

PiTiVi



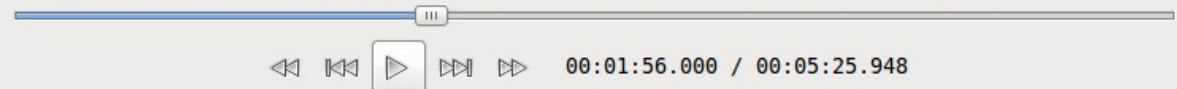
An overview

Jean-François Fortin Tam



Bibliothèque de séquences


- video : 1280 x 720 pixels à 29.97 fps**
Audio: 2 channels at 48000 Hz (16 bits)
- pano de minibus à la gauchetière.MOV** 00m28s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)
- polytechnique trépied pano lent.MOV** 01m26s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)
- polytechnique trépied pano rapide.MOV** 00m38s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)
- polytechnique trépied pano vertical.MOV** 00m23s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)
- test HD 6.MOV** 00m15s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)
- test HD 7.MOV** 00m08s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)
- test HD 8.MOV** 00m08s
Vidéo : 1280 x 720 pixels à 29.97 fps
Audio: 2 channels at 48000 Hz (16 bits)



The background of the slide is a dark blue gradient representing a night sky, filled with numerous light blue stars of varying sizes. In the upper left corner, there is a black silhouette of a telescope mounted on a hill. The hill is represented by a solid black shape that spans the width of the slide.

Specto

Unobtrusive Notification



NANOKRON
studios

DISCLAIMER: IANAD.





Bugzilla

Logged In nekohayo@gmail.com | [Log Out](#)

