Buffers

Operation	<u>Keystroke</u>	Function	<u>Note</u>
Emacs Buffers	PEL provides the po pel-use-uniquify pel-use-ascii-tab pel-use-nhexl-m	el-pkg-for-buffer customization group to co : activates <u>uniquify</u> to that buffer na ble : activates the <u>ascii-table</u> external p ode : activates the <u>nhexl-mode</u> external	rs. This table lists the commands you can use to list and manage buffers. where the distinguishing directory after the file name, like this: fname dir backage. See ** Help/Info** for the key binding. I package used to display and manipulate the content of the current buffer in hexadecimal. Acternal package used for piping up a list of buffers.
	PEL also provides a Hy	dra that manipulates Emacs windows and	buffers. See the <u>Numbers</u> table for its description.
Open this PDF file. See also: <u>Nelp/Info</u>	<f11> b <f1></f1></f11>	(pel-help-pdf &optional OPEN-WEB- PAGE)	Open the <u>Numbers</u> PDF using method specified by the pel-open-pdf-method user-option or the alternate one if a command prefix (like C-u) was used.
<u>Secustomize</u> PEL Buffer Support	<f11> b <f2></f2></f11>	(pel-customize-pel &optional OTHER-WINDOW)	Customize PEL Buffer support: open PEL buffer support specific group. • If OTHER-WINDOW is non-nil (use C-u), display in other window.
<u>∑ Customize</u> Emacs & external package buffer support	<f11> b <f3></f3></f11>	(pel-customize-library &optional OTHER-WINDOW)	Customize Emacs and external packages related to buffer. This includes the following customize groups: Buffer-menu, ibuffer, minibuffer, hexl, nhexl, popup-switcher. When a prefix argument (like C-u) opens the buffer inside another window. • PEL prompts for files that may not be loaded to allow you to access all customization groups.
List Buffers & Switch to Buffer	The first 2 commands open a menu overlaid on the current buffer that you can use to switch to another buffer: • buffer-menu-open is a drop-down hiererchical menu • psw-switch-buffer is a pop-up menu. The switch-to-buffer command uses a prompt at the bottom of the frame. The list-buffers and ibuffer commands use a new buffer.		
Open buffer menu	• C- <f10></f10>	(buffer-menu-open)	Start key navigation of the buffer menu.
See also: <u>Nenus</u>	• <c-down- mouse-1></c-down- 		List buffers in a drop-down menu. Lists the buffers by major-mode when several buffers of the same major-mode are opened. Compared to the compared
List open buffers in popup menu	<f11> b b</f11>	(psw-switch-buffer &optional ARG)	In graphics mode this can also be invoked using the <c-down-mouse-1> Show buffers list menu to switch buffer in a popup window menu. • If ARG show only buffers with files and without * in the beginning and end of the buffer name. Requires popup-switcher activated by PEL when pel-use-popup-switcher user-option is turned on (t).</c-down-mouse-1>
Switch to buffer See also: Completion/ Input	С-ж в	(switch-to-buffer BUFFER-OR-NAME &optional NORECORD FORCE-SAME- WINDOW)	Switch window to display the previous, or another buffer (entered at echo area prompt). Switch window to display the previous, or another buffer (entered at echo area prompt). The invisible buffers have a name that start with a space. To see them type space and tab and a list of those buffers will appear before the list of visible buffers.
List all buffers	С-х С-ь	(list-buffers & optional ARG) (ibuffer & optional OTHER-WINDOW-P NAME QUALIFIERS NOSELECT SHRINK FILTER-GROUPS FORMATS)	► See <u>Completion/Input</u> for description of completion modes available. Display a list of existing buffers in a buffer named "*Buffer List*", the buffer displays information about all buffers and enters the <i>Buffer Menu Mode</i> . See the keystrokes for the Buffer Menu Mode below. ► The PEL package uses the ' <u>ibuffer</u> ' function instead, which provides more functionality, working like dired, allowing to sort by name, size, mode, filtering by mode (hit return on the mode of a buffer). Type <f1> m to get the list of possible actions that can be done on the listed buffers.</f1>
Next/Previous Buffer	The following command	ds change current buffer to next or previous	s buffer, or to what was used last.
