



[Home](#) | [Faq](#) | [Doc](#) | [Wiki](#) | [Planet](#) | [Download](#) | [Screenshots](#) | [Contact](#) | [Devel](#) | [TestFarm](#) | [Bugs](#) |

NEWS

May 07, 2013

TestFarm 2.0 released

We just released TestFarm 2.0. Now on [GitHub](#).

You can install it by running:

```
sudo pip install testfarm
```

In Debian/Ubuntu, if you installed python-stdeb first, it will be installed as a deb package you can remove as other debian packages.

This release is a major rewrite on the server side. You can expect it more reliable, more scalable and easier to install. It is also easier to maintain. Most changes are at the server and the client-server interface. Client API is mostly the same and migration of existing clients should be quite straight forward.

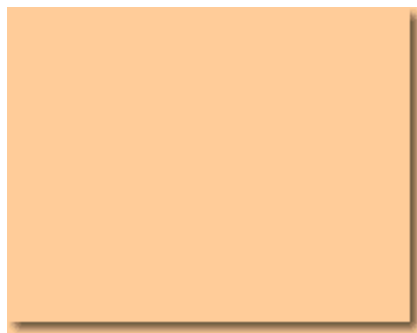
Regarding CLAM, it would be nice if we can get [a bunch of CLAM testfarm clients](#). Now clients are easier to setup. In order to setup one, please, contact us.

[Add a Comment](#)

April 04, 2011

CLAM at Debian!

CLAM finally made its way into the official Debian repositories. Many thanks to the maintainer, Taniguchi Takaki.



CLAM (C++ Library for Audio and Music) is a full-fledged software framework for research and application development in the Audio and Music Domain. It offers a conceptual model as well as tools for the analysis, synthesis and processing of audio signals.



TestFarm

CLAM is constantly built and automatically-tested in several platforms. Through testfarm you can also monitor the development activity:



Twitter

Archived news

[May 2009](#)

<http://packages.debian.org/source/sid/clam>
<http://packages.debian.org/source/sid/clam-networkeditor>
<http://packages.debian.org/source/sid/clam-chordata>

March 2009

February 2009

2008

2007

2007-2004

Comments: 5

Ubuntu PPA for CLAM

For the convenience of Ubuntu users, we deployed a personal package archive (PPA) in launchpad.

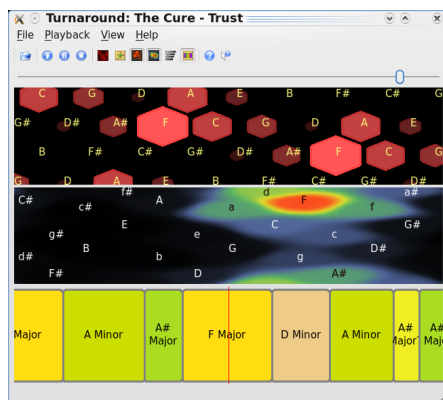
<https://launchpad.net/~dgarcia-ubuntu/+archive/ppa>

Instructions available at the same page. It currently contains libraries, extension plugins, NetworkEditor and Chordata packages for maverick, and platforms i386 and amd64.

Comments: 1

March 08, 2010

CLAM Chordata 1.0



The CLAM project is pleased to announce the first stable release of Chordata, which is released in parallel to the 1.4.0 release of the CLAM framework.

Chordata is a simple but powerful application that analyses the chords of any music file in your computer. You can use it to travel back and forward the song while watching insightful visualizations of the tonal features of the song. Key bindings and mouse interactions for song navigation are designed thinking in a musician with an instrument at hands.

Chordata in live:

<http://www.youtube.com/watch?v=xVmkIznjUPE>

The tutorial: http://clam-project.org/wiki/Chordata_tutorial

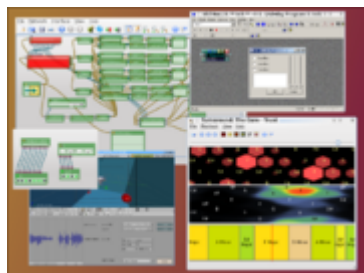
Download it at <http://clam-project.org>

This application was developed by Pawel Bartkiewicz as his GSoC 2008 project, by using existing CLAM technologies under a more suited interface which is now Chordata. Please, enjoy it.