Level 17
bug necromancer



Basic stats

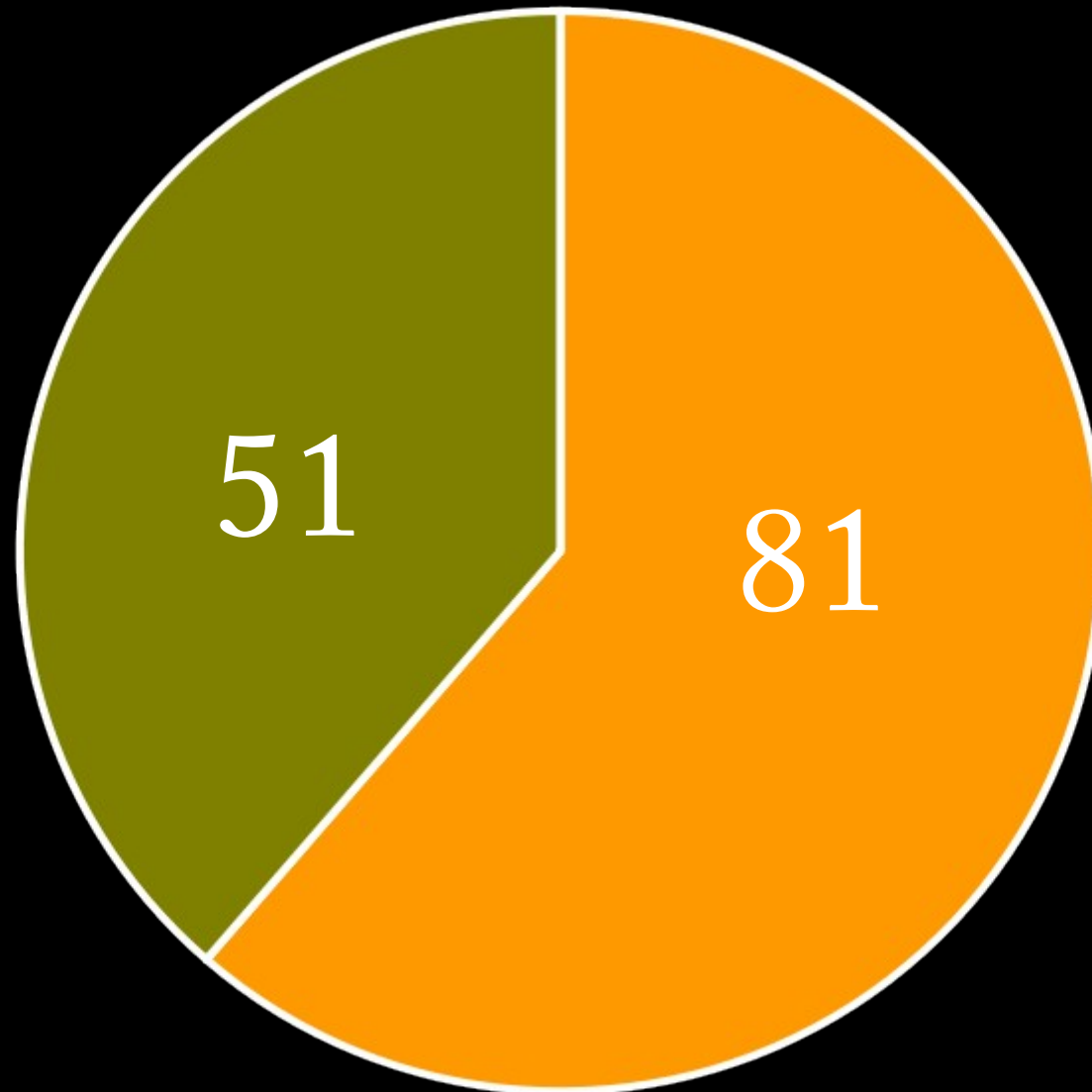
you

- added 1263 comments to bugs.
- closed 34 bugs.
- reported 308 bugs.
- gathered 17 points

Reports

- [All closed bugs](#)
- [All bugs cc'ed](#)

YOUR BUGS ARE UNDER ATTACK.

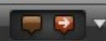
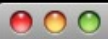


■ bugs involving nekohayo ■ other bugs

WHY DO I LOVE IT?

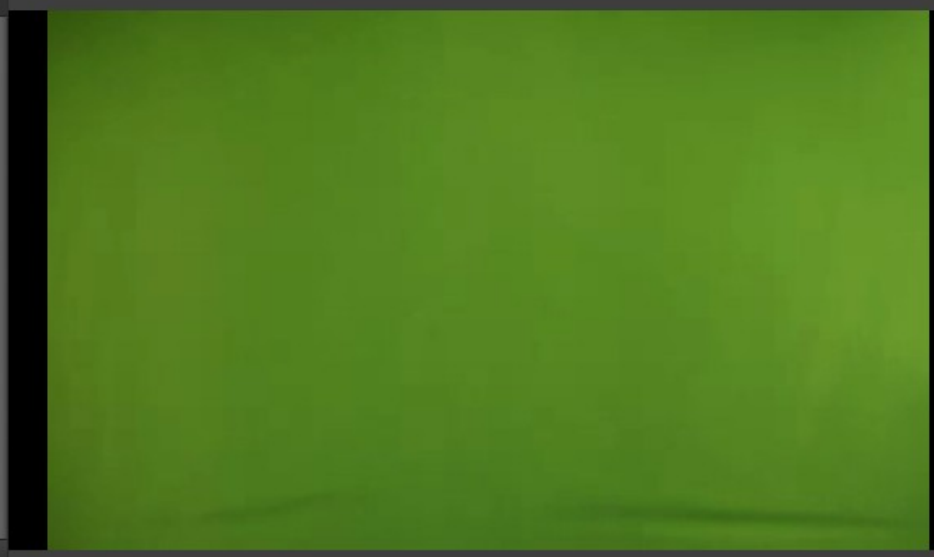
- Python, GStreamer and GTK+
- One size fits all
- Here to stay
- Doesn't look like monkey arse
- Torture test

DESIGN
MATTERS.



Project Library area with five dashed boxes for media placement.

Drag media here to create a new project



Timeline controls: play/pause buttons, 0s total, progress slider, 5s

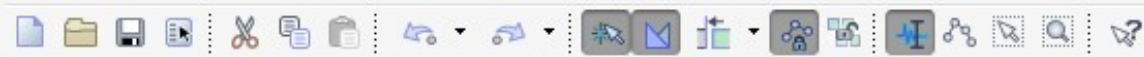
Toolbar with icons for: Stop, Undo, Zoom, Split, Star, Unstar, Delete, Keyframe, Audio, Crop, Info, Volume, Music, Camera, Text, Share, and a globe icon.

Event Library sidebar:

- Last Import
- iPhoto Videos
- 2009
 - Green Screen
 - Discus Feeding
 - New Event 01-01-09 1
 - New Event 01-01-09 2
 - New Event 01-01-09
 - New Event 09-01-09 - Day 2
- 2008

Event browser grid showing various video thumbnails. The bottom row includes a thumbnail of a person in front of a green screen.

