

**Nu**

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Modern keybinding for Emacs

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# 1 Overview

“Nu “ is a modern keybinding for Emacs.

nu-mode is a global minor mode, its keymap, and the commands which are not provided in raw Emacs.

Modern, means respecting conventions like

1. *Control-f* to find
2. *Control-r* to replace
3. *Control-s* to save
4. *Control-x*, *Control-c*, *Control-v* to cut, copy, paste.

To allow user to leverage large panel of functions, nu-mode relies on prompts. For example, *Control-f* raises a prompt precisig which key - actually, which sequence - to press in order to execute desired function : once *Control-f* has been pressed and the “Find-prompt” appears, pressing *f* will start a regexp search, while *g* will execute goto-line, or *s* will move point to previous selection.

Inverse is sometimes true : since *Control+s* invoking a prompt would be irritating, this sequence directly saves buffer, while *Alt+s* runs the “save prompt”.

nu-emacs does not only provides nu-mode. There are also two independant parts

1. nu-alias is a simple mechanism to define aliases into org-mode file(s). This way its easier to maintain aliases to be invoked from Mx. See its REAME.
2. dhammacakka is a light set of customization. See its README.

## 1.1 Dependencies

Nu depends on several libraries, both native or external ones :

1. help-fns+
2. undo-tree
3. ace-jump
4. recentf
5. cua-selection-mode
6. magit is optional

## 1.2 Help

Use *Control-q* to quit a sequence or a command in progress. Use *Alt+z* to undo last command. Use *Control+h* to gain access to help functions. This includes the usual shortcuts to describe what a key does, or what a function does. If you messed up, use *Control+w* then *Control+q* to quit.

Prompts are usually triggered using a *Control* modifier and advertise a function using the same key, but with *Alt* modifier. For example, *Control-f* will pop-up a find-prompt, while *Alt-f* will directly allow you to ‘ace-jump’ to a char.

These prompts offer you to quickly learn where functions are.

## 2 NU for the power user

If you are not used to Emacs, reading this chapter is not necessary. But Emacs veteran should probably start here. emacs-nu redefines many keys, however two points make learning curve shorter

1. For any user, knowing CUA keybinds will make emacs-nu discoverable.
2. For veteran Emacs user, two important sequences remain:

*M-x* is still there. This means, you can probably obtain what you want. Also, *Control+h* for help-prefix is still there.

Now, two things should probably be kept in mind while trying nu-mode

1. To trigger a major mode sequence, start with *Control+Space*. This will invoke vanilla emacs *Control+c*. For example, into org-mode, use *Control+Space Control+n* to navigate to next node. If you already defined you own keys starting with *Control+c*, do not amend this definition.

```
(define-key mykeymap kbd("\C-c h") myfunction)
```

To invoke above myfunction example, press *Control-SPC h*.

2. You should not rely on *Control+x*, or at least no regularly. However to trigger x prefix, use *Control+Alt+Space*.

‘Repeat’ did not work fine with prompts. As of today it is hard to trigger. However prefix arguments (numeric-argument, negative-argument) should do fine with prompts.

Note that ‘where-is’ function, which sometimes advertises shortcuts, will not really work, since a prompt is not a keymap : ‘where-is’ do not know how to invoke *Control-f* then *k* to reach end of buffer. (Did you try where-is git push in magit?)

Thus :

1. For each function accessible from a prompt, an additional shortcut is created, accessible from *menu* plus the same *key* than the prompt, in order to make where-is advertise. Hence, if you read ‘You can run this command with <menu> f k’, please understand, despite it is also true, that you can also run the command with *Control-f-k*.
2. From the help prompt (*Control-h*), run *h* to invoke nu-help. This function will present you all prompts, and will offer you to describe their keymaps - that is, all the functions you can access from these prompts.

## 3 View and Edit

Obviously just type keys to input text. With slight notes : *Alt+m* to carriage return + indent. Use *Alt+v + c* to insert literally a character.

### 3.1 Navigate

While arrows still work, Nu uses *Alt* key to navigate. Hence, the thumb often presses *Alt* key, while pinky finger remains safe. Navigate up left right down using *Alt* and :

```
I
J K L
```

Additionally, use *Alt u* and *Alt o* to move to previous, next word.

```
U I O
J K L
```

Use *Alt+\$* to go to end of line, or *Alt+h* to go beginning of line. To reach a line or a specific character, or the beginning of buffer, or the end of the buffer, use *Control+f* then the appropriate key. Just read the prompt. Or use *Alt+f* if you just want to find-char.

Notice that *f* key, used both with ‘control’ and ‘alt’ modifiers, offers find-related features. One of these keys is direct : it directly executes a command, & maybe a very common one. The other key does raise a prompt to offer more features. This principle to have one ‘alt’ modifier plus one ‘control’ modifier applies to other keys, as well.

However - let’s finish with navigation. Use *Alt+Space* to scroll (to the bottom), and *Alt+Backspace* to go back to the top. Emacs vanilla keybindings for ‘help-mode’ and some other offer Space and Backspace to do this - this is one of the few conventions respected into Emacs-nu. Yup.