Comments: 32

CLAM 1.4.0, 3D molluscs in the space

The



CLAM project is delighted to announce the long awaited 1.4.0 release of [CLAM, the C++ framework for audio and music](#), code name *3D molluscs in the space*.

In summary, this long term release includes a lot of new spacialization modules for **3D audio**; **MIDI**, **OSC** and **guitar effects** modules; architectural enhancements such as

typed controls; nice **usability** features for the NetworkEditor interface; convenience tools and scripts to make CLAM experience better; enhanced building of LADSPA plugins and new support for **LV2 and VST** plugin building; a new easy to use application to explore songs chords called **Chordata**; many optimizations, bug fixing and code clean ups.

Many thanks to the people who contributed to this release, including but not limited to the GSoC 2008 students and all the crew at Barcelona Media's Audio Group.

Some details follow:

- **Chordata** is a new CLAM application which offers a user friendly way to explore the chords of your favourite songs, using already existing technology in the CLAM framework but with a much simpler interface. [Video](#)
- The **spacialization module** and helper tools, contributed by [Barcelona Media](#) audio group, turn CLAM in tandem with Blender and Ardour, into a powerful 3D audio authoring and exhibition platform. Here you can see some related [Videos](#).
- **Typed controls** extend CLAM with the ability to use whichever C++ type as the message for a control. So, not just floats, but also booleans, enums, integers, or envelopes can be sent as asynchronous controls. Examples on boolean and MIDI controls are provided.
- NetworkEditor has been ported to the [QGraphicsView](#) framework. Dealing with heavy networks such the big ones

used in Barcelona Media have pushed many usability enhancements into its interface: multi-wire dragging, wire highlighting, default port and control actions, network and in-canvas documentation...

[Video](#)

- It also made necessary to provide a tool such `clamrefactor.py` to perform batch high level changes to clam network XML files such as renaming processing types, ports, or configuration parameters, changing configuration values, duplicating sets of processings, connecting them...
- **Music Annotator** application now is designed to aggregate several sources of descriptors and update them after edit. Descriptors are mapped to a work description schema that can be graphically defined. Also semantic web descriptor sources to access webservice such as MusicBrainz have been implemented.

You can download them from the [download page](#). Source, windows, debian and ubuntu packages are available. Contributed binaries for other platforms are welcome.

See also: [development screenshots](#), the [CHANGELOG](#), the [version migration guide](#) and the new [CLAM group on youtube](#).

[Add a Comment](#)

November 24, 2009

Clam developers at the Blender conference

Clam developers Pau Arumí and Natanel Olaiz recently presented some new work in the fantastic [Blender conference](#) in Amsterdam. The talk was about a technology developed at [BarcelonaMedia](#) involving an innovative usage of Blender for 3D audio using CLAM for the audible-scene rendering and decoding and Ardour for playing out to any loudspeaker-layout. It was really nice to meet Blender developers and artists, and the overall conference was fun and a great experience! Now we expect to collaborate more with the Blender project in the future.

Our talk was entitled: *Remixing of movie soundtracks into immersive 3D audio*

The summary:

We present a use of Blender for an innovative purpose: the remastering of traditional movie soundtracks into highly-immersive 3D audio soundtracks. To that end we developed a complete workflow making use of Blender with Python extensions, Ardour (the Digital Audio Workstation) and audio plugins for 3D spatialization and room acoustics simulation. The workflow consists in two main stages: the authoring of a simplified scene and the audio rendering. The first stage is done within Blender: taking advantage of the video sequence editor playing next to a 3D view, the operator recreates the animation of sound sources mimicking the original video. He then associates the objects in the scene with existing audio tracks of an Ardour session with the soundtrack mix and, optionally, adds acoustics properties to the scene prop materials (e.g. defining how a wooden room will sound) to render acoustics simulation using ray-tracing

algorithms. In the second stage, a specification of the loudspeakers positions used in the exhibition is given, and the Ardour session with the soundtrack is automatically modified incorporating all the Blender's edited sound scene, the necessary routing, and the 3D audio decoding plugins such as Ambisonics and other techniques implemented with CLAM.