Bottom toolbar: Add star, play/pause, search, Show: Favorites and Unmarked, 3:08 total, progress slider, 5s



00:01:06:27

00:00:00:00 00:00:14:29 00:00:29:29 00:00:44:28 00:00:59:28 00:01:14:27 00:01:29:27 00:01:44:26 00:01:59:26

1

2
Vol: 0,0 dB
Pan: Center

3
Level: 100.0 %

4
Vol: 0,0 dB
Pan: Center

Rate: 0,00

00:01:06:27

- Clock Wipe
- Cross Effect
- Dissolve
- Flash
- Iris
- Linear Wipe
- Page Loop
- Page Peel
- Page Roll
- Portals
- Push
- Slide
- Spiral
- Split
- Squeeze
- Swap
- Venetian Blinds
- Zoom

Preset:

Top-Left, Diagonal, Soft Edge	Top-Down, Hard Edge	Left-Right, Hard Edge
Bottom-Up, Hard Edge	Right-Left, Hard Edge	Right-Left, Soft Edge

Explorer Trimmer Media Pool **Transitions** Video FX Media Genera

Master

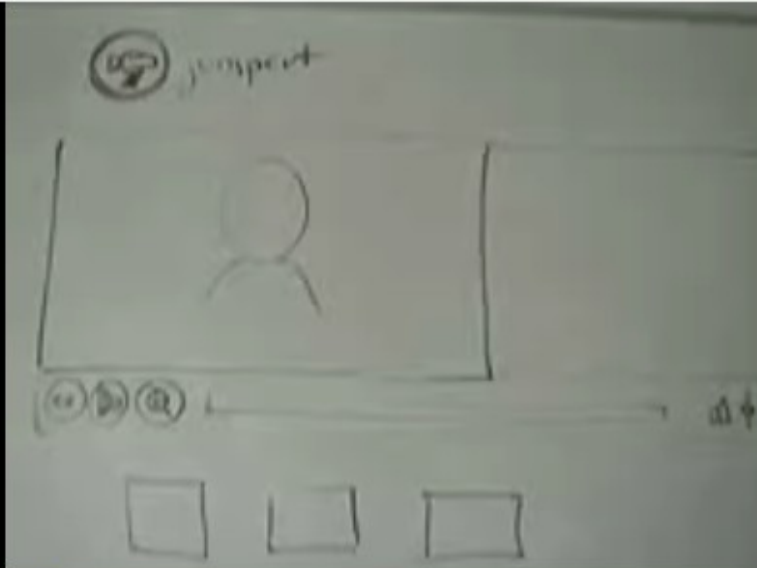
-Inf. -Inf.

6
12
18
24
30
36
42
48
54

0,0 0,0

Preview (Auto)

Project: 720x480x32; 29,970i Frame: 2 007
Preview: 360x240x32; 29,970p Display: 360x240x32



tutorial_zoom (12.41 sec)

Transition

(None) [dropdown arrow]

Duration

In point

0

Out point

12.41

Volume

Background (Music)

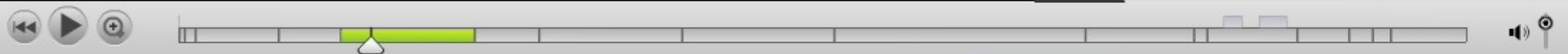


Clip Audio



tutorial_zoom (12.41 sec)

Clip Audio Titles Effects Actions + Add



jumpcut™



- dtbmshrow14_12801
- AnimationClip2
- AnimationClip3
- EffectsClip4
- AnimationClip5
- flame_6
- flamekey_7
- greeneye_8
- starfight_9
- fantasy_10



Mode



00:01:00

FPS

Step

Desktop

JahShaka 2.0RC1

Jahshaka Video Player : AnimationClip

Animation

Effects

Editing

Paint

Text CG

PLAYER

ASSET

DISK Player

RAM Player

STATUS

Player Ready

Load into RAM

STARTFRAME

00:00 01

STARTFRAME

00:00 01

FPS

ENDFRAME

00:03 09

ENDFRAME

00:03 09



Cinelerra
File Edit Keyframes Audio Video Tracks Settings View Window

0:00:11.733 | 0:00:00.000 | 0:00:02.000 | 0:00:04.000 | 0:00:06.000 | 0:00:08.000 | 0:00:10.000 | 0:00:12.000 | 0:00:14.000 | 0:00:16.000 | 0:00:18.000

