

Object, Executable Files Inspection

Description	Keystroke	Function	Note
Inspecting Object, Executable and Binary Files  This page is a placeholder, showing which modes can be activated with PEL. Use C-h m in those modes to see the bindings. Last updated on: 2025-10-29	Emacs does not have explicit support for inspecting the content of object files. - However, the following external packages can be used to inspect the content of some object file formats: ELF  elf-mode  pel-use-elf-mode set to t activates it.   Several forks of the original code exist. Some support customization. - The version currently supported by PEL has some customization under the elf-mode customization group. - To customize with PEL, type: <f11> <f2> g elf-mode Once I have time I'd like to bring every fork together and provide more information on the various features. That's in my to-do list to update PEL to support the latest. Intel Hex  intel-hex-mode  pel-use-intel-hex set to t activates this mode.  pel-intel-hex-activates-minor-modes allows specifying other minors modes activated for .hex files.		
elf-mode	Open ELF (Executable Linkable File) object files with elf-mode activated by pel-use-elf-mode user-option. When the elf-mode is active the following key bindings are available. The buffer opens in the elf-mode-symbols, showing the symbols.		
	A	(elf-mode-arch-specific)	
	G	(elf-mode-section-groups)	
	I	(elf-mode-histogram)	
	S	(elf-mode-section-headers)	Lists the object section headers. Each section name is a button. Typing return on it opens a buffer that dumps the binary content of that section.
	V	(elf-mode-version-info)	
	c	(elf-mode-archive-index)	
	d	(elf-mode-dynamic)	
	e	(elf-mode-headers)	
	g	(revert-buffer &optional IGNORE-AUTO NOCONFIRM PRESERVE-MODES)	
	h	(elf-mode-header)	
	l	(elf-mode-program-headers)	
	m	(elf-mode-md5sum)	Show the MD5sum of this object file.
	n	(elf-mode-notes)	Show the notes found in the object file. Each note is on a line and have the following columns: - Owner, - Data size, - Description, - Build ID
	q	(quit-window &optional KILL WINDOW)	
	r	(elf-mode-relocs)	List the relocation sections, the name of the section, number of entries inside each section and the data in the following columns: - Offset - Info - Type: Example: R_X86_64_PLT32 , RX86_64_32S - Symbol's value - Symbol's Name + Addend : Example: "printk - 4"
Show symbols Buttons to objdump of functions.	s	(elf-mode-symbols)	List the symbol table (.symtab) in the object file, which has the following columns: - Index number starting at 0 - Value - Size (in bytes) - Type: NOTYPE FILE SECTION OBJECT FUNC ... - Bind: LOCAL GLOBAL - Vis(ibility): - Index: UND ABS # - Name : The function names are buttons. Typing return on them opens a buffer with the objdump output showing the binary, the assembler code and the original source code and comment.
	u	(elf-mode-unwind)	Decode unwind sections
	x	(elf-mode-dyn-syms)	
Show strings extracted from the object file	z	(elf-mode-strings)	Prints the the output of running strings on the object file.
Hexadecimal Editing with nhexl See also: Buffers	 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 <f11> b <f2> 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.		
Toggle buffer between normal and hex display	<f11> b x	(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	(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.