The [slides](#) are available (we hope to add the accompanying videos soon).

[Add a Comment](#)

May 17, 2009

CLAM at LAC 2009 and WWW 2009



Several nice CLAM related presentations has been given in conferences during last month. At the [Linux Audio Conference](#) in Parma, we presented an [article on Blender-CLAM integration for real-time 3D audio](#) (paper, slides, and video available at the link) and we also gave a [workshop on CLAM app and plugin prototyping features](#). At the [WWW2009](#) in Madrid, we presented an article on the new [web services based extractors for Annotator and the data source aggregation interface](#) also [some videos of the presentation and demos are available](#) featuring data

sources aggregation and live chord
extraction from youtube videos.

[Add a Comment](#)

March 03, 2009

Google Summer of Code 2009 Warming Up



GSoC 2009

Google Summer of Code 2009 is warming up. We still don't know whethe CLAM will be hosted again in this program. But, in any case, we really encourage you to get involved in the program.

If you have doubts, we recommend you take a look at the [following video](#).

And, where to follow? Take a look at [this ToDo List](#) for GSoC 2009 and of course, read the [program FAQ](#).

[Add a Comment](#)

February 23, 2009

New Domain: clam-project.org

CLAM has moved to a new home: clam-project.org We also changed the wiki URL scheme.

Home: <http://clam-project.org/>
Planet: <http://clam-project.org/planet>
Wiki: <http://clam-project.org/wiki>
Testfarm: <http://clam-project.org/testfarm>

And last but not least we moved the subversion server to the new domain and we changed some repository names. You can easily migrate existing subversion sandboxes by using the following command:

```
'svn switch --relocate [old-svn-root]
[new-svn-root] [sandbox]
```

You can get the svn-root with 'svn info [sandbox]' and the new locations for the repositories are:

clam: <http://clam-project.org/clam>
clam-test-data: http://clam-project.org/clam_data
clam-oldapps: http://clam-project.org/clam_oldapps
clam-web: http://clam-project.org/clam_web
efficiencyguardian: <http://clam-project.org/efficiencyguardian>

Thousands thanks to the MTG and the IUA for hosting CLAM resources for so long after not being an official MTG project. And special thanks to Jordi Funollet, the MTG sysop, who has helped us to do the migration and responded to all our weird support petitions during those three years ;-)

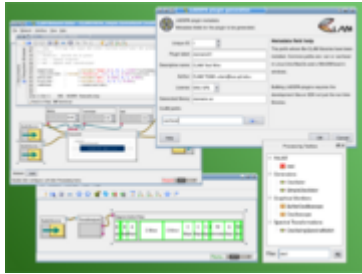
The CLAM Team.

Comments: 1

August 12, 2008

CLAM 1.3.0, the Shooting Flying Plugins release

The CLAM team enraptured to



announce the 1.3.0 release of [CLAM, the C++ framework for audio and music](#),

code name *The Shooting of the Flying Plugins* release.

Highlights of this release are:

- NetworkEditor [automatically generates and compiles a LADSPA plugin](#) containing the network you are editing. CLAM also provides a [new simple API to code that by hand yourself](#).
- More [FAUST](#) integration into network editor: edit faust code, compile, reload, view the svg diagrams (Natanael Olaiz GSoC)
- Lots of usability enhancements on the NetworkEditor: cut&paste, context menus to connect ports, keyboard shortcuts, default double click actions, and a processing tree filter (Natanael Olaiz GSoC)
- Annotator has also enhanced its functionality (Wang Jun GSoC):
 - You can build a project that aggregates content from several extractors
 - Extractors may have a config file
 - Extractors can write back data (useful if the extractor is a database of webservice and needs to upload modifications)
- New ProgressControl widget

and paired
AudioFileMemoryLoader
processing to support seeking
(Pawel Bartkiewicz GSoC)

