <f3> to access the external package customization groups.</f3></f2></f11></li> <li>Once you have modified the relevant user-option values, apply or save them and then either execute M-x pel-init or restart Emacs.</li> <li>PEL provides integration with the following Emacs built-in libraries or functionalities:</li> <li>Library ffap activated by pel-use-ffap to provide several commands to open file at point.</li> <li>Library recent activated by pel-use-recent to list files recently opened.</li> <li>Automatic file time stamp update on file save activated by pel-update-time-stamp.</li> <li>Automatic update of copyright notice year on file save activated by pel-update-copyright.</li> </ul>		
► <u>》Key-Chords</u>	<ul> <li>It also provides integration with the following external packages when the corresponding PEL user-option is activated:         <ul> <li>key-chord</li> <li>activated by pel-use-key-chord, provides convenient key-chords for some commands.</li> <li>rfc-mode</li> <li>activated by pel-use-rfc-mode, provides ability to download and browse IETF RFC documents easily (see RFC edit ivy/counsel</li> <li>activated by pel-use-counsel provides completion for some file commands. PEL supports more. See Completion</li> <li>NeoTree</li> <li>activated by pel-use-neotree provides an alternative to Dired to navigate a file directory.</li> </ul> </li> <li>treemacs</li> <li>activated by pel-use-treemacs provides project-oriented file directory navigation.</li> <li>activated by pel-use-ztree an other alternative to Dired to navigate a file directory.</li> </ul>		-chord, provides convenient key-chords for some commands.  mode, provides ability to download and browse <u>IETF RFC</u> documents easily (see <u>RFC editor</u> ).  nsel provides completion for some file commands. PEL supports more. See <u>▼ Completion/Input</u> .  tree provides an alternative to <u>▼ Dired</u> to navigate a file directory.
Open this PDF file. See also: <u>∑ Help/Info</u>	<f11> f <f1> 1</f1></f11>	(pel-help-pdf &optional OPEN-WEB-PAGE)	Open the <u>New File-mngt local PDF.</u> If the prefix argument (like <b>C-u</b> or <b>M</b> ) is used, then open remote GitHub hosted raw PDF instead. If <b>pel-flip-help-pdf-arg</b> user-option is set it's the other way around
<u>∑ Customize</u> PEL File/ Directory Management	<f11> f <f2> 1</f2></f11>	(pel-customize-pel &optional OTHER-WINDOW)	Customize PEL support for file management.  • If OTHER-WINDOW is non-nil (use <b>C-u</b> ), display in other window.
<u>∑ Customize</u> Emacs file management support	<f11> f <f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs support for file management. Includes the following: files, recentf, popup-switches
Customize Emacs support for file revert	<f11> f r <f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs support for file automatic revert management.
Customize ffap (find file at point)	<f11> f a <f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs support for management of ffap (find file at point).
Show file mngt status	<f11> f ?</f11>	(pel-show-filemng-status)	Display status of various file management controls: encoding, resolving relative path method, etc
Open File in OS application	The following command opens file(s) outside Emacs, using OS applications registered with the file type.  See: <u>Dired</u> , <u>Dired</u> , <u>Web</u>		
Open currently file visited in current buffer with the default OS application.	<f11> f F</f11>	(pel-open-buffer-file-in-os- app &optional <u>FNAME</u> )	Open the file in the present buffer with the OS-registered application.  If the buffer is modified, prompt to save buffer first.  In dired-mode buffers, open each marked files in its S-registered applications.  Inside a dired-mode buffer you can also type z to open the current file or all selected files.
Opening file	The command used mechanisms can be  Help PEL customization change the completic compl	installed and activated and the n system allows you to specify	stion is also shown.  It is default. It supports Emacs' basic tab completion. Packages that support other completion in the command uses a different completion mechanism.  Whether you want to use one or several other completion mechanisms. It also has a command to u can change it without restarting Emacs or event re-executing pel-init.
File Lock	'	1 1	the same file with a lock. If you attempt to edit the buffer of a locked file, or save a buffer of a locked lock (with 's'), 2) proceed ('p') to edit the file anyway or 3) quit ('q').
Open file-open dialog	8-0 (ns-open-file-using-panel)   € On macOS in graphics mode only: open a file, select the file name via an OS File dialog.		6 On macOS in graphics mode only: open a file, select the file name via an OS File dialog.
Open (visit) a file/ directory  See also:  Completion/Input  Dired	• <f11> f f • <m-f11> M-f M-f C-x C-f</m-f11></f11>	(find-file FILENAME &optional WILDCARDS)	Prompt for the file or directory name to open. Open the selected file/directory in a buffer with the appropriate mode. For directory, the buffer opens in Dired-mode.  • With PEL, the <f11> f f and <m-f11> M-f M-f key bindings are always available, regardless of what completion mechanism is in use. It can be used as a fallback when testing various completion packages. I have seen some of them fail and break Ido.  Note that <m-f12> M-f M-f is also available in some major modes to open files in a way that</m-f12></m-f11></f11>
• <u>∑ Customize</u>		(ido-find-file)	takes the major mode into account, like providing a list of files in the project. See major mode pages Same as above with Ido completion  See Completion/Input for completion modes available at the prompt.  The ido-use-filename-at-point user-options control whether ido-find-file uses the file name at point as the basis for selecting the file name to open. PEL provides the <f11> f M key sequence to dynamically change the value. See below.</f11>
Prevent Ido expansion with C-j	When ido mode is us Type C-f or C-z want to specify the Type C-j to accept To open a file in reace	sed, you can also:  k f to change to original find- e name of a file that does not e t the file/directory name verbati d-only mode you can: Use or Use C-	efault completion. When Ido is used, the ido-find-file command is used instead.  -file mode and prevent Ido completion from trying to provide the name of an existing file when you exists yet.  - im without replacement or suggestion. Also useful to open a directory in dired mode.  - ine of the commands below (C-x C-r, etc)  - x C-f then type C-x C-q to change the mode of the buffer to read-only mode.  - but that control the way this command operates to help you select a file name: (ido, ivy, helm).
