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1. Tools

1.1. iTerm2

I guess you are already using iTerm2. If you are not, start by installing it iterm2.com and use that instead of terminal.

1.2. Homebrew

Also another tool that we will need in the journey is homebrew (brew.sh). If you don't already have it, just install it by:

```
    /bin/bash -c "$(curl -fsSL
https://raw.githubusercontent.com/Homebrew/install/HEAD/install.sh)"
```

after the installer is done, you need to execute a couple of lines to add it to your path (***replace with your current username*** in the first one)

```
    (echo; echo 'eval "$(/usr/local/bin/brew shellenv)"') >>
/Users/szigeti/.zprofile

    eval "$(/usr/local/bin/brew shellenv)"
```

1.3. K9S

The best CLI kubernetes explorer. Install it also with Homebrew:

```
brew install derailed/k9s/k9s
```

Documentation is here

1.4. Xcode (OPTIONAL - not initially needed)

A third tool to keep in consideration are Apple Xcode tools. Do:

```
sudo rm -rf /Library/Developer/CommandLineTools

sudo xcode-select --install
```

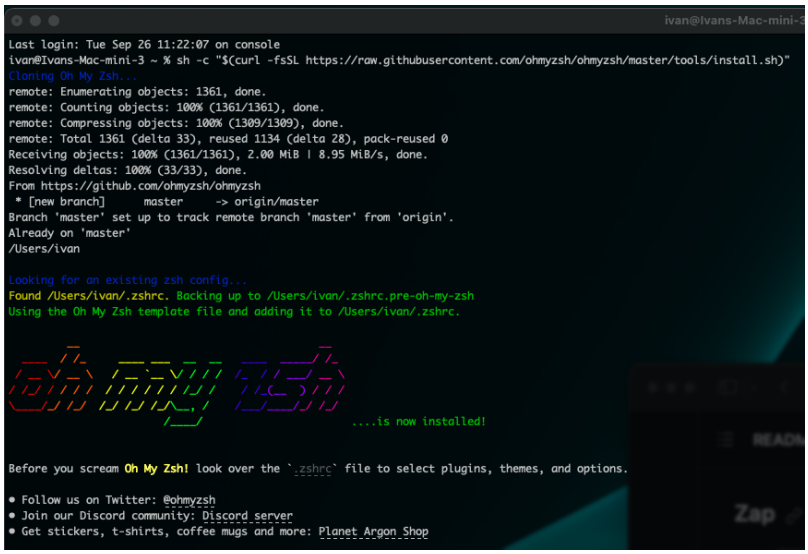
...and accept the license pop-up.

2. CLI enhancements

2.1. Framework

Next thing to consider is the installation of a framework. Here we chose OhMyZsh. Execute the following:

```
sh -c "$(curl -fsSL
https://raw.githubusercontent.com/ohmyzsh/ohmyzsh/master/tools/install.sh)
"
```



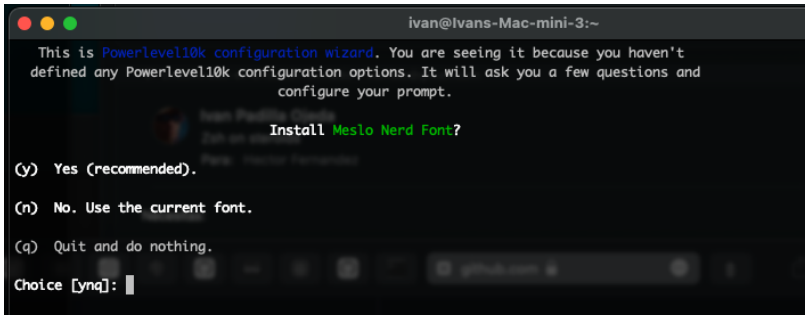
2.2. P10k

Now let's add some customization to the prompt with powerlevel10k P10k. If you just run:

```
    brew install powerlevel10k

    echo "source $(brew --prefix)/share/powerlevel10k/powerlevel10k.zsh-
theme" >>~/.zshrc
```

... and then close the terminal window and open a new one, and follow the on screen menu for customizing the prompt to match your likes. It will be important later on, to show the cluster and namespace in which you are working. You can always use defaults if you don't have a personal preference on something. Usually first line is the typical choice.



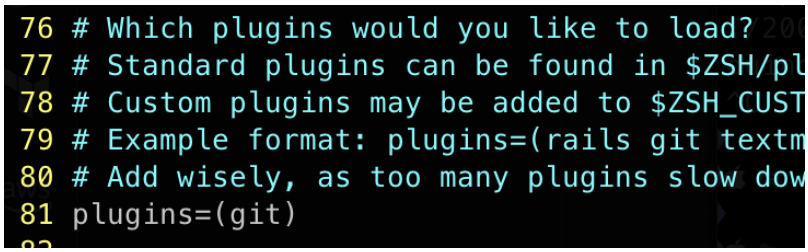
2.3. Plugins

Lets add some plugins to make typing easier. They are all here, but there is a minimum set recommended.