Video 1: t1.18.mpg #1
Video 2: t1.04.mpg #1
Audio 1: t1.04.mpg #1
Audio 2: t1.04.mpg #2

0:00:18.794 | 64 | 32 | Audio Fade: -80.0 to 6.0 | 0:00:12.608 | 0:00:00.021 | 0:00:12.629
0:00:04.971, 0.00 | 0%

Cinelerra: Resources

- Audio Effects
- Video Effects
- Audio Transiti
- Video Transiti
- Labels
- Clips
- Media

- Rotate
- SVG via Inkscape
- Scale
- Selective Temporal Averaging
- Sharpen
- ShiftInterlace
- Swap channels
- Unsharp
- Threshold
- Time Average
- TimeFront
- Title
- Translate
- VideoScope
- Wave
- Whirl
- YUV
- Zoom Blur

File Edit Play Effects Tracks Selection Tools Render View Help | Mouse mode: Move | Snap mode: On

Timecode 00:00:14.31



Year W

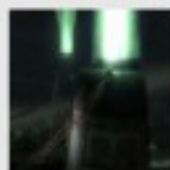


62 frames

1 selected

ec.

Final.Fantasy.VII



1964 frames

1 to 1964 selected

81.92 sec.

Night of The Living



754 frames

1 to 754 selected

31.45 sec.

Ultra



62 frames

1 to 62 selected

2.5 sec.

Single click on timeline to select a frame.

Double click on timeline to select a block.

Clips can be dragged onto the timeline.

Mouse mode is: Move

Clips can be moved around.

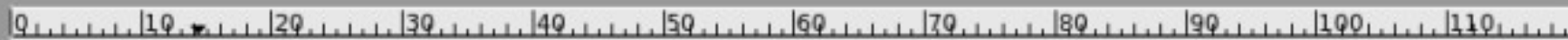
LIVES

0.000

Selection

0.000

Timeline (seconds)



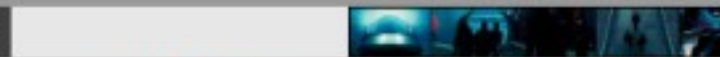
Backing audio



Video 1 (layer)



Video 2 (layer)



Video 3 (layer)



Video 4 (layer)



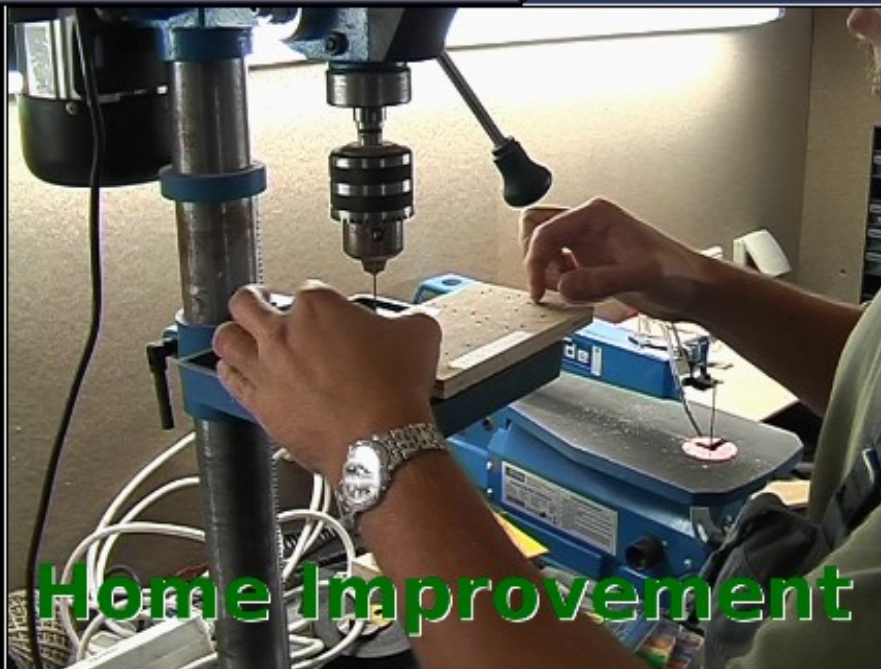
Inserted frames 1 to 622 from clip Ultraviolet[2006][Unrated.Edition]DVD.avi (new2) into track video 2 from time 25.4400 to 49.5826
 Inserted frames 1 to 1964 from clip Final.Fantasy.VII-Advent.Children.DvDrip.AC3[Eng]-aXXo.avi (new2) into track Video 3 from time 6.8800 to 88.7952
 Inserted frames 1 to 754 from clip Night of The Living Dead (1968).avi (new2) into track Video 4 from time 3.0000 to 34.4481
 Inserted audio 0.0000 to 31.4800 from clip Night of The Living Dead (1968).avi (new2) into backing audio from time 37.8800 to 69.3600
 Inserted audio 0.0000 to 31.4481 from clip Night of The Living Dead (1968).avi (new2) into backing audio from time 47.8400 to 79.2881

