Kiwix-Desktop Set-up Guide

In order to get your Ubuntu environment ready to run our version of Kiwix, please enter the following commands into your terminal to download necessary dependencies and prepare the build.

Prerequisite

- Ensure that your system is up to date:
  - sudo apt update && sudo apt upgrade -y
- Install git
  - sudo apt-get install git

Step 1: Install Required Dependencies

- Run the following command to install necessary dependencies:
  - sudo apt update && sudo apt install -y \
    libicu-dev \

    libzim-dev \

    libpugixml-dev \

    libcurl4-gnutls-dev \

    libcurl4-nss-dev \

    libcurl4-openssl-dev \

    libmicrohttpd-dev \

    zlib1g-dev \

    googletest \

    aria2

- Pugixml:
  - sudo apt update
  - sudo apt install libpugixml-dev
- Meson:
  - sudo apt update meson
- Ninja:
  - sudo apt install ninja-build
- Libcurl development package:
  - sudo apt install libcurl4-openssl-dev

- Xapian development package:
    - sudo apt install libxapian-dev
- Install Mustache (C++):
    - git clone https://github.com/kainjow/Mustache.git
    - cd Mustache
    - mkdir build && cd build
    - cmake ..
    - make
    - sudo make install
        - If any errors occur after this step, run this command
            - sudo cp ~/Mustache/mustache.hpp /usr/local/include/
- QT
    - sudo apt-get install qtwebengine5-dev
    - Sudo apt-get install build-essential libgl1-mesa-dev

- Libkiwix:
    - git clone https://github.com/kiwix/libkiwix.git
    - sudo apt install pkg-config
    - rm -rf build
    - meson setup build
    - ninja -C build

Step 2: Clone and Build libzim

This part gave us the most trouble by far. If you do not already have one, you'll need an SSH key to clone the GitHub repository for libzim.

- Check for existing SSH keys:
    - ls -al ~/.ssh
- Generate a new SSH key if none exist:
    - ssh-keygen -t rsa -b 4096 -C your_email@example.com
        - When asked for a file to save the key, press enter (it will use the default)
- Add the SSH key to the SSH agent
    - eval "$(ssh-agent -s)"
      ssh-add ~/.ssh/id_rsa
- Add the SSH connection to GitHub:
    - ssh -T git@github.com
    - If this works, GitHub will allow you to clone the libzim repository
- Clone the libzim and libkiwix repositories:
    - git clone https://github.com/openzim/libzim.git

        - git clone https://github.com/kiwix/libkiwix.git
- Build libzim and libkiwix
    - cd libzim
    - meson . build
    - ninja -C build
    - sudo ninja -C build install
    - cd libkiwix
    - meson . build
    - ninja -C build
    - sudo ninja -C build install
- Navigate out of the directories, then clone our repository
    - git clone https://github.com/IanChorne/kiwix-desktop.git
    - cd kiwix-desktop
    - qmake .
    - make
    - sudo make install

Step 3: Running Kiwix

To run the Kiwix desktop application, simply input the following:

- kiwix-desktop

If you wish to inspect the code but don't want to do it in the terminal, you can open the project using Qt Creator.