A NUMPTY DUMPTY guide to installing the TED Editor on Ubuntu Linix 22 (Wilma)

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Abstract

This paper discusses the download, compilation, and installation of the Ted editor for Ubuntu Linux 22 Wilma edition. This paper is intended for complete NUMTY DUMPTIES whose time is precious, and would prefer just one document to refer to. A knowledge of basic Linux is required, as well as the use of the editor Vi.

THE READER will be conscious of A SERIOUS CHRISTMAS PRESENT to be presented to the author.

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Figure 1: The Ted editor.

1 Introduction

The intention of this paper this i to describe how to install the Ted editor on Ubuntu Linux 22 (Wilma). At the end of the this discussion the reader should have a system wide install of Ted.

2 Problem Statement

It turns out that the Ted editor, being old, is not a simple install using one of the many package managers as there are dependencies which are not easily available. These being libTiff and libPNG12. Ubuntu has updated versions of the libraries built in. There is also a problem with the final makefile in which the Tiff library in not included in the final step of the build, and as a result the build fails.

3 Proposed Solution

In this paper we will discuss how to download, compile and install Ted.

3.1 Environment

It is presumed that the reader will have installed Ubuntu Linux 22 (Wilma). It is also presumed that the system is up to date. To do this open a terminal and type

sudo apt update && sudo apt upgrade -y and press enter.

(This may take a few minutes)

4 Implementation

4.1 Getting started

First we will need the source code for Ted so to download we open a terminal and type the following commands (making sure you are in your home directory) :

mkdir tedsrc cd tedsrc Then we download the software with the following command.

wget http://ftp.nluug.nl/pub/editors/ted/ted-2.23.src.tar.gz

and then unpack it by typing :

$tar\ xvfz\ ted\text{-}2.23.src.tar.gz$

This will create a directory called Ted-2.23.

Next we change to that directory, and edit a shell script which will install all prerequisites for Ted

cd Ted-2.23

To edit the shell script we type :

vi ./apt-get-prerequisites.sh

Remove the entries for libtiff4-dev and libpbg12-dev as Ubuntu already has the libraries prebuilt. Save the file and quit vi.

Next we run the shell script and press y for it to continue :

sudo ./apt-get-prerequisites.sh

(This may take a few minutes).

4.2 Building Ted

Now to build Ted, we simply type:

make

followed by Enter.

This will auto configure the make environment, and begin the build.

4.3 Fixing the build failure

Now then, at some point the reader will see a bunch of errors regarding unresolved entries for the Tiff library API . **DO NOT PANIC**. All is not lost.

It turns out in the sub directory called Ted is another makefile, which for some crazy reason, does not include the tiff library in the linker stage of compilation. So to fix this we do the following

cd Ted vi makefile

and change this part of the file :

```
192 IMG\_STATIC\_LIBS=
  194
  195
                  -lpng 16
  196
  197
  198 IMG\_SHARED\
  199
  200
                  -ljpeg
  201
                  Ipng 16
  202
to
192 IMG\_STATIC\_LIBS=
  193
  194
                  ljpeg
  195
                  Ipng 16
  196
                 -ltiff
  197
                 -lz
198
199 IMG\_SHARED\|LIBS=\
  200
  201
                  -ljpeg
  202
203
                 -lpng 16
-ltiff
  204
                 -lz
```

Figure 2: Change in makefile

Notice the line numbers here for guidance. To see line numbers, press ESQ (to switch to command mode), then press: and then type set number (and hit enter). You will now see line numbers.

Save this file. Then we return to the parent directory with:

cd ..

and then re-run the build:

make

If all goes well you should see a screen similar to the following:

```
wayne@wayne-virtual-machine: ~/tedsrc/Ted-2.23
File Edit View Search Terminal Help
4000)
         libdatrie.so.1 => /lib/x86_64-linux-gnu/libdatrie.so.1 (0x00007030d9cfb0
00)
         libgraphite2.so.3 => /lib/x86 64-linux-gnu/libgraphite2.so.3 (0x00007030
d9cd5000)
          libbrotlicommon.so.1 => /lib/x86 64-linux-gnu/libbrotlicommon.so.1 (0x00
007030d9cb2000)
          libbsd.so.0 \Rightarrow /lib/x86 64-linux-gnu/libbsd.so.0 (0x00007030d9c9c000)
         libblkid.so.1 => /lib/x86 64-linux-gnu/libblkid.so.1 (0x00007030d9c61000
         libmd.so.0 => /lib/x86_64-linux-gnu/libmd.so.0 (0x00007030d9c52000)
make[1]: Leaving directory '/home/wayne/tedsrc/Ted-2.23/Ted'
 Static executable Ted/Ted.static ready
       To make an installation package
      you can now run 'make package'. Depending on the platform, it might be that this must be done AS ROOT. Try to use 'fakeroot' if possible. Otherwise fall back to 'sudo' To install Ted for yourself only you can now run 'make private'
 ayne@wayne-virtual-machine:~/tedsrc/Ted-2.23$
```

Figure 3: The finished compilation.

4.4 Post build instructions

To finish off, we type

sudo make package

Followed by

sudo make install

And finally type the following:

Ted

5 Conclusion

This is actually pretty straight forward. Even NUMPTY DUMPTIES should be able to solve this. The reader will also realise that serious Christmas is in order (to be discussed)