Screenshot Example Project

Files Media Browser Clip Inspector Filters & Effects Titles

Font Helvetica b
Font Size 64
Color

Home Improvement



Tools 0:18 00:00:06 00:00:31 00:00:56 00:01:21 00:01:46 00:02:11 00:02:36 00:03:01 00:

Video	
Video	
Audio	
Audio	



POWELL MOTORS

Presents

The Homer

Powerful like a Gorilla



Carlos R. Bisquertt - © 20

(Obligatory car analogy)

Images	Label	Icon	Filename	Media Type	Length	Video	Audio
	bin 1						
			05 Camera - dialogue.avi	video/audio	17s	720x576 25 fps	2 x 32000Hz 16 bit
			06 HP - slide dinosaurs.avi	video/audio	12s	720x576 25 fps	2 x 32000Hz 16 bit
			105 FUMEE SUPER.AVI	video/audio	28s	720x576 25 fps	2 x 48000Hz 16 bit
			45 VXG MARC ET BLASTE.AVI	video/audio	31s	720x576 25 fps	2 x 44100Hz 16 bit
			58 MARC ET VXG.AVI	video/audio	7s	720x576 25 fps	2 x 44100Hz 16 bit



Timeline Project

File Windows Help

Unit: Seconds Zoom: x16

Time: 0:07:00

00:00:08 00:00:16 00:00:24 00:00:32 00:00:40 00:00:48 00:00:56

Video A: [Timeline track with video thumbnails]

Fx A: [Timeline track with effects icons]

Transition: [Timeline track with transition icons]

Fx B: [Timeline track with effects icons]

Video B: [Timeline track with video thumbnails]

Audio A: [Timeline track with audio waveforms]

Audio B: [Timeline track with audio waveforms]

- Effects
- Transition
 - BarWipe
 - LeftToRight
 - TopToBottom
 - Video
 - BoxWipe
 - TopLeft
 - TopRight
 - BottomRight
 - BottomLeft
 - TopCenter
 - RightCenter
 - BottomCenter
 - LeftCenter
 - Audio
 - FourBoxWipe
 - CornersIn
 - CornersOut




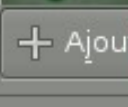
"save as" may be redundant with "save"?



we already have this?

should be centered vertically (yalign=0.5)

Sources

	fRO 01.ogg Vidéo: 640 x 480 pi... Audio: 1 canaux à 7...	01m02s
	fRO 02.ogg Vidéo: 640 x 480 pi...	00m00s
	fRO 03.ogg Vidéo: 640 x 480 pi... Audio: 1 canaux à 7...	00m19s
	fRO 04.ogg Vidéo: 640 x 480 pi... Audio: 1 canaux à 7...	01m05s
	fRO 05.ogg Vidéo: 640 x 480 pi... Audio: 1 canaux à 7...	01m15s
	fRO 06.ogg Vidéo: 640 x 480 pi... Audio: 1 canaux à 7...	00m36s



