

AqBanking - Feature #214

Consider maintaining a vcpkg recipe

20.06.2020 21:02 - wrobelda

Status:	Feedback	Beginn:	20.06.2020
Priorität:	Normal	Abgabedatum:	
Zugewiesen an:		% erledigt:	0%
Kategorie:	AqBanking	Geschätzter Aufwand:	0:00 Stunde
Zielversion:		Anwendung:	GnuCash, KMyMoney
Betriebssystem:	Linux, MacOSX, Windows	Version der Anwendung:	
AqBanking-Version:	6.0.0		
Beschreibung			
Hi,			
Both GnuCash [1] and KMyMoney [2] have discussed potentially moving to vcpkg to maintain their dependencies.			
Please do consider crating and requesting the addition of the build recipes for both libaqbanking and libgwenhywfar to the vcpkg repository: https://vcpkg.readthedocs.io/en/latest/maintainers/maintainer-guide/			
This would tremendously reduce the effort required to maintain a consistent delivery of cross-platform builds of any of the software using your libraries.			
[1] http://gnucash.1415818.n4.nabble.com/GNC-dev-Building-on-Windows-tp4712455p4712685.html			
[2] https://invent.kde.org/office/kmymoney/-/issues/23			

Historie

#1 - 21.03.2021 14:13 - wrobelda

Answering myself:

FYI, I am working on bringing both libs and their dependencies to vcpkg myself:

<https://github.com/microsoft/vcpkg/pull/16810>

#2 - 28.03.2021 22:18 - wrobelda

wrobelda schrieb:

<https://github.com/microsoft/vcpkg/pull/16810>

The port was merged upstream. Unfortunately, it doesn't seem to work properly. I tried to compile a simple test:

```
#include <gwenhywfar/gwenhywfar.h>
int main() {
    GWEN_Init();
    return 0;
}
```

with `gcc test.c -I vcpkg/installed/x64-osx/include -L vcpkg/installed/x64-osx/lib -lgwenhywfar`

Getting:

Undefined symbols for architecture x86_64:

"_gcry_check_version"

(...)

"_gnutls_bye", referenced from:

(...)

"_iconv", referenced from:

Vcpkg only supports static builds on macOS and Linux, but gwenhywfar apparently doesn't properly link its dependencies. A quick google got me to <https://homebanking-hilfe.de/forum/topic.php?t=11759>, a post from 2010, which seems to indicate that static builds were not supported. is this still the case?

Not sure how relevant that is, but in the config log I see:

```
checking whether to build shared libraries... no
checking whether to build static libraries... yes
checking if gcc static flag -static works... no
checking if g++ static flag -static works... no
```

I will appreciate your help investigating this.

#3 - 29.03.2021 08:02 - ipwizard

I did not know, that

Vcpkg only supports static builds on macOS and Linux.

Since the referenced article from 2010 clearly states, that AqBanking and Gwenhywfar don't use and support static linking due to the dynamic plugin structure. AFAIR (and understood aquamaniac) that is still the case and won't change in the near future.

While not knowing anything about vcpkg, I found <https://vcpkg.readthedocs.io/en/latest/examples/overlay-triplets-linux-dynamic/> . Again, I don't know if this helps here or not. Also, the same or similar mechanism seems to be available for MacOSX (<https://github.com/microsoft/vcpkg/pull/10348>)

#4 - 03.04.2021 02:11 - wrobelda

Since the referenced article from 2010 clearly states, that AqBanking and Gwenhywfar don't use and support static linking due to the dynamic plugin structure. AFAIR (and understood aquamaniac) that is still the case and won't change in the near future.

Yes, I saw the plugins and that will most likely be a concern. Turns out, however, that the issue above was unrelated to gwenhywfar and had to do with -lhogweed I forgot to link to.

While not knowing anything about vcpkg, I found <https://vcpkg.readthedocs.io/en/latest/examples/overlay-triplets-linux-dynamic/> . Again, I don't know if this helps here or not. Also, the same or similar mechanism seems to be available for MacOSX (<https://github.com/microsoft/vcpkg/pull/10348>)

Yes, dynamic linking can absolutely be enabled, but it is not officially supported. Their CI/CD infra also doesn't test for it. And AFIK you can't mix and match triplets – so once you choose dynamic linking, it would affect all of one's project's dependencies (ports) installed via vcpkg. So given how it's unsupported and that ports often just won't build with dynamic linking, almost no one would be using it this way.