### 3.2 Selections and Deletion

Several alternatives offer to delete (cut) text.

1. Use *Control-x* to cut the current line.
2. Use *Control+j,Control+l* to delete backward, forward char.
3. Use *Control + u* to delete previous word.
4. Use *Control + \$* to delete up to end of line.
1. Use *Alt+d* to trigger a prompt. This will offer you to delete what you want (function, org-node, sentence, ...).
2. Alternatively, first mark (select) text you want to select then use *Control+x*.

Right, but how to select? Once again, several alternatives...here we go

1. The paddle allow to directly select (“mark”) text : keep *shift* pressed, then move either with arrows or *Alt+<some key of the paddle>*. Using *Alt-Shift-u*, for example, will select previous word (or extend current selection to previous word).
2. An alternative in order to select text is to press *Alt+a* to set a mark, then move to extend selection.
3. An alternative is to press *Control+a* to invoke “a-” prompt, allowing to select “a-” word, “a-” sentence, and so on, or to set the mark. Or, to set a rectangular mark.

### 3.3 Cut Copy Paste

When no selection is active, use **Control + x** to cut current line, or a deletion command since deletions actually cut text (as a reminder : emacs ‘kill-’ commands will copy to kill-ring, while emacs ‘delete-’ commands will not).

Use **Control + c** to copy current line, or, while a selection is active, copy this selection.

Use **Control + v** to paste the current clipboard. Following **Control + v** will replace this paste with precedent clipboard item. However, if you need to paste several times, first invoke a numeric prefix argument to specify how many times to paste, then type **Control+v**. Or, you can use **Alt + v** to invoke an advanced “Paste” prompt.

### 3.4 Undo or Redo

Use **Alt+z** to undo. Or, use **Control+z** to invoke undo-tree visualizer to play with discard changes in an advanced way.

### 3.5 Advanced Edition

Some advanced editon features rely on **Control-r**, which will invoke replace prompt, allowing you to replace-regexp, merge-lines, delete spaces, or invoke other functions.

1. **Alt+y** will copy to current line char under point (on the below line).
2. **Alt+e** will copy to current line char above point (on the above line).

**Alt+v** prompt to open a line. **Control+g** global prompt will also propose goal-column feature. (This prompt is hard to reached ; it won’t offer really much.)

## 4 Files Buffers Windows

Use *Control + s* to save current file, *Alt + s* to invoke a prompt to rename it.

1. Use *Control+o* to open a file, a window, a buffer, or use bookmarks,... Or move to another frame...or buffers list...
2. Use *Control+w* to raise a prompt offering to close this frame, or move to another frame, .... Or *Alt+w* to make this frame the only visible one.
3. Use *Control+n* to open a sracth buffer (blank untitled buffer) or split current frame.
4. Use *Control+t* to open another tab. It directly shows up an ibuffer list.

<sup>2</sup> will invoke buffers list on the current frame. The tab invokes on another one.Â■



## 5 Hacking

The print buffer, invoked from *Control+p*, will offer you to eval things or make (compile). The insert prompt, invoked from *Alt+v*, will allow you to insert a file, or the result of an async shell command into a new buffer. The save buffer, from *Alt+s*, offers to use git power to save cats or so.

*Control+p* also offers to grep, find-grep or ediff.

## 6 NU & other libraries

How does NU integrate with other libraries?

### 6.1 org

As of today, NU has few features related to org. **Alt+s** prompt will allow you to org-store-link. **Alt+v** prompt will allow you to org-table-insert-column or row. More will come later ; as usual help is welcomed!

### 6.2 magit

Use Alt+s, ie save-prompt, to gain access to magit-status.

### 6.3 evil-mode

While nu-mode is not a modal editor, and aims at being the most efficient keymap, sometimes using lot of modifiers might still be harassing. Using vim keymap is feasible : you can activate evil-mode, then switch from evil-state to emacs-state as you want.

Even while in evil-state, you will enjoy a few nu-mode keys, like Alt+v, Alt+f, and probably many others. However vim paddle (hjkl for left down up right) and nu-mode paddle (ijkl for up left down right) disagree on three of these four keys! If you want to have evil with nu-mode paddle, I recommend you to make vim paddle similar to nu-mode. Since **i** will not be available anymore to insert, use **h** for this purpose. Simply put below lines on your .emacs:

```
(define-key evil-normal-state-map (kbd "h") 'evil-insert)
(define-key evil-normal-state-map (kbd "j") 'evil-backward-char)
(define-key evil-normal-state-map (kbd "i") 'evil-previous-line)
(define-key evil-normal-state-map (kbd "k") 'evil-next-line)
```

Obviously this only fixes the basic paddle. Backward and Forward word are different, but fixing the paddle is fine.

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the Front-Cover Texts being list, and with the Back-Cover Texts
being list.
```

If you have Invariant Sections without Cover Texts, or some other combination of the three, merge those two alternatives to suit the situation.

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