Deploying your C# application from Monodevelop

Summary

This document outlines the steps that I found were required to package and deploy a simple desktop application written in C# using the Monodevelop IDE.

Preamble

The source was developed using Monodevelop 2.4 running on Ubuntu 10.04 with Mono 2.6.7 installed – the application was packaged on this same machine and then deployed to another Ubuntu computer with exactly the same software configuration.

What does "deploying an application" mean? For me, it is providing the end user with an easily installable software package. It doesn't mean extracting .tar or .zip files, fiddling around with creating folders, moving files, compiling source and setting up desktop launchers and Application menu items. From the little knowledge I have, it seemed like a Debian package was the way to go. One of Ubuntu's noteworthy successes is in the distribution of their software packages and I thought that I might try to emulate this – I still have a lot to learn!

It's hoped that the process outlined below will help other applications developers – it took me a couple of weeks to begin to understand how this all works. Needless to say, I've limited experience so comments and corrections are welcome.

In addition, the final package that was created was only for limited distribution to friends, (I still have a few, OK, one or two) so I was not concerned with digitally signing the package, distributing the source code or maintaining the application – basically I just wanted to wrap up the application into a package that was easy to install and see if others would like it.

Notes on reading this document:

- command line instructions carried out from Applications>Accessories>Terminal are highlighted in ==yellow==.

- my application for this exercise was called myRSS, simply replace this with the name of your application

The Steps

1. Create the "build" environment
2. Copy the Source code
3. Run autotools
4. Create the "package" environment for Debian
5. Create an original Debian package
6. Check the Debian files
7. Create the final Debian binary package
8. Install the package on another computer and test it

This document ends with a few notes of appreciation, some references and links and a little light relief; it is, after all, rather long - enjoy!

Actions Summary

The commands and actions carried to build a Debian package are summarised below. This could be useful as a sort of check-list reference, possibly after you've read the document.

Step 1: Create the "build" environment

1. install libtool using Synaptic Package Manager
2. install autotools-dev using Synaptic Package Manager

Step 2: Copy the Source code

3. in Monodevelop, ensure resource set as Build Action for any supporting files
4. in Monodevelop, set Solution Configuration to Release i386
5. in Monodevelop, Generate Makefiles after selecting the Autotools option
6. create a BUILDS directory
7. copy contents of RELEASES/your application (source) folder name to BUILDS/your application folder name
8. ~$ cd /home/azuregulf/AppsCSharp/BUILDS/myRSS
9. :~/AppsCSharp/BUILDS/myRSS$ ls -l

Step 3: Run Autotools

10. :~/AppsCSharp/BUILDS/myRSS$ autoreconf -i -f
11. :~/AppsCSharp/BUILDS/myRSS$ ./configure && make
12. :~/AppsCSharp/BUILDS/myRSS$ ls -l
13. :~/AppsCSharp/BUILDS/myRSS$ ls ./bin/Release -l

Step 4: Create the "package" environment for Debian

14. create a PACKAGES directory
15. copy the BUILD/myRSS folder to a new folder in PACKAGES/myrss-0.1 (using the naming convention for the new folder name)
16. set the Debian environment variables for your email and name with
    :~/AppsCSharp/PACKAGES/myrss-0.1$ cat >>~/.bashrc <<EOF
    DEBEMAIL=derek@azuregulf.com
    DEBFULLNAME="DJW Cahusac de Caux"
    export DEBEMAIL DEBFULLNAME
    EOF

Step 5: Create an original Debian package

17. build an original Debian make, with
    :~/AppsCSharp/PACKAGES/myrss-0.1$ dh_make --createorig
    enter s when prompted for the package type
18. check that an original copy has been created in the PACKAGES folder – this should be called myrss-0.1.orig
19. check that a new folder called debian has been created and list the files there:
    :~/AppsCSharp/PACKAGES/myrss-0.1$ ls ./debian -l

Step 6: Check the Debian files

20. edit the **control** file
21. edit the **copyright** file
22. edit the **changelog** file
23. edit the **rules** file
24. edit the documentation file **myrss.doc.base.EX** and rename it to **myrss.doc.base**
25. edit the **menu.ex** file and rename it to **menu**
26. remove the trailing '.ex' to rename the following files:

> **postinst.ex**
> **postrm.ex**
> **preint.ex**
> **prerm.ex**
> **watch.ex**
> **manpage.1.ex**

27. delete the following files:

> **cron.d.ex**
> **emacsen-install.ex**
> **emacsen-remove.ex**
> **emacsen-startup.ex**
> **init.d.ex**
> **init.d.ls.ex**
> **myrss.default.ex**
> **manpage.sgml.ex**
> **manpage.xml.ex**
> **READE.Debian**
> **README.source**

28. ignore all other files...

Step 7: Create the final Debian binary package

29. create the Debian binary package with this command:
> :~/AppsCSharp/PACKAGES/myrss-0.1$ <mark>dpkg-buildpackage</mark>

Step 8: Install the package on another computer and test it

> Copy the .deb file to another computer
> then, from the folder containing this file, install it with:
> azuregulf@azuregulf-laptop:~/Desktop$ <mark>sudo dpkg --install myrss_0.1-1_i386.deb</mark>

Step 1: Create the "build" environment

Building executable code on Unix and its derivative flavours is far from simple. Don't assume that you already have all the various software packages needed to do this installed on your computer. In the end, I probably over-installed everything that looked like:

- autotools, autoreconf, autotools-dev
- build-essential
- configure, build, make
- deb, debhelper
- devscripts, fakeroot
- dh_make
- libtool, libtoolize

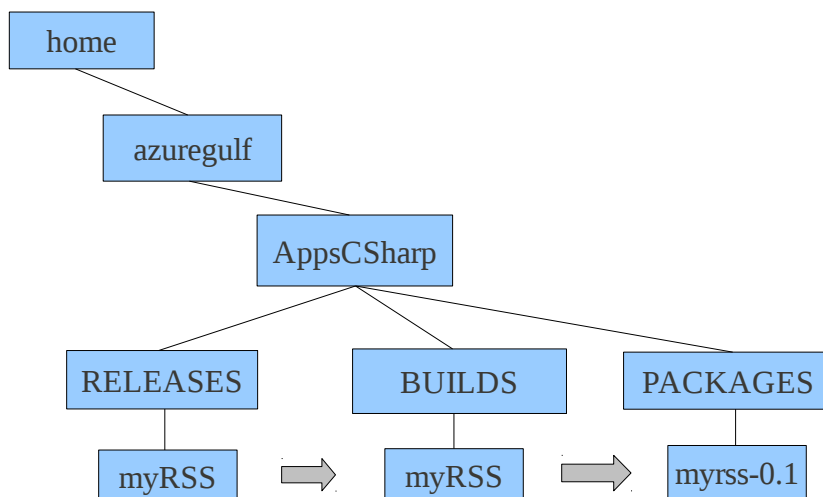There are generally three ways of installing packages, using one of these methods:

- from the terminal command line ...$ sudo apt-get install package-name
- from Ubuntu's System>Administration>Synaptic Package Manager
- or, Ubuntu's Applications>Ubuntu Software Center

I'd recommend checking first in Ubuntu's Synaptic Package Manager.

Step 2: Copy the Source code

Create another directory to prevent you from accidentally messing up your 'original' source code.

I've ended up with a directory structure looking like:

My code is written in the RELEASES directory with Monodevelop; I then copy the source code directory (myRSS) to the BUILDS directory and build the binaries there; these are then copied with their associated files to the PACKAGES directory for the final process of producing a Debian package.

(Yes, I know RELEASES should be called SOURCES or similar but I've found that it's a real

headache renaming folders and then expecting Monodevelop to figure out the new name – I usually end up editing a few of Monodevelop's configuration files for that project. And, Debian expects executables to be named in lower-case, so it's probably best to start that way and avoid including capitals, as I did.)

In Monodevelop:

- Check that any supporting files, such as logos, icons, text etc, in your solution folder have their Build Action set to Resource – this can be set by right-clicking on the file name in the Solutions pad.
- Ensure that your Solution configuration is set to Release i386.
- Then, either right-click on the Solution name in the Solution pad or choose the menu item Project>Generate the Makefiles...
- select the Use Autotools make files options (not the Simple option) in the Generate Makefiles Dialog.