Switch to next buffer	• C-x <right> • C-x C-<right> • <f11> b n</f11></right></right>	(next-buffer)	Switch to the next buffer displayed in the current window.
Switch to previous buffer	• C-x <left> • C-x C-<left> • <f11> b p</f11></left></left>	(previous-buffer)	Switch to the previous buffer displayed in the current window.
Switch to previous buffer in window	<f11> b 1</f11>	(pel-switch-to-last-used – buffer)	Switch buffer in current window to the buffer previously seen in this window. Used twice returns to the same buffer.
To next/previous recently visited buffer	A list of buffers is sheYou can also identify	own in the minibuffer at the bottom of the s buffer filtering in the iflipb customization g	ers in a way that resembles what Alt-Tab and Alt-Shift-Tab does on Windows. screen when you use the command. Repeat the command with <f5>. roup (use <f11> b <f3> and select iflipb to access it). when pel-use-iflipb user-option is turned on (set to t).</f3></f11></f5>
Flip to next buffer	<f9></f9>	(iflipb-next-buffer ARG)	Flip to the next buffer in the buffer list. Consecutive invocations switch to less recent buffers in the buffer list. Buffers matching 'iflipb-always-ignore-buffers' are always ignored. Without a prefix argument, buffers matching 'iflipb-ignore-buffers' are also ignored.
Flip to previous buffer	<s-f9></s-f9>	(iflipb-previous-buffer)	Flip to the previous buffer in the buffer list. Consecutive invocations switch to more recent buffers in the buffer list.
Kill buffer (but keep the flip buffer state)	<f11> b K</f11>	(iflipb-kill-buffer)	Same as 'kill-buffer' but keep the iflipb buffer list state.
Manage Buffers	The following command	ds support buffer management: display info	ormation, change read-only mode, clone buffer, rename buffer, kill buffer, etc
Show name of previous buffer in window	<f11> b ?</f11>	(pel-show-window-previous-buffer)	Show the name of previous buffer used in the current window.
Toggle read-only status of buffer	• C-x C-q • <f11> b r</f11>	(read-only-mode &optional ARG)	When the buffer is in read-only mode the mode line shows '%%' on the left side, in the 'ch' area of "cs:ch-fr buf pos line (major minor)". The manual states: "For a read-only buffer, it shows '%*' if the buffer is modified, and '% 'otherwise." See also: the View Mode activating commands toward the end of this table. A buffer in View Mode cannot be modified. The View Mode may be used to ensure that no modifications are made to a buffer (visiting a file or not).
Clone buffer	<f11> b c</f11>	(clone-buffer &optional NEWNAME DISPLAY-FLAG)	Create and return a twin copy of the current buffer. Unlike an indirect buffer, the new buffer can be edited independently of the old one (if it is not read-only). NEWNAME is the name of the new buffer. It may be modified by adding or incrementing <n> at the end as necessary to create a unique buffer name. For example if buffer *Help* is opened it opens another one named *Help*<2> (or *Help*<3> if *Help*<2> already exists, etc)</n>
Rename a buffer	<f11> b R</f11>	(rename-buffer NEWNAME &optional UNIQUE)	If UNIQUE argument is non-nil via C-u M-x rename-buffer, the name is auto generated to be unique.
Rename buffer - use unique name	<f11> b U</f11>	(rename-uniquely)	Rename the current buffer by adding ' <number>' to the end. • Use this if you want multiple *Buffer* or *Info* buffers for example. • Example: StackExchange: How can I have multiple help buffer with different content</number>

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
Kill current buffer See also: Windows	• <f11> b k •</f11>	(kill-current-buffer)	 Kill (close) the current buffer. Does not prompt if there is no change in the buffer. PEL also provides a window management Hydra with ability to kill the current buffer. See ▼ Windows for more info.
