Subject: [SOLVED][Question] Is anyone able to build UPP and Binaries based upon it as 32-Bit?
Posted by MeerMusik on Thu, 09 Dec 2021 05:08:13 GMT
View Forum Message <> Reply to Message

Hello.

Is anyone able to build UPP and Apps based on UPP in X86 Mode on a X86_64 Linux Machine?

On Manjaro X86_64 I keep getting this Error:

```
/usr/include/glib-2.0/glib/gtypes.h: In function 'gboolean _GLIB_CHECKED_ADD_U64(guint64*, guint64, guint64)':
/usr/include/glib-2.0/glib/gtypes.h:463:47: error: static assertion failed: Expression evaluates to false
  463 |   G_STATIC_ASSERT(sizeof (unsigned long long) == sizeof (guint64));
      |                   ~~~~~~~~~~~~~~~~~~~~~~~~~~~~^~~~~~~~~~~~~~~~~~
/usr/include/glib-2.0/glib/gmacros.h:823:46: note: in definition of macro 'G_STATIC_ASSERT'
  823 | #define G_STATIC_ASSERT(expr) static_assert (expr, "Expression evaluates to false")
```

Does the pkg-config provided by UPP something to prevent building X86 Libs? Another Place I should look for something hard-coded by UPP?

I also asked a similar Question about theIDE and UMK in another Section - which seems mostly to be visited by Google Bots these Days: https://
www.ultimatepp.org/forums/index.php?t=msg&th=11685&s tart=0&

System Info:
1. Manjaro KDE, X86_64
2. GCC 11.2 Multilib
3. All necessary Lib32-* Variants are installed
4. GCC Flags includes: -m32
5. Link Options includes: -Wl,-melf32_x86_64

Any other Ideas!?

Thank you very much in advance!

EDIT01:

Right, me being an complete Idiot (and not having used Manjaro == Linux for nearly a year), I forgot that I also need to overwrite the Makefile with the following options:

```
export PKG_CONFIG_PATH="/usr/lib32/pkgconfig/"
export LD_LIBRARY_PATH="/usr/lib32/"
export CPPFLAGS="-L/usr/lib32/"
```

And also add
-Wl,-melf_i386
to the CFLAGS and CXXFLAGS.

Which results in:

make -j$(nproc) V=1 -f Makefile CC="cc -m32" CXX="c++ -m32" CFLAGS="-O3 -ffunction-sections -fdata-sections -std=c2x -Wl,-melf_i386 -Wl,--gc-sections" CXXFLAGS="-O3 -ffunction-sections -fdata-sections -std=c++20 -Wl,--gc-sections -Wl,-melf_i386"

With that the IDE compiles fine. Will update the other Thread soon.

Sorry and have a nice Day :)
