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Modern Vim

Craft Your Development Environment with Vim 8 and Neovim

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Switching to Neovim



Neovim can be used as a drop-in replacement for Vim. In this tip, you'll find out how to install Neovim on Debian and macOS, and how to make Neovim use your existing vimc and Vim plugins. If you want to install Neovim on another system, Neovim's wiki contains comprehensive installation instructions for many systems.²

Tip 2

Installing Neovim on Linux

Linux users should be able to get Neovim with their package manager. For example, on Debian, you'd install Neovim by running:

```
⇒ $ sudo apt-get install neovim
```

If that doesn't work, you may need to install the Personal Package Archive (PPA):

```
⇒ $ sudo add-apt-repository ppa:neovim-ppa/stable
```

```
⇒ $ sudo apt-get install neovim
```

Alternatively, you can install Neovim as an AppImage,³ which is a universal package that should work on most modern Linux distributions. You can get the latest nightly build from the Neovim releases page.⁴ After downloading, you need to make the package executable:

```
$ $ curl -L0 https://github.com/neovim/neovim/releases/download/nightly/nvim.appimage
$ $ chmod u+x nvim.appimage
```

You could then launch Neovim by running:

⇒ \$./nvim.appimage

If you choose this option, you may want to set up an alias so that you can launch Neovim without typing so many characters.

^{2.} https://github.com/neovim/neovim/wiki/Installing-Neovim

^{3.} http://appimage.org

^{4.} https://github.com/neovim/neovim/releases

The Origins of Neovim

In 2014, when version 7.4 of Vim was current, Thiago de Arruda submitted a patch that introduced multi-threading capabilities to Vim. The patch wasn't accepted, and he didn't receive any feedback to suggest why the contribution was rejected. In response, Thiago created a fork of Vim and named it *Neovim*. To support his work on this project, Thiago ran a fundraising campaign,^a which raised over \$33,000.

Thiago led the development of Neovim for 18 months and built a strong community around the project. When Thiago stepped down in late 2015, Justin Keyes stepped in as lead developer.

Today, reading the original project goals on BountySource, I'm struck by how ambitious the Neovim project was. And I'm impressed to realize that all of the project's original goals have been met.

a. https://www.bountysource.com/teams/neovim/fundraiser

Installing Neovim on macOS

On macOS, you can install Neovim using Homebrew:

⇒ \$ brew install neovim

Launching Neovim

"Neovim" is the name of the software; "neovim" is the name of the package; and the executable command is abbreviated to nvim. When you've installed it, launch Neovim by running:

⇒ **\$ nvim**

The act of typing "vim" is probably burned into your fingers' muscle memory. You might want to configure your shell with an alias so that typing "vim" starts Neovim instead of Vim. You could also set the \$VISUAL variable to nvim, so that programs that launch a text editor (such as git commit) will use Neovim. In bash, you could set that up as follows:

```
nvim-aliases.sh
# Use Neovim as "preferred editor"
export VISUAL=nvim
# Use Neovim instead of Vim or Vi
alias vim=nvim
alias vi=nvim
```

For a couple of examples showing how \$VISUAL can be useful, skip ahead to Tip 22, *Using an Existing nvim Instance as the Preferred Editor*, on page ?.

Reusing Your Vim Configuration

For a smooth transition from Vim to Neovim, it helps to reuse your existing configuration. Neovim can load your Vim runtime configuration files, but first you have to tell it where to find them.

When Vim starts up, it looks in your ~/.vim directory for a vimc configuration file. The equivalent configuration file for Neovim is located in a ~/.config/nvim directory and is called init.vim (:help base-directories).

You'll have to create the configuration directory for Neovim:

```
⇒ $ mkdir -p ~/.config/nvim
```

Next, create and save a ~/.config/nvim/init.vim file with the following contents:

```
init.vim
set runtimepath^=~/.vim runtimepath+=~/.vim/after
let &packpath = &runtimepath
source ~/.vim/vimrc
```

Next time you launch nvim, it should load the same runtime files as vim. That means that your Vim customizations now apply to Neovim.

Vim Script Compatibility

Most Vim plugins written in Vim script should *just work*TM in Neovim. The one area where you have to be cautious is with any plugin that uses job control to perform work asynchronously. Both Vim and Neovim support this functionality, but their APIs are different. Since the job control feature is relatively new, this issue doesn't affect many plugins.

Contextual Instructions for Neovim

Throughout this book, you'll come across generalized instructions that look like this:

```
⇒ $ mkdir -p $VIMCONFIG/pack/bundle/start
⇒ $ mkdir -p $VIMDATA/undo
```

When running Neovim on Unix, you could execute those commands by running:

```
⇒ $ mkdir -p ~/.config/nvim/pack/bundle/start
⇒ $ mkdir -p ~/.local/share/nvim/undo
```

Alternatively, you could set the \$VIMCONFIG and \$VIMDATA variables for your shell. For example, in bash you would run:

```
⇒ $ export VIMCONFIG=~/.config/nvim
```

\$ export VIMDATA=~/.local/share/nvim

Having set these variables, you could then run the mkdir -p VIMCONFIG/pack/bundle/start and mkdir -p <math display="inline">VIMDATA/undo commands verbatim.