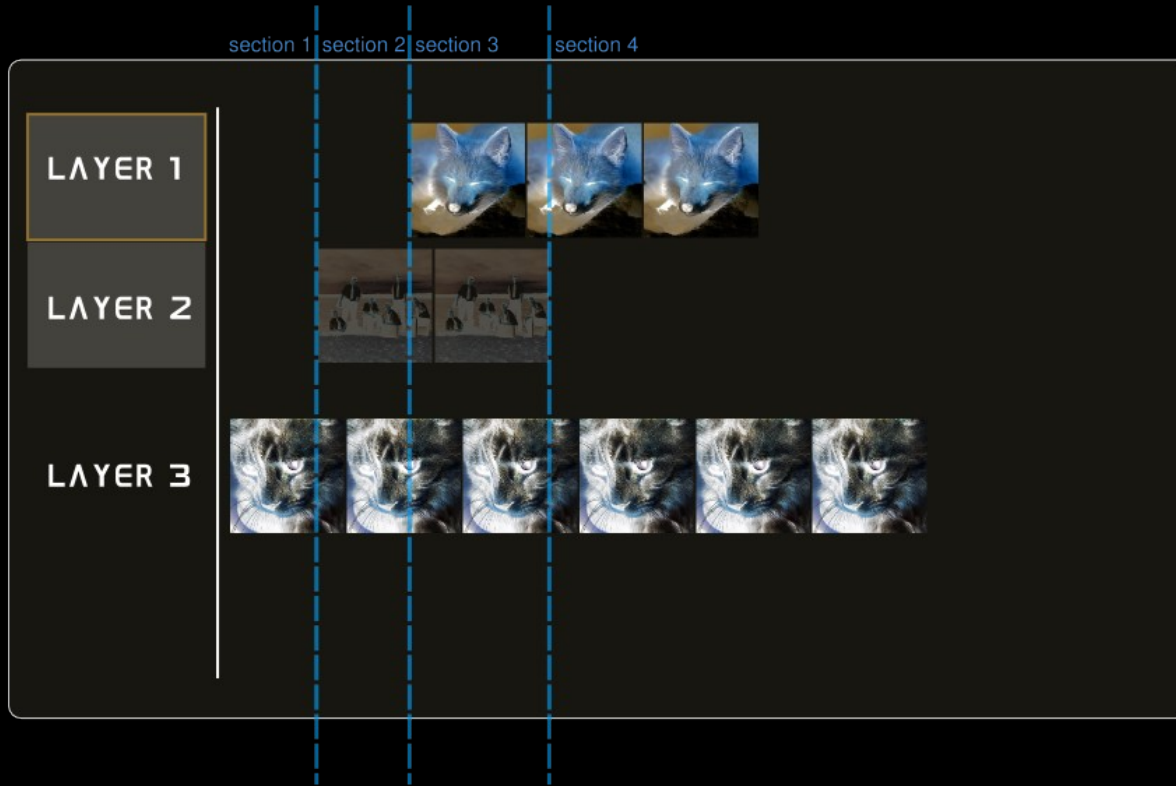
the buttons are going out of the notebook bounds?

should be a folder icon?

Commencez à travailler sur votre projet, en glissant un clip ici

PiTiVi

Blending mockup



Results in the preview window

section 1



section 2



section 3



section 4



Séquences

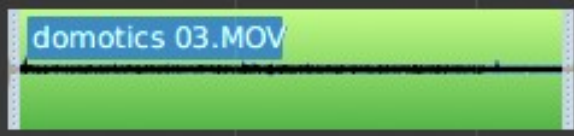
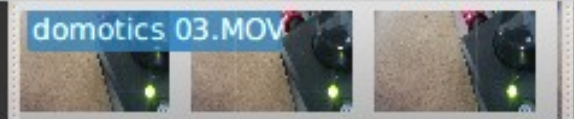
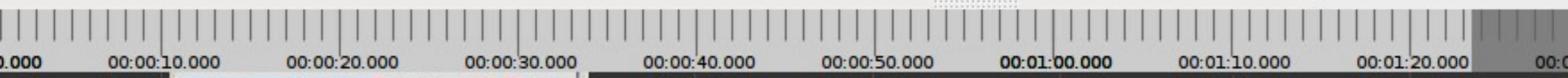
	Fate/Hollow ataraxia OP1.avi Vidéo : 800 x 600 pixels à 29.97 fps (DivX MPEG-4 Version 5) Audio : 2 canaux à 48000 Hz (16 bits) (MPEG-1 layer 3)	02m02s
	Fate/Hollow ataraxia OP2.avi Vidéo : 800 x 600 pixels à 29.97 fps (DivX MPEG-4 Version 5) Audio : 2 canaux à 48000 Hz (16 bits) (MPEG-1 layer 3)	01m34s
	Hare Hare Yukai.avi Vidéo : 704 x 396 pixels à 29.97 fps (XVID MPEG-4) Audio : 2 canaux à 48000 Hz (16 bits) (MPEG-1 layer 3)	01m13s
	Tsukuyomi - Moon Phase - Opening 01 - Creditless.mkv Vidéo : 720 x 480 pixels à 23.98 fps (XVID MPEG-4) Audio : 2 canaux à 48000 Hz (32 bits) (Vorbis)	01m31s



