## A Yoshimi Cookbook

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#### Contents

1	Introduction	1
	1.1 Project Structure	1
	1.2 What Game Shall We Play Today?	2
2	Banks and General MIDI	2
	2.1 Root Paths	2
3	Summary	3
4	References	3
${f L}$	ist of Figures	
	1 Rank Root Paths	9

#### 1 Introduction

This document is a follow-on to the author's "A Yoshimi User Manual" [8]. The user manual attempts complete coverage of the user-interface and concepts behind *Yoshimi*. This cookbook attempts to provide recipes to solve some common problems in getting *Yoshimi* to perform at its best for the user.

#### 1.1 Project Structure

The "Yoshimi Cookbook" project consists of two parts:

- The source material for this document.
- A self contained "yoshimi" configuration and data section to support the examples in this cookbook.

The documentation source-files are provided in the tex directory. They are use to create the cookbook via Makefiles and the external "latexmk" project. The result of a "make" is a new PDF of the cookbook in the pdf directory. The latest PDF is always provided there so that one does not have to install the external projects needed to create it.

The configuration, banks, presets, and instrument files can be used to supplement or replaces the user's own configuration and data files.

#### 1.2 What Game Shall We Play Today?

There are a number of recipes that are hinted at in the user manual, but that solve problems that the author has encountered while using *Yoshimi*.

- Banks and MIDI. Yoshimi has had recent modifications to support bank-switching and using program-change messages to make Yoshimi a more flexible MIDI playback tool.
- General MIDI. It should be possible to set up one or more banks that are General MIDI compliant.
- Usage of Modulators. Yoshimi provides a number of modulation setups, but it isn't clear how to use them, especially the ring modulator.
- More! ...

#### 2 Banks and General MIDI

Banks are discussed quite heavily in the user manual [8]. Banks have evolved quite a bit in *Yoshimi*, and are a powerful way to manage instruments, and more amenable to automation than ever.

In this section, we will attempt to set up a basic bank that is compliant with the General MIDI specification. In order to do so, we will cherry pick instruments from the package that is provided when *Yoshimi* is installed, renaming them as needed to fit into the appropriate General MIDI slot.

One problem is the selection of the *best* instrument for a given General MIDI program number. There are simply too many to be able to evaluate them all.

For this recipe, the banks and presets directories will be stored in the following directory of this project:

yoshimi/gm/basic

#### 2.1 Root Paths

The first thing to do is to add the yoshimi-cookbook banks directory to your setup.

Run Yoshimi, and navigate the following user-interface path:

Menu / Instrument / Show Root Paths ...

Then click **Add root directory...**. Navigate to where the yoshimi-cookbook project is stored and add the **yoshimi/gm** directory. The result should be something like the following:

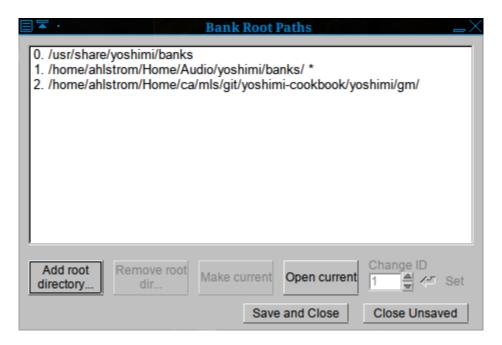


Figure 1: Bank Root Paths

Click on the new directory. It has ID = 2 in that diagram. We will refer to this value as the "GM path ID", and the actual path as the "GM path". Now click the **Make current** button. Verify that it now has the asterisk. Click the **Save and Close** button.

# 3 Summary

In summary, we can say that you will absolutely love Yoshimi.

#### 4 References

The Yoshimi cookbook reference list.

### References

- [1] Will J. Godfrey A discussion of making Bank/Root specifications more regular. http://sourceforge.net/p/yoshimi/mailman/message/33200765/ 2014.
- [2] LinuxMusicians newsgroup Ring Modulation in ZynAddSubFX http://linuxmusicians.com/viewtopic.php?f=1&t=8178 2012.
- [3] Manuel Op de Coul ¡coul@huygens-fokker.org; The Scala Musical Tuning Application. http://www.huygens-fokker.org/scala/ Scala is a powerful software tool for experimentation with musical tunings, such as just intonation scales, equal and historical temperaments, microtonal and macrotonal scales, and non-Western scales. 2014.

- [4] Sharphall How to create drum sounds in ZynAddSubFX or Yoshimi, Part 1 http://sharphall.org/docs/zynaddsubfx\_yoshimi\_drum\_tutorial.php Never got continued, unfortunately.
- [5] Gordon Reid Synth Secrets: Creative Synthesis http://www.soundonsound.com/sos/allsynthsecrets.htm 1999-2004.
- [6] Yoshimi team abrolag@users.sourceforge.net The download site for the Yoshimi software synthesizer. http://yoshimi.sourceforge.net/ 2015.
- [7] Yoshimi team The alternate location for the Yoshimi source-code. https://github.com/abrolag/yoshimi/ 2015.
- [8] Chris Ahlstrom A Yoshimi User Manual. https://github.com/ahlstromcj/yoshimi-doc/ 2015.