Open in read-only:  Open file via popup menu	<f11> f M-f</f11>	(pel-psw-navigate-files)	Open file from a pop-up menu listing files in current directory. Uses (psw-navigate-files ".").  • Narrow menu list by typing part of the file name. You can also select directory names.  • Requires popup-switcher PEL activates when pel-use-popup-switcher is t.
Open another file in buffer	C-x C-v	(find-alternate-file FILENAME & optional WILDCARDS) (ido-find-alternate-file)	Kills buffer and open the newly specified file in a new buffer same window.  When ido-mode is used, the ido-find-alternate-file is used instead.  Useful when just selected an empty file just selected by mistake.
Open file in other window	• C-x 4 f • <f11> f o</f11>	(find-file-other-window FILENAME &optional WILDCARDS) (ido-find-file-other- window)	Edit file FILENAME, in another window.  • Like C-x C-f, but creates a new window or reuses an existing one.
Open file in other frame	C-x 5 f	(find-file-other-frame FILENAME &optional WILDCARDS)	Edit file FILENAME, in another frame.  • Like C-x C-f, but creates a new frame or reuses an existing one.

(ido-find-file-other-frame)

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>	
** Set whether ido- find-file uses filename at point	<f11> f M</f11>	(pel-set-ido-use-fname-at- point &optional GLOBALLY)	Set Ido's ability to use the filename at point as a starting point in the current buffer or globally. It can set it to one of:  • disabled: don't use filename at point.  • guess: try to identify an exiting file name from the name at point.  • literal: use name at point in the Ido search for a file name.	
	<ul> <li>By default this commands sets ido-find-file behaviour for the current buffer only by setting a ido-use-filename-at-point buffer local variable.</li> <li>Use any prefix argument (eg. C-u) to modify the behaviour globally for the current Emacs session, it does not persist across Emacs sessions. For a persistent behaviour change you must customize ido-use-filename-at-point user-option variable. For that, use M-x customize-option.</li> <li>This affects the behaviour of all commands opening file using Ido completion: ido-find-file as the others.</li> </ul>			
Open in read-only	The following command	ds open files in read-only mode	. While in read-only mode, use Use <b>C-x C-q</b> to permit editing.	
Open a file in read-only mode	С-ж С-г	(find-file-read-only     FILENAME &optional     WILDCARDS)     (ido-find-file-read-only)	Edit file FILENAME but don't allow changes.  Like <b>C-x C-f</b> , but marks buffer as read-only. Use <b>C-x C-q</b> to permit editing.	
Open file in other window in read-only mode	• C-x 4 r • <f11> f 0</f11>	(find-file-read-only-other-window FILENAME & optional WILDCARDS)     (ido-find-file-read-only-other-window)	(find-file-read-only-other-window FILENAME &optional WILDCARDS) Edit file FILENAME in another window but don't allow changes. Like C-x C-f, but marks buffer as read-only. Use C-x C-q to permit editing.	
Open as root	On Unix/Linux/macOS	some files are write protected a	and can only be opened with root privilege with su or sudo. Use the following command for those.	
Open file with root privilege	<f11> f R</f11>	(pel-edit-as-root &optional ARG)	Open a file as root with sudo.  • If already visiting a file and a prefix ARG is specified then edit currently visited file as root.  • The function uses tramp and will prompt for password if necessary.	
Open Literally	Note that when using	g Ido completion, it is possible	d in the Fundamental mode: the major mode normally associated with the file type is not used.  to use a command during completion to force Ido to open the file literally. However, if you are using the only way to open a file literally.	
Visit a file literally: with no encoding support and conversion	<f11> f M-1</f11>	(find-file-literally FILENAME)	Visit file FILENAME with no conversion of any kind.	
	<ul><li>The major mode used</li><li>Automatic uncompre</li></ul>	d is Fundamental mode regardlession and adding a newline at	are both disabled, and multibyte characters are disabled in the resulting buffer.  less of the file name, and local variable specifications in the file are ignored.  the end of the file due to 'require-final-newline' is also disabled.  e, this command asks you whether to visit it literally instead.	
Open binary	Open a file in hex binary	y mode. There are also comma	ands to convert current buffer to hexadecimal editing, like nhexl (described in <u>Natural Buffers</u> ).	
Open a file in hexl-mode See also: <u>Nauffers</u>	<f11> f M-x</f11>	(hexl-find-file FILENAME)	Edit file FILENAME as a binary file in hex dump format, using the 'hexl-mode'.  • Switch to a buffer visiting file FILENAME, creating one if none exists.	
Recently opened			PEL ensures that Emacs remembers the list of recently opened files and provides:	
<u>S Completion/Input</u>	<ul> <li>the pel-initial-recent-f-function user-option identifies which function use used to open the recently opened files:         <ul> <li>ido-recentf-open</li> <li>uses the current Ido prompt or Ido enhanced mechanism. Use <f11> M-c ? to list them and see which one is active.</f11></li> </ul> </li> <li>counsel-recentf         <ul> <li>uses a vertical list prompt.</li> <li>Requires counsel</li> <li>external package activated by pel-use-counsel</li> <li>psw-switch-recentf: uses a popup menu</li> </ul> </li> <li>The menu bar includes a File-&gt;Open Recent menu entry.</li> </ul>			
Open recently opened files, using active method	<f11> f M-r M-r</f11>	(pel-find-recent-file)	Open the recent file prompt using the currently active function.  The function is selected by <b>pel-initial-recent-f-function</b> . It can be modified in the current editing session by pel-select-recentf-function, bound to <f11> f M-r M-R.  When basic Ido is used, type <tab> to get possible expansions listed in a separate buffer.  Ido completion is selectable. Use <f11> M-c ? to list them and see which one is active.  When counsel-recentf is used, you can type C-c C-o to copy the list of files inside a special buffer.</f11></tab></f11>	
Display the name of the function used to prompt for recently opened file	<f11> f M-r M-?</f11>	(pel-show-recentf-function &optional AFTER- SELECTION-P)	Display what function is used to visit recently opened files.  • The argument is for internal use, it is not available interactively.	