- A bunch of new 3D spatialization processings from [CI Barcelona Media](#) audio research group.
- [Scripts](#) and [graphical front-end](#) to generate a native CLAM plugin project from scratch.
- [Experimental Python bindings](#) ([still just-for-hackers install procedure](#))
- TickExtractor example is compiling again (many thanks to Amaury Hazan from MTG-UPF)
- Development deployment for Windows native compilation using MinGW (Wang Jun GSoC)

And a lot of small nice features and fixes you will appreciate for sure. Source and binary packages for different platforms are available at the [CLAM download page](#).

See also: [development screenshots](#), the [CHANGELOG](#), and the [version migration guide](#).

We are very excited on what next releases promise us. Some ongoing work:

- Generating other types of network based plugins and programs (LV2, JACK, VST...),
- Subnetworks (Natanael Olaiz GSoC)
- Improved [OSC](#) support, 3D scene descriptors parametrization receivers processings and [Blender](#) exporter to the spatialization processing choreographer. (Natanael Olaiz GSoC – [related blogging](#))

- Typed controls (Francisco Tufro GSoC)
- A new musician-oriented standalone [chord extraction application](#) (Pawel Bartkiewicz GSoC)

[Add a Comment](#)

May 25, 2008

CLAMs GSoC 08 Projects Announced

We are very happy to announce the final list of this year's projects in the Google Summer of Code. We have been extremely fortunate to have a large number of great students apply for CLAM this year and we are confident that the 5 projects outlined below will have a huge impact on the project and the CLAM "family":

Natanael Olaiz UNQ, Argentina
"Network scalability and Blender integration"

This is a two sided project. The first part will improve the usability of CLAM networks allowing users to hierarchically embed networks as a processing units. The second part consists in developing a set of Blender plugins and CLAM networks to drive audio spacialization based on direct sound from Blender 3D geometries.

Yushen Han (Indiana University, US)
"Real-time woodwind instrument synthesizer using SMS models"

The project consists in building a real-time synthesizer based on CLAM processing plugins, using SMS models, allowing flexible sound timber manipulation. This project is a continuation to Greg Kellum's 2007 GSoC project.

Francisco Tufro (UBA, Argentina)

“MIDI Implementation for Network Editor”

This project is both about developing all the needed and most common MIDI processings and also about doing all the required refactorings to the Framework in order to achieve this (i.e. Typed Controls).

Pawel Bartkiewicz (AGH University, Poland)

“Standalone chord extractor application”

This project is about adapting CLAM's chord extraction technology into an standalone application focusing on usability for instrument players. This project will integrate existing visual and processing components and it will have impact on the interaction between realtime and offline CLAM components.

Wang Jun (Chinese Academy of Science, China)

“AnnMerger-to stand on the shoulders of the masses”

This project goal is add into Annotator the ability of combining several sources of several kinds (webservice, database, files, extractors) into a single project. Secondary goals are providing new data sources and polishing the program workflow.

Read [here](#) for more details on the projects:

[Add a Comment](#)

March 19, 2008

CLAM in GSoC 2008!

We are glad to announce that 2008 summer is also going to be a Summer of Code for CLAM. Google just announced the [list of mentoring organizations for GSoC 2008](#) and

CLAM is in it!

Now we seek smart students who enjoy coding free software so that they can earn some bucks for the summer. Last year, [GSoC 2007](#) was a very fun and productive experience and we are willing to repeat it. Take a look at the [CLAM GSoC 2008 wiki page](#) for more information on how to apply and some [sample ideas for projects](#).

We are waiting for you!

STUDENT:
Need a summer job?