You can enable the ones you need by editing the `~/.zshrc` file:

```
   vim ~/.zshrc
```

Locate the plugin section, usually like this:



These are the ones I've enabled:

```
    plugins=(git
            docker
            docker-compose
            kubectl
            zsh-autosuggestions
            zsh-syntax-highlighting
            zsh-navigation-tools
            copypath
            copyfile
```

```
            copybuffer
        )
```

Most of them are already inside the plugin directory of your Oh-My-Zsh ($HOME/.oh-my-zsh/plugins/), but some of them need to be downloaded. I'll detail them bellow in a particular section for each.

Also, to make the autocompletion works correctly while using the Oh-My-Zsh framework, you need to add the following PATH modification before sourcing the Oh-My-Zsh, as per here

```
FPATH="$(brew --prefix)/share/zsh/site-functions:${FPATH}"
```

As a reference, this is my full ~/.zshrc attached

2.3.1. Kubectl

Kubectl autocompletion. This plugin is already downloaded. You just need to enable it on the ~/.zshrc

It gives you a nice set of alias that you can use to shorten your calls to 'kubectl' commands:

Alias	Command
kaf ...	-> kubectl apply -f ...
kgpo	-> kubectl get pods

... all the available aliases are listed here

2.3.2. zsh-autosuggestions

You need to download this plugin and also declare it in the plugin section of the ~/.zshrc. Download it with:

```
    git clone https://github.com/zsh-users/zsh-autosuggestions
${ZSH_CUSTOM:-~/.oh-my-zsh/custom}/plugins/zsh-autosuggestions
```

2.3.3. zsh-syntax-highlighting

Declare the plugin on your `~./zshrc` and exec this also to download it:

```
    git clone https://github.com/zsh-users/zsh-syntax-highlighting.git
${ZSH_CUSTOM:-~/.oh-my-zsh/custom}/plugins/zsh-syntax-highlighting
```

2.4. Other enhancements

2.4.1. kubecolor

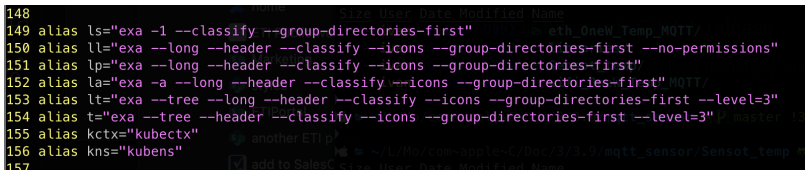
Install this tool with homebrew:

```
    brew install hidetatz/tap/kubecolor
```

and add this at the end of your .zshrc

```
    # get zsh complete kubectl
    source <(kubectl completion zsh)
    alias kubectl=kubecolor
    # make completion work with kubecolor
    compdef kubecolor=kubectl
```

I have several alias in my ~/.zshrc that make my life easier:



2.4.2. Autojump

Very useful tool, that allows you to jump directly into the directory of your project just using its name.

```
    brew install autojump
```

That also install a wrapper `j`, so I do very often things like `'j thisProject'`

2.4.3. Exa

Good replacement for 'ls', you can see the alias in the previous picture in my ~/.zshrc. The tool can be found here, but you can install it directly with homebrew with:

```
    brew install exa
```

See some examples of the use here. Actually when you add some alias, you don't have to do anything special for using it, it is called everytime you do an `'ls'`. These are my alias for it on my `~/.zshrc` file:

```
  la='exa -a --long --header --classify --icons --group-directories-first'
  ll='exa --long --header --classify --icons --group-directories-first --
no-permissions'
  lp='exa --long --header --classify --icons --group-directories-first'
  ls='exa -1 --classify --group-directories-first'
  lt='exa --tree --long --header --classify --icons --group-directories-
first --level=3'
  t='exa --tree --header --classify --icons --group-directories-first --
level=3'
```

2.4.4. Context and Namespace alias

These two alias can also be added to the `~/.zshrc` to allow easy change of cluster/namespace:

```
alias kx='f() { [ "$1" ] && kubectl config use-context $1 || kubectl
config current-context ; } ; f'

alias kn='f() { [ "$1" ] && kubectl config set-context --current --
namespace $1 || kubectl config view --minify | grep namespace | cut -d" "
-f6 ; } ; f'
```

But you can also install `'kubectx' and 'kubens'` tools described here, which will do the same but also will display a list of the available choices for context and namespace:

```
brew install kubectx
```