Select the function used to list/prompt the recently opened files.	<f11> f M-r M-R</f11>	(pel-select-recentf- function & optional RECENTF-FUNCTION SILENT)	Select the function to visit recently opened files. Modifies what is used in the current editing session, not the persistent value selected by the <b>pel-initial-recent-f-function</b> user-option.  • The arguments are for internal use, they are not available interactively.	
Edit list of recently opened files	<f11> f M-r M-e</f11>	(recentf-edit-list)	Show a dialog to delete selected files from the recent list.  • Use this to remove some of the files from the list.	
Open file at point	The following commands, followed by the flap commands, allow opening files from the file name taken at point (the cursor location). They work regardless of the input completion method currently used.  Note that when using the Ido completion mode, it is possible to instruct Ido to use a file name at point as the basis for the file name to open. This Ido behaviour is controlled by the ido-use-filename-at-point user-option. With PEL you can control it globally or locally with <f11> f M</f11>			
Open filename at point in a browser See also:  •	• <f11> f / • 6u</f11>	(pel-browse-filename-at- point)	Open the file name at point inside the system's browser.  • If point is at a directory name, open the systems application that browses directories (eg. macOS Finder, Windows Explorer).  • This is the same as using pel-open-at-point with the argument N set to 9. It is easier to type and PEL assigns its own key-chord for it.	
Open URL at point in a browser See also:  • <u>Sey-Chords</u> , <u>Sey-Chords</u>	• <f11> f M-/ • 7u</f11>	(browse-url-at-point &optional ARG)	Ask a WWW browser to load the URL at or before point.  • Variable 'browse-url-browser-function' says which browser to use.  • With prefix argument inverts the value of the option 'browse-url-new-window-flag'.  • Use <f11> <f2> E u to open the browse-url group that contains relevant user options.</f2></f11>	
Copy URL at point in temporary file and visit the file	<f11> f M-u</f11>	(pel-open-url-at-point)	Copy the URL at point to a local temporary file and visit that file.  • A The download copy of the file does not have the same name and may not open with the proper mode because it won't have an extension. The HTML formatted files will be recognized by Emacs but most of the files won't be.  • Save the file somewhere else using the C-x C-w key sequence and identify the proper extension to activate the required major mode.	
With goto-address-mode	C-c C-f		This binding is only available when point is over the URL and the <u>goto-address-mode</u> minor mode is active. Use <f11> f u or <f11> f U to activate this mode.</f11></f11>	
Set base directory for pel-open-at-point relative file names	<f11> f ;</f11>	(pel-set-open-at-point-dir)	Set the behaviour of 'pel-open-at-point' in current buffer.  • Select how it determines the directory from which a relative file name is built. Prompts to allow selection of one of the following methods:  • Use visited file parent directory (the default).  • Use buffer's current working directory.  • Use a specified directory. Prompts for the directory name. Supports completion.	

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>	
Open file or web-page whose name is at point	• C-^ • <f11> f . • <m-f11> M-f</m-f11></f11>	(pel-open-at-point &optional N)	Open the file, library or the URL, named at point, with potential line & column #s.  • Will find source files in current project as specified by pel-filename-at-point-finders user-option.  Supports glob characters, partial directory path. When multiple files are found it prompts using	
**	М		the method selected by <b>pel-prompt-read-method</b> user-option.	
See also:	• <u>6y</u>		The <u>6v</u> key-chord is available if <b>pel-use-key-chord</b> is non-nil.	
• <u>∑ Key-Chords</u> • <u>M reStructuredText</u>				
• <u>Bī - C</u>	<ul> <li>This command works generically but is also specialized for some major modes, like C, C++, Erlang, reStructuredText.</li> <li>See their respective pages for the mode specific features.</li> </ul>			
• <u>ֆմ - C++</u> • ֆմ - Erlang	When executed from		he '=' and ':' characters are used as additional delimiters. Shell variables (such as \$HOME) are	
y. Lining	In general the com- directory. If the file identified by the p	expanded • In general the command extracts the file (or directory) name (and possibly line and column numbers) from text at point and tries to open the file or directory. If the file is not found then the command searches the file inside a directory tree holding the current file. The root of that directory tree is identified by the presence of a project marker file, one of the file identified in the pel-project-root-identifiers user option. Something like .git, .ng, .project or .pel-project by default.		
	If embedded space(s	are allowed in the filename, the	text at point. The name is either surrounded by white space characters or the delimiters listed below. hen point must be located at the first of the 2 delimiter characters. by by the point tab, newline and: "`' ()[]{ $<$ ''" [] () $<$ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	
	If embedded space	e in the file name is not allowe	d, then the file name must also be enclosed in the above delimiters, the space acts as an extra	
	If the string identifies		e page in the systems' default browser.	
Change relative path base directory selection			lob characters (even though this is not used in a #include "" or #include <> statements).  ectory or the buffer's current working directory by default.	
method 🖛		•	y executing the <b>pel-set-open-at-point-dir</b> command ( <b><f11> f ;</f11></b> ) in the buffer. <b>en-file-at-point-dir</b> user-option. Use <b><f11> f <f2></f2></f11></b> to open the customization buffer to modify it.	
	Otherwise the comm	and attempts to open the file r	name with the specified name. If that file does not exists it then proceed to search for it.  nbers the point is moved to that position.	
Select prompt method <del></del> ■		•	•	
			I lists them and prompts using the method selected by <b>pel-prompt-read-method</b> user-option.  Ited by PEL. You can select a more powerful <b>ivy</b> prompting instead.	
			pel-use-ivy to t pand <u>Ivy mode</u> will be installed automatically when you restart Emacs.	
	This allows you	to detect potential duplication	the specified search method, it does not only use the first one found. in header file names in large include paths.	
Select target window	' '		ng the find file (with completion), search for libraries files (type 1) according to current file type.	
