Installation of CCN Browser

We recommend that you'd better view the complete pages before your installation, then you may chose or find a better way for the installation.

System Requirements(our experimental environment)

- Ubuntu（12.04）;
- gcc-4.7.2;
- qt-5.0.2;

Installing gcc-4.7.2

If you want to use a higher version of gcc, there will be some problem when you are building the qtwebkit. But if you insist, you may find the solution from google.

Before installing gcc-4.7.2, please install mpc,mpfr and gmp in order

You can refer to the following link:

http://blog.csdn.net/gengshenghong/article/details/7498085

Now, use "sudo apt-get install m4" before all operations;

1) **Installing gmp-5.1.1**

   #sudo mkdir -p /usr/local/gmp-5.1.1

   #tar -jxvf gmp-5.1.1.tar.bz2

   #cd gmp-5.1.1

   #./configure --prefix=/usr/local/gmp-5.1.1

   #make

   #make install

2) **Installing mpfr-3.1.2**

   #sudo mkdir -p /usr/local/mpfr-3.1.2

   #tar -jxvf mpfr-3.1.2.tar.bz2

   #cd mpfr-3.1.2

   #./configure --prefix=/usr/local/ mpfr-3.1.2 --with-gmp=/usr/local/gmp-5.1.1

   #make

   #make install

3) **Installing mpc-1.0.1**

#sudo mkdir -p /usr/local/mpc-1.0.1

#tar -zxvf mpc-0.8.1.tar.gz

#cd mpc-1.0.1

#./configure --prefix=/usr/local/mpc-1.0.1 --with-gmp=/usr/local/gmp-5.1.1

  --with-mpfr=/usr/local/mpfr-3.1.2

#make

#make install

4) **Installing gcc-4.7.2**

#sudo mkdir -p /usr/local/ gcc-4.7.2

#tar -jxvf gcc-4.7.2.tar.bz2

#cd gcc-4.7.2

Execute the following commands at first. Then, you will have no problems or just a few, when you are installing gcc:

export LD_LIBRARY_PATH=$LD_LIBRARY_PATH:/opt/gmp-4.3.2/lib:

      /opt/mpfr-2.4.2/lib:/opt/mpc-0.8.1/lib

export C_INCLUDE_PATH=/usr/include/x86_64-linux-gnu &&

      export CPLUS_INCLUDE_PATH=$C_INCLUDE_PATH

export LIBRARY_PATH=/usr/lib/x86_64-linux-gnu

export OBJC_INCLUDE_PATH=$C_INCLUDE_PATH

sudo ln -s /usr/lib/x86_64-linux-gnu /usr/lib64

#./configure --prefix=/usr/local/ gcc-4.7.2 -enable-threads=posix -disable-checking

disable-multilib –enable-languages=c,c++ --with-gmp=/usr/local/gmp-5.1.1

  --with-mpfr=/usr/local/mpfr-3.1.2 --with-mpc=/usr/local/ mpc-1.0.1

#make（take one or two hours）

#make install

Finally, you should change the using version of gcc to gcc-4.7.2

Multimedia

If you want to use multimedia in browser, you need to install gstreamer and its plugins

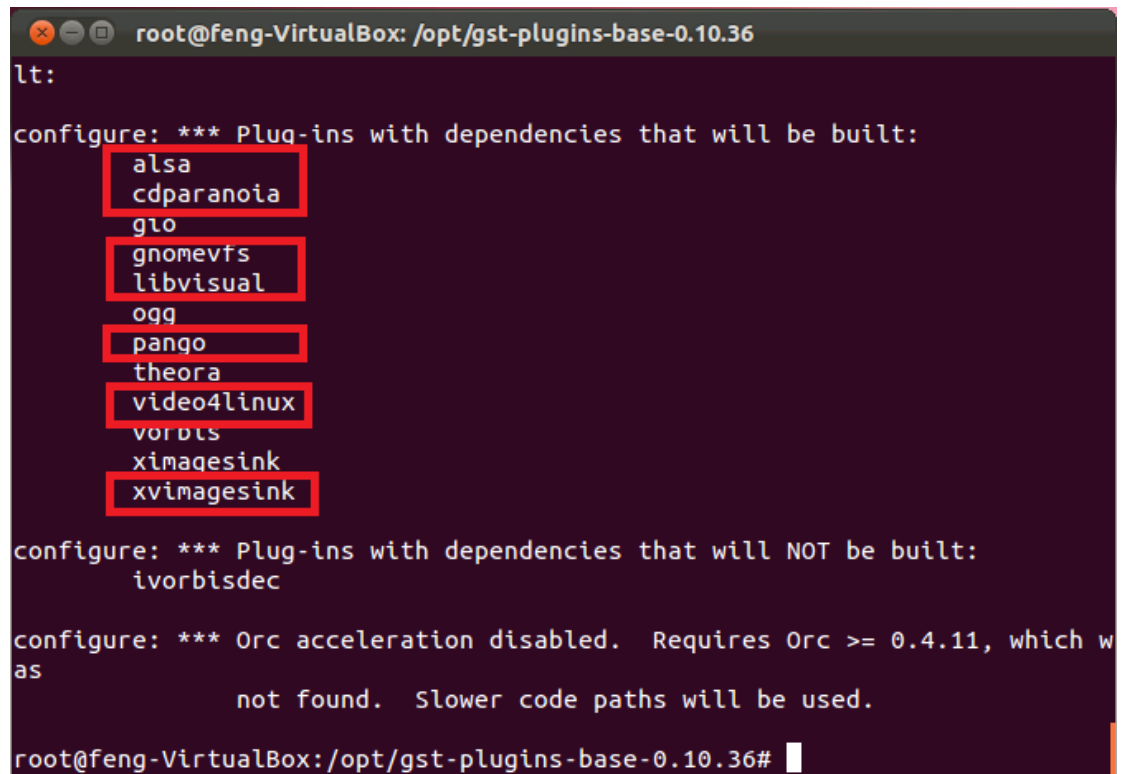Here are two ways for you, and you can refer to the following link:

