

Download and compile the latest linux kernel

Target

1. Download the latest linux kernel
2. config the latest linux kernel
3. compile the latest linux kernel
4. boot ubuntu with the latest linux kernel

preparations

install related software package

```
sudo apt-get update  
sudo apt-get upgrade
```

```
sudo apt-get install build-essential
```

```
sudo apt-get install wget
```

```
sudo apt-get install pkg-config  
sudo apt-get install libgtk2.0-dev  
sudo apt-get install libcanberra-gtk-module  
sudo apt-get install glade libglade2-dev
```

```
sudo apt-get install flex bison  
sudo apt-get install libssl-dev  
sudo apt-get install libelf-dev  
sudo apt-get install libncurses-dev
```

view the current linux kernel version

```
uname -a
```

How to do

Download and compile the latest linux kernel

1. Download the latest linux kernel from www.kernel.org

- linux-5.19.10.tar.xz

```
cd ~  
pwd
```

```
wget -c https://cdn.kernel.org/pub/linux/kernel/v5.x/linux-5.19.10.tar.xz
```

```
tar xvjf linux-5.19.10.tar.xz
```

```
sudo ln -s `pwd`/linux-5.19.10 /usr/src/linux
```

2. config the latest linux kernel

```
cd /usr/src/linux  
cp /boot/config-`uname -r` .config
```

```
make oldconfig  
make gconfig
```

3. compile the latest linux kernel (long wait)

compile the latest linux kernel

```
make -j4
```

install the latest linux kernel

```
sudo make modules_install  
sudo make install
```

4. boot ubuntu with the latest linux kernel

```
sudo reboot
```

```
uname -a
```