-	Select target windo     Without argument:	:		
	If no window ho	olds that file, select the target v	int to that window and to the line column coordinates if specified following the file name at point. window based on the number of editable windows in frame: if 1, split that window and use the new	
N>20 : open the directory	With numeric argu		re, use the current window.	
directory *	<ul> <li>(abs N) &gt; 20: th</li> </ul>		of the file. Interpret the window position from the N value adjusted: N-20 (or N+20 if N is negative)	
		other' (the next) window. ove (excluding 8, 9 and 10): se	elect the target window based on the number of editable windows in frame:	
	if 1 windows:     split that window, and use the new window,     if 2 windows:     use the other window,			
	if 3 or more windows: use the current window.  N is: 8: up, 2: down, 4:left, 5:current, 6:right.			
See function docstring	<ul> <li>N is 9: open the file in the system's browser (with N=29 or N=-29, open the directory of the file name in the system's browser), open a directory name at point with directory browsing (eq. macOS Finder, Windows Explorer).</li> </ul>			
for more info.	<ul> <li>N is 10: open the URL at point in the system's browser.</li> <li>Selecting Minibuffer, inexistent or dedicated window is not allowed.</li> </ul>			
ffap commands	Emacs provides the ffap (find file at point) command set. The ffap command is similar to pel-find-file-at-point-in-window but does not support line and numbers, does not support identifying a window with command arguments and is not designed to support multiple programming languages. It does however support other facilities and can be installed to replace the behaviour of standard file management command bindings such as C-x C-f.			
	PEL activates the E	macs built-in ffap library when	the <b>pel-use-ffap</b> user option is set to either <b>t</b> or to <b>ffap-bindings</b> . In both cases these activate the	
		is set to ffap-bindings, then PE	EL also activates the standard ffap bindings which take over the behaviour of the main file finding and	
	dired commands. This means that Ido, Ivy or Helm are no longer available for these commands.  If <b>pel-use-ffap</b> is only set to <b>t</b> then the standard ffap bindings is not activated.			
Find file/URL at point	<f11> f a p</f11>	(ffap &optional FILENAME)	Find FILENAME, guessing a default from text around point.  • If 'ffap-url-regexp' is not nil, the FILENAME may also be an URL. Web URL opens in browser.	
			<ul> <li>With a prefix, this command behaves exactly like 'ffap-file-finder'.</li> <li>If 'ffap-require-prefix' is set, the prefix meaning is reversed.</li> </ul>	
			See also the variables 'ffap-dired-wildcards', 'ffap-newfile-prompt', 'ffap-url-unwrap-local', 'ffap-url-unwrap-remote', and the functions ffap-file-at-point' and 'ffap-url-at-point'.	
Find file/URL at point - read only	<f11> f a P</f11>	(ffap-read-only)	Like 'ffap', but mark buffer as read-only.	
Find another file/URL at point in window Find file/URL in other	<f11> f a v</f11>	(ffap-atternate-file) (ffap-other-window)	Like 'ffap' and 'find-alternate-file': kills current buffer and open new file in the same window.  Like 'ffap', but put buffer in another window.	
window Find file/URL in other	<f11> f a w</f11>	(ffap-other-frame)	Like 'ffap', but put buffer in another frame.	
frame Find file/URL in other	<f11> f a f</f11>	(ffap-read-only-other-	Like 'ffap', but put buffer in another frame.  Like 'ffap', but put buffer in another window and mark as read-only.	
window - read only Find file/URL in other	<f11> f a W</f11>	(πap-read-only-other- window) (ffap-read-only-other-	Like 'ffap', but put buffer in another frame and mark as read-only.  Like 'ffap', but put buffer in another frame and mark as read-only.	
frame - read only  Start Dired with file at		frame) (dired-at-point &optional	Start Dired, defaulting to file at point. See 'ffap'.	
point  Start Dired with file at	<f11> f a d</f11>	FILENAME)		
Start Dired with file at point in other window  Start Dired with file at	<f11> f a D</f11>	(ffap-dired-other-window)	Like 'dired-at-point', but put buffer in another window.	
point in other frame	<f11> f a M-d</f11>	(ffap-dired-other-frame)	Like 'dired-at-point', but put buffer in another frame.	
List directory of file at point	<f11> f a l</f11>	(ffap-list-directory)	Like 'dired-at-point' and 'list-directory'.	
Open a menu of all files, URL in current buffer.	<f11> f a m</f11>	( <b>ffap-menu</b> &optional RESCAN)	Put up a menu of files and URLs mentioned in this buffer. Set mark, jump to choice, and try to fetch it. The menu is cached in 'ffap-menu-alist', and rebuilt by 'ffap-menu-rescan'.  • With prefix argument: forces a rebuild. Searches with 'ffap-menu-regexp'.	

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
Open <u>Dired</u> (Directory Editor)	When "opening" (visiting) a directory Emacs opens a buffer in Dired mode, that looks like a ls -l output, which allows several operations. If you specify a directory path to Cx C-f then Dired-mode is used. You can also use the following commands to open buffer in Dired mode.  It's also possible to browse a file directory tree with file tree browsers, like NeoTree and Ztree, described below in this table.  The Sependbar can also be used.		
Open a directory editor See also: <u>&gt; Dired</u> > Completion/Input	• C-x d • %-D	(dired DIRNAME &optional SWITCHES)     (ido-dired)	Opens a Dired-mode buffer on the specified directory. Prompt for the directory name.  PEL activates ido when the pel-use-ido-mode user option is set to t.  See Completion/Input for completion modes available at the prompt.
Run Dired in other (next) window	C-x 4 d	(dired-other-window)	Opens a Dired-mode buffer on the specified directory inside another window.  Prompt for the directory name.
List Directory See also:  Completion/Input	C-x C-d	(list-directory DIRNAME &optional VERBOSE)	Display a list of files in or matching DIRNAME, a la 'ls'.  • DIRNAME is globbed by the shell if necessary.  • Prefix arg ( <b>C-u</b> ) means supply -l switch to 'ls'.
