

Core Concepts

Neovim is a hyperextensible Vim-based text editor emphasizing extensibility and modern features.

- Built-in LSP (Language Server Protocol): Smart autocompletion and diagnostics.
- Tree-sitter: High-performance syntax highlighting and code analysis.
- Lua Support: Scriptable and configurable with Lua.
- Modern defaults: Better terminal support and standard settings.

Navigation and Manipulation

(Compatible with standard Vim commands)

- **h, j, k, l**: Movement.
- **w, b, e**: Word-wise movement.
- **u, <C-r>**: Undo and Redo.
- **cw, dw, yw**: Change, Delete, Yank words.
- **ci(, ci", ci{**: Change inside brackets/quotes.

Built-in LSP Commands

(Configured via `vim.lsp.buf`)

- **K**: Hover information (documentation).
- **gd**: Go to Definition.
- **gr**: List References.
- **gi**: Go to Implementation.
- **<leader>ca**: Code Actions.
- **<leader>rn**: Rename symbol.
- **[d,]d**: Move to previous/next diagnostic (error/warning).

Tree-sitter Actions

- Smart selection: Incrementally expand selection based on syntax tree.
- Text objects: Precise selection of functions, classes, and loops.

Telescope (Standard Plugin)

Highly recommended fuzzy finder.

- **<leader>ff**: Find files.
- **<leader>fg**: Live grep (search text in files).
- **<leader>fb**: Find buffers.
- **<leader>fh**: Help tags.

Neovim Terminal

- **:terminal**: Open a terminal buffer.
- **<C-\<><C-n>**: Exit terminal mode to normal mode.

Configuration (init.lua)

Standard location: `~/.config/nvim/init.lua`

```
-- Global options
vim.opt.number = true
vim.opt.relativenumber = true
vim.opt.expandtab = true
vim.opt.shiftwidth = 2

-- Key mappings
vim.keymap.set('n', '<leader>w',
':w<CR>')
```

Plugin

Management (lazy.nvim)

```
require("lazy").setup({
  "nvim-treesitter/nvim-treesitter",
  "neovim/nvim-lspconfig",
  "nvim-telescope/telescope.nvim",
  "catppuccin/nvim", -- Colorscheme
})
```

Advanced Workflow

Search and Global

- **:%s/pattern/replacement/g**: Global search and replace.
- **:g/pattern/d**: Delete all lines matching the pattern.

Macros

- **q[a-z]**: Start recording a macro to a register.
- **q**: Stop recording.
- **@[a-z]**: Play the macro.
- **@@**: Repeat last macro.

External Commands

- **:.!ls**: Insert output of `ls` into the current line.
- **:w !sudo tee %**: Save file as sudo when opened without privileges.

Health Check

- **:checkhealth**: Run diagnostic report for configurations and plugins.