

CrossFPC on the move

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Abstract

Some time ago, a new project was introduced: CrossFPC. CrossFPC is a plugin for Delphi, which allows to cross-compile CLX applications with FPC, to any target supported by FPC and FreeCLX. Meanwhile FPC and CrossFPC have reached a major milestone. A progress report.

1 Introduction

In one of the previous issues, CrossFPC was presented: CrossFPC is a replacement for CrossKylix. CrossKylix and CrossFPC have the same goal: Cross-compiling CLX applications for linux right from the Delphi IDE. CrossKylix was a plugin for Delphi that allowed to cross-compile CLX applications from the Delphi IDE using the Kylix compiler. Since support for Kylix has been officially discontinued, an alternative has been developed using the Free Pascal compiler: CrossFPC. More about this project can be found on it's website:

<http://www.crossfpc.org/>

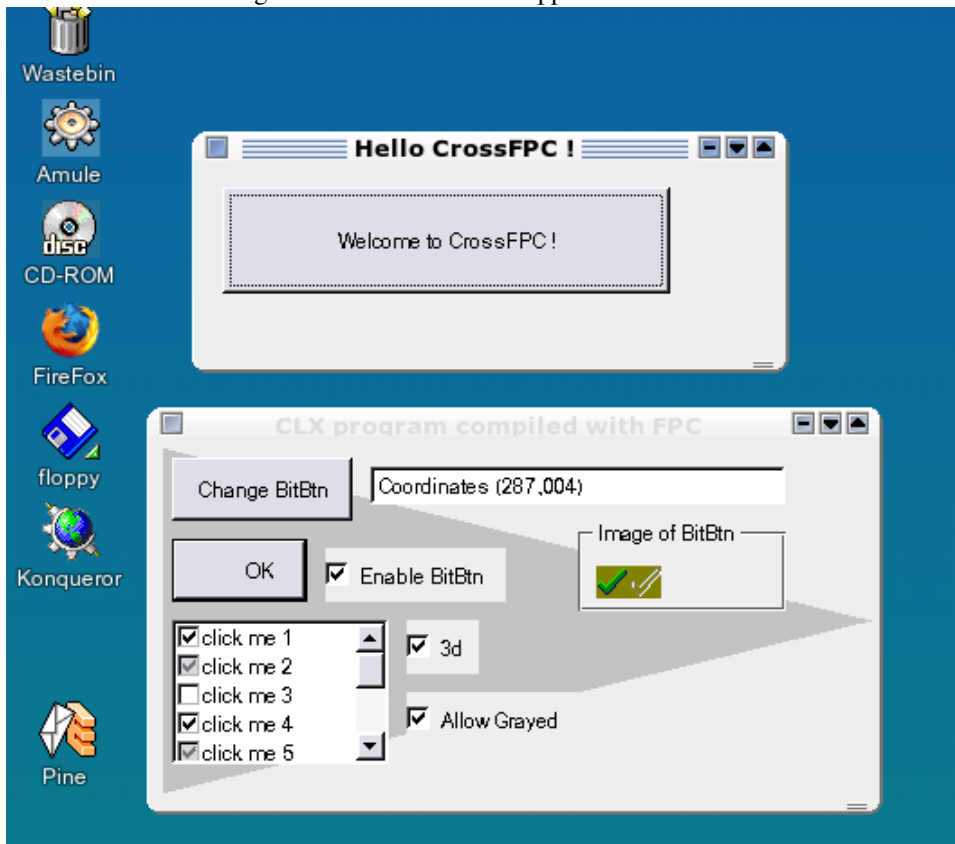
At the time of the first report, crossfpc was not yet capable of much: only the most basic console applications could be compiled. Since that time, a lot has changed, meanwhile a third beta has been released: time for an update.

2 The progress

The area where the biggest progress has been made is the FPC compiler: it is of course the fundament on which CrossFPC is built. There has been improvement in the following areas:

- The Libc unit distributed with FPC has been made more compatible with the one shipped with Kylix.
- There have been various patches to basic units.
- A special Kylix compatibility unit has been introduced, which is included by default when cross-compiling in CrossFPC. This unit masks differences in the basic RTL routines of Free Pascal and Kylix.
- Many compiler bugs and deficiencies have been fixed, allowing the compiler to compile most of the CLX.
- Last but not least, FPC now has support for embedded resources: a special tool was made to include resources in the application.

Figure 1: Visual CrossFPC applications at work



- The CrossFPC installation itself was improved: a patched FreeCLX has been included instead of the original FreeCLX by Borland.

As a result, with CrossFPC the following should now be possible:

- Compile and run console applications.
- Compile and run Visual CLX applications. (Including resources)
- Compile DBExpress applications. Due to some bugs still under investigations, these applications crash when run.

The main missing part for complete support of the CLX is the use of `TClientDataset` datasets (DataSnap or Midas). Due to some compiler issues, the units for DataSnap do not yet compile.

In figure 1 on page 2 a screenshot of CLX applications compiled with CrossFPC is shown. Both applications run out of the box on a SuSE 9.3 distribution: No extra deployment libraries were needed.

3 Conclusion

6 months after the initial start of the project, a lot has been achieved. Not only the technical side of things (although this is most prominent) but the FreeCLX initiative has obtained a

license from Borland, allowing to perfect and enhance the FreeCLX: this ensures that any CLX code out there has a future.