Activating URLs to browse and open files	Emacs provides the <b>goto-url-mode</b> and the <b>goto-url-prog-mode</b> that turn URLs found in the current buffer into clickable buttons.  • Once the mode is active the following key sequences are available wheel point is over a URL button:  • <b>C-c RET</b> or the mouse to click on the button.  • If the URL is an email address a buffer to write an email to that address opens.  • If the URL is a web or FTP address the system browser is invoked to open the address.  • <b>C-c C-n</b> : move point to the end of the next URL in the buffer.  • <b>C-c C-p</b> : move point to to the previous URL in the buffer.  • <b>C-c C-f</b> : download the file identified by the URL into a local temporary file and visit the file. See (pel-open-url-at-point) above.		
Toggle goto-address- mode	<f11> f u</f11>	(goto-address-mode &optional ARG)	Minor mode to buttonize URLs and e-mail addresses in the current buffer.  With a prefix argument ARG, enable the mode if ARG is positive, and disable it otherwise.
Toggle goto-addrress- prog-mode	<f11> f U</f11>	(goto-address-prog-mode &optional ARG)	Like 'goto-address-mode', but only for comments and strings.
Open the URL (email or web page)	C-c RET	(goto-address-at-point &optional EVENT)	Open the URL at point:  If URL is a web page: open it in a browser  If URL is a mail address:  Send mail to address at point:  Find e-mail address around or before point. Then search backwards to beginning of line for the start of an e-mail address.  If no email address is found there, then load the URL at or before point.
Move to end of next URL in buffer See also: <u>Navigation</u>	C-c C-n <f6> C-n</f6>	(pel-goto-next-url)	Move point forward to the end of the next URL located in the current buffer.  • The global <f6> C-n key binding activates the goto-address-mode if it is not already active.</f6>
Move to beginning of previous URL in buffer See also: <u>Navigation</u>	C-c C-p <f11> C-p</f11>	(pel-goto-previous-url)	Move point backward to the beginning of the previous URL located in the current buffer.  • The global <f6> C-p key binding activates the goto-address-mode if it is not already active.</f6>
Insert text of another file at point	The following commands can be used to insert text from other files at point in the current buffer.		
Insert file at point	• C-x i • <f11> f i</f11>	• (insert-file FILENAME) • (ido-insert-file)	Insert contents of file FILENAME into buffer after point.  • Set mark after the inserted text.
Insert file literally at point	<f11> f I</f11>	(insert-file-literally FILENAME)	Insert contents of file FILENAME into buffer after point with no conversion.  Set mark after the inserted text.
Write text into specified file	The following command	ls can be used to write text se	lected from current buffer into specified file.
Write region text to file	<f11> f w</f11>	(write-region START END FILENAME &optional APPEND VISIT LOCKNAME MUSTBENEW)	Write current region into specified file.  • Prompts for the specified file.
Append region text to file	<f11> f W</f11>	(append-to-file START END FILENAME)	Append the contents of the region to the end of file FILENAME.  • Prompts for the specified file.
Set file mode	<f11> f m</f11>	(set-file-modes FILENAME MODE)	Set mode bits of file named FILENAME to MODE (an integer).  Only the 12 low bits of MODE are used.  Prompts for file name and then for chmod-like file mode value.
Reverting Files	If the file's content changed on the disk and you want to refresh the Emacs buffer visiting that file, you need to "revert" the file.  If you want to use Emacs to monitor the content of a file that is continuously modified by an external process (like a log file) set the <i>revert-without-query</i> variable to a list of regular expressions describing the field it'll apply to.  You can also activate the auto-revert mode for the current buffer or globally and restart its timer.		
Revert a buffer See also: Diff & Merge	• <f11> f r f • ₩-u</f11>	(revert-buffer & optional IGNORE-AUTO NOCONFIRM PRESERVE-MODES)	Replace current buffer text with the text of the visited file on disk.  • This undoes all changes since the file was visited or saved.  • With a prefix argument, offer to revert from latest auto-save file, if that is more recent than the visited file.  • This is also the command to use to reload a file that was modified on the file system.  • You can use ediff-current-file to see the difference between the buffer and its disk file. PEL binding for this is <f11> e b f.</f11>
Toggle auto-revert mode	<f11> f r a</f11>	(auto-revert-mode &optional ARG)	Toggle reverting buffer when the file changes (Auto-Revert Mode).  With a prefix argument ARG, enable Auto-Revert Mode if ARG is positive, and disable it otherwise.  • Auto-Revert Mode is a minor mode that affects only the current buffer. When enabled, it reverts the buffer when the file on disk changes.  • When a buffer is reverted, a message is generated. This can be suppressed by setting 'auto-revert-verbose' to nil.
Toggle auto-revert tail mode	• <f11>   t • <f11> f r t</f11></f11>	(auto-revert-tail-mode &optional ARG)	Toggle reverting tail of buffer when the file grows.  • With a prefix argument ARG, enable Auto-Revert Tail Mode if ARG is positive, and disable it
See also: <b>∑ Scrolling</b>			<ul> <li>otherwise.</li> <li>When Auto-Revert Tail Mode is enabled, the tail of the file is constantly followed, as with the shell command 'tail -f'. This means that whenever the file grows on disk (presumably because some background process is appending to it from time to time), this is reflected in the current buffer.</li> <li>You can edit the buffer and turn this mode off and on again as you please. But make sure the background process has stopped writing before you save the file!</li> </ul>
Cancel/restart auto- revert timer	<f11> f r SPC</f11>	(pel-auto-revert-set-timer)	Restart or cancel the timer used by Auto-Revert Mode. If such a timer is active, cancel it.
	Start a new timer if Global Auto-Revert Mode is active or if Auto-Revert Mode is active in some buffer.  Restarting the timer ensures that Auto-Revert Mode will use an up-to-date value of 'auto-revert-interval' (which is normally 5 seconds by default).    Pel-auto-revert-set-timer is a thin wrapper over auto-revert-set-timer that displays a warning if executed when the buffer is not already in auto-revert-mode. It also displays the value of auto-revert-interval when auto-revert-set-timer is executed.		