Monodevelop's creating makefiles output will look like this:

```
Generating Autotools files for Solution myRSS

Creating Makefile.am for Solution myRSS

Creating Makefile.am for Project myRSS
Creating autogen.sh
Creating configure.ac
Creating Makefile.include
Adding variables to top-level Makefile

Autotools files were successfully generated.
```

Now copy your Monodevelop source code folder to a folder with the same name in BUILDS. This is the folder after copying everything from RELEASES, you'll see that it includes any sub-folders such as those used for the Gtk GUI:

```
azuregulf@azuregulf-desktop:~$ cd /home/azuregulf/AppsCSharp/BUILDS/myRSS

azuregulf@azuregulf-desktop:~/AppsCSharp/BUILDS/myRSS$ ls -l
total 156
-rw-r—r-- 1 azuregulf azuregulf   971 2010-10-16 11:11        AssemblyInfo.cs
-rwxrwxr-x 1 azuregulf azuregulf  2182 2010-10-27 09:32        autogen.sh
-rw-r—r-- 1 azuregulf azuregulf 12012 2010-10-13 16:26        AZG_LOGO.gif
-rw-r—r-- 1 azuregulf azuregulf  1005 2010-10-19 22:03        AZG_RSS_Feeds.txt
-rw-r—r-- 1 azuregulf azuregulf  1623 2010-10-27 09:32        configure.ac
-rw-r—r-- 1 azuregulf azuregulf   822 2010-10-27 09:32        expansions.m4
drwxr-xr-x 2 azuregulf azuregulf  4096 2010-10-22 14:39        gtk-gui
-rw-r—r-- 1 azuregulf azuregulf 13792 2010-10-18 23:07        internet-feed-reader.svg
-rw-r—r-- 1 azuregulf azuregulf   220 2010-10-19 17:41        Main.cs
-rw-r—r-- 1 azuregulf azuregulf   233 2010-10-27 09:32        Makefile.am
-rw-r—r-- 1 azuregulf azuregulf  6691 2010-10-27 09:32        Makefile.include
-rw-r—r-- 1 azuregulf azuregulf  4086 2010-10-25 20:14        myRSS.csproj
-rw-r—r-- 1 azuregulf azuregulf   183 2010-10-27 17:56        myRSS.desktop
-rw-r—r-- 1 azuregulf azuregulf    66 2010-10-27 09:32        myrss.in
-rw-r—r-- 1 azuregulf azuregulf  2656 2010-10-27 09:32        myRSS.make
-rw-r—r-- 1 azuregulf azuregulf 13317 2010-10-26 20:12        myRSS.pidb
```

```
-rw------- 1 azuregulf azuregulf  1616 2010-10-25 20:14      myRSS.sln
-rw-r—r-- 1 azuregulf azuregulf  1118 2010-10-27 17:56      myRSS.userprefs
-rw-r—r-- 1 azuregulf azuregulf   410 2010-10-19 17:32      NewsWebView.cs
-rw-r—r-- 1 azuregulf azuregulf 42820 2010-10-20 20:39      RSSreader.cs
```

STEP 3: Run Autotools

Initialise the 'build' by running autoreconf (to check what the flags -i and -f mean, use 'man autoreconf' at the command line).

> azuregulf@azuregulf-desktop:~/AppsCSharp/BUILDS/myRSS$ autoreconf -i -f

If all's well with autoreconf, there is no output to the Terminal.

Unlike the first time that I ran autoreconf, it crashed with a 'cannot find libtoolize' error which was cured by installing libtool using Synaptic Package Manager.

Then run configure and make, as follows:

> azuregulf@azuregulf-desktop:~/AppsCSharp/BUILDS/myRSS$ ./configure && make

```
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /bin/mkdir -p
checking for gawk... gawk
checking whether make sets $(MAKE)... yes
checking whether to enable maintainer-specific portions of Makefiles... no
checking for pkg-config... /usr/bin/pkg-config
./configure: line 2294: SHAMROCK_EXPAND_LIBDIR: command not found
./configure: line 2295: SHAMROCK_EXPAND_BINDIR: command not found
./configure: line 2296: SHAMROCK_EXPAND_DATADIR: command not found
checking for gmcs... /usr/bin/gmcs
checking pkg-config is at least version 0.9.0... yes
checking for GTK_SHARP_20... yes
checking for GLIB_SHARP_20... yes
checking for GLADE_SHARP_20... yes
checking for WEBKIT_SHARP_10... yes
configure: creating ./config.status
config.status: creating myrss
config.status: creating Makefile
Making all in .
make[1]: Entering directory `/home/azuregulf/AppsCSharp/BUILDS/myRSS'
mkdir -p 'bin/Release'
cp 'myrss' 'bin/Release/myrss'
chmod +x 'bin/Release/myrss'
mkdir -p bin/Release
gmcs -noconfig -codepage:utf8 -warn:4 -optimize- -out:bin/Release/myRSS.exe -target:winexe './gtk-
gui/generated.cs' './Main.cs' './AssemblyInfo.cs' './RSSreader.cs' './NewsWebView.cs' './gtk-
gui/myRSS.RSSreader.cs' './gtk-gui/myRSS.NewsWebView.cs' '-resource:./gtk-gui/gui.stetic'   -r:System
-r:/usr/lib/pkgconfig/../../lib/cli/pango-sharp-2.0/pango-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/atk-sharp-
2.0/atk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gdk-sharp-2.0/gdk-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/gtk-sharp-2.0/gtk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-sharp-2.0/glib-
sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-sharp-2.0/glib-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glade-
sharp-2.0/glade-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/pango-sharp-2.0/pango-sharp.dll
```

```
-r:/usr/lib/pkgconfig/../../lib/cli/atk-sharp-2.0/atk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gdk-sharp-2.0/gdk-
sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gtk-sharp-2.0/gtk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-
sharp-2.0/glib-sharp.dll   -r:Mono.Posix   -r:System.Xml   -r:/usr/lib/cli/webkit-sharp-1.1/webkit-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/pango-sharp-2.0/pango-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/atk-sharp-
2.0/atk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gdk-sharp-2.0/gdk-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/gtk-sharp-2.0/gtk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-sharp-2.0/glib-
sharp.dll
./RSSreader.cs(501,40): warning CS0219: The variable `News_Media' is assigned but its value is never used
./RSSreader.cs(51,24): warning CS0414: The private field `myRSS.RSSreader.Active_child' is assigned but its
value is never used
./RSSreader.cs(59,22): warning CS0414: The private field `myRSS.RSSreader.StartTime' is assigned but its
value is never used
Compilation succeeded - 3 warning(s)
mkdir -p 'bin/Release'
cp 'internet-feed-reader.svg' 'bin/Release/internet-feed-reader.svg'
mkdir -p 'bin/Release'
cp 'AZG_RSS_Feeds.txt' 'bin/Release/AZG_RSS_Feeds.txt'
mkdir -p 'bin/Release'
cp 'AZG_LOGO.gif' 'bin/Release/AZG_LOGO.gif'
make[1]: Leaving directory `/home/azuregulf/AppsCSharp/BUILDS/myRSS'
```

I ignored the SHAMROCK errors – don't know what they mean. And, ignored the compile time
warnings in my code – hey, it's my code :)

You'll now see a few additions to your directory:

```
azuregulf@azuregulf-desktop:~/AppsCSharp/BUILDS/myRSS$ ls -l
total 464
-rw-r--r-- 1 azuregulf azuregulf  30061 2010-10-28 18:47      aclocal.m4
-rw-r--r-- 1 azuregulf azuregulf    971 2010-10-16 11:11      AssemblyInfo.cs
-rwxrwxr-x 1 azuregulf azuregulf   2182 2010-10-27 09:32      autogen.sh
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-28 18:47      autom4te.cache
-rw-r--r-- 1 azuregulf azuregulf  12012 2010-10-13 16:26      AZG_LOGO.gif
-rw-r--r-- 1 azuregulf azuregulf   1005 2010-10-19 22:03      AZG_RSS_Feeds.txt
drwxr-xr-x 3 azuregulf azuregulf   4096 2010-10-28 18:50      bin
-rw-r--r-- 1 azuregulf azuregulf  11647 2010-10-28 18:50      config.log
-rwxr-xr-x 1 azuregulf azuregulf  27824 2010-10-28 18:50      config.status
-rwxr-xr-x 1 azuregulf azuregulf 121075 2010-10-28 18:47      configure
-rw-r--r-- 1 azuregulf azuregulf   1623 2010-10-27 09:32      configure.ac
-rw-r--r-- 1 azuregulf azuregulf    822 2010-10-27 09:32      expansions.m4
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-22 14:39      gtk-gui
-rwxr-xr-x 1 azuregulf azuregulf  13663 2010-10-28 18:47      install-sh
-rw-r--r-- 1 azuregulf azuregulf  13792 2010-10-18 23:07      internet-feed-reader.svg
-rw-r--r-- 1 azuregulf azuregulf    220 2010-10-19 17:41      Main.cs
-rw-r--r-- 1 azuregulf azuregulf  38486 2010-10-28 18:50      Makefile
-rw-r--r-- 1 azuregulf azuregulf    233 2010-10-27 09:32      Makefile.am
-rw-r--r-- 1 azuregulf azuregulf  36653 2010-10-28 18:47      Makefile.in
-rw-r--r-- 1 azuregulf azuregulf   6691 2010-10-27 09:32      Makefile.include
-rwxr-xr-x 1 azuregulf azuregulf  11419 2010-10-28 18:47      missing
-rw-r--r-- 1 azuregulf azuregulf     62 2010-10-28 18:50      myrss
-rw-r--r-- 1 azuregulf azuregulf   4086 2010-10-25 20:14      myRSS.csproj
-rw-r--r-- 1 azuregulf azuregulf    183 2010-10-27 17:56      myRSS.desktop
-rw-r--r-- 1 azuregulf azuregulf     66 2010-10-27 09:32      myrss.in
-rw-r--r-- 1 azuregulf azuregulf   2656 2010-10-27 09:32      myRSS.make
-rw-r--r-- 1 azuregulf azuregulf  13317 2010-10-26 20:12      myRSS.pidb
-rw------- 1 azuregulf azuregulf   1616 2010-10-25 20:14      myRSS.sln
-rw-r--r-- 1 azuregulf azuregulf   1118 2010-10-27 17:56      myRSS.userprefs
```

```
-rw-r--r-- 1 azuregulf azuregulf    410 2010-10-19 17:32         NewsWebView.cs
-rw-r--r-- 1 azuregulf azuregulf  42820 2010-10-20 20:39         RSSreader.cs
```

and there's a new directory /bin/Release containing a compiled executable and supporting files:

```
azuregulf@azuregulf-desktop:~/AppsCSharp/BUILDS/myRSS$ ls ./bin/Release -l
total 76
-rw-r--r-- 1 azuregulf azuregulf 12012 2010-10-28 18:50        AZG_LOGO.gif
-rw-r--r-- 1 azuregulf azuregulf  1005 2010-10-28 18:50        AZG_RSS_Feeds.txt
-rw-r--r-- 1 azuregulf azuregulf 13792 2010-10-28 18:50        internet-feed-reader.svg
-rwxr-xr-x 1 azuregulf azuregulf    62 2010-10-28 18:50        myrss
-rwxr-xr-x 1 azuregulf azuregulf 38912 2010-10-28 18:50        myRSS.exe
```

