## **Tulu-C-IDE Helix Edition**

## **Helix**

#### What is Helix?

From their website and GitHub repository, we can find their description of Helix: A post-modern **text editor**.

Helix is a toy version of the revered Vim text editor, with **batteries included**. It is as much a toy as our mascot Tulu. He (Tulu) looks like a toy, but a close inspection will reveal that he is a real thing. Helix is on the same page.

Helix is a **no-nonsense** text editor inspired by Kakoune, Vim, and Neovim written from scratch in RUST. Helix provides us with crucial Vim features we actually need and tasks we often perform in Vim, so less configuration is needed. The only difference is that it has a slightly different way of working. Open a terminal of your choice (e.g., CMD.EXE) and type hx. Go to Command Mode SHIFT+; (i.e., :).



https://user-images.githubusercontent.com/16861933/102935218-baebd680-44cb-11eb-996c-f92435a903c1.gif

Then type tutor.

Is there a downside? Yes and No. If you expect Helix to be a text editor with a GUI and Menubar like Geany, VSCode and Notepad++, you are out of luck. It's quite similar to Neovim in this regard. However, Helix won't be difficult to use and you won't experience any inconvenience either. Nothing to worry about at all!

Batteries Included: Helix comes with built-in LSP (Language Server Protocols) support for autocompletion and syntax checking without any external plugin or extra configuration. Most common needs are served out of the box. It is pretty much an Install-n-Go text editor.

# Installation on Microsoft Windows 10 (x64) and Ubuntu/Ubuntu Derivative Linux:

Their official website is: https://helix-editor.com/

You'll have to install MSYS2 (x64) and 64-bit versions of RUSTC and CARGO.

Look here.

The Helix installation part:

Open the Microsoft Windows Command Prompt.

```
WINDOWS + r -> cmd
```

**Ubuntu:** 

Open any terminal emulator you prefer. ctrl + Alt + T (Ubuntu XFCE or Ubuntu GNOME).

Navigate to a directory where you have at least 4 GB of drive space left.

Clone the repository.

```
git clone https://github.com/helix-editor/helix
```

Enter the directory containing the source files of 'helix'.

```
cd helix
```

Build & Install Helix.

```
cargo install --path helix-term
```

Wait a couple of minutes till the build process is complete. Don't close the Command Prompt. Keep it open.

Helix will be installed into %USERPROFILE%\.cargo\bin (Linux: ~/.cargo/bin ). The name of the Helix executable is hx.exe . On Linux: ~/.cargo/bin/hx .

```
C:\Users\YOUR_USERNAME\.cargo\bin\hx.exe .
```

Add %USERPROFILE%\.cargo\bin to System PATH (Environment Variables).

Helix will look for its configuration file <code>config.toml</code> (.vimrc/init.lua equivalent) and LSP query files in <code>%AppData%\helix</code> (Linux: ~/.config/helix/). The folder <code>%AppData%\helix</code> (Linux: ~/.config/helix/) is empty as of now. We will have to provide Helix with the files it requires.

The cloned repository contains a folder runtime. We will have to copy this folder to %AppData%\helix (Linux: ~/.config/helix/).

In the Command Prompt, type:

```
xcopy /e /i runtime %AppData%\helix\runtime
```

Helix will look for 'theme' files in %AppData%\helix\themes (Linux: ~/.config/helix/themes). The cloned repository comes with a plethora of themes. The folder runtime contains all the themes that were also copied along with the runtime files. We will have to copy the themes folder to %AppData%\helix\from %AppData%\helix\runtime (Linux:

```
~/.config/helix/runtime to ~/.config/helix).
```

```
xcopy /e /i %AppData%\helix\runtime\themes %AppData%\helix\themes
```

#### **Ubuntu:**

```
mkdir ~/.config/helix/runtime
```

```
cp -r $PWD/runtime/ ~/.config/helix/
```

```
cp -r ~/.config/helix/runtime/themes ~/.config/helix/themes
```

## Helix configuration file

Open the supplied **Helix configuration file** config.toml (inside \_helix\_edition) with a GUI text editor like Notepad2-mod. **Read it line by line**. Everything is pretty self-explanatory. Change settings as you wish.

Now, copy this <code>config.toml</code> file to <code>%AppData%\helix</code> (Linux: ~/.config/helix/) folder. You can drop this file into the cloned repository first and then use the Windows terminal/(Any Linux terminal emulator) to copy the file as well.

```
copy config.toml %AppData%\helix
```

**Ubuntu:** 

```
cp $PWD/config.toml ~/.config/helix/
```

**NOTE for Windows Users**: The folder grammars that contains *Tree-sitter parsers* (syntax highlighting etc.) is around 770 MB, and this directory contains several Dynamic Link Library (Windows shared library) files along with their sources. If you find that the Windows file copier failed to copy this directory properly at the first attempt, you'll have to take one extra step.

```
cd runtime\
```

```
xcopy /e /i grammars %AppData%\helix\runtime\grammars
```

Finally, visit the directory %AppData%\helix\runtime and check whether everything is okay. Without the Tree-sitter parser files, you'll miss syntax highlighting and many features of Helix.

Find the location where the Helix executable is installed. The where command will tell you the location.

where hx

C:\Users\YOUR\_USERNAME\.cargo\bin\hx.exe

Means,

```
%USERPROFILE%\.cargo\bin\hx.exe
```

**Ubuntu:** 

whereis hx

## How will you use Helix:

1. **RUST**: You need a **Cargo-generated project folder** to work with RUST source files.

rustc, cargo, and rust-analyzer must be found on the System Search PATH. MSYS2 usually installs the complete RUST toolchain including the rust-analyzer.

```
rust-analyzer --version
```

```
rust-analyzer 1.64.0 (8517eff67 2022-09-23).
```

If you don't see it on the system, find the file rust-analyzer-build-instructions.txt and follow the instructions

- 2. **C/C++**: You need a compile\_commands.json or a compile\_flags.txt file alongside the code being edited. clangd along with the entire LLVM Clang toolchain must be found on the System Search PATH.
- 3. Other Languages: **I'm not sure.** Have a look at the supported LSPs here: Language Support

Open CMD.EXE and navigate to an appropriate directory containing source codes, and type hx <space> filename\_with\_extension . For example:

```
hx main.rs
```

More about build and install:

#### https://github.com/helix-editor/helix#installation

If you want to learn and use Helix, go ahead and do so. Helix is a complemental utility to GVim. You'll need both on different occasions. In a terminal-only environment where a GUI is inaccessible Helix works better without any hassle of setting things up. For a quick edit, Helix is

a better choice. Helix also looks better in terminals. On the other hand, GVim can be extended beyond imagination. They are complemental to one another.

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