Manual installation：

Installing gstreamer, gst-plugins-base, gst-plugins-good, gst-plugins-ugly, and gst-ffmpeg

Plugins marked in red need be installed.

gst-plugin-base-0.10.36

gst- plugin-good-0.10.31

gst-plugins-ugly-0.10.19

Using apt-get：

1） Adding 163 source

2） Installing gstreamer libs

- apt-get install libgstreamer0.10-dev gstreamer-tools gstreamer0.10-tools gstreamer0.10-doc   //install location /user/share/doc/

- apt-get install gstreamer0.10-plugins-base gstreamer0.10-plugins-good gstreamer0.10-plugins-ugly gstreamer0.10-plugins-bad gstreamer0.10-plugins-bad-multiverse   //install location /user/share/doc/和/user/lib

- Installing ffmpeg:

  sudo add-apt-repository ppa:mc3man/trusty-media

  sudo apt-get update

  sudo apt-get install gstreamer0.10-ffmpeg   //install location /user/share/doc/

- sudo apt-get install libasound2-dev libgstreamer0.10-dev libgstreamer-plugins-base0.10-dev

Installing Qt-5.0.2 And Building Qtwebkit

Requirements：

- build-essential

- libgl1-mesa-dev

- libicu-dev

- libsqlite3-dev

- libxslt1-dev

- libssl-dev

- ruby

- flex

- bison

- gperf

- …………………………………

Attention!

You should read the building guide for QT 5, and you will avoid many problems. Here's the link:

http://wiki.qt.io/Building_Qt_5_from_Git

http://trac.webkit.org/wiki/BuildingQtOnLinux

You can download qt-5.0.2 from the official website. Then, building the qtwebkit:

- Selecting all the options when you install qt-5.0.2;

- Replacing files of qt-5.0.2 with the files we provided. Here are three paths for your reference:

