

Annotated mingw-6 changes to clazzes-org debian packages

summarizes the most important changes to debian packages

debian/control

Key changes:

- mingw-w32-pkg-config and mingw-w64-pkg-config are deprecated, use mingw-w64-tools, which contains tools for both architectures (w32/w64).
- mingw-w32-gcc and mingw-w64-gcc are deprecated, simply use g++-mingw-w64, which contains all compilers for both architectures (w32/w64).
- Split packages to dev and runtime package
- Root runtime dependencies are mingw-w64-gcc-rt resp. mingw-w64-g++-rt and mingw-w32-gcc-rt resp. mingw-w32-g++-rt
- Root development dependencies are mingw-w64-i686-dev (w32) and mingw-w64-x86-64-dev (w64)
- Correctly refer to upstream dev/runtime packages like mingw-w64-zlib, mingw-w64-zlib-dev and other likewise dependencies of your package (not shown in the example below...)
- Depend on debhelper >= 9
- Distribution is jessie, generation is 6

```
Index: debian/control
-----
--- debian/control      (.../mingw-w64-libiconv-1.13.1)      (Revision 560)
+++ debian/control      (.../mingw-w64-libiconv-1.14)      (Arbeitskopie)
@@ -2,18 +2,28 @@
  Priority: extra
  Section: devel
  Maintainer: Wolfgang Glas <wolfgang.glas@iteg.at>
 -Build-Depends: cdb, debhelper (>> 5), mingw-w32-gcc, mingw-w64-gcc
 +Build-Depends: cdb, debhelper (>= 9), g++-mingw-w64, mingw-w64-tools
  XBCS-PBA-Category: mingw
 -XBCS-PBA-Generation: 5
 -XBCS-PBA-Distributions: squeeze wheezy
 +XBCS-PBA-Generation: 6
 +XBCS-PBA-Distributions: jessie
  XBCS-PBA-Repositories: deb.clazzes.org

  Package: mingw-w64-libiconv
  Architecture: all
 -Depends: mingw-w64-gcc
 +Depends: mingw-w64-gcc-rt
  Description: This is the libiconv port to mingw-w64.

 +Package: mingw-w64-libiconv-dev
 +Architecture: all
 +Depends: mingw-w64-x86-64-dev, mingw-w64-libiconv (= ${Source-Version})
 +Description: This package contain header files and import libraries of the libiconv port to mingw-w64.
 +
  Package: mingw-w32-libiconv
  Architecture: all
 -Depends: mingw-w32-gcc
 +Depends: mingw-w32-gcc-rt
  Description: This is the libiconv port to mingw-w32.
 +
 +Package: mingw-w32-libiconv-dev
 +Architecture: all
 +Depends: mingw-w64-i686-dev, mingw-w32-libiconv (= ${Source-Version})
 +Description: This package contain header files and import libraries of the libiconv port to mingw-w32.
```

Result: <http://svn.clazzes.org/svn/mingw-pkg/trunk/mingw-w64-deb/mingw-w64-libiconv-1.14/debian/control>

debian/rules

Key changes:

- Split deb and runtime packages.
- Do not include /usr/share/cdb/1/rules/debhelper.mk

- Use dh wildcard rule as described e.g. in <https://wiki.debian.org/IntroDebianPackaging>
- Define DEB_UPSTREAM_VERSION on your own as seen below, if you need it. (Not needed for most packages...)
- Move \$(prefix)/lib and \$(prefix)/include to \$(devprefix) (likewise for w32...)
- IMPORTANT: Add debian/devhost.txt.gz, debian/*.substvars and debian/*.debhelper.log to the list of cleaned files. (If you don't do this, you will suffer from really crazy effects on rebuilds!!!)
- Do not clean debian/compat, add it to the svn repository.

The fiddling with libiconv.pc is specific to the libiconv example, most modern autoconf packages come with a suitable *.pc file installed in the correct location.

```

Index: debian/rules
=====
--- debian/rules      (.../mingw-w64-libiconv-1.13.1)      (Revision 560)
+++ debian/rules      (.../mingw-w64-libiconv-1.14)      (Arbeitskopie)
@@ -1,10 +1,11 @@
 #!/usr/bin/make -f

-include /usr/share/cdbs/1/rules/debhelper.mk
+DEB_UPSTREAM_VERSION ?= $(shell dpkg-parsechangelog | sed -rne 's/^Version: ([0-9.]+)[-+].*$$/\1/p')

prefix=/usr

package = mingw-w64-libiconv
+devpackage = mingw-w64-libiconv-dev
target = x86_64-w64-mingw32
prefix = /usr/$(target)
docdir = debian/$(package)/usr/share/doc/$(package)
@@ -12,6 +13,7 @@
 DESTDIR = $(shell /bin/pwd)/debian/$(package)

package32 = mingw-w32-libiconv
+devpackage32 = mingw-w32-libiconv-dev
target32 = i686-w64-mingw32
prefix32 = /usr/$(target32)
docdir32 = debian/$(package32)/usr/share/doc/$(package32)
@@ -24,11 +26,23 @@

DEB_DH_ALWAYS_EXCLUDE := .svn

+
+%.
+      dh $@
+
# do not strip anything.
# call 'strip' on a mingw lib*.a file causes the ranlib information to
# be discarded rendering the libraries useless.
-DEB_DH_STRIP_ARGS := -Xlib
+override_dh_strip:

+override_dh_shlibdeps:
+
+export DEB_CFLAGS_MAINT_SET = -O2 -Wall
+export DEB_LDFLAGS_MAINT_SET =
+
+build-indep: common-build-indep
+install-indep: common-install-indep
+
INSTALL_PROGRAM = install

common-build-indep::
@@ -44,7 +58,7 @@

clean::
  rm -f compile common-install-indep common-build-indep
-  rm -rf *~ debian/$(package) debian/$(package32) debian/*~ debian/files* debian/substvars debian/compat
+  rm -rf *~ debian/$(package) debian/$(devpackage) debian/$(package32) debian/$(devpackage32) debian/*~
  rm -rf $(builddir)
  rm -rf $(builddir32)
@@ -55,15 +69,23 @@