Kill buffer	• ж-& С-х k	(kill-buffer &optional BUFFER-OR-	Kill (close) the current buffer.
Kill current buffer and close window	• C-x 4 0 • <f7> k</f7>	NAME) (kill-buffer-and-window)	 Always prompt to identify a buffer, current is identified. Press enter to kill the buffer. Kill the current buffer and delete the selected window. PEL also provides a window management Hydra with ability to kill the current buffer and
See also: <u>➤ Windows</u> Kill some buffer		(kill-some-buffers &optional LIST)	close windows in separate operations. See <u>Windows</u> for more info. Kill some buffers. Asks the user whether to kill each one of them.
Delete all windows of a specific buffer		(delete-windows-on &optional BUFFER-OR-NAME FRAME)	Deletes all windows showing BUFFER-OR-NAME, by calling 'delete-window' on those windows.
Accumulating Text	Emacs provides the fol	lowing commands to insert text in buffer from	
Append region to	<f11> b M-a</f11>	(append-to-buffer BUFFER START	Append to specified BUFFER the text of the region.
specified buffer		END)	 The text is inserted into that buffer before its point. BUFFER can be a buffer or the name of a buffer; this function will create BUFFER if it doesn't already exist.
Prepend region to specified buffer	<f11> b M-p</f11>	(prepend-to-buffer BUFFER START END)	Prepend to specified BUFFER the text of the region. The text is inserted into that buffer after its point. BUFFER can be a buffer or the name of a buffer; this function will create BUFFER if it doesn't already exist.
Copy region to specified buffer (replacing old content)	<f11> b C-c</f11>	(copy-to-buffer BUFFER START END)	Copy to specified BUFFER the text of the region. The text is inserted into that buffer, replacing existing text there. BUFFER can be a buffer or the name of a buffer; this function will create BUFFER if it doesn't already exist.
Insert content of specified buffer at point	<f11> b i</f11>	(insert-buffer BUFFER)	Insert after point the contents of BUFFER. • Puts mark after the inserted text. • BUFFER may be a buffer or a buffer name.
Append region's text to specified file	<f11> b f</f11>	(append-to-file START END FILENAME)	Append the contents of the region to the end of file FILENAME. • This does character code conversion and applies annotations like 'write-region' does.
Indirect Buffers	ways it is a buffer analous editing either one are volumes, different names, different	ogue of a symbolic link between files. The isible immediately in the other. But in all oth nt values of point, different narrowing, different narrowing, different narrowing.	shares the text of some other buffer, called the base buffer of the indirect buffer. In some text of the indirect buffer is always identical to the text of its base buffer; changes made by her respects, the indirect buffer and its base buffer are completely separate. They can have erent markers, different major modes, and different local variables." s but want to narrow an area in 1 buffer while seeing the complete text in the other window.
Create indirect buffer explicitly	<f11> b I m</f11>	(make-indirect-buffer BASE-BUFFER NAME &optional CLONE)	Create and return an indirect buffer for buffer BASE-BUFFER, named NAME. BASE-BUFFER should be a live buffer, or the name of an existing buffer. NAME should be a string which is not the name of an existing buffer. Optional argument CLONE non-nil means preserve BASE-BUFFER's state, such as major and minor modes, in the indirect buffer. CLONE nil means the indirect buffer's state is reset to default values.
Create indirect buffer of current buffer	<f11> b I c</f11>	(clone-indirect-buffer NEWNAME DISPLAY-FLAG &optional NORECORD)	Create an indirect buffer that is a twin copy of the current buffer.
	called with a prefix a an existing suffix. Tr DISPLAY-FLAG non-	rg, NEWNAME defaults to the current buffe ying to clone a buffer whose major mode s nil means show the new buffer with 'pop-to	EWNAME from the minibuffer when invoked with a prefix arg. If NEWNAME is nil or if not er's name. The name is modified by adding a ' <n>' suffix to it or by incrementing the N in symbol has a non-nil 'no-clone-indirect' property results in an error. o-buffer'. This is always done when called interactively. uffer at the front of the list of recently selected ones.</n>
Create indirect buffer of current buffer in another window	• C-x 4 c • <f11> b I w</f11>	(clone-indirect-buffer-other-window NEWNAME DISPLAY-FLAG &optional NORECORD)	Like 'clone-indirect-buffer' but display in another window.
