## **Aligning Text Vertically**

<u>Operation</u>	Keystroke	Function	Note Note		
Align text vertically					
Align by rules     Align by regexp     Highlight whitespace to modify     Align/indent on RET	<ul> <li>Emacs provides several ways to align text vertically.</li> <li>One set of commands are provided by the built-in <u>align.el</u> library provides the following commands, all based on alignment regular expression rules.</li> <li>These can be very useful for source code and some style of comments.</li> <li>The commands are listed in the rows below.</li> <li>There are <u>other ways</u> to align code.</li> <li>in Emacs the TAB key is used to indent semantically, so it can be used to align the left side of the code. See <u>Indentation</u></li> <li>It's also possible to use the multiple-cursor mode and delete or add whitespace. See <u>ICursor</u>.</li> </ul>				
	<ul> <li>The artist and picture modes allows you to move the cursor in "void" space, after the end of a line, that can also help. See <u>Pawing</u>.</li> <li>Automatic vertical alignment of text can be done when the <u>M-RET</u> key sequence is typed if that behaviour is enabled in the current buffer. You can either use the <f11> <u>M-RET</u> command to toggle this behaviour or have it automatically enabled for a set of major modes.</f11></li> </ul>				
			or a specified major mode by adding the name of the mode in the <b>pel-mode-activating-align-on-return</b> tion buffer by typing <b><f11> t a <f2></f2></f11></b>		
Open this PDF file. See also: <u>∑ Help/Info</u>	<f11> t a <f1></f1></f11>	(pel-help-pdf &optional OPEN-WEB-PAGE)	Open the <u>Salign</u> local PDF. If the prefix argument (like <b>C-u</b> or <b>M</b> ) is used, then it opens the remote GitHub hosted raw PDF instead. If the <b>pel-flip-help-pdf-arg</b> user-option is set it's the other way around.		
Open PEL align customization group. See also: <u>▼ Customize</u>	<f11> t a <f2></f2></f11>	(pel-customize-pel &optional OTHER- WINDOW)	Open the PEL customize group(s) for the current context.  • Use it to change PEL user option variables the activate and control the various abbreviations features.  • With a prefix argument (like <b>C</b> - <b>u</b> ) opens the buffer inside another window.		
Customize Emacs built- in align support See also: <u>▼ Customize</u>	<f11> t a <f3></f3></f11>	(pel-customize-library &optional OTHER- WINDOW)	<ul> <li>Customize Emacs align group.</li> <li>When a prefix argument (like C-u) opens the buffer inside another window.</li> <li>Group belonging to files that have not yet been loaded are normally not accessible in Emacs and via the customize-group command. PEL, however, attempts to locate the file that defines a non-loaded customization group and will prompt you for loading the file if it finds it.</li> </ul>		
Display current buffer's vertical alignment behaviour See also:   Indentation	<f11> t a ?</f11>	(pel-align-info &optional APPEND)	Print information about text aligning info in a *pel-align-info* help-mode buffer.  • Prints current state and values of relevant user-options as buttons you can use to get more info and change their customized values:  • behaviour of M-RET in the current buffer: show if that command aligns text or not.  • whether the modes are activating vertical alignment on return.  • Clear previous buffer content. Use prefix arg (like C-u) to append instead.		
Align text based on alignment rules	<f11> t a a</f11>	(align BEG END &optional SEPARATE RULES EXCLUDE-RULES)	Attempt to align a region based on a set of alignment rules.  BEG and END mark the region. If BEG and END are specifically set to nil (this can only be done programmatically), the beginning and end of the current alignment section will be calculated based on the location of point, and the value of 'align-region-separate' (or possibly each rule's 'separate' attribute).  If SEPARATE is non-nil, it overrides the value of 'align-region-separate' for all rules, except those that have their 'separate' attribute set.  RULES and EXCLUDE-RULES, if either is non-nil, will replace the default rule lists defined in 'align-rules-list' and 'align-exclude-rules-list'. See 'align-rules-list' for more details on the format of these lists.		
Align contiguous lines of text using pre-defined aligning rules.	<f11> t a c</f11>	(align-current &optional RULES EXCLUDE- RULES)	Call 'align' on the current alignment section.		
Default rules include variable assignment alignment, comment alignment, etc	<ul> <li>This function assumes you want to align only the current section, and so saves you from having to specify the region. If RULES or EXCLUDE-RULES is set to a list of rules (see 'align-rules-list'), it can be used to override the default alignment rules that would have been used to align that section.</li> <li>This command aligns a set of assignment statements using programming language specific rules. For example it would align the '=' of several C variable assignment statements on contiguous lines. Lines separated by spaces are not considered inside the same group. Use align-entire with a region for that.</li> <li>With point over a location anywhere on the following lines of C code in a buffer in c-mode:</li> </ul>				
	<pre>count_lines=0;  // first comment idx=&amp;lines[0];  // second comment completed=FALSE;  // last comment</pre>				
	Running this command transforms the text to the following:				
	<pre>count_line idx completed</pre>	= &lines[0]; //	first comment second comment last comment		
	<ul> <li>The command uses a set of pre-defined alignment rules made of regular expressions and applies all rules that match. The rules are major-mode specific.</li> <li>It is possible to add more rules and to customize them. The rules are stored in the align-rules-list user option.</li> </ul>				
Align all lines of text in the current region	<f11> t a e</f11>	(align-entire BEG END &optional RULES EXCLUDE-RULES)	Align the selected region as if it were one alignment section.  BEG and END mark the extent of the region. If RULES or EXCLUDE-RULES is set to a list of rules (see 'align-rules-list'), it can be used to override the default alignment rules that would have been used to align that section.  The command uses a set of pre-defined alignment rules made of regular expressions and applies all rules that match. The rules are major-mode specific.  It is possible to add more rules and to customize them. The rules are stored in the align-rules-list user option.		
Align statement with above lines and add new line and indent.	<f11> t a l</f11>	(align-newline-and-indent)	A replacement function for 'newline-and-indent', aligning as it goes.  The alignment is done by calling 'align' on the region that was indented.  Use <f11> M-RET to toggle the behaviour of the M-RET key to make it align as well as inserting new lines and indent.</f11>		
Align a set of lines on some text	• <f11> t a r • M-<f11> M-a</f11></f11>	(align-regexp BEG END REGEXP &optional GROUP SPACING REPEAT)	Align the current region using an ad-hoc rule read from the minibuffer. BEG and END mark the limits of the region. Prompts for the regular expression REGEXP to align with.  • First select a region, then issue the command. For example, to align assignment of variables over the equal sign use = as the regexp.  • The PEL package creates the ar alias for align-regexp, so it's also possible to invoke it with M-x ar RET		
Align a set of lines on multiple columns	M- <f11> M-A</f11>	(pel-multi-align-regexp)	Align marked area with consecutive regexp.  Use this to align a marked area one several column, each with its own regexp, starting on the left and going toward the right. Useful for lining up tables of text.  The command prompts for a regexp and then another and it will use as many regex as provided. To stop providing regexp, just hit RET without entering text.		
Highlight whitespace that a specific rule would modify	<f11> t a h</f11>	(align-highlight-rule BEG END TITLE &optional RULES EXCLUDE- RULES)	Highlight the whitespace which a given rule would have modified.  • BEG and END mark the extent of the region. TITLE identifies the rule that should be highlighted. If RULES or EXCLUDE-RULES is set to a list of rules (see 'align-rules-list'), it can be used to override the default alignment rules that would have been used to identify the text to be colored.		
Remove highlighting created by above command	<f11> t a H</f11>	(align-unhighlight-rule)	Remove any highlighting that was added by 'align-highlight-rule'.		

