Emacs support for Forth

<u>Description</u>	<u>Keystroke</u>	Function	<u>Note</u>		
Forth programming	Support for the Forth programming language is minimal: you can activate the forth-mode package by setting the pel-use-forth user option. • Files with the .f, .fs, .fth and .4th are recognized as Forth source files and will automatically activate forth-mode if the package has been activated via that user-				
Language	option. Generic programming language features like template text insertion handle Forth comment style. See Inserting Text.				
Support	• provided by forth-mode external package automatically downloaded and installed by PEL when the pel-use-forth user option				
Last on data days	This mode supports Emacs <u>Speedbar</u> : it shows Forth variables and words. See 12.				
Last updated on: Open this PDF file.	2025-10-17 <f11> SPC f <f1></f1></f11>	(pel-help-pdf &optional OPEN-	Open the \$1 - Forth local PDF. If the prefix argument (like C-u or M) is used, then it		
See also: <u>∑ Help/Info</u>	<f12> <f1></f1></f12>	WEB-PAGE)	opens the remote GitHub hosted raw PDF instead. If the pel-flip-help-pdf-arg user-option is		
- 0 · · · · · · · · · · · · · · · · · ·			set it's the other way around.		
∑ Customize PEL Forth support	<f11> SPC f <f2></f2></f11>	(pel-customize-pel &optional OTHER-WINDOW)	Customize PEL Forth support. • If OTHER-WINDOW is non-nil (use C-u), display in another window.		
∑ Customize Emacs	<f12> <f2> <f11> SPC f <f3></f3></f11></f2></f12>	(pel-customize-library &optional	Customize Emacs Forth support: forth, forth-smie, forth-spec.		
Forth support	<f12> <f3></f3></f12>	OTHER-WINDOW)	If OTHER-WINDOW is non-nil (use C-u), display in another window.		
	1227 1207				
Show PEL setup for Forth	<f11> SPC e ? ?</f11>	(pel-forth-setup-info &optional APPEND)	Display Forth setup information inside a *pel-forth-info* buffer with buttons providing quick access to the customization buffer of each variable shown. The information shown includes		
	<f12> ? ?</f12>		the value and interpretation of: • the user options controlling indentation and hard tab width rendering.		
			To append information in the buffer instead of clearing the previous content type any prefix argument (such as C-u) before the command keystroke.		
Forth Language	The following commands conr	lect to a web site to retrieve specifica	tion information about Forth words.		
Reference Access					
Forth '94 word specification	C-c C-d 1	(forth-spec-lookup-1994 NAME)	View the documentation on NAME from the ANS'94 Forth Standard • Prompts for Forth word. Supports completion. • Connects to http://lars.nocrew.org/dpans/dpans.htm , a draft of ANSI Forth '94.		
Forth 2012 word	C-c C-d 2	(forth-spec-lookup-2012 NAME)	View the documentation on NAME from the Forth 2012 Standard.		
specification / ##			 Attempts to access http://www.forth200x.org/documents/html/alpha.html http://www.forth200x.org/documents/html/alpha.html http://www.forth200x.org/documents/html/alpha.html http://www.forth200x.org/documents/html/alpha.html http://www.forth200x.org/documents/html/alpha.html http://www.forth200x.org/documents/html/alpha.html http://www.forth200x.org/documents/html <		
			contain information about Forth 2012 such as http://www.forth200x.org/documents/ forth-2012.pdf. http://www.forth200x.org/documents/		
Navigation incide	Basic navigation commands a	re available: both standard Emacs no	1		
Navigation inside Forth Code	Basic navigation commands are available: both standard Emacs navigation and extra commands provided by PEL, as listed below. • This mode supports Emacs <u>Speedbar</u> : it shows Forth variables and words.				
See also: <u>∑ Navigation</u>		feel banks to the second	Manufacture to the backets of the second sec		
Forward to start of next word definition	<f6> <down></down></f6>	(pel-beginning-of-next-defun &optional SILENT DONT-	Move forward to the beginning of the next word definition. • Beeps if does not find beginning of next function unless SILENT is non-nil.		
		PUSH_MARK)	 If the beginning of next function is found, push the start location to the mark ring unless DONT-PUSH_MARK is non-nil. 		
			 Move back to previous position with M-`. this should but does not work in Forth. Shift marking is available: hold Shift after typing <f6>.</f6> 		
Backward to end of	<f6> <left></left></f6>	(pel-end-of-previous-defun	Move backwards to the end of the previous word definition.		
previous word definition		&optional SILENT DONT- PUSH MARK)	Beeps if does not find end of previous function unless SILENT is non-nil. If the end of previous function is found, push the start location to the mark ring unless		
demination		1 001 _1,11,11 11 11	DONT-PUSH_MARK is non-nil.		
			 Move back to previous position with M-\[\tilde{\chi}\] this should but does not work in Forth. Shift marking is available. 		
Backward to beginning	• C-M-a	(beginning-of-defun &optional	Move backward to the beginning of a word.		
of function definition	• C-M- <home> • <f6> <up></up></f6></home>	ARG)	With ARG, do it that many times. Negative ARG means move forward to the ARGth following beginning of word.		
	• C-[C-a • Esc C-a		► Shift marking is available in graphics mode, not in terminal mode (for C-M-a and C-M- <home>). It's always available for <f6> <up>: hold Shift after typing <f6>.</f6></up></f6></home>		
Forward to end of	• C-M-e	(end-of-defun &optional ARG)	Move forward to next end of word.		
function and class definition	• C-M- <end> • <f6> <right></right></f6></end>		With argument, do it that many times. Negative argument -N means move back to Nth preceding end of word		
	• C-[C-e		Shift marking is available in graphics mode, not in terminal mode (both keys).		
Moulsing Couth	• Esc C-e				
Marking Forth Words					
Mark current Forth	C-M-h	(mark-defun &optional ALLOW-	Put mark at end of this word definition, point at beginning.		
word		EXTEND)	The Foth word marked is the one that contains point or follows point. With positive ARG, mark this and that many next words; with negative ARG, change the		
See also: Marking			direction of marking. • If the mark is active, it marks the next or previous word(s) after the one(s) already marked.		
Forth Evaluation			t to provide interactive evaluation within Emacs.		
Open a Forth shell	• The first time a command re	quiring a Forth executable is require in (run-forth)	Start an interactive forth session.		
		(tall fordly	Prompt for a Forth executable. • gforth is a good free implementation.		
			 On macOS, you can install it with brew install gforth in a terminal shell. 		
			 Notice that it is integrated with the Home-brew Emacs installation and it will upgrade your Homebre-based Emacs unless its pinned (in which case Homebrew 		
			won't install gforth). Requires the forth-mode external package PEL installs and activates when the pel-		
			use-forth user option is t. It also requires a Forth interpreter (which must be installed		
Evaluate Forth	C-c C-e	(forth-eval-last-expression)	separately) Evaluate Forth expression at point.		
Expression		, ,			
Restart Forth	C-c C-f	(forth-restart)	Restart the Forth process		
Kill Forth process	C-c C-k	(forth-kill &optional BUFFER)	Kill Forth process associated with current buffer.		
Load Forth File	C-c C-1	(forth-load-file FILE)	Load specified file in the Forth interpreter.		
Evaluate region of Forth code	C-c C-r	(forth-eval-region START END)	Evaluate marked region of Forth code.		
SEE code of current word	C-c C-s	(forth-see WORD)	Execute the Forth <u>SEE</u> command on the current word, accessing the code of that word. • Uses the word at point, showing the result inside the *see* buffer.		
Opens the Forth process output buffer	C-c C-z	(forth-switch-to-output-buffer)	Opens the Forth process output buffer		
Evaluate Forth expression.	C-c :	(forth-eval STRING)	Prompts for a Forth expression. On RET uses the Forth interpreter to evaluate it and display the result in the minibuffer.		