Step 4: Create the "package" environment for Debian

Create the packaging directory – I called mine PACKAGES – and copy the source folder in BUILD to a new folder in the PACKAGES directory using this naming convention for the new folder name:

> application package name - release number

> note:
> * the hyphen (no spaces either side)
> * the release number can follow a convention, if you wish
> * the application package name must be lower-case and without any spaces

> so, my 'myRSS' folder name becomes 'myrss-0.1' in the PACKAGES directory

After the copy, the newly named folder in PACKAGES looks like:

```
azuregulf@azuregulf-desktop:~/AppsCSharp$ ls
BUILDS  PACKAGES  RELEASES
azuregulf@azuregulf-desktop:~/AppsCSharp$ cd PACKAGES
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES$ cd myrss-0.1

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ ls -l
total 464
-rw-r--r-- 1 azuregulf azuregulf  30061 2010-10-28 18:47        aclocal.m4
-rw-r--r-- 1 azuregulf azuregulf    971 2010-10-16 11:11        AssemblyInfo.cs
-rwxrwxr-x 1 azuregulf azuregulf   2182 2010-10-27 09:32        autogen.sh
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-28 18:47        autom4te.cache
-rw-r--r-- 1 azuregulf azuregulf  12012 2010-10-13 16:26        AZG_LOGO.gif
-rw-r--r-- 1 azuregulf azuregulf   1005 2010-10-19 22:03        AZG_RSS_Feeds.txt
drwxr-xr-x 3 azuregulf azuregulf   4096 2010-10-28 18:50        bin
-rw-r--r-- 1 azuregulf azuregulf  11647 2010-10-28 18:50        config.log
-rwxr-xr-x 1 azuregulf azuregulf  27824 2010-10-28 18:50        config.status
-rwxr-xr-x 1 azuregulf azuregulf 121075 2010-10-28 18:47        configure
-rw-r--r-- 1 azuregulf azuregulf   1623 2010-10-27 09:32        configure.ac
-rw-r--r-- 1 azuregulf azuregulf    822 2010-10-27 09:32        expansions.m4
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-22 14:39        gtk-gui
-rwxr-xr-x 1 azuregulf azuregulf  13663 2010-10-28 18:47        install-sh
-rw-r--r-- 1 azuregulf azuregulf  13792 2010-10-18 23:07        internet-feed-reader.svg
-rw-r--r-- 1 azuregulf azuregulf    220 2010-10-19 17:41        Main.cs
```

```
-rw-r--r-- 1 azuregulf azuregulf  38486 2010-10-28 18:50       Makefile
-rw-r--r-- 1 azuregulf azuregulf    233 2010-10-27 09:32       Makefile.am
-rw-r--r-- 1 azuregulf azuregulf  36653 2010-10-28 18:47       Makefile.in
-rw-r--r-- 1 azuregulf azuregulf   6691 2010-10-27 09:32       Makefile.include
-rwxr-xr-x 1 azuregulf azuregulf  11419 2010-10-28 18:47       missing
-rw-r--r-- 1 azuregulf azuregulf     62 2010-10-28 18:50       myrss
-rw-r--r-- 1 azuregulf azuregulf   4086 2010-10-25 20:14       myRSS.csproj
-rw-r--r-- 1 azuregulf azuregulf    183 2010-10-27 17:56       myRSS.desktop
-rw-r--r-- 1 azuregulf azuregulf     66 2010-10-27 09:32       myrss.in
-rw-r--r-- 1 azuregulf azuregulf   2656 2010-10-27 09:32       myRSS.make
-rw-r--r-- 1 azuregulf azuregulf  13317 2010-10-26 20:12       myRSS.pidb
-rw------- 1 azuregulf azuregulf   1616 2010-10-25 20:14       myRSS.sln
-rw-r--r-- 1 azuregulf azuregulf   1118 2010-10-27 17:56       myRSS.userprefs
-rw-r--r-- 1 azuregulf azuregulf    410 2010-10-19 17:32       NewsWebView.cs
-rw-r--r-- 1 azuregulf azuregulf  42820 2010-10-20 20:39       RSSreader.cs
```

Set the Debian environment variables for your name and email address – I think that you can enter these elsewhere but this seemed simpler as they're set once for all subsequent Debian operations.

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ cat >>~/.bashrc <<EOF
DEBEMAIL=derek@azuregulf.com
DEBFULLNAME="DJW Cahusac de Caux"
export DEBEMAIL DEBFULLNAME
EOF
```

If cut & pasting the above text, paste it into the command line and then up-arrow to change the email and name then down-arrow to after the F on the second EOF and press Enter.

Step 5: Create an original Debian package

Run the dh_make command to "debianise" the source folder using the –createorig option and enter s when asked for what type of package (s means a single binary).

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ dh_make --createorig

Type of package: single binary, indep binary, multiple binary, library, kernel module, kernel patch or cdbs?
 [s/i/m/l/k/n/b] s

Maintainer name : DJW Cahusac de Caux
Email-Address   : derek@azuregulf.com
Date            : Thu, 28 Oct 2010 20:09:46 +0100
Package Name    : myrss
Version         : 0.1
License         : blank
Using dpatch    : no
Using quilt     : no
Type of Package : Single
Hit <enter> to confirm:
Done. Please edit the files in the debian/ subdirectory now. myrss
uses a configure script, so you probably don't have to edit the Makefiles.
```

This also creates an original copy of the source in a folder called myrss-0.1.orig in the PACKAGES directory.

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ ls .. -l
total 8
drwxr-xr-x 6 azuregulf azuregulf 4096 2010-10-28 20:10    myrss-0.1
drwxr-xr-x 5 azuregulf azuregulf 4096 2010-10-28 19:38    myrss-0.1.orig
```

You'll notice that the dh_make command has also added new folder called debian with a number of files, as shown below:

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ ls -l
total 468
-rw-r--r-- 1 azuregulf azuregulf  30061 2010-10-28 18:47    aclocal.m4
-rw-r--r-- 1 azuregulf azuregulf    971 2010-10-16 11:11    AssemblyInfo.cs
-rwxrwxr-x 1 azuregulf azuregulf   2182 2010-10-27 09:32    autogen.sh
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-28 18:47    autom4te.cache
-rw-r--r-- 1 azuregulf azuregulf  12012 2010-10-13 16:26    AZG_LOGO.gif
-rw-r--r-- 1 azuregulf azuregulf   1005 2010-10-19 22:03    AZG_RSS_Feeds.txt
drwxr-xr-x 3 azuregulf azuregulf   4096 2010-10-28 18:50    bin
-rw-r--r-- 1 azuregulf azuregulf  11647 2010-10-28 18:50    config.log
-rwxr-xr-x 1 azuregulf azuregulf  27824 2010-10-28 18:50    config.status
-rwxr-xr-x 1 azuregulf azuregulf 121075 2010-10-28 18:47    configure
-rw-r--r-- 1 azuregulf azuregulf   1623 2010-10-27 09:32    configure.ac
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-28 20:10    debian
-rw-r--r-- 1 azuregulf azuregulf    822 2010-10-27 09:32    expansions.m4
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-22 14:39    gtk-gui
-rwxr-xr-x 1 azuregulf azuregulf  13663 2010-10-28 18:47    install-sh
-rw-r--r-- 1 azuregulf azuregulf  13792 2010-10-18 23:07    internet-feed-reader.svg
-rw-r--r-- 1 azuregulf azuregulf    220 2010-10-19 17:41    Main.cs
-rw-r--r-- 1 azuregulf azuregulf  38486 2010-10-28 18:50    Makefile
-rw-r--r-- 1 azuregulf azuregulf    233 2010-10-27 09:32    Makefile.am
-rw-r--r-- 1 azuregulf azuregulf  36653 2010-10-28 18:47    Makefile.in
-rw-r--r-- 1 azuregulf azuregulf   6691 2010-10-27 09:32    Makefile.include
-rwxr-xr-x 1 azuregulf azuregulf  11419 2010-10-28 18:47    missing
-rw-r--r-- 1 azuregulf azuregulf     62 2010-10-28 18:50    myrss
-rw-r--r-- 1 azuregulf azuregulf   4086 2010-10-25 20:14    myRSS.csproj
-rw-r--r-- 1 azuregulf azuregulf    183 2010-10-27 17:56    myRSS.desktop
-rw-r--r-- 1 azuregulf azuregulf     66 2010-10-27 09:32    myrss.in
-rw-r--r-- 1 azuregulf azuregulf   2656 2010-10-27 09:32    myRSS.make
-rw-r--r-- 1 azuregulf azuregulf  13317 2010-10-26 20:12    myRSS.pidb
-rw------- 1 azuregulf azuregulf   1616 2010-10-25 20:14    myRSS.sln
-rw-r--r-- 1 azuregulf azuregulf   1118 2010-10-27 17:56    myRSS.userprefs
-rw-r--r-- 1 azuregulf azuregulf    410 2010-10-19 17:32    NewsWebView.cs
-rw-r--r-- 1 azuregulf azuregulf  42820 2010-10-20 20:39    RSSreader.cs
```

You should see quite a few files in the new 'debian' folder:

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ ls ./debian -l
total 124
-rw-r--r-- 1 azuregulf azuregulf    191 2010-10-28 20:10    changelog
-rw-r--r-- 1 azuregulf azuregulf      2 2010-10-28 20:10    compat
-rw-r--r-- 1 azuregulf azuregulf    398 2010-10-28 20:10    control
-rw-r--r-- 1 azuregulf azuregulf   1095 2010-10-28 20:10    copyright
-rw-r--r-- 1 azuregulf azuregulf    125 2010-10-28 20:10    cron.d.ex
-rw-r--r-- 1 azuregulf azuregulf     18 2010-10-28 20:10    docs
-rw-r--r-- 1 azuregulf azuregulf   1231 2010-10-28 20:10    emacsen-install.ex
-rw-r--r-- 1 azuregulf azuregulf    465 2010-10-28 20:10    emacsen-remove.ex
-rw-r--r-- 1 azuregulf azuregulf   1108 2010-10-28 20:10    emacsen-startup.ex
```

```
-rw-r--r-- 1 azuregulf azuregulf  4392 2010-10-28 20:10      init.d.ex
-rw-r--r-- 1 azuregulf azuregulf  9407 2010-10-28 20:10      init.d.lsb.ex
-rw-r--r-- 1 azuregulf azuregulf  1745 2010-10-28 20:10      manpage.1.ex
-rw-r--r-- 1 azuregulf azuregulf  4659 2010-10-28 20:10      manpage.sgml.ex
-rw-r--r-- 1 azuregulf azuregulf 11001 2010-10-28 20:10      manpage.xml.ex
-rw-r--r-- 1 azuregulf azuregulf   120 2010-10-28 20:10      menu.ex
-rw-r--r-- 1 azuregulf azuregulf   229 2010-10-28 20:10      myrss.default.ex
-rw-r--r-- 1 azuregulf azuregulf   493 2010-10-28 20:10      myrss.doc-base.EX
-rw-r--r-- 1 azuregulf azuregulf   955 2010-10-28 20:10      postinst.ex
-rw-r--r-- 1 azuregulf azuregulf   928 2010-10-28 20:10      postrm.ex
-rw-r--r-- 1 azuregulf azuregulf   688 2010-10-28 20:10      preinst.ex
-rw-r--r-- 1 azuregulf azuregulf   875 2010-10-28 20:10      prerm.ex
-rw-r--r-- 1 azuregulf azuregulf   183 2010-10-28 20:10      README.Debian
-rw-r--r-- 1 azuregulf azuregulf   189 2010-10-28 20:10      README.source
-rwxr-xr-x 1 azuregulf azuregulf   442 2010-10-28 20:10      rules
-rw-r--r-- 1 azuregulf azuregulf   769 2010-10-28 20:10      watch.ex
```

All of the files ending in .ex are examples. You'll need to edit, rename or delete most of these files, as explained below.

Step 6: Check the Debian files

There a number of files here that are mandatory and will need to be changed in order to comply with the standards for Debian packaging. We'll go through the files in their order of importance. I used gedit to edit the files. Any blank lines and leading spaces (which are more likely to be tab characters) should be left untouched.

File: control

The original file looked like:

```
Source: myrss
Section: unknown
Priority: extra
Maintainer: DJW Cahusac de Caux <derek@azuregulf.com>
Build-Depends: debhelper (>= 7), autotools-dev
Standards-Version: 3.8.3
Homepage: <insert the upstream URL, if relevant>

Package: myrss
Architecture: any
Depends: ${shlibs:Depends}, ${misc:Depends}
Description: <insert up to 60 chars description>
 <insert long description, indented with spaces>
```

This was changed to:

```
Source: myrss
Section: Network
Priority: optional
Maintainer: DJW Cahusac de Caux <derek@azuregulf.com>
Build-Depends: debhelper (>= 7), autotools-dev
```

```
Standards-Version: 3.8.3
Homepage: <insert the upstream URL, if relevant>

Package: myrss
Architecture: any
Depends: ${shlibs:Depends}, ${misc:Depends}
Description: <RSS news feed reader>
 a C# Gtk GUI application developed with the MonoDevelop IDE
 that reads RSS news feeds and some blogs to provide a text-based
 view of current news together with the benefits GUI manipulation
 and access to the web page for any news story.
```

Brief notes on these changes are described below:

- line 2 Section changed to 'Network' - see http://packages.debian.org/unstable/ for a list of categories and choose one that applies to your software

- line 3 Priority changed to optional

- line 5 Build-Depends – as far as I could see this was correct, so left as is

- Line 11 Builds – leave as is – but, I originally thought that I'd have to manually figure out the various packages that would need to be installed on the target computer in order for my application to work there. So, in the Monodevelop Solution pad, I right-clicked on References and chose the Edit References option from the pop-up and made a note of any Package names that corresponded to the Assembly names that were ticked as required. These were:

    ```
    gtk-sharp-2.0
    mono
    glade-sharp-2.0
    glib-sharp-2.0
    webkit-sharp-1.0
    ```

    However, I then read that the {shlibs:Depends} would figure out the various shared libraries, so I removed my additions to this line, which had looked like:

    ```
    Depends: ${shlibs:Depends}, ${misc:Depends}, gtk-sharp (>=2.0), mono (>=2.0), glade-sharp
    (>=2.0), glib-sharp (>=2.0), webkit-sharp (>=1.0)
    ```

    After building the Debian package, I could see that the various Gtk, webkit etc shared libraries were referenced but I didn't notice any 'dependency' on mono itself – this has left a question, so far unanswered, as I've only tested on machines with mono already installed.

File: copyright file

The original file looked like:

```
This work was packaged for Debian by:
```

DJW Cahusac de Caux <derek@azuregulf.com> on Thu, 28 Oct 2010 20:09:46 +0100

It was downloaded from <url://example.com>

Upstream Author(s):

   <put author's name and email here>
   <likewise for another author>

Copyright:

   <Copyright (C) YYYY Name OfAuthor>
   <likewise for another author>

License:

   <Put the license of the package here indented by 4 spaces>

The Debian packaging is:

   Copyright (C) 2010 DJW Cahusac de Caux <derek@azuregulf.com>

Please chose a license for your packaging work. If the program you package
uses a mainstream license, using the same license is the safest choice.
Please avoid to pick license terms that are more restrictive than the
packaged work, as it may make Debian's contributions unacceptable upstream.
If you just want it to be GPL version 3, leave the following lines in.

and is licensed under the GPL version 3,
see `/usr/share/common-licenses/GPL-3'.

Please also look if there are files or directories which have a
different copyright/license attached and list them here.

And was changed to:

This work was packaged for Debian by:

   DJW Cahusac de Caux <derek@azuregulf.com> on Thu, 28 Oct 2010 20:09:46 +0100

It was downloaded from <desktop@azuregulf.com>

Upstream Author(s):

   DJW Cahusac de Caux <derek@azuregulf.com>

Copyright:

   Copyright (C) AzureGulf T&C wll 2010

License:

   GPL-3+

The Debian packaging is:

   Copyright (C) 2010 DJW Cahusac de Caux <derek@azuregulf.com>

and is licensed under the GPL version 3,
see `/usr/share/common-licenses/GPL-3'.

Brief notes:

- my changes are probably don't completely conform to the Debian standards – the software wasn't downloaded and I'm not really concerned about a licence. So, just a quick chop and change.

File: changelog

The original file:

myrss (0.1-1) unstable; urgency=low

  * Initial release (Closes: #nnnn) <nnnn is the bug number of your ITP>

 -- DJW Cahusac de Caux <derek@azuregulf.com> Thu, 28 Oct 2010 20:09:46 +0100

and after:

myrss (0.1-1) unstable; urgency=low

  * Initial release (Closes: #0.0)

 -- DJW Cahusac de Caux <derek@azuregulf.com> Thu, 28 Oct 2010 20:09:46 +0100

Brief notes:

- again, just quick changes to make it look sort of right – hope I don't meet a pedantic Debian packager!

File: rules

The original file:

```
#!/usr/bin/make -f
# -*- makefile -*-
# Sample debian/rules that uses debhelper.
# This file was originally written by Joey Hess and Craig Small.
# As a special exception, when this file is copied by dh-make into a
# dh-make output file, you may use that output file without restriction.
# This special exception was added by Craig Small in version 0.37 of dh-make.

# Uncomment this to turn on verbose mode.
#export DH_VERBOSE=1

%:
        dh  $@
```

and after careful changes:

```
#!/usr/bin/make -f
# -*- makefile -*-
# Sample debian/rules that uses debhelper.
# This file was originally written by Joey Hess and Craig Small.
# As a special exception, when this file is copied by dh-make into a
# dh-make output file, you may use that output file without restriction.
# This special exception was added by Craig Small in version 0.37 of dh-make.