<u>Operation</u>	<u>Keystroke</u>	Function		<u>Note</u>	
Saving Files	PEL supports the foll	nands to save the content of owing controllable actions or ed with a command for the fi	file save. Each of these actions are activ	vated via an action-specific PEL user-optic heir associated user-option and command	on, and can I are listed here:
	Action  Delete trailing space override it for som Update time stamp o	and lines on save pel-del e major modes: pel-m n save pel-upo	te-trailing-whitespace pel-tog des-preventing-delete-trailing-whitespac ate-time-stamp pel-tog	ggle-update-time-stamp-on-save	Key Sequence <f11> M-W <f11> M-T</f11></f11>
Save file to disk	<ul><li>Update copyright not</li><li>C-x C-s</li></ul>	(save-buffer &optional ARG	1, 5	ggle-update-copyright-on-save	<f11> M-C</f11>
Safe ine to disk	• %-s	(save-same) deplication of the	Save current buffer to associated file. By default, it makes the previous version into a backup file i previously requested or if this is the first save.  • With C-u: marks this version to become a backup when the next save is done  • With C-u C-u: makes the previous version into a backup file  • With C-u C-u: marks this version to become a backup when the next save is done, and makes the previous version into a backup file.  • With prefix 0: never make the previous version into a backup file.  • On macOS in graphics mode only: %-s brings a OS file-save dialog.  • Save and activated on-file-save actions only occur when the buffer is in "changed" status. Use M to flip that status to force an action when it has just been activated.		e save is done, and
Save all/some files	С-х s	(save-some-buffers & optional ARG PRED)  Prompt for files that are modified. Options:  • y : save • n : don't save • C-r : look at the buffer in question • d : view differences with diff-buffer-with-file			
Write buffer to specified file  Save As	C-x C-w	(write-file FILENAME &optional CONFIRM)     (ido-write-file)	Similar to "Save-As": prompt for the fill • Can also be yanked in the mini buffe  Use that command to rename the file	er, use <b>M-n</b> to edit it.	
Changed current buffer changed state	M-~	( <b>not-modified</b> &optional ARG)	Mark current buffer as unmodified, not needing to be saved.  • With C-u prefix ARG, mark buffer as modified, so C-x C-s will save.		
Toggle copyright update on save	<f11> M-@</f11>	(pel-toggle-update- copyright-on-save &optional GLOBALLY)	<ul> <li>Toggle copyright update on file save and display current state.</li> <li>By default change behaviour for local buffer only.</li> <li>When GLOBALLY argument is non-nil, using any prefix argument, change it for all buffers for the current Emacs editing session (the change does not persist across Emacs sessions).</li> <li>To modify the global state permanently modify the customized value of the 'pel-update-copyright' user option via the 'pel-pkg-for-filemng' group customize buffer with <f11> f <f2> 1.</f2></f11></li> <li>This command is only available when the pel-update-copyright is set to t.</li> </ul>		
Toggle timestamp update on save	<f11> M-T</f11>	(pel-toggle-update-time- stamp-on-save &optional GLOBALLY)	<ul> <li>Toggle time-stamp update on file save and display current state.</li> <li>By default change behaviour for local buffer only.</li> <li>When GLOBALLY argument is non-nil, using any prefix argument, change it for all buffers for the current Emacs editing session (the change does not persist across Emacs sessions).</li> <li>To modify the global state permanently modify the customized value of the 'pel-update-time-stamp' user option via the 'pel-pkg-for-filemng' group customize buffer with <f11> f <f2> 1.</f2></f11></li> <li>This command is only available when the pel-update-time-stamp is set to t.</li> </ul>		
Toggle delete trailing space on save See also: Whitespace	• <f11> M-W • <f11> t w M-W</f11></f11>	(pel-toggle-delete-trailing- space-on-save &optional GLOBALLY)	current Emacs editing session (the case Trailing whitespace deletion is autowhitespace user-option is set to t. Use To modify the global state permaner		ssions). pel-delete-trailing- ivate it. el-delete-trailing-
Inserting & Automatically Updating Copyrights	Emacs has built-in support for insertion and update of copyright notices inside files.  • Two commands, shown below, are provided to manually insert or update the file's copyright notice.  • The copyright notice can be automatically updated by adding the copyright-update function to the list of before-save-hook variable with the following code:  (add-hook 'before-save-hook 'copyright-update)  • To be automatically updated, the copyright notice must be placed within an area at the beginning of the file specified by the value of the copyright-limit variable, normally defined as the first 2000 characters. This variable is customizable.				
Insert copyright notice at point See also: <u>∑ Inserting</u> Text	<f11> i C</f11>	(copyright &optional STR ARG)	Insert a copyright by \$ORGANIZATION notice at cursor.  • If the ORGANIZATION environment variable is not available, Emacs prompts for it.		or it.
Update file's copyright notice	M-x copyright- update	(copyright-update &optional ARG INTERACTIVEP)		e current year. in the notice rather than adding the current ppl-version' is set, any copying permissions	•
	<ul> <li>Even when used interactively copyright-update does not warn if there is no copyright in the current buffer to update.</li> <li>It does not create a missing notice.</li> <li>If you want to be prompted automatically to update an existing but out-of-date copyright notice, write the following inside your init.el file:         <ul> <li>(add-hook 'before-save-hook 'copyright-update)</li> </ul> </li> </ul>				

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>	
Automatic File			es. It must be activated by adding the <b>time-stamp</b> function to the <b>before-save-hook</b> variable.	
