DISTRHO Plugin Framework – An easier way to create audio plugins

Filipe Coelho

https://github.com/falkTX/DPF Viseu, Portugal falktx@falktx.com

Abstract

DISTRHO Plugin Framework, or DPF for short, is a C++ framework for creating audio plugins and OpenGL-based UIs.

Keywords

Plugin, Framework, OpenGL, hmmm.

1 Introduction

Talk about developing plugins in general, not using a helper framework, related to next point (mix them).

Then 1. the many plugin formats, 2. LV2 being a bit more hard to develop for, 3. VST license thing.

Extend to 1. UI toolkits on linux, how LV2 is having issues dealing with it, 2. cross-platform is a challenge

2 Similar frameworks

Mention Juce and the cockos/reaper thing (not for linux).

Give special attention to licensing.

3 Overview or something

Base intro on how the framework works, what is supposed to do, the target.

Really basic intro here.

3.1 Licensing

Explain license reasons, the limitations on some code; example DSSI-UI uses liblo, VST can use vstsdk or GPLv2+ header.

3.2 Capabilities

Explain what devs can do.

3.3 Limitations

Explain what it can't do.

3.3.1 Subsubsection

Text of the subsubsection. Text of the subsubsection.

4 Exporters

How the export works.

4.1 LADSPA

Text here about LADSPA.

4.2 DSSI

Text here about LADSPA.

4.3 LV2

Text here about LADSPA.

4.4 VST

Text here about LADSPA.

4.5 Other

How to extend.

5 Operating systems

Explain how the core works everywhere, but UI needs some platform-specific bits.

Reference pugl here.

5.1 Linux (X11)

Using glx and xlib.

5.2 MacOS

Using Cocoa.

5.3 Windows

Using win32, as expected.

5.4 Other

How to extend.

6 Conclusion and future work

Show some working plugin pics.

Mention which stuff is working properly and fully tested, and which didn't had time to check 100%.

Mention DISTRHO project I guess.

7 Acknowledgements

Our thanks go to ...

Thanks to David Robilla, Robin ... and Harrison people for the work at pugl.

Any other that used or tested DPF, like Harry and Andreee.

Linux Foundation maybe:P

References

- [1] M. Kay. 1986. Parsing in Functional Unification Grammar. In K. Spark Jones B. J. Grosz and B. L. Webber, editors, *Readings in Natural Language Processing*, pages 125-138. Morgan Kaufmann Publishers, Los Altos, California.
- [2] Frederick Mosteller and David Wallace. 1964. *Inference and Disputed Authorship: The Federalist.* Addison-Wesley, Reading, Massachusetts.