# Uncomment this to turn on verbose mode.
        export DH_VERBOSE=1
        export DH_OPTIONS=-v

%:
        dh  $@
```

Brief notes:

- uncommented the verbose option by removing the # character
- added another DH_OPTIONS flag -v so that all subsequent 'dh_' also output what commands they're invoking...
- used gedit, but note that the # (comment) before 'export' was deleted and then replaced with a TAB and a TAB was inserted for the second 'export' line
- needless to say, you will probably switch off any further verbosity, once you're familiar with the process

File: myrss.doc.base.EX

Documentation of some sort is mandatory for a Debian package, so at least this file is essential – you can also include a number of other files such as the README, if you wish. I just kept this as my only documentation file and it initially looked like this:

```
Document: myrss
Title: Debian myrss Manual
Author: <insert document author here>
Abstract: This manual describes what myrss is
 and how it can be used to
 manage online manuals on Debian systems.
Section: unknown

Format: debiandoc-sgml
Files: /usr/share/doc/myrss/myrss.sgml.gz

Format: postscript
Files: /usr/share/doc/myrss/myrss.ps.gz

Format: text
Files: /usr/share/doc/myrss/myrss.text.gz

Format: HTML
```

Index: /usr/share/doc/myrss/html/index.html
Files: /usr/share/doc/myrss/html/*.html

And after a few simple changes:

Document: myrss
Title: Debian myrss Manual
Author: DJW Cahusac de Caux
Abstract: This manual briefly describes myRSS
 it is auto-generated by myRSS the first time you click Help.
Section: User Guide

Format: HTML
Index: /usr/bin/myrss/index.html
Files: /usr/bin/myrss/*.html

Brief notes:

- this file needs to be renamed by removing the trailing '.EX' from the filename

File: manpage.1.ex

before

```
.\"                        Hey, EMACS: -*- nroff -*-
.\" First parameter, NAME, should be all caps
.\" Second parameter, SECTION, should be 1-8, maybe w/ subsection
.\" other parameters are allowed: see man(7), man(1)
.TH MYRSS SECTION "October 28, 2010"
.\" Please adjust this date whenever revising the manpage.
.\"
.\" Some roff macros, for reference:
.\" .nh        disable hyphenation
.\" .hy        enable hyphenation
.\" .ad l      left justify
.\" .ad b      justify to both left and right margins
.\" .nf        disable filling
.\" .fi        enable filling
.\" .br        insert line break
.\" .sp <n>    insert n+1 empty lines
.\" for manpage-specific macros, see man(7)
.SH NAME
myrss \- program to do something
.SH SYNOPSIS
.B myrss
.RI [ options ] " files" ...
.br
.B bar
.RI [ options ] " files" ...
.SH DESCRIPTION
This manual page documents briefly the
.B myrss
and
.B bar
```

```
commands.
.PP
.\" TeX users may be more comfortable with the \fB<whatever>\fP and
.\" \fI<whatever>\fP escape sequences to invode bold face and italics,
.\" respectively.
\fBmyrss\fP is a program that...
.SH OPTIONS
These programs follow the usual GNU command line syntax, with long
options starting with two dashes (`-').
A summary of options is included below.
For a complete description, see the Info files.
.TP
.B \-h, \-\-help
Show summary of options.
.TP
.B \-v, \-\-version
Show version of program.
.SH SEE ALSO
.BR bar (1),
.BR baz (1).
.br
The programs are documented fully by
.IR "The Rise and Fall of a Fooish Bar" ,
available via the Info system.
.SH AUTHOR
myrss was written by <upstream author>.
.PP
This manual page was written by DJW Cahusac de Caux <derek@azuregulf.com>,
for the Debian project (and may be used by others).
```

Brief notes:

- Couldn't be bothered to change, so left as is and renamed by removing the trailing '.ex'
- I'm not sure if this file is mandatory

File: menu.ex

The file before:

```
?package(myrss):needs="X11|text|vc|wm" section="Applications/see-menu-manual"\
  title="myrss" command="/usr/bin/myrss"
```

and after:

```
?package(myrss):needs="X11" section="Applications/Internet"\
  title="myRSS" command="/usr/bin/myrss"
```

Brief notes:

- changed the menu entry to be in the Internet section
- and removed the trailing '.ex from the filename

Files that were deleted

The following files were deleted:

cron.d.ex
all files with names starting with 'emacsen'
init.d.ex
init.d.ls.ex
myrss.default.ex
manpage.sgml.ex
manpage.xml.ex
READE.Debian
README.source

Files renamed

The following files were not edited but their names were changed by removing the trailing '.ex':

postinst.ex
postrm.ex
preint.ex
prerm.ex
watch.ex

Files left unchanged:

The following files were left as is:

compat
docs

After all the above edits, renames and deletes, these files remain:

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ ls ./debian -l
total 56
-rw-r--r-- 1 azuregulf azuregulf  152 2010-10-29 15:44      changelog
-rw-r--r-- 1 azuregulf azuregulf    2 2010-10-28 20:10      compat
-rw-r--r-- 1 azuregulf azuregulf  684 2010-10-28 22:36      control
-rw-r--r-- 1 azuregulf azuregulf  488 2010-10-28 22:46      copyright
-rw-r--r-- 1 azuregulf azuregulf   18 2010-10-28 20:10      docs
-rw-r--r-- 1 azuregulf azuregulf 1745 2010-10-28 20:10      manpage.1
-rw-r--r-- 1 azuregulf azuregulf  102 2010-10-29 16:46      menu
-rw-r--r-- 1 azuregulf azuregulf  275 2010-10-29 16:34      myrss.doc-base
-rw-r--r-- 1 azuregulf azuregulf  955 2010-10-28 20:10      postinst
-rw-r--r-- 1 azuregulf azuregulf  928 2010-10-28 20:10      postrm
-rw-r--r-- 1 azuregulf azuregulf  688 2010-10-28 20:10      preinst
-rw-r--r-- 1 azuregulf azuregulf  875 2010-10-28 20:10      prerm
-rwxr-xr-x 1 azuregulf azuregulf  464 2010-10-29 16:22      rules
-rw-r--r-- 1 azuregulf azuregulf  769 2010-10-28 20:10      watch
```

Step 7: Create the final Debian binary package

And, finally, the Debian binary package can be created with the dpkg-buildpackage command as shown below. Make sure you execute this in the PACKAGES source folder – for your information, I've included the verbose output (some five pages!):

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ dpkg-buildpackage

dpkg-buildpackage: set CFLAGS to default value: -g -O2
dpkg-buildpackage: set CPPFLAGS to default value:
dpkg-buildpackage: set LDFLAGS to default value: -Wl,-Bsymbolic-functions
dpkg-buildpackage: set FFLAGS to default value: -g -O2
dpkg-buildpackage: set CXXFLAGS to default value: -g -O2
dpkg-buildpackage: source package myrss
dpkg-buildpackage: source version 0.1-1
dpkg-buildpackage: source changed by DJW Cahusac de Caux <derek@azuregulf.com>
dpkg-buildpackage: host architecture i386
 fakeroot debian/rules clean
dh  clean
   dh_testdir
   dh_auto_clean
          make -j1 distclean
make[1]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
Making distclean in .
make[2]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
test -z "bin/Release/internet-feed-reader.svg bin/Release/AZG_RSS_Feeds.txt bin/Release/AZG_LOGO.gif
bin/Release/myrss   bin/Release/myRSS.exe bin/Release/myRSS.exe.mdb bin/Release/myrss    " || rm -f
bin/Release/internet-feed-reader.svg bin/Release/AZG_RSS_Feeds.txt bin/Release/AZG_LOGO.gif
bin/Release/myrss   bin/Release/myRSS.exe bin/Release/myRSS.exe.mdb bin/Release/myrss
test -z "myrss" || rm -f myrss
test . = "." || test -z "" || rm -f
test -z "  bin/Release/*" || rm -f   bin/Release/*
rm -f TAGS ID GTAGS GRTAGS GSYMS GPATH tags
make[2]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
rm -f config.status config.cache config.log configure.lineno config.status.lineno
rm -f Makefile
make[1]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
   dh_clean
          rm -f debian/myrss.substvars
          rm -f debian/myrss.*.debhelper
          rm -f debian/myrss.debhelper.log
          rm -rf debian/myrss/
          rm -f debian/files
          find .  \( \( -type f -a \
               \( -name '#*#' -o -name '.*~' -o -name '*~' -o -name DEADJOE \
                  -o -name '*.orig' -o -name '*.rej' -o -name '*.bak' \
                  -o -name '.*.orig' -o -name .*.rej -o -name '.SUMS' \
                  -o -name TAGS -o \( -path '*/.deps/*' -a -name '*.P' \) \
               \) -exec rm -f {} \; \) -o \
               \( -type d -a -name autom4te.cache -prune -exec rm -rf {} \; \) \)
          rm -f *-stamp
 dpkg-source -b myrss-0.1
dpkg-source: info: using source format `1.0'
dpkg-source: info: building myrss in myrss_0.1.orig.tar.gz
```