```

```

common-install-indep::
    rm -rf debian/$(package)
+   rm -rf debian/$(devpackage)
    mkdir debian/$(package)
    cd $(builddir) && make DESTDIR=$(DESTDIR) install
-   cd debian/$(package)$(prefix)/lib; ln -s ../bin/libiconv-2.dll libiconv.dll
+   mkdir -p debian/$(devpackage)/usr/$(target)
+   mv debian/$(package)/usr/$(target)/include debian/$(devpackage)/usr/$(target)
+   mv debian/$(package)/usr/$(target)/lib debian/$(devpackage)/usr/$(target)
+   rm -rf debian/$(package)/usr/$(target)/share
    rm -rf debian/$(package32)
+   rm -rf debian/$(devpackage32)
    mkdir debian/$(package32)
    cd $(builddir32) && make DESTDIR=$(DESTDIR32) install
-   cd debian/$(package32)$(prefix32)/lib; ln -s ../bin/libiconv-2.dll libiconv.dll
-   mkdir -p debian/$(package)/usr/x86_64-w64-mingw32/lib/pkgconfig
-   sed -e 's/__VERSION__/$(DEB_UPSTREAM_VERSION)/' -e 's/__arch__/x86_64-w64-mingw32/' < pc/libiconv.pc >
debian/$(package)/usr/x86_64-w64-mingw32/lib/pkgconfig/libiconv.pc
-   mkdir -p debian/$(package32)/usr/i686-w64-mingw32/lib/pkgconfig
-   sed -e 's/__VERSION__/$(DEB_UPSTREAM_VERSION)/' -e 's/__arch__/i686-w64-mingw32/' < pc/libiconv.pc >
debian/$(package32)/usr/i686-w64-mingw32/lib/pkgconfig/libiconv.pc
+   mkdir -p debian/$(devpackage32)/usr/$(target32)
+   mv debian/$(package32)/usr/$(target32)/include debian/$(devpackage32)/usr/$(target32)
+   mv debian/$(package32)/usr/$(target32)/lib debian/$(devpackage32)/usr/$(target32)
+   rm -rf debian/$(package32)/usr/$(target32)/share
+   mkdir -p debian/$(devpackage)/usr/$(target)/lib/pkgconfig
+   sed -e 's/__VERSION__/$(DEB_UPSTREAM_VERSION)/' -e 's/__arch__/$(target)/' < pc/libiconv.pc > debian
/$(devpackage)/usr/$(target)/lib/pkgconfig/libiconv.pc
+   mkdir -p debian/$(devpackage32)/usr/$(target32)/lib/pkgconfig
+   sed -e 's/__VERSION__/$(DEB_UPSTREAM_VERSION)/' -e 's/__arch__/$(target32)/' < pc/libiconv.pc > debian
/$(devpackage32)/usr/$(target32)/lib/pkgconfig/libiconv.pc
    touch common-install-indep

```

Result: <http://svn.clazzes.org/svn/mingw-pkg/trunk/mingw-w64-deb/mingw-w64-libiconv-1.14/debian/rules>

debian/compat

Please add a debian/compat file to svn with a single line containing the number '9' and never delete this file with

```

Index: debian/compat
=====
--- debian/compat      (.../mingw-w64-libiconv-1.13.1)      (Revision 0)
+++ debian/compat      (.../mingw-w64-libiconv-1.14)      (Revision 609)
@@ -0,0 +1 @@
+9

```

Portable projects examples

- Simple app project: <http://svn.clazzes.org/svn/pba/trunk/pba-helloworld-portable/> (mingw-6 applied and released as of 0.3.2)
- Simple lib project: <http://svn.clazzes.org/svn/pba/trunk/pba-hellolib-portable/> (mingw-6 TBD)
- Multimodule app project: <http://svn.clazzes.org/svn/pba/trunk/pba-hellobigworld-portable/> (mingw-6 TBD)