<u>Description</u>	<u>Keystroke</u>	Function	<u>Note</u>	
Evaluate the current Forth word.	С-М-ж	(forth-eval-defun)	Evaluate the current word.	
Evaluate current Forth expression	С-х М-е	(forth-eval-last-expression- display-output)	Evaluate current Forth expression.	
Indenting Forth Code	Jype <f12>? to see how indentation is controlled in Forth buffers. You can change the value of the indentation via the buffer this opens.</f12>			
Indent expression	C-M-q	(prog-indent-sexp &optional DEFUN)	Indent the expression after point. When interactively called with prefix, indent the enclosing defun instead.	
Commenting Forth Code				
Insert, realign, comment/uncomment region See also: Somments With PEL: Comment the current line with:	M-;	(comment-dwim ARG)	Insert or realign comment on current line (or region if a region is active). If line/region is already commented, uncomment it. On a single line, the comment is placed after the code. C-u M-; executes comment-kill Forth comments are quite flexible. This command uses uses the \ word at the beginning of a line and () after now-whitespace. With PEL, use the <f11>; ? command to get a full list of the variables used to control Forth comments.</f11>	
M-0 M-;		(pel-comment-dwim ARG)	Same as comment-dwim but comments the current line with a numeric ARG or 0.	

Forth - References

Document	Notes
Forth Programming Language	Forth is a stack-based programming language designed Designed by Charles H. Moore
The Forth Programming Language - Wikipedia	
Forth Books @ forth.com	Links to several good Forth Books, including Starting Forth the original 1981 Forth book by Leo Brodie.
forth-standard.org	Get the latest information about Forth on this web site.
ANSI Forth '94 Draft Specification	
Forth 200x Extension Proposals	
Forth Implementations	
GForth @ Wikipedia	GNU Forth, a free implementation
GForth @ GNU	
• <u>SwiftForth</u>	A commercial implementation.
Forth Projects & Resources	Awesome Forth @ Github ForthHub @ Github