```
dpkg-source: info: building myrss in myrss_0.1-1.diff.gz
dpkg-source: warning: ignoring deletion of file Makefile
dpkg-source: warning: ignoring deletion of file config.log
dpkg-source: warning: ignoring deletion of file myrss
dpkg-source: warning: ignoring deletion of file config.status
dpkg-source: warning: ignoring deletion of file bin/Release/myRSS.exe
dpkg-source: warning: ignoring deletion of file bin/Release/AZG_RSS_Feeds.txt
dpkg-source: warning: ignoring deletion of file bin/Release/myrss
dpkg-source: warning: ignoring deletion of file bin/Release/AZG_LOGO.gif
dpkg-source: warning: ignoring deletion of file bin/Release/internet-feed-reader.svg
dpkg-source: warning: ignoring deletion of directory autom4te.cache
dpkg-source: warning: ignoring deletion of file autom4te.cache/traces.0
dpkg-source: warning: ignoring deletion of file autom4te.cache/traces.1
dpkg-source: warning: ignoring deletion of file autom4te.cache/output.0
dpkg-source: warning: ignoring deletion of file autom4te.cache/output.1
dpkg-source: warning: ignoring deletion of file autom4te.cache/requests
dpkg-source: info: building myrss in myrss_0.1-1.dsc
 debian/rules build
dh  build
   dh_testdir
   dh_auto_configure
          ./configure --build=i486-linux-gnu --prefix=/usr --includedir=\${prefix}/include --mandir=\$
{prefix}/share/man --infodir=\${prefix}/share/info --sysconfdir=/etc --localstatedir=/var --libexecdir=\$
{prefix}/lib/myrss --disable-maintainer-mode --disable-dependency-tracking
configure: WARNING: unrecognized options: --disable-dependency-tracking
checking for a BSD-compatible install... /usr/bin/install -c
checking whether build environment is sane... yes
checking for a thread-safe mkdir -p... /bin/mkdir -p
checking for gawk... gawk
checking whether make sets $(MAKE)... yes
checking whether to enable maintainer-specific portions of Makefiles... no
checking for pkg-config... /usr/bin/pkg-config
./configure: line 2294: SHAMROCK_EXPAND_LIBDIR: command not found
./configure: line 2295: SHAMROCK_EXPAND_BINDIR: command not found
./configure: line 2296: SHAMROCK_EXPAND_DATADIR: command not found
checking for gmcs... /usr/bin/gmcs
checking pkg-config is at least version 0.9.0... yes
checking for GTK_SHARP_20... yes
checking for GLIB_SHARP_20... yes
checking for GLADE_SHARP_20... yes
checking for WEBKIT_SHARP_10... yes
configure: creating ./config.status
config.status: creating myrss
config.status: creating Makefile
configure: WARNING: unrecognized options: --disable-dependency-tracking
   dh_auto_build
          make -j1
make[1]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
Making all in .
make[2]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
mkdir -p 'bin/Release'
cp 'myrss' 'bin/Release/myrss'
chmod +x 'bin/Release/myrss'
mkdir -p bin/Release
gmcs -noconfig -codepage:utf8 -warn:4 -optimize- -out:bin/Release/myRSS.exe -target:winexe './gtk-
gui/generated.cs' './Main.cs' './AssemblyInfo.cs' './RSSreader.cs' './NewsWebView.cs' './gtk-
gui/myRSS.RSSreader.cs' './gtk-gui/myRSS.NewsWebView.cs'  '-resource:./gtk-gui/gui.stetic'   -r:System
-r:/usr/lib/pkgconfig/../../lib/cli/pango-sharp-2.0/pango-sharp.dll    -r:/usr/lib/pkgconfig/../../lib/cli/atk-sharp-
```

2.0/atk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gdk-sharp-2.0/gdk-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/gtk-sharp-2.0/gtk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-sharp-2.0/glib-
sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-sharp-2.0/glib-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glade-
sharp-2.0/glade-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/pango-sharp-2.0/pango-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/atk-sharp-2.0/atk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gdk-sharp-2.0/gdk-
sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gtk-sharp-2.0/gtk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-
sharp-2.0/glib-sharp.dll   -r:Mono.Posix -r:System.Xml   -r:/usr/lib/cli/webkit-sharp-1.1/webkit-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/pango-sharp-2.0/pango-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/atk-sharp-
2.0/atk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/gdk-sharp-2.0/gdk-sharp.dll
-r:/usr/lib/pkgconfig/../../lib/cli/gtk-sharp-2.0/gtk-sharp.dll   -r:/usr/lib/pkgconfig/../../lib/cli/glib-sharp-2.0/glib-
sharp.dll
./RSSreader.cs(501,40): warning CS0219: The variable `News_Media' is assigned but its value is never used
./RSSreader.cs(51,24): warning CS0414: The private field `myRSS.RSSreader.Active_child' is assigned but its
value is never used
./RSSreader.cs(59,22): warning CS0414: The private field `myRSS.RSSreader.StartTime' is assigned but its
value is never used
Compilation succeeded - 3 warning(s)
mkdir -p 'bin/Release'
cp 'internet-feed-reader.svg' 'bin/Release/internet-feed-reader.svg'
mkdir -p 'bin/Release'
cp 'AZG_RSS_Feeds.txt' 'bin/Release/AZG_RSS_Feeds.txt'
mkdir -p 'bin/Release'
cp 'AZG_LOGO.gif' 'bin/Release/AZG_LOGO.gif'
make[2]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
make[1]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
   dh_auto_test
        make -j1 check
make[1]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
Making check in .
make[2]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
make[2]: Nothing to be done for `check-am'.
make[2]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
make[1]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
 fakeroot debian/rules binary
dh binary
   dh_testroot
   dh_prep
        rm -f debian/myrss.substvars
        rm -f debian/myrss.*.debhelper
        rm -rf debian/myrss/
   dh_installdirs
        install -d debian/myrss
   dh_auto_install
        make -j1 install DESTDIR=/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1/debian/myrss
make[1]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
Making install in .
make[2]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
make[3]: Entering directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
test -z "/usr/bin" || /bin/mkdir -p "/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1/debian/myrss/usr/bin"
 /usr/bin/install -c bin/Release/myrss '/home/azuregulf/AppsCSharp/PACKAGES/myrss-
0.1/debian/myrss/usr/bin'
test -z "/usr/lib/myrss" || /bin/mkdir -p "/home/azuregulf/AppsCSharp/PACKAGES/myrss-
0.1/debian/myrss/usr/lib/myrss"
 /usr/bin/install -c bin/Release/myRSS.exe '/home/azuregulf/AppsCSharp/PACKAGES/myrss-
0.1/debian/myrss/usr/lib/myrss'
test -z "/usr/lib/myrss" || /bin/mkdir -p "/home/azuregulf/AppsCSharp/PACKAGES/myrss-
0.1/debian/myrss/usr/lib/myrss"
 /usr/bin/install -c -m 644 bin/Release/internet-feed-reader.svg bin/Release/AZG_RSS_Feeds.txt

bin/Release/AZG_LOGO.gif '/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1/debian/myrss/usr/lib/myrss'
make[3]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
make[2]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
make[1]: Leaving directory `/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
  dh_install
  dh_installdocs
      install -g 0 -o 0 -d debian/myrss/usr/share/doc/myrss
      cp -a AZG_RSS_Feeds.txt debian/myrss/usr/share/doc/myrss
      chown -R 0:0 debian/myrss/usr/share/doc
      chmod -R go=rX debian/myrss/usr/share/doc
      chmod -R u\+rw debian/myrss/usr/share/doc
      install -g 0 -o 0 -m 644 -p debian/copyright debian/myrss/usr/share/doc/myrss/copyright
      install -g 0 -o 0 -d debian/myrss/usr/share/doc-base/
      install -g 0 -o 0 -m644 -p debian/myrss.doc-base debian/myrss/usr/share/doc-base/myrss
  dh_installchangelogs
      install -o 0 -g 0 -p -m644 debian/changelog debian/myrss/usr/share/doc/myrss/changelog.Debian
  dh_installexamples
  dh_installman
  dh_installcatalogs
  dh_installcron
  dh_installdebconf
      install -o 0 -g 0 -d debian/myrss/DEBIAN
  dh_installemacsen
  dh_installifupdown
  dh_installinfo
  dh_pysupport
      /usr/share/python-support/private/movemodules debian/myrss
  dh_installinit
Duplicate specification "O=s" for option "O"
Duplicate specification "O=s" for option "O"
  dh_installmenu
      install -d debian/myrss/usr/share/menu
      install -p -m644 debian/menu debian/myrss/usr/share/menu/myrss
      echo "# Automatically added by dh_installmenu">> debian/myrss.postinst.debhelper
      sed "" /usr/share/debhelper/autoscripts/postinst-menu >> debian/myrss.postinst.debhelper
      echo '# End automatically added section' >> debian/myrss.postinst.debhelper
      echo "# Automatically added by dh_installmenu">> debian/myrss.postrm.debhelper
      sed "" /usr/share/debhelper/autoscripts/postrm-menu >> debian/myrss.postrm.debhelper
      echo '# End automatically added section' >> debian/myrss.postrm.debhelper
  dh_installmime
  dh_installmodules
  dh_installlogcheck
  dh_installlogrotate
  dh_installpam
  dh_installppp
  dh_installudev
  dh_installwm
  dh_installxfonts
  dh_bugfiles
  dh_lintian
  dh_gconf
  dh_icons
  dh_perl
  dh_usrlocal
  dh_link
  dh_compress
      cd debian/myrss

