

CentOS 非root服务器配置

前言

实习生终于有了自己的远程服务器，但是没有root权限。安装软件有点困难。记录一下配置过程遇到的问题。

Anaconda3

1. 从THU镜像下载最新的Anaconda3

```
1  wget
   https://mirrors.tuna.tsinghua.edu.cn/anaconda/archive/Anaconda3-2020.07-Linux-x86_64.sh
```

2. 安装, 注意后续执行 `conda init`, 将 `conda` 命令路径加入到 `$HOME/.bashrc` 中。

```
1  sh Anaconda3-2020.07-Linux-x86_64.sh
2  # 安装结束后进入安装位置
3  cd $HOME/anaconda3/bin
4  # 执行 conda init
5  ./conda init
```

3. 测试一下conda命令可用:

```
1  source ~/.bashrc
2  conda -V # conda 4.8.3
```

4. 在 `$HOME` 下新建 `.bash_profile`, 写入:

```
1  if test -f ~/.bashrc ; then
2  source ~/.bashrc
3  fi
```

这样每次SSH后，都可以自动加载一下自己的 `.bashrc`

zsh

先下载 zsh

```
1 cd $HOME/app/
2 wget -O zsh.tar.xz
  https://sourceforge.net/projects/zsh/files/latest/download
3 # 解压后出现 zsh-5.7.1
4 tar -xvf zsh.tar.xz
```

配置和编译和安装 zsh

```
1 cd zsh-5.7.1/
2 ./configure --prefix=$HOME/Applications/zsh
3 make -j $(nproc)
4 make install
```

zsh 加入 PATH:

```
1 vim ~/.bashrc
2 # 加入zsh
3 export PATH="$HOME/Applications/zsh/bin:$PATH"
4 source ~/.bashrc
```

zsh配置报错: ncurses-devel 相关

./configure 可能报错:

```
1 onfigure: error: in `/home/lihao/app/zsh-5.7.1':
2 configure: error: "No terminal handling library was found on
  your system.
3 This is probably a library called 'curses' or 'ncurses'. You
  may
4 need to install a package called 'curses-devel' or 'ncurses-
  devel' on your
5 system."
```

此时需要非root安装 ncurses-devel, 首先查看系统支持哪个版本

```

1 ls /usr/lib64/libncurses*
2 # 显示5.9
3 /usr/lib64/libncurses.so.5      /usr/lib64/libncurses++.so.5.9
  /usr/lib64/libncurses++w.so.5.9
4 /usr/lib64/libncurses++.so.5   /usr/lib64/libncurses++w.so.5
  /usr/lib64/libncursesw.so.5.9
5 /usr/lib64/libncurses.so.5.9   /usr/lib64/libncursesw.so.5

```

所以对应下载5.9版本

```

1 cd $HOME/app
2 wget https://ftp.gnu.org/gnu/ncurses/ncurses-5.9.tar.gz
3 tar -zxvf ncurses-5.9.tar.gz
4 cd ncurses-5.9
5 # 添加环境变量
6 export CXXFLAGS=" -fPIC"
7 export CFLAGS=" -fPIC"
8 # 生成动态链接库
9 ./configure --prefix=$HOME/Applications/ncurses --enable-
  shared
10 make -j $(nproc)
11 make install
12 # 安装结束后执行
13 ./test/ncurses
14 # 如果不出问题则可以使用

```

配置环境变量

```

1 export NCURSES_HOME=$HOME/Applications/ncurses
2 export PATH=$NCURSES_HOME/bin:$PATH
3 export LD_LIBRARY_PATH=$NCURSES_HOME:$LD_LIBRARY_PATH
4 export CPPFLAGS="-I$NCURSES_HOME/include" LDFLAGS="-
  L$NCURSES_HOME"

```

然后配置zsh

```

1 export CXXFLAGS=" -fPIC"
2 export CFLAGS=" -fPIC"
3 ./configure --prefix=$HOME/Applications/zsh --enable-shared
  LDFLAGS=-L$HOME/Applications/ncurses/lib CPPFLAGS=-
  I$HOME/Applications/ncurses/include

```

oh-my-zsh

进入zsh

```
1  zsh
2  sh -c "$(wget -O-
https://raw.githubusercontent.com/ohmyzsh/ohmyzsh/master/tools/
install.sh)"
3  # 后续会选择是否让zsh成为默认shell 我选的no
```

配置常用插件:

```
1  git clone https://github.com/zsh-users/zsh-autosuggestions
$ZSH_CUSTOM/plugins/zsh-autosuggestions
2  git clone https://github.com/zsh-users/zsh-syntax-
highlighting.git $ZSH_CUSTOM/plugins/zsh-syntax-highlighting
3  git clone https://github.com/zsh-users/zsh-history-substring-
search.git $ZSH_CUSTOM/plugins/history-substring-search
```

`.zshrc` `plugins` 更新如下:

```
1  plugins=(
2      git
3      zsh-autosuggestions
4      zsh-syntax-highlighting
5      colored-man-pages
6      history-substring-search
7  )
```

VS Code Remote

这里是Memtor帮忙配的。大致的流程是使用 `VSCode Remote-SSH` 这个插件, `command+shift+P`, 输入;

```
1  Remote-SSH: Connect to Host
```

通过跳板机链接到服务器

其配置大致内容为

```

1 Host *
2     AddKeysToAgent yes
3     UseKeychain yes
4     IdentityFile ~/.ssh/id_rsa
5
6 Host xxx.xxx.xxx.xxx(服务器IP)
7     HostName xxx
8     User xxx(服务器用户名)
9     IdentityFile /path_to/.ssh/id_rsa.dms (本地私钥)
10    ProxyCommand ssh xxx(跳板机) -W %h:%p

```

然后可以就可以连上服务器了。

按照个人需求服务器那段安装了Shell/Python相关的插件。

VSCode修改默认Bash

首先查一下`\$HOME/.zshrc`，一定要加上这句话

```

1 # If you come from bash you might have to change your $PATH.
2 export PATH=$HOME/bin:/usr/local/bin:$PATH

```

然后修改默认bash为zsh，VSCode通过Remote-SSH 连上服务器后，`comand+shift+P` 输入

```

1 Open Remote Settings(SSH: 服务器IP)

```

然后打开`setting.json`文件，加入zsh所在的地址

```

1 {
2     "terminal.integrated.shell.linux":
3     "$HOME/Applications/zsh/bin/zsh"
4 }

```

经测试，打开的Terminal默认是zsh

总结

现在的跑代码的解决思路就是conda创建环境，用VScode 远程过去直接运行就可以。VScode也支持单步调试，虽然没有Pycharm那么智能。已经够用了。使用zsh是由于其更为智能化，同时支持高亮，方便纠错。