I know they are going to eventually support it officially, but likely not soon.

How difficult would it be to enable plugins to build statically, or just add a config option to disable plugin support and amalgamate the code into the main library?

#5 - 21.05.2021 01:50 - wrobelda

It seems that plugins load just fine even if compiled statically:

```
cromo@Daves-Macbook-Air ~ cat test.c
#include <gwenhywfar/gwenhywfar.h>
int main()
{
    GWEN_Init();
    return 0;
}
cromo@Daves-Macbook-Air ~ arch -x86_64 gcc test.c -I Documents/Sourcecode/vcpkg/installed/x64-osx/include/gwenhywfar5 -I Documents/Sourcecode/vcpkg/installed/x64-osx/include -L Documents/Sourcecode/vcpkg/installed/x64-osx/lib -framework Security -lhogweed -lgnutls -lintl -liconv -Wl,-framework -Wl,CoreFoundation -lgmp -lnettle -ltasn1 -lgcrypt -lgpg-error -lidn2 -lgwenhywfar
ld: warning: PIE disabled. Absolute addressing (perhaps -mdynamic-no-pic) not allowed in code signed PIE, but used in ___gmpn_divexact_l from Documents/Sourcecode/vcpkg/installed/x64-osx/lib/libgmp.a(dive_1.o). To fix this warning, don't compile with -mdynamic-no-pic or link with -Wl,-no_pie
cromo@Daves-Macbook-Air ~ ./a.out
7:2021/05/20 19:49-10:gwen(72648):.../././src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 248: Initializing I18N module
4:2021/05/20 19:49-10:gwen(72648):.../././src/5.6.0-7b89005ea8.clean/src/base/i18n.c: 147: Could not bind textdomain (-68)
7:2021/05/20 19:49-10:gwen(72648):.../././src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 252: Initializing Inet Addr module
7:2021/05/20 19:49-10:gwen(72648):.../././src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 256: Initializing Socket module
```

```

7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 260: Initializing Libl
oader module
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 264: Initializing Cryp
t3 module
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 268: Initializing Proc
ess module
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 272: Initializing Plug
in module
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 276: Initializing Data
Base IO module
6:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/base/plugin.c: 589: Plugin type "
dbio" registered
6:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/parser/dbio.c: 107: Adding plugin
path [/Users/cromo/Documents/Sourcecode/vcpkg/installed/x64-osx/lib/gwenhywfar/plugins/79/dbio]
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 280: Initializing Conf
igMgr module
6:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/base/plugin.c: 589: Plugin type "
configmgr" registered
6:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/parser/configmgr.c: 81: Adding p
lugin path [/Users/cromo/Documents/Sourcecode/vcpkg/installed/x64-osx/lib/gwenhywfar/plugins/79/configmgr]
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 284: Initializing Cryp
tToken2 module
6:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/base/plugin.c: 589: Plugin type "
ct" registered
6:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/crypttoken/ctplugin.c: 66: Addin
g plugin path [/Users/cromo/Documents/Sourcecode/vcpkg/installed/x64-osx/lib/gwenhywfar/plugins/79/ct]
7:2021/05/20 19-49-10:gwen(72648):../../../../src/5.6.0-7b89005ea8.clean/src/gwenhywfar.c: 288: Initializing GUI
module

```

#6 - 25.08.2022 22:42 - wrobelda

FYI, I managed to build gwenhywfar using vcpkg with clang-cl under Windows, with some substantial patching. I will post the patches to the mailing list, as well as send a few emails regarding the changes that I hacked, but otherwise need a more systematic approach.

#7 - 25.08.2022 22:54 - martin

- Status wurde von New zu Feedback geändert

Hi,
thanks for the feedback! Adding patches here would be better than sending them to the mailinglist because on the list they might get forgotten about...

Patches here would be a constant reminder that there are patches to be applied.

Regards
Martin

#8 - 25.08.2022 22:55 - wrobelda

Fair enough. I'll post them here.