```
        chmod a-x usr/share/doc/myrss/changelog.Debian
        gzip -9nf usr/share/doc/myrss/changelog.Debian
        cd '/home/azuregulf/AppsCSharp/PACKAGES/myrss-0.1'
  dh_fixperms
        find debian/myrss  -print0 2>/dev/null | xargs -0r chown --no-dereference 0:0
        find debian/myrss ! -type l  -print0 2>/dev/null | xargs -0r chmod go=rX,u+rw,a-s
        find debian/myrss/usr/share/doc -type f  ! -regex 'debian/myrss/usr/share/doc/[^/]*/examples/.*'
-print0 2>/dev/null | xargs -0r chmod 644
        find debian/myrss/usr/share/doc -type d  -print0 2>/dev/null | xargs -0r chmod 755
        find debian/myrss/usr/share/man debian/myrss/usr/man/ debian/myrss/usr/X11*/man/ -type f  -print0
2>/dev/null | xargs -0r chmod 644
        find debian/myrss -perm -5 -type f \( -name '*.so*' -or -name '*.la' -or -name '*.a' \)  -print0
2>/dev/null | xargs -0r chmod 644
        find debian/myrss/usr/include -type f  -print0 2>/dev/null | xargs -0r chmod 644
        find debian/myrss/usr/share/applications -type f  -print0 2>/dev/null | xargs -0r chmod 644
        find debian/myrss -perm -5 -type f \( -name '*.cmxs' \)  -print0 2>/dev/null | xargs -0r chmod 644
        find debian/myrss/usr/lib/perl5 debian/myrss/usr/share/perl5 -type f -perm -5 -name '*.pm'  -print0
2>/dev/null | xargs -0r chmod a-X
        find debian/myrss/usr/bin -type f  -print0 2>/dev/null | xargs -0r chmod a+x
  dh_strip
  dh_makeshlibs
        rm -f debian/myrss/DEBIAN/shlibs
  dh_shlibdeps
  dh_installdeb
        perl -pe 's~#DEBHELPER#~qx{cat debian/myrss.postinst.debhelper}~eg' < debian/postinst >
debian/myrss/DEBIAN/postinst
        chown 0:0 debian/myrss/DEBIAN/postinst
        chmod 755 debian/myrss/DEBIAN/postinst
        sed s/#DEBHELPER#// < debian/preinst > debian/myrss/DEBIAN/preinst
        chown 0:0 debian/myrss/DEBIAN/preinst
        chmod 755 debian/myrss/DEBIAN/preinst
        sed s/#DEBHELPER#// < debian/prerm > debian/myrss/DEBIAN/prerm
        chown 0:0 debian/myrss/DEBIAN/prerm
        chmod 755 debian/myrss/DEBIAN/prerm
        perl -pe 's~#DEBHELPER#~qx{cat debian/myrss.postrm.debhelper}~eg' < debian/postrm >
debian/myrss/DEBIAN/postrm
        chown 0:0 debian/myrss/DEBIAN/postrm
        chmod 755 debian/myrss/DEBIAN/postrm
  dh_gencontrol
        echo misc:Depends= >> debian/myrss.substvars
        dpkg-gencontrol -ldebian/changelog -Tdebian/myrss.substvars -Pdebian/myrss
dpkg-gencontrol: warning: unknown substitution variable ${shlibs:Depends}
        chmod 644 debian/myrss/DEBIAN/control
        chown 0:0 debian/myrss/DEBIAN/control
  dh_md5sums
        (cd debian/myrss >/dev/null ; find . -type f  ! -regex '.*/DEBIAN/.*' -printf '%P\0' | xargs -r0 md5sum
> DEBIAN/md5sums) >/dev/null
        chmod 644 debian/myrss/DEBIAN/md5sums
        chown 0:0 debian/myrss/DEBIAN/md5sums
  dh_builddeb
        dpkg-deb --build debian/myrss ..
dpkg-deb: building package `myrss' in `../myrss_0.1-1_i386.deb'.
 signfile myrss_0.1-1.dsc
gpg: skipped "DJW Cahusac de Caux <derek@azuregulf.com>": secret key not available
gpg: [stdin]: clearsign failed: secret key not available

 dpkg-genchanges  >../myrss_0.1-1_i386.changes
dpkg-genchanges: including full source code in upload
```

```
dpkg-buildpackage: full upload (original source is included)
dpkg-buildpackage: warning: Failed to sign .dsc and .changes file

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$
```

Now check the output, fingers crossed, in the directory above the PACKAGES source folder – you should see a number of new files, as shown below:

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ cd ..

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES$ ls -l
total 264
drwxr-xr-x 5 azuregulf azuregulf   4096 2010-10-29 19:15  myrss-0.1
-rw-r--r-- 1 azuregulf azuregulf   3151 2010-10-29 19:15  myrss_0.1-1.diff.gz
-rw-r--r-- 1 azuregulf azuregulf    738 2010-10-29 19:15  myrss_0.1-1.dsc
-rw-r--r-- 1 azuregulf azuregulf   1391 2010-10-29 19:16  myrss_0.1-1_i386.changes
-rw-r--r-- 1 azuregulf azuregulf  33686 2010-10-29 19:16  myrss_0.1-1_i386.deb
-rw-r--r-- 1 azuregulf azuregulf 215034 2010-10-29 19:15  myrss_0.1.orig.tar.gz
```

For the sake of completeness, I listed the PACKAGES source folders' contents after the buildpackage command – you'll notice a few additional directories and files. They're worth looking at, but, if you're like me, just jump straight to Step 8 and install the damn thing.

```
azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES$ cd myrss-0.1

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ ls -l
total 464
-rw-r--r-- 1 azuregulf azuregulf  30061 2010-10-28 18:47      aclocal.m4
-rw-r--r-- 1 azuregulf azuregulf    971 2010-10-16 11:11      AssemblyInfo.cs
-rwxrwxr-x 1 azuregulf azuregulf   2182 2010-10-27 09:32      autogen.sh
-rw-r--r-- 1 azuregulf azuregulf  12012 2010-10-13 16:26      AZG_LOGO.gif
-rw-r--r-- 1 azuregulf azuregulf   1005 2010-10-19 22:03      AZG_RSS_Feeds.txt
drwxr-xr-x 3 azuregulf azuregulf   4096 2010-10-28 18:50      bin
-rw-r--r-- 1 azuregulf azuregulf  12027 2010-10-29 19:15      config.log
-rwxr-xr-x 1 azuregulf azuregulf  28476 2010-10-29 19:15      config.status
-rwxr-xr-x 1 azuregulf azuregulf 121075 2010-10-28 18:47      configure
-rw-r--r-- 1 azuregulf azuregulf   1623 2010-10-27 09:32      configure.ac
drwxr-xr-x 3 azuregulf azuregulf   4096 2010-10-29 19:16      debian
-rw-r--r-- 1 azuregulf azuregulf    822 2010-10-27 09:32      expansions.m4
drwxr-xr-x 2 azuregulf azuregulf   4096 2010-10-22 14:39      gtk-gui
-rwxr-xr-x 1 azuregulf azuregulf  13663 2010-10-28 18:47      install-sh
-rw-r--r-- 1 azuregulf azuregulf  13792 2010-10-18 23:07      internet-feed-reader.svg
-rw-r--r-- 1 azuregulf azuregulf    220 2010-10-19 17:41      Main.cs
-rw-r--r-- 1 azuregulf azuregulf  38541 2010-10-29 19:15      Makefile
-rw-r--r-- 1 azuregulf azuregulf    233 2010-10-27 09:32      Makefile.am
-rw-r--r-- 1 azuregulf azuregulf  36653 2010-10-28 18:47      Makefile.in
-rw-r--r-- 1 azuregulf azuregulf   6691 2010-10-27 09:32      Makefile.include
-rwxr-xr-x 1 azuregulf azuregulf  11419 2010-10-28 18:47      missing
-rw-r--r-- 1 azuregulf azuregulf     62 2010-10-29 19:15      myrss
-rw-r--r-- 1 azuregulf azuregulf   4086 2010-10-25 20:14      myRSS.csproj
-rw-r--r-- 1 azuregulf azuregulf    183 2010-10-27 17:56      myRSS.desktop
-rw-r--r-- 1 azuregulf azuregulf     66 2010-10-27 09:32      myrss.in
-rw-r--r-- 1 azuregulf azuregulf   2656 2010-10-27 09:32      myRSS.make
-rw-r--r-- 1 azuregulf azuregulf  13317 2010-10-26 20:12      myRSS.pidb
-rw------- 1 azuregulf azuregulf   1616 2010-10-25 20:14      myRSS.sln
```

```
-rw-r--r-- 1 azuregulf azuregulf   1118 2010-10-27 17:56        myRSS.userprefs
-rw-r--r-- 1 azuregulf azuregulf    410 2010-10-19 17:32        NewsWebView.cs
-rw-r--r-- 1 azuregulf azuregulf  42820 2010-10-20 20:39        RSSreader.cs


azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1$ cd debian

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1/debian$ ls -l
total 84
-rw-r--r-- 1 azuregulf azuregulf  152 2010-10-29 15:44        changelog
-rw-r--r-- 1 azuregulf azuregulf    2 2010-10-28 20:10        compat
-rw-r--r-- 1 azuregulf azuregulf  586 2010-10-29 19:11        control
-rw-r--r-- 1 azuregulf azuregulf  684 2010-10-29 19:09        control.djw
-rw-r--r-- 1 azuregulf azuregulf  488 2010-10-28 22:46        copyright
-rw-r--r-- 1 azuregulf azuregulf   18 2010-10-28 20:10        docs
-rw-r--r-- 1 azuregulf azuregulf   38 2010-10-29 19:16        files
-rw-r--r-- 1 azuregulf azuregulf 1745 2010-10-28 20:10        manpage.1
-rw-r--r-- 1 azuregulf azuregulf  102 2010-10-29 16:46        menu
drwxr-xr-x 4 azuregulf azuregulf 4096 2010-10-29 19:15        myrss
-rw-r--r-- 1 azuregulf azuregulf  636 2010-10-29 19:16        myrss.debhelper.log
-rw-r--r-- 1 azuregulf azuregulf  275 2010-10-29 16:34        myrss.doc-base
-rw-r--r-- 1 azuregulf azuregulf  168 2010-10-29 19:15        myrss.postinst.debhelper
-rw-r--r-- 1 azuregulf azuregulf  143 2010-10-29 19:15        myrss.postrm.debhelper
-rw-r--r-- 1 azuregulf azuregulf   14 2010-10-29 19:16        myrss.substvars
-rw-r--r-- 1 azuregulf azuregulf  955 2010-10-28 20:10        postinst
-rw-r--r-- 1 azuregulf azuregulf  928 2010-10-28 20:10        postrm
-rw-r--r-- 1 azuregulf azuregulf  688 2010-10-28 20:10        preinst
-rw-r--r-- 1 azuregulf azuregulf  875 2010-10-28 20:10        prerm
-rwxr-xr-x 1 azuregulf azuregulf  464 2010-10-29 16:22        rules
-rw-r--r-- 1 azuregulf azuregulf  769 2010-10-28 20:10        watch

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1/debian$ cd myrss

azuregulf@azuregulf-desktop:~/AppsCSharp/PACKAGES/myrss-0.1/debian/myrss$ ls -l
total 8
drwxr-xr-x 2 azuregulf azuregulf 4096 2010-10-29 19:16        DEBIAN
drwxr-xr-x 5 azuregulf azuregulf 4096 2010-10-29 19:15        usr
```