- develop a CLAM audio-related project this summer
- work side-by-side with experienced developers
- earn a stipend of \$4500
- have fun developing free-software!


the framework for audio and music



APPLICATION DEADLINE:
~~March 31~~ **April 7**

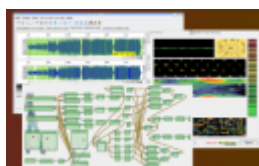
Learn more. Apply.
<http://clam.iua.upf.edu>
#clam at freenode



[Add a Comment](#)

February 07, 2008

CLAM 1.2, the GSoCket plugged-in release



We are jubilous to announce CLAM

1.2 “GSoCket plugged-in release”.

We had to wait for some months to make this release as we had to redeploy the [multiplatform release infrastructure](#). Thus, the feature buffer of this release is pretty full. It incorporates both, the results of the [Summer of Code](#) students work and the involvement of David and Pau with the crew at [Barcelona Media Foundation Audio Research Line](#).

We want to thank the involvement of GSoC students [Hernan Hordiales](#), [Bennet Kolasinsky](#), [Greg Kellum](#), Andreas Calvo, [Roman Goj](#) and Abe Kazemzadeh, Google Inc, and Barcelona Media audio lab members for their precious involvement in CLAM.

A summarized list of changes follows. See also the [CHANGES files](#) for details, or the [development screenshots](#) for a visual guided tour. As usual binary packages for Windows, MacOSX and several flavors of Linux are available to download.

Summary of changes:

The most exciting feature is the new plugin system (acalvo) which enables third party algorithms to be distributed separately from the core binaries. LADSPA plugins support has been enhanced and a first iteration on [FAUST](#) integration. The [wiki](#) contains how-to's that cover most of that.

Most of the GSoC work come as plugins: a SMS Synthesizer (gkellum), a Voice synthesis/analysis (akazem) and some some cool guitar effects (hordia). Also not included as plugins but in the main repository several enhancements have been done on the SMS transformations (hordia) and the tonal analysis (rgoj).

[Some interesting work](#) has been done on the Barcelona Media Audio Lab on having a system to simulate 3D room acoustics which can be reproduced on several exhibition systems. Some precomputed room databases are available to try. Check the wiki NetworkEditor Tutorial for more information.

Regarding the applications, Network Editor incorporates new usability enhancements, a new on-line Tutorial and a new Spectrogram like view. The Annotator received Bennet Kolasinsky attention improving its the flexibility of its interface, the practical effects are multiple segmentation and low-level descriptors panes and that we are pretty close to visualization and auralization plugins.

Enjoy.

Comments: 9

November 16, 2007

Two CLAM journal articles

The past few weeks a couple of CLAM-related journal articles have been published in two top-tier journals.

The article entitled “A framework for efficient and rapid development of cross-platform audio applications” – coauthored by Xavier Amatriain, Pau Arumi, and David Garcia – has just appeared in the [ACM Multimedia Systems Journal](#). This can be considered as the “ultimate” CLAM article. Apart from presenting the main features in CLAM, we talk about the metamodel and some of the patterns present in the framework design.



Also Xavier Amatriain published the article entitled “A Domain-Specific Metamodel for Multimedia Processing Systems” in the [IEEE Transactions on Multimedia](#). This is a more detailed and justified explanation of the metamodel that was derived while designing and implementing the CLAM framework.

[Add a Comment](#)

CLAM team at Googleplex

Last month Pau Arumi and David Garcia from the CLAM team attended the Google Summer of Code [Mentor Summit](#) at Googleplex in Mountain View, California. Hundreds of mentors from many of the participating projects were invited to a one-day workshop where different issues related to the Summer of Code and Open Source in general were discussed. It was a great opportunity for the CLAM team to make connections with related projects and meet many interesting people.



Read more at [David's blog](#).

[Add a Comment](#)

September 04, 2007

CLAM articles at Polish Linux Magazine



[Polish journal Linux Magazine](#) has recently published two articles about CLAM, written by Paweł Wołniewicz. First — dealing with Music Annotator, SMSTools, and Voice2MIDI — and second, describing development of audio application, using Network Editor, accompanied by Prototyper. They were published in July and August issues.

Both articles were written in Polish.

[Add a Comment](#)