  QT5.0.2/5.0.2/Src/qtwebkit/Tools/QtTestBrowser

  QT5.0.2/5.0.2/Src/qtwebkit/Source/WebCore/platform/graphic/gstreamer

  QT5.0.2/5.0.2/Src/qtwebkit/Source/WebCore/platform/graphic/

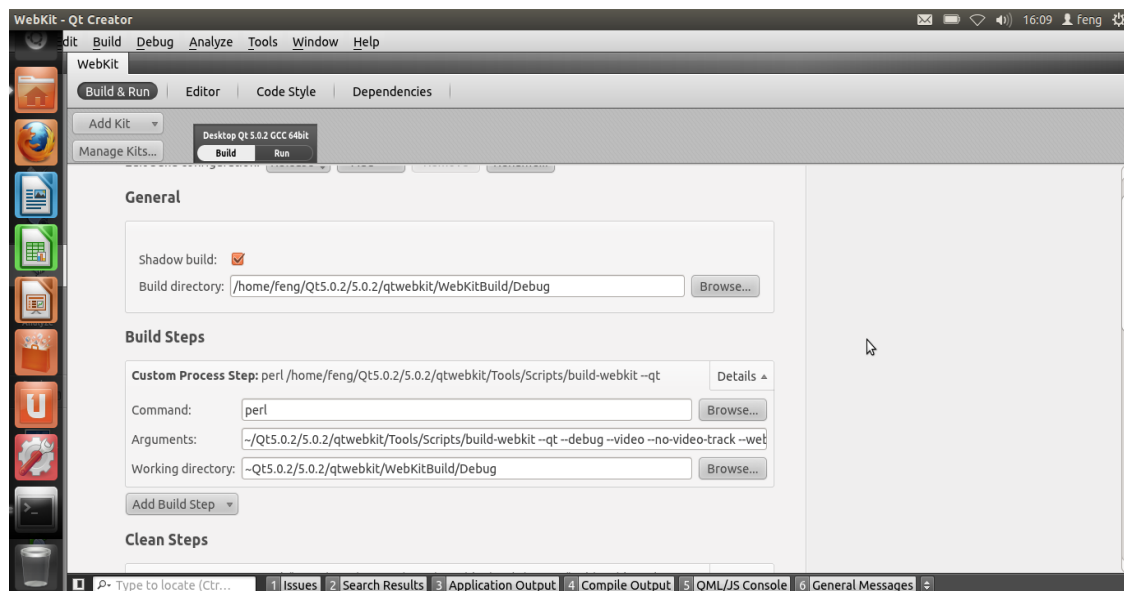- To switch to root permissions, run

  sudo –s

  cd Qt5.0.2/Tools/QTCreator/bin

  ./qtcreator

- Importing WebKit.pro in folder " QT5.0.2/5.0.2/Src/qtwebkit"

- Configuration：

  Creating folder WebKitBuild and it's sub folders which are named Debug and Release in qtwebkit folder.

1) **Adding build directory:**

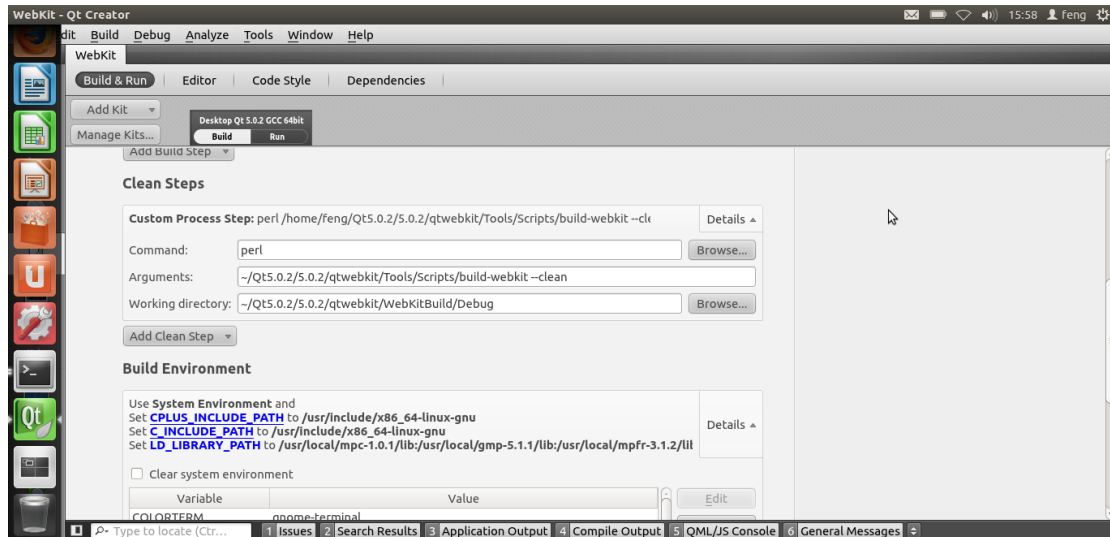   For example: /home/feng/QT5.0.2/5.0.2/qtwebkit/WebKitBuild/Debug

2) **Adding build step:**

   For example:

   Command: perl

Arguments: ~/QT5.0.2/5.0.2/qtwebkit/Tools/Scripts/build-webkit --qt --debug --video --no-video-track --web-audio

Working directory: ~/QT5.0.2/5.0.2/qtwebkit/WebKitBuild/Debug

3)   Adding clean step(Optional)

4)   **Adding paths：**

For example:

CPLUS_INCLUDE_PATH=/usr/include/x86_64-linux-gnu

C_INCLUDE_PATH=/usr/include/x86_64-linux-gnu

LD_LIBRARY_PATH=/usr/local/mpc-1.0.1/lib:/usr/local/gmp-5.1.1/lib:/usr/local/mpfr-3.1.2/lib:/usr/local/gcc-4.7.2/lib:/usr/local/lib

● Finally, using qtcreator to build qtwebkit. This process will take a few hours, but all depend on hardware. And you may have a lot of problems during the complication. Just look for the solution by google.

GOOD LUCK FOR YOU！