Step 8: Install the package on another computer and test it

Not everything works perfectly first time, so try installing your application onto another computer from the binary package – in my case, an old notebook on which only Ubuntu's desktop version works, but that's another story. I dropped the .deb file onto its Desktop and then installed using the dpkg --install command, as below:

```
azuregulf@azuregulf-laptop:~$ cd /home/azuregulf/Desktop
azuregulf@azuregulf-laptop:~/Desktop$ ls -l
total 44
-rwxr-xrwx 1 azuregulf azuregulf    326 2010-10-19 10:42        GUIBackUp.desktop
-rwxr-xr-x 1 azuregulf azuregulf  33686 2010-10-29 19:16        myrss_0.1-1_i386.deb
-rwxr-xr-x 1 azuregulf azuregulf    355 2010-10-24 15:51        myRSS.desktop

azuregulf@azuregulf-laptop:~/Desktop$ dpkg --install myrss_0.1-1_i386.deb
dpkg: requested operation requires superuser privilege
```

OK, so you need to use 'sudo', as follows:

```
azuregulf@azuregulf-laptop:~/Desktop$ sudo dpkg --install myrss_0.1-1_i386.deb
[sudo] password for azuregulf:
Selecting previously deselected package myrss.
(Reading database ... 192759 files and directories currently installed.)
Unpacking myrss (from myrss_0.1-1_i386.deb) ...
Setting up myrss (0.1-1) ...

Processing triggers for doc-base ...
Processing 1 added doc-base file(s)...
Registering documents with scrollkeeper...
azuregulf@azuregulf-laptop:~/Desktop$
```

Well, looks like everything worked – and, once I'd adjusted the desktop launcher that I'd previously created to look like:

```
azuregulf@azuregulf-laptop:~/Desktop$ cat myRSS.desktop

[Desktop Entry]
Version=1.0
Type=Application
Terminal=false
Icon[en_GB]=/usr/share/icons/Humanity/apps/128/internet-feed-reader.svg
Name[en_GB]=test myRSS
Exec=mono "/usr/lib/myrss/myRSS.exe"
Name=myRSS
Icon=/usr/share/icons/Humanity/apps/128/internet-feed-reader.svg
Comment[en_GB.utf8]=c"$@" from bin sh
azuregulf@azuregulf-laptop:~/Desktop$
```

I could run the software, after changing the Exec line (more easily done on the GUI desktop).

There are still a few bugs, which I'm in the process of fixing and no doubt I'll adjust this document based upon the experience of solving these:

1. no menu item created
2. no desktop launcher created
3. .exe and associated files seem OK and can run when properly invoked with mono
4. but still don't know if the "Depends" on mono are correct when installing – because mono was already installed together with shared libs (webkit etc)
5. myRSS.exe fails because it's trying to write to the 'working' / install directory '/usr/lib/myrss' as this is owned by root.....ugh so, I've now corrected this in the code by using:
   ```
   string base_directory = Environment.GetFolderPath
   (Environment.SpecialFolder.ApplicationData);
   ```
   and
   ```
   HelpText_FileName = System.IO.Path.Combine (base_directory,
   myRSSDataFolder + "/" + "AZG_RSS_HelpText.html");
   ```
   which should write and read from your personal './config' folder.

New release coming up, I cannot wait to re-build it!

References, appreciation and some light relief

References and appreciation:

The one document that really helped me, and which I only found after many many clicks was:

>Debian New Maintainers' Guide
>Josip Rodin <joy-mg@debian.org>
>version 1.2.23-svn, 2010-09-27 15:52:54 UTC

You can see the online HTML version at:
>http://www.us.debian.org/doc/manuals/maint-guide/index.en.html#contents

but I found a downloaded PDF copy easier to work with, from:
>http://www.debian.org/doc/devel-manuals#maint-guide

Needless to say, I wish I'd come across it earlier. Although, on reflection, I might not have appreciated it so much if I had and I probably wouldn't have understood it either. After reading it, I was determined to make the summary of my own process much shorter, but it's somehow ballooned into its own cloud...mind you, his oeuvre is 75 pages or so.

The Debian New Maintainers' Guide imposed a discipline and structure in the whole process for which I'm very grateful. You will notice that my simple procedural steps generally follow those outlined in that document, which are described with much greater detail and explanation.

In my long hours of googling for answers to almost every step in the above process, I've kept a few web links and thank the many authors of & contributors to those pages for their assistance. I've included a brief list of urls below, in no particular order – there were many others...

http://lists.ximian.com/pipermail/monodevelop-list/ (with thanks to Michael Hutchinson, Jo Shields and Quandary for their helpful pointers)
http://pkg-mono.alioth.debian.org/cli-policy/ch-packaging.html#s-general-packaging
http://forums.debian.net/viewtopic.php?f=16&t=38976
http://www.linux.com/archive/feed/60383
http://www.debian.org/doc/FAQ/ch-pkg_basics.en.html
http://forums.debian.net/viewtopic.php?f=16&t=24362
http://wiki.maemo.org/Packaging
http://www.linuxjournal.com/content/using-checkinstall-build-packages-source
(tried checkinstall, but it didn't quite work for me)
http://thedarkmaster.wordpress.com/2008/05/24/how-to-create-manipulate-a-deb-file-of-a-compiled-application/
http://www.clearchain.com/blog/posts/autotools
http://www.mono-project.com/Guide:Running_Mono_Applications
(wasn't sure about mkbundle – not sure that it's in current use and it doesn't seem to solve the 'packaging' problem of how to provide something that's easy to install and is also a widely accepted solution – there is also a brief summary in mono docs http://www.go-mono.com/docs/)
http://www.mono-project.com/Guidelines:Application_Deployment#Layout_Recommendation
http://www.mono-project.com/Assemblies_and_the_GAC

https://wiki.ubuntu.com/Packaging/Training/Logs/2009-07-16
http://sources.redhat.com/automake/automake.html#Creating-amhello

Finally, you might have wondered why I was writing yet another RSS news feed reader. Well, I'd been following Paul Hudson's set of tutorials at http://www.tuxradar.com/hca which are generally console applications. I thought I'd try rewriting some of them as GUI Gtk based applications. Whilst looking for answers on deployment, I came across this link http://linuxformat.co.uk/wiki/index.php/Go_graphical_with_Gtk, which was sort of along the lines of my own effort! Anyway, thanks to Paul for stimulating my interest in a new language C#...

and then, another kick in the...when I read this note from: http://tirania.org/blog//texts/md-build.html by Miguel de Icaza (miguel@ximian.com):

> "Autoconf and automake are to be avoided for the traditional C# targets, as these systems are better suited for C and C++ development and have their own sets of portability and dependency problems."

So, was my choice of Autotools in Monodevelop correct? Who knows, it seems to work, for now.

Light relief

If you've read this far, you're probably thinking much the same as I was. "Good grief, all this just to get my twenty cents worth of code out on the road!"

And then it dawned on me, I'd just stumbled into the biggest car showroom in the world. It was huge, cars everywhere, there were people rushing around in all directions, all looked happy and busy. No-one paid any attention to me, I had to stop people and ask where I was. "You're here" was the usual reply or "ask over there".

Still, I was astounded, the variety, the beauty, the energy, the abundance and best of all was the massive sign projected onto the vaulted ceilings. "FREE". Every car that I could see was free. And, not only that, it came with free fuel for life. On one rather sophisticated raised platform, I noticed groups of people, usually three at a time, huddled together with linked arms all chanting the same words...oobuntu, oobuntu, oobuntu...over and over and over. Close by, on another rather more glitzy stage, a loud cheer-leading penguin was exclaiming "Give me a U, give me a B, give me a U, give me a N, give me a T, give me a U NOW what's that SPELL?" "Oobubmmm red hat" I muttered to myself, I never was very good at following gnus.

But, it looked good, sure looked better and faster than my old banger. "Yes" I said, seizing the moment, "I'll take one". Instantly, a suave salesman was by my side. "Good choice", "Care to take a look inside", "We'll even throw in a few extras, just to get you started – Monodevelop goes well with this model and you look like an intelligent man". I was sold. Hang on, I thought, it's free? "Yes, still all free" he assured me.

I was so happy that I just sat in the car. And I sat there for weeks, blissfully tinkering, revving the engine, listening to the burbling twin exhausts behind me. Even the horn was so sonorous that I could make it iterate through ienumerable scales – I almost thought I'd discovered a new musical instrument. Finally, I realised that I should probably drive the car somewhere, even if only for a test drive.

"No problem" the salesman encouraged me, "you'll just need a roadmap". "What!" Reluctantly, he dragged himself away from his iG9 to look me straight in the eye. "Did you know that your car can automatically connect with my iG9 and it's not even publicly available yet", he smirked. "I know, but where's the road?" I replied, testily. "Don't forget my friend, that your car is unique, press that button there and it instantly changes into any colour you desire. Going on a hot date, fire it up Ferrari red, babyee" he sleazed, slicking back his hair. "And by the way, you can get all the indicators to flash symuletayneeowsly – that's cooool, everyone on the road can see you".

"What road?" I asked again, "I just want to get from here to there, a short test drive to my friend's place". "Oh, the ROAD", he said slowly, "Didn't I say you'd have to build that yourself".

Somewhere in the distance, the lights in a multi-coloured window started to flicker...