Edit Binary file with <u>hexl</u>	use the hexl-find-	ilt-in <u>hexl</u> mode to edit files in hexadecima file to open the file in binary mode, or e command to convert an already opened l	ll mode. To use it you must: buffer. To exit this mode and go back to the original mode type C-c C-c
Open a file in hexl-mode	<f11> f M-x</f11>	(hexl-find-file FILENAME)	Edit file FILENAME as a binary file in hex dump format. • Switch to a buffer visiting file FILENAME, creating one if none exists, and edit the file in
See also: <u>∑ File-mngt</u>			'hexl-mode'.
Toggle hexl mode	<f11> b M-x</f11>	(hexl-mode &optional ARG)	Toggle the hexl mode: a mode for editing binary files in hex dump format.
	 This is not an ordinary major mode; it alters some aspects of the current mode's behavior, but not all; also, you can exit Hexl mode and return to the previous mode using 'hexl-mode-exit'. This function automatically converts a buffer into the hexl format using the function 'hexlify-buffer'. Each line in the buffer has an "address" (displayed in hexadecimal) representing the offset into the file that the characters on this line are at and 16 characters from the file (displayed as hexadecimal values grouped every 'hexl-bits' bits, and as their ASCII values). If any of the characters (displayed as ASCII characters) are unprintable (control or meta characters) they will be replaced by periods. 		
Insert a byte in decimal	C-M-d	(hexl-insert-decimal-char ARG)	Insert a character given by its decimal code ARG times at point.
Insert a byte in octal	С-М-о	(hexl-insert-octal-char ARG)	Insert a character given by its octal code ARG times at point.
Insert a byte in hex	С-М-х	(hexl-insert-hex-char ARG)	Insert a character given by its hexadecimal code ARG times at point.
Goto 512-byte page start	С-М-а	(hexl-beginning-of-512b-page)	Go to beginning of 512 byte boundary.
Goto to 512-byte page end	С-М-е	(hexl-end-of-512b-page)	Go to end of 512 byte boundary.
Goto 1K end	C-x]	(hexl-end-of-1k-page)	Go to end of 1KB boundary.
Goto 1K beginning	C-x [(hexl-beginning-of-1k-page)	Go to beginning of 1KB boundary.
Goto address entered in hexadecimal	M-g	(hexI-goto-hex-address HEX- ADDRESS)	Go to Hexl mode address (hex string) HEX-ADDRESS. • Signal error if HEX-ADDRESS is out of range.
Goto to address entered in decimal	M-j	(hexl-goto-address ADDRESS)	Go to hexl-mode (decimal) address ADDRESS. • Signal error if ADDRESS is out of range.
Exit hexl mode	C-c C-c	(hexl-mode-exit &optional ARG)	Exit Hexl mode, returning to previous mode. • With arg, don't unhexlify buffer.
Hexadecimal Editing with nhexl	The nhexl-mode external package used to display and manipulate the content of the current buffer in hexadecimal and manipulate hex dump files. PEL downloads installs and activates this package when the pel-use-nhexl user option is set to t. Use the sfl key sequence to open the PEL buffer customization buffer to access this user option. Once the hexadecimal mode is on, turn it off by executing the nhexl-mode command again. Good nhexl-mode features: The nhexl-mode keeps the undo history when you toggle the nhexl mode. Something that the helx mode does not do. You can use all of the normal navigation commands. You don't need to use specialized commands. PEL home and end commands work.		

<u>Operation</u>	Keystroke	Function	<u>Note</u>	
Toggle buffer between normal and hex display	<f11> b x</f11>	(nhexl-mode &optional ARG)	Toggle minor mode to edit files via hex-dump format. Requires the nhexl-mode package activated when pel-use-nhexl user option is t.	
