

How can I setup lazy vim to format on save for python projects. I want it to use ruff / uv. Ruff will be installed in the projects locally .venv directory.

To set up LazyVim for Python formatting on save using Ruff/UV installed in a project's `.venv`, follow these steps:

1. Enable Python Extras

Activate LazyVim's pre-configured Python tools:

```
-- Add to your LazyVim config (lua/config/lazy.lua)
{ "LazyVim/LazyVim", import = "lazyvim.plugins" },
{ import = "lazyvim.plugins.extras.lang.python" }, -- Enables Ruff-LSP, pyright, etc.
```

2. Install Ruff Locally

Use UV (or pip) to install Ruff in your project's virtual environment:

```
# In your project directory
source .venv/bin/activate # Activate virtual env
uv install ruff # or `pip install ruff`
```

3. Configure Ruff as the Formatter

Update `conform.nvim` to prioritize Ruff for Python:

```
-- Add to lua/config/plugins/formatting.lua (or similar)
require("conform").setup({
  formatters_by_ft = {
    python = { "ruff_format" }, -- Uses Ruff for formatting
  },
})
```

4. Ensure Virtual Environment Detection

Install `venv-selector.nvim` to auto-detect `.venv`:

```
-- Add to your LazyVim plugins
{
  "linux-cultist/venv-selector.nvim",
  opts = {
```

```
    auto_detect = true, -- Automatically find .venv
  },
}
```

5. Enable Format-on-Save

Add this to your LazyVim config:

```
-- lua/config/autocmds.lua
vim.api.nvim_create_autocmd("BufWritePre", {
  pattern = "*.py",
  callback = function(args)
    require("conform").format({ bufnr = args.buf, async = false })
  end,
})
```

Key Details:

- **Ruff Path Handling:** The virtual environment detection ensures Ruff from `.venv/bin` is prioritized.
- **Mason Integration:** If using Ruff globally (not recommended), install `ruff-lsp` via `:Mason`.
- **Troubleshooting:** Verify Ruff is detected with `:ConformInfo` and check `:LspInfo` for active LSPs^{[1] [2]}.

This setup avoids global Ruff installations, ensuring project-specific formatting. For advanced configuration (e.g., `pyproject.toml`), see [Ruff's documentation](#)^[3].

✱

1. <https://github.com/LazyVim/LazyVim/discussions/2810>
2. <https://lazyvim.github.io/plugins/formatting>
3. <https://docs.astral.sh/ruff/editors/setup/>