Time Stamp on file save	This can either be done via Emacs customization system or explicitly inside your init file with the following code:			
References:	• Time-stamp: " "			
<u>TimeStamps @</u> <u>EmacsWiki</u>	You can, however change these defaults and get Emacs to update all sorts of time stamp formats, even inside source code statements: Emacs controls automatic insertion of timestamp with the following variables:			
Change time stamp format in:	• time-stamp-pattern consists of 4 parts, each one controlled by a variable:			
<ul> <li>markdown file</li> <li>reStucturedText file</li> </ul>	<ul> <li>time-stamp-limit: identifies where in the file the time stamp can be located. Defaults to 8: the first 8 lines.</li> <li>time-stamp-start: identifies the text pattern that precedes the time stamp.</li> <li>time-stamp-end: identifies the end of the time stamp.</li> <li>time-stamp-format specifies the format of the time stamp.</li> </ul>			
See also:  Inserting	• Som	<ul> <li>time-stamp-format specifies the format of the time stamp.</li> <li>Something like "%:y-%02m-%02d %02H:%02M:%02S %u" to specify the date and time in ISO format, with the user login's name.</li> </ul>		
Text	<ul> <li>time-stamp-time-zone specifies the time zone selection:</li> <li>nil: Emacs local time</li> </ul>			
	• t: Unive • wall : sy	rsal time vstem wall clock time		
		ntrolled by a TZ environment va p-format and time-stamp-tim	ariable  e-zone variables can be set in your init file or via the Emacs customization system.	
	n *	d in the <b>time-stamp</b> customiza	tion group.  ling or after the automatically updated time stamp, it is best to use file local variables: this will allow	
			ious formats. As an example, see the top and end of the PEL manual raw format file.	
			within the <b>first 8 lines</b> of the file, otherwise it will not be updated automatically.  set the <b>time-stamp-line-limit</b> file local variable.	
	PEL provides the ex	tra user-option to control the a	utomatic generation of time-stamps:	
		The state of the s	ether time-stamps are automatically update time stamps in all files where a valid time-stamp pove. Set it to <b>t</b> (the default) to allow automatic time stamp updates. Set it to nil to prevent them. You	
			session by using the <f11> f M-t key sequence.  kage provides a set of text insert commands which include inserting a time stamp.</f11>	
		ng Text table for the appropria		
Update file time stamp	<f11> f t</f11>	(time-stamp)	Force update the time stamp string(s) in the current buffer.  • Updates a time stamp of format recognized by <i>Emacs current settings</i> even when automatic time-	
			stamp update is off.  • More information about the "Emacs current settings" in the description block above.	
Toggle time stamp	<f11> f M-t</f11>	(time-stamp-toggle-active	Toggle 'time-stamp-active', setting whether <f11> f t updates a buffer.</f11>	
automatic update		&optional ARG)	With ARG, turn time stamping on if and only if arg is positive.	
RFC-Mode		_	mode commands. Requires <u>rfc-mode</u> activated by <u>pel-use-rfc-mode</u> ,	
Read a specific RFC Browse RFCs	<f11> B r <f11> B R</f11></f11>	(rfc-mode-read NUMBER)	Read the RFC document NUMBER. Offer the number at point as default.  Browse through all RFC documents referenced in the index.	
		(rfc-mode-browse)		
Browsers	<ul> <li>Emacs supports mechanisms to browse file directories. This includes:</li> <li>Emacs built-in <u>Dired</u> directory editor, along with several extensions. You can have several different Dired buffers in an Emacs session.</li> <li>The Emacs built-in <u>Sepeedbar</u> and its extensions. There can only be one instance of a Speedbar buffer and that can be inside another frame.</li> <li>Several other external packages: <u>Neotree</u>, treemacs and <u>Ztree</u></li> </ul>			
View Directory	The NeoTree extern	al package provides a Vim-Nei	rdTree like tree-view of a directory with expansion/collapse.	
Tree with NeoTree	PEL activates it when <b>pel-use-neotree</b> is set to <b>t</b> .  • <f11> B N <f2> opens the PEL customization group to set <b>pel-use-neotree</b>.</f2></f11>			
	<ul> <li><f11> B N <f3> prompts, select neotree to open the neotree customization group.</f3></f11></li> <li>There is only one NeoTree window. It is a <u>dedicated window</u>.</li> <li>Icons used in the tree can be changed:         <ul> <li>In text mode set pel-neotree-font-in-terminal to arrows to use arrows instead of '+'.</li> <li>In graphics mode, if pel-neotree-font-in-graphics is set to icons then the icons provided by <u>all-the-icons package</u> is used.</li> </ul> </li> </ul>			
		The state of the s	ackage it does not install the fonts.  executing: M-x all-the-icons-install-fonts	
View directory tree with	<f11> B N N</f11>	(neotree-toggle)	Toggle show/hide the NeoTree window.	
<u>NeoTree</u>		In the NeoTree buffer the follo		
		<ul><li>n next line, p previous</li><li>&gt; end of buffer, &lt; top buffe</li></ul>	r	
		<ul><li>SPC or RET or TAB : Open</li><li>U Go up a directory</li></ul>	current item if it is a file, Fold/Unfold current item if it is a directory.	
		<ul><li> g Refresh</li><li> A Maximize/Minimize the N</li></ul>	leoTree Window	
		• H Toggle display hidden file	es. Controlled by <b>neo-hidden-regexp-list</b> user option.	
		<ul> <li>O Recursively open a direct</li> <li>C-c C-n Create a file or c</li> </ul>	tory  breate a directory if filename ends with a '/'	
		<ul> <li>C-c C-d Delete a file or a</li> <li>C-c C-r Rename a file or</li> </ul>	•	
		• C-c C-c Change the root • C-c C-p Copy a file or a	directory.	
Open NeoTree for dir of current buffer	<f11> B N F</f11>	(neotree-find &optional PATH DEFAULT-PATH)	Open a NeoTree window using the directory of the current buffer. No prompt.	
Open NeoTree for specified directory	<f11> B N D</f11>	(neotree-dir PATH)	Prompt for a directory. Open a Neotree window for that directory.	
Close NeoTree window	<f11> B N H</f11>	(neotree-hide)	Close the NeoTree window.	
Show NeoTree window	<f11> B N S</f11>	(neotree-show)	Show the NeoTree window.	
<u>Treemacs</u>			pace/project oriented tree-based view with expansion/collapse and actions of directories and files.	