Activate Hex nibble editing mode	<f11> b X</f11>	(nhexl-nibble-edit-mode &optional ARG)	Minor mode to edit the hex nibbles in 'nhexl-mode'. Note: only works after nhexl-mode has been activated once. Requires the nhexl-mode package activated when pel-use-nhexl user option is t.	
Buffer View Mode	Several commands (view-buffer, etc, see at top of this table) activate the View Mode for a buffer where the buffer is essentially read-only and special commands are available.			
View buffer - no modification allowed	<f11> b v</f11>	(view-buffer BUFFER &optional EXIT-ACTION)	View BUFFER in View mode, returning to previous buffer when done. • Emacs commands editing the buffer contents are not available; instead, a special set of commands (mostly letters and punctuation) are defined for moving around in the buffer. • Space scrolls forward, Delete scrolls backward. • Type H for a list of all View commands. See the View Mode command list below.	
View Mode commands	Digits pro- net common	roll backward "half page size" lines. With preform of lower of low	croll forward prefix lines. croll backward prefix lines. efix. efix. efix. sfix. x, sets "half page size" to prefix lines and scrolls forward that much. efix, sets "half page size" to prefix lines and scrolls backward that much. dr prefix line(s). kward prefix line(s). se this to view a changing file. buffer. rst line). s pushed at start of every successful search and when jump to line occurs. end. g after current page. ! and @ have a special meaning at the beginning of the regexp: regexp. backward search) of buffer. ting before current page. fer to previous state. q is the normal way to leave view mode. this if you started viewing a buffer (file) and find out you want to edit it. only status of the buffer. ditable even if it was not editable before entry to View mode. us state. don't kill this buffer. to other buffer. e-other-frame, or M-x dired-view-file (M-x view-file, M-x view-file-other-window, M-x	
Buffer Menu Mode	other-window, or M-x view-file-other-frame, then c, q and C will return to that buffer. The list of buffers is shown inside its own buffer, "Buffer List* when (list-buffer) is executed. This buffer support the following commands. ➡ The full list of key bindings is available via the <f1> m key. ➡ Note that PEL uses (ibuffer) for the C-x C-b key binding, so the list of commands and key bindings that are available differ. They are listed in the next section.</f1>			
Buffer Menu Mode keys	• ? : Get help • g : Update • C-n : next bu • N : next bu • C-p : previou: • p : previou: • C-d : mark bu • k : mark bu • k : mark bu • k : Move to • M- : Remove • u : unmark • x : execute • - : mark bu • % : toggle r • 1 : display • 2 : Display • o : replace • m : mark bu	buffer list ffer in list ffer in list ffer in list ffer in list s buffer in list s buffer in list s buffer in list uffer for deletion uffer e a specific mark from all buffers all marks on buffer marked commands (delete buffers marked uffer as un-modifiable ead-only emacs in full emacs screen this buffer & next in horizontal window other (next) window with this buffer uffer to be displayed in windows buffers marked with in as many windows as	: immediately : immediately : immediately : immediately : immediately : immediately : when pressing v	

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
iBuffer Mode See also: ∑ibuffer-mode		le in the ibuffer window. b key binding open the Ibuffer window.	
IBuffer Mode commands	A : Vie H : Vie V : Re T : To, D : Kill M-s a C-s : Do, M-s a C-M-s : Ise r : Re Q : Qu I : As P : Pri O : Lis X : Pig N : Re ! E : Ev, W : As k : Re	we the marked buffers. We the marked buffers in the selected frame, we the marked buffers in another frame. Wert the marked buffers in another frame. Wert the marked buffers. I ggle read-only state of marked buffers. I ggle lock state of marked buffers. I incremental search in the marked buffers. I incremental search in the marked buffers. I incremental search in the marked buffers. I place by regexp in each of the marked buffers replace in each of the marked buffers. I tilnes in all marked buffers which match a sea the contents of the marked buffers to a seplace the contents of the marked buffers win a shell command with the buffer's file as aluate a form in each of the marked buffers for example, if you want to make all of the above, but view each buffer while the form move the marked lines from the "Ibuffer" bit all buffers marked for deletion.	fers. given regexp (like the function 'occur'). shell command. vith the output of a shell command. an argument. This is a very flexible command. marked buffers read-only, try using (read-only-mode 1) as the input form.