<u>Operation</u>	<u>Keystroke</u>	Function	Note		
Align/Indent On RET	The following commands are used to control text alignment on end of line.				
Toggle text alignment on pel-newline-and-indent-below See also: Indentation	<f11> M-RET</f11>	(pel-toggle-newline- indent-align)	Toggle variable pel-newline-does-align for the local buffer.  This toggles the way function 'pel-newline-and-indent-below' operates.  If pel-newline-does-align is t, it aligns several syntactic element in the current block: the comments, the assignments.  Black lightly modes where pel-newline-does-align is automatically activated (set to t) by adding the major mode to the list in the pel-modes-activating-align-on-return user option.  This affects the behaviour of the following commands:  pel-cc-newline (assigned to RET in CC modes like c-mode, c++-mode and d-mode).  pel-newline-and-indent-below (assigned the M-RET)		
Insert an indented line below current line See also: Indentation	• M-RET • <f11> <tab> RET</tab></f11>	(pel-newline-and-indent-below)	Insert an indented line just below current line.  • The command can also align text vertically if this special mode was activated for the buffer with the <f11> M-RET.  • Use <f11> t a ? to display whether the M-RET command aligns text or not.</f11></f11>		

## Aligning Text — Reference

Topic/URL	Comment
ErgoEmacs — Emacs: Align Text	Xah Lee's page provides a good and simple description on how to align (and sort) tables of text using the align-regex command.
EmacsWiki — Align Command	