Manipulate directory			cs user-option is turned on (set to t).	
trees associated as projects/workspaces	Treemacs has a large number of user-options in the <b>treemacs</b> customization group and sub-groups.  PEL <f11> B <f3> key sequence gives access to the customization group.</f3></f11>			
<ul> <li>Manipulate the directories and files</li> </ul>	On PEL, open (or close) the treemacs buffer with the <f11> B T key sequence.</f11>			
**	<ul> <li>In graphics mode the mouse provides access to most commands.</li> <li>In terminal (and graphics) mode when pain is inside the treemacs dedicated window, the treemacs major mode key-bindings, listed below, are available.</li> </ul>			
See: <b>∑X</b> Treemacs	The treemacs-mode an	d extensions have an extensive	e command set. See ∑X Treemacs for the complete list	
Open/close treemacs	<f11> B T</f11>	(treemacs)	Initialise or toggle treemacs. See ∑x Treemacs for treemacs-mode commands.	
	_	·	If the treemacs window is visible hide it.	
			If a treemacs buffer exists, but is not visible show it. If no treemacs buffer exists for the current frame create and show it.  If the street and show it.  If the first analysis and the street and show it.	
			If the workspace is empty additionally ask for the root path of the first project to add.	

Operation	<u>Keystroke</u>	Function	<u>Note</u>			
View Directory	The <b>ztree</b> external package provides a text-based tree-view of a directory with expansion/collapse.					
Tree with ZTree	PEL ztree customization:					
	• <f11> B <f2> opens the PEL customization group (select the tree subgroup) . See also: Customize.</f2></f11>					
		es it when <b>pel-use-ztree</b> is set				
		following PEL provided custon				
	<ul> <li>pel-ztree-dir-n</li> <li>pel-ztree-dir-f</li> </ul>		ve focus to new entry when <ret> is typed. egexp to ignore more file. Do not enter quote for string.</ret>			
	per-zu ce-un-i		b ignore the .pyc files, enter <b>^.*pyc</b> on a line.			
	•		olay filtered files until <b>H</b> is typed. Normally they are not shown until <b>H</b> is typed.			
			the ztree customization group itself.			
	1. Execute M-x pel	-init after settling and apply	ing new values to activate the new values.			
View directory as tree	<f11> B Z</f11>	(ztree-dir PATH)	Open an interactive buffer with the directory tree of the PATH given.			
with ztree-dir			<ul> <li>▶ Opens the tree buffer in the current window.</li> <li>▶ There can be several buffers with different ztree-dir trees.</li> </ul>			
		In the Ztree Dir buffer the follo				
		> : narrow/display director	· ·			
		• d : Open Dired at point.	, ,			
			d files. Controlled by regexp in the <b>ztree-dir-filter-list</b> user option.			
		• x : Toggle expand/collapse				
			n large directory trees it takes a long time. I have see Emacs hang when typing ${f x}$ again during that			
		time. Minvestigate.				
Searching/Finding		ds can be used to search for fil				
Files	A	#6 : searching and finding files.				
See also:	<ul><li>Use man to get mo</li><li>on locate: <f1< li=""></f1<></li></ul>					
• <u>∑ Help/Info</u>	• on find: <f1< td=""><td></td><td></td></f1<>					
• <u>National Direct</u>	You can manipulate	e the result in Dired with Dired o	commands. For instance type ( to toggle the display of more than the file names.			
Search for file with	<f11> f L</f11>	(locate SEARCH-STRING	Prompt for a search pattern and search for filenames using the system <b>locate</b> command line utility			
locate		&optional FILTER ARG)	through the sell to search a database of all pathnames that match the specified search pattern. The			
			database is recomputed periodically.			
			<ul> <li>The search result is shown in a '*Locate*' buffer.</li> <li>With prefix arg ARG, prompt for the exact shell command to run instead. This way you can specify</li> </ul>			
			options to the locate command line utility.			
Run grep via find	• <f11> f g</f11>	(find-grep COMMAND-	Run grep via find, with user-specified args COMMAND-ARGS.			
	• <f11> g f</f11>	ARGS)	Collect output in a buffer.			
See also: <u>See also</u>			• While find runs asynchronously, you can use the <b>C-x</b> ` command to find the text that grep hits refer to.			
			This command uses a special history list for its arguments, so you can easily repeat a find			
			command.			
Search for files with	<f11> f d</f11>	(find-dired DIR ARGS)	Prompts for the root to search from, and a <b>find</b> command to search for files with the Unix find.			
'find' and open Dired			Specify the arguments for the <u>find command</u> .     For example to perform a case inspecifive search for all higher user in area. (**) high			
buffer			<ul> <li>For example, to perform a case insensitive search for all .h files, use: -iname "*\.h"</li> <li>Opens a Dired-mode buffer and show the files found in there.</li> </ul>			
Search directory for	<f11> f n</f11>	(find-name-dired DIR	Search DIR recursively for files matching the globbing pattern PATTERN, and run Dired on those files.			
files and open Dired		PATTERN)	PATTERN is a shell wildcard (not an Emacs regexp) and need not be quoted.			
buffer for those			The default command run (after changing into DIR) is:			
			findname 'PATTERN' -ls			
Find files in a directory	<f11> f h</f11>	(find-grep-dired DIR	Find files in DIR that contain matches for REGEXP and start Dired on output.			
and open Dired output		REGEXP)	The command run (after changing into DIR) is:			
			find.\(-typef-exec'grep-program'find-grep-options'-eREGEXP{}\;\)-ls			
			where the first string in the value of the variable 'find-ls-option' specifies what to use in place of "-ls"			
			as the final argument.			
Find Emacs Lisp files in	<f11> f 1</f11>	(find-lisp-find-dired DIR	Find Emacs Lisp files in DIR, matching REGEXP.			
directory tree		REGEXP)	Open *Find Lisp Dired* buffer on output.			

## File Management — References

Topic & Link	Description		
Emacs Display - Mode Line	Read first. Describes what the Emacs mode line displays.		
GNU Emacs Manual - File Handling	Describes how to open and deal with files and directories in Emacs.		
GNU EMACS Manual - Interactive Do	Describes the ido-mode, a nice addition that helps with completing file names at prompts.		
Display path of file in status bar	In graphics mode, display the buffer name and the full path file in parenthesis inside the frame title bar.		
How do I rename an open file in Emacs?			
Find files faster with the recent files package	Mickey Petersen article describing the recent file feature. PEL ido-recentf-open is taken from Mickey Peterson code.		