IBuffer Mode Marking commands	m : Mark the buffer at point. t : Unmark all currently marked buffers, and mark all unmarked buffers. c : Change the mark used on marked buffers. u : Unmark the buffer at point. DEL : Unmark the previous buffer. M-DEL : Unmark buffers marked with MARK. U : Unmark buffers marked with MARK. U : Unmark all marked buffers. * M : Mark buffers by major mode. * u : Mark all "unsaved" buffers. This means that the buffer is modified, and has an associated file. * m : Mark all modified buffers, regardless of whether they have an associated file. * s : Mark all buffers whose name begins and ends with "". * e : Mark all buffers whose name begins and ends with "". * v : Mark all buffers which have an associated file, but that file doesn't currently exist. * r : Mark all read-only buffers. * / : Mark buffers in 'dired-mode'. * h : Mark buffers in 'help-mode', 'apropos-mode', etc : Mark buffers in 'help-mode', 'apropos-mode', etc : Mark buffers by their name, using a regexp. \$ n : Mark buffers by their major mode, using a regexp. \$ f : Mark buffers by their major mode, using a regexp. \$ g : Mark buffers by their filename, using a regexp. \$ g : Mark buffers by their content, using a regexp. \$ L : Mark buffers by their content, using a regexp. \$ L : Mark all locked buffers.		
IBuffer Mode Filtering commands		(ibuffer-filter-chosen-by-completion)	Select and apply filter chosen by completion against available filters. Indicates corresponding key sequences in echo area after filtering. The completion matches against the filter description text of ach filter in 'ibuffer-filtering-alist'.
		(ibuffer-filter-by-directory QUALIFIER)	Limit current view to buffers with directory matching QUALIFIER. • For a buffer associated with file '/a/b/c.d', this matches against '/a/b'. For a buffer not associated with a file, this matches against the value of 'default-directory' in that buffer.
	/ M : Add a filter by / n : Add a filter by / c : Add a filter by / f : Add a filter by / i : Add a filter by / e : Add a filter by / > : Add a filter by / > : Add a filter by / < : Add a filter by / < : Add a filter by / * : Add a filter by / * : Add a filter by / v : Add a filter by / v : Add a filter by / v : Save the cum / r : Switch to pre / a : Add saved fill / & : Replace the to / p : Remove the to / ! : Invert the log / d : Break down to	y a major mode now in use. y derived mode. y buffer name. y buffer content. y buffer content. y file axtension. y modified buffers. y an arbitrary Lisp predicate. y buffer size. y buffer size. y special buffers. y buffers with a name. eviously saved filters. ters to current filters. top two filters with their logical AND. top two filters with their logical OR.	
IBuffer Mode Filter commands	/ P : Remove to portable : Move to the remove all a / S : Save the current / R : Restore previous / P : Restore pr		
IBuffer Mode Sorting commands	s i : Reverse the c s a : Sort the buffe s f : Sort the buffe s v : Sort the buffe s s : Sort the buffe	een the various sorting modes. current sorting order. ers lexicographically. ers by the file name. ers by last viewing time. ers by size. ers by major mode.	

<u>Operation</u>	<u>Keystroke</u>	Function	<u>Note</u>
IBuffer Mode Other commands	: Change the SPC : Move point C-p : Move point h : Show this h = : View the dif RET : View the bu o : As above, b C-o : As both abo	current display format. Use this to set to the next line. to the previous line. elp. ferences between this buffer and its association.	ggle whether buffers that match 'ibuffer-maybe-show-predicates' should be displayed. e the complete file name when the file name is long. ated file.