Date: Mon, 31 Aug 92 07:57:27 PDT
From: jos
To: mkdist
Subject: NeXT has signed off on the Music Kit and DSP Tools

Steve Jobs himself finally signed the CCRMA/NeXT agreement which enables CCRMA to distribute the Music Kit and DSP Tools along with source (except for Bug56 and the low-level device drivers). I can therefore announce its location at CCRMA to this group:

cmn14:/projects/musicKit

Please take a look and send me any comments you may have.

Note that there are two "Packages" for release. One is an "installation only" package which merely installs the music and dsp tools on your machine (if you are logged in as root). The other is a "source package" which contains all the source, unbuilt. The source package fits on 4 floppies, and installation package currently requires 5 floppies. could be trimmed

We invite anyone who plans to be using the Music Kit and/or DSP Tools on the NeXT platform to copy the installation or source package from the Packages subdirectory and test out the functionality you will be needing. For now, bugs, suggestions, etc. should be sent to me.

As soon as musickit@ccrma and dsptools@ccrma exist, we plan to announce the availability of the installation-only package via ccrma-ftp. We want to hold off for at least a month on releasing the source package to the world so it can be cleaned up a little more. However, I am sending specific sources to anyone who expresses a need (e.g. libdsp, synthpatches), and you are welcome to do the same. Everything is now "free software" in the context of NeXT platforms. New contributions by CCRMA and others can be copyrighted by the individual who wrote it, or deemed free software, or whatever.

Below is the current content of the file AAA_README in that directory:

HOW TO MAKE THE PACKAGES

cd to this directory and type

```
rm -rf Packages mk_inst.root
(cd mk-1; make clean)
(cd mk-1/unitgenerators; make really_clean)
make pkgs
```

"make pkgs" is equivalent to
"make nopkgs" (removing all packages) followed by
"make src_pkg" (make the source package) followed by
"make inst_pkg" (the installation image).

The directory Packages will contain a source package, and installation-only package, and floppy versions of each (having numbers appended to their names). I think the floppy labels have to be the same as the numbered filenames. I don't know if the floppy chunks actually reconstruct properly. Installation from them should be tested before sending them to anyone. Hopefully nobody will ask for floppies.

A make clean is necessary before "make src_pkg" because everything in mk-1 just gets tossed into the source package. When we have "clones" of the various component projects (multiple versions), this will not do. Almost every project already supports "make installsrc SRCROOT=<srcdir>", so with a little bit of makefile hacking, we should be able to say "make installsrc SRCROOT=/path/mk_src.root" in mk-1 and get a clean source tree created in mk_src.root for making the source package. For now, mk_src.root is just a symbolic link to mk-1.

A "make really_clean" is necessary in unit_generators to get rid of all the derived leaf unit-generator classes which makes everything fit on four floppies instead of five (but makes the build take much longer as a result).

THINGS TO DO BEFORE THE BETA RELEASE, DEFINITELY

Get agreement signed by Jeff Sasmor or Tony Agnello of Ariel allowing us (1) to have the Bug56 source code at CCRMA, (2) to support Bug56 and add features to it, and (3) to distribute Bug56 in BINARY FORM ONLY as part of the CCRMA DSP Tools release. [JOS - I wrote to Jeff requesting the letter and Patte will receive it.]

Need musickit@ccrma.stanford.edu and dsptools@ccrma.stanford.edu to exist.
Need musickit-bugs@ccrma.stanford.edu and dsptools-bugs@ccrma.stanford.edu to exist?

THINGS TO DO BEFORE THE BETA RELEASE, PREFERABLY (in JOS's opinion)

Consider COPYING.rtf in this directory as a proposed copyright notice for "contributed" software, i.e., post-NeXT.

Read and carefully consider the files REPORTING_BUGS and FIXING_BUGS in the release top directory. This is a proposed support system.

Consider the installation directories we use at present:

    /LocalLibrary/Source/CCRMA
    /usr/local
    /LocalDeveloper/Apps
    /LocalLibrary/Documentation/CCRMA/
    /LocalLibrary/Music/CCRMA/Scores
    /LocalLibrary/Music/CCRMA/Ensemble
    /LocalLibrary/Music/CCRMA/Midi

The rationale for introducing the CCRMA path segment is that paths like /LocalLibrary/Music/Scores seem likely to exist already under 2.1 (as shared networked directories). I suppose the same argument can be made for /LocalDeveloper, but we would lose automatic searching for apps by Workspace.

Place a copy of OpenBugs file in the ftp directory in the form
    OpenBugs.<date_code>
This will be retrieved separately via ftp by people interested in watching the bug list grow (or shrink, as the case may be, ha ha).

DOCUMENTATION

Need to convert remaining .frame files to .framemif (using FrameMaker), then use Doc/miftortf to creat .rtf format. I would go ahead and delete the Frame and .framemif versions at that point and let the .rtf files be the master copies. FrameMaker and a license to use can probably be obtained from Doug Fulton (lbj@next.com).

Figures in .rtf files are left-justified instead of centered.

VARIOUS WARTS

Install ALL man pages in mk_src.root/Doc/Man/ or flush that directory (if man pages are to be kept with and installed by each project individually).

When making installation package, some filenames were too long. The solution I picked for now is to compress part of the path into one file as indicated below. That way, they can be decompressed when needed, and the name should not be too long in that context. I've heard that gnutar is more robust than tar for long filenames. Maybe we should make the packages using our own script adapted from the Installer.apps's scripts (see the Makefile, target pkgs, for pointers).

Over-long paths (compressed using Workspace):
LocalLibrary/Documentation/CCRMA/DSPDoc/UnitGenerators/HowToWriteUGAndAPMacros.wn/*.eps --> UnitGenerators.compressed
LocalLibrary/Documentation/CCRMA/MusicDoc/Illustrations/SynthPatches/<many>
--> Illustrations.compressed
LocalLibrary/Documentation/CCRMA/2.0_Doc/2.0_SndMusicDSP/Reference/02_Classes/<many> --> 2.0_Doc.compressed

The new version of Bug56 (the one whose source appears here) does not recognize the QuintProcessor! Since the 2.1 binary works fine, I placed it in the mk-1 release instead. The new version has only one major new feature that I added which is label support in X and Y memory viewers. However, there are two nits to fix which I'll do after I get back in time for the final "CCRMA 3.0 release."

One of the last things I did was tweak the makefiles and remake all the unit generators from DSP source. If anything turns up broken, unpack the older source package and see what changed (it's not much). I did not have time to test things.

When the unit generators build from source, they include macros from /usr/local/lib/dsp/ instead of $(DSTROOT)/usr/local/lib/dsp/.

Loading an Ensemble document no longer autoloads the associated score.

DAVID'S LIST OF THINGS TO DO

Figure out about how to get dynamic loading symbols. (Asked mself)
Then adjust playscore, ScorePlayer, and examples.

Fix comment in SynthPatch.h about lmusic_s once mself tells me what it should say.

Fix man pages for playscore, find convertscore and deal with them somehow.

Do release notes.

Get jos to fix dsplib so that TMQ works.

Testing:

the following work:

SineGen
PerformerExample
PlayNote

Optional:

Put in bug-fixes to music kit and doc, if possible.

Bring doc up to date for 3.0 (and 2.0).

Put in dynamic loading into playscorefile2 and playscorefile?

To reduce size of Music Kit programs, consider removing -ObjC flag and libdsp from Midi* examples, playscore and ScorePlayer. (This depends on getting the category symbol somehow.) Add -libsys_s.

Try getting precomp into build of musickit.

Try and get sources for mixsounds files.