Timeline and tracks:

- Piste vidéo**
 - Alexandre jumps out of a bush
 - Eye panor...
 - Mountain Dew Commercial in...
 - Crazy motorcycle chase
- Piste audio**
- BG actors**
- Pyrotechs**
 - Sending smoke signals

Timeline: 00:00 00:00:05 00:00:10 00:00:15 00:00:20 00:00:25 00:00:30 00:00:35 00:00:40 00:00:45 00:00:50 00:00:55 00:01:00 00:01:05 00:01:10 00:01:15 00:01:20 00:01:25 00:01:30 00:01:35 00:01:40 00:01:45 00:01:50 00:01:55



Render project

Fichier de sortie :

Choisissez un fichier

Paramètres

Video: 720 x 576 pixels at 25.00 fps (theoraenc)

Audio: 2 channels at 44100 Hz (16 bits) (vorbisenc)

Properties for x264enc

x264enc

Description :

H264 Encoder

Auteur :

Josef Zlomek <josef.zlomek@itonis.tv>

Propriétés

Bitrate	2048
VBV buffer capacity	600
Motion Estimation	hexagonal search, radius 2
Subpixel Motion Estimation	1
Analyse	GFlags
DCT8x8	<input type="checkbox"/>
Reference Frames	1
B-Frames	0
B-Pyramid	<input type="checkbox"/>
Weighted B-Frames	<input type="checkbox"/>
SPS ID	0
Trellis quantization	<input checked="" type="checkbox"/>
Key-frame maximal interval	0
Use CABAC	<input checked="" type="checkbox"/>

Annuler

Valider

Properties for Speex audio encoder

Speex audio encoder

Description :

Encodes audio in Speex format

Auteur :

Wim Taymans <wim@fluendo.com>

Propriétés

Quality	8,00000
Encoding Bit-rate	0
Mode	Ultra Wide Band
VBR	<input type="checkbox"/>
ABR	0
VAD	<input type="checkbox"/>
DTX	<input type="checkbox"/>
Complexity	3
NFrames	1
last-message	None

GEEK

Seal of Approval

General

Video

Audio

Output file:

(Aucun)



Container format:

MP4



- Render only the selected clips
- Draft (no special effects, single pass)
- Render bypassed clips

General

Video

Audio

Resolution:

1280



x 720 pixels

Edit Project Settings...

Frame rate:

29.97 fps



Codec:

H.264



Edit Advanced Settings...

Encoding method:

2 pass



Average bitrate



Average bitrate (kb/s):

1500



X Fermer

Render

Encoding method:

2 pass

Average bitrate

Average bitrate (kb/s):

1500



3 possible solutions

- 1) Hand-crafted interfaces for some/all existing codecs, fallback to auto-generated stuff
- 2) Come up with some scheme for generating better UI (things like mutually exclusive options) and maintain that, since it would be external to gstreamer
- 3) *Somehow* persuade gstreamer developers to add this functionality

UI Design



- navigation
- [Main Page](#)
 - [Downloads](#)
 - [Current events](#)
 - [Developers](#)
 - [Recent changes](#)

- links
- [GStreamer](#)

search

- toolbox
- [What links here](#)
 - [Related changes](#)
 - [Upload file](#)
 - [Special pages](#)
 - [Printable version](#)
 - [Permanent link](#)

Contents [hide]

- 1 To Be Done
 - 1.1 Editing
- 2 Design Principles
 - 2.1 Noun-Verb Interaction
- 3 Representative Tasks

FIGHT FEATURITIS

General Timeline

Autosave project every minute

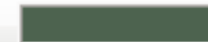
Default capture location:

General Timeline

- Generate thumbnails
- Draw audio waveforms
- Snap nearby clips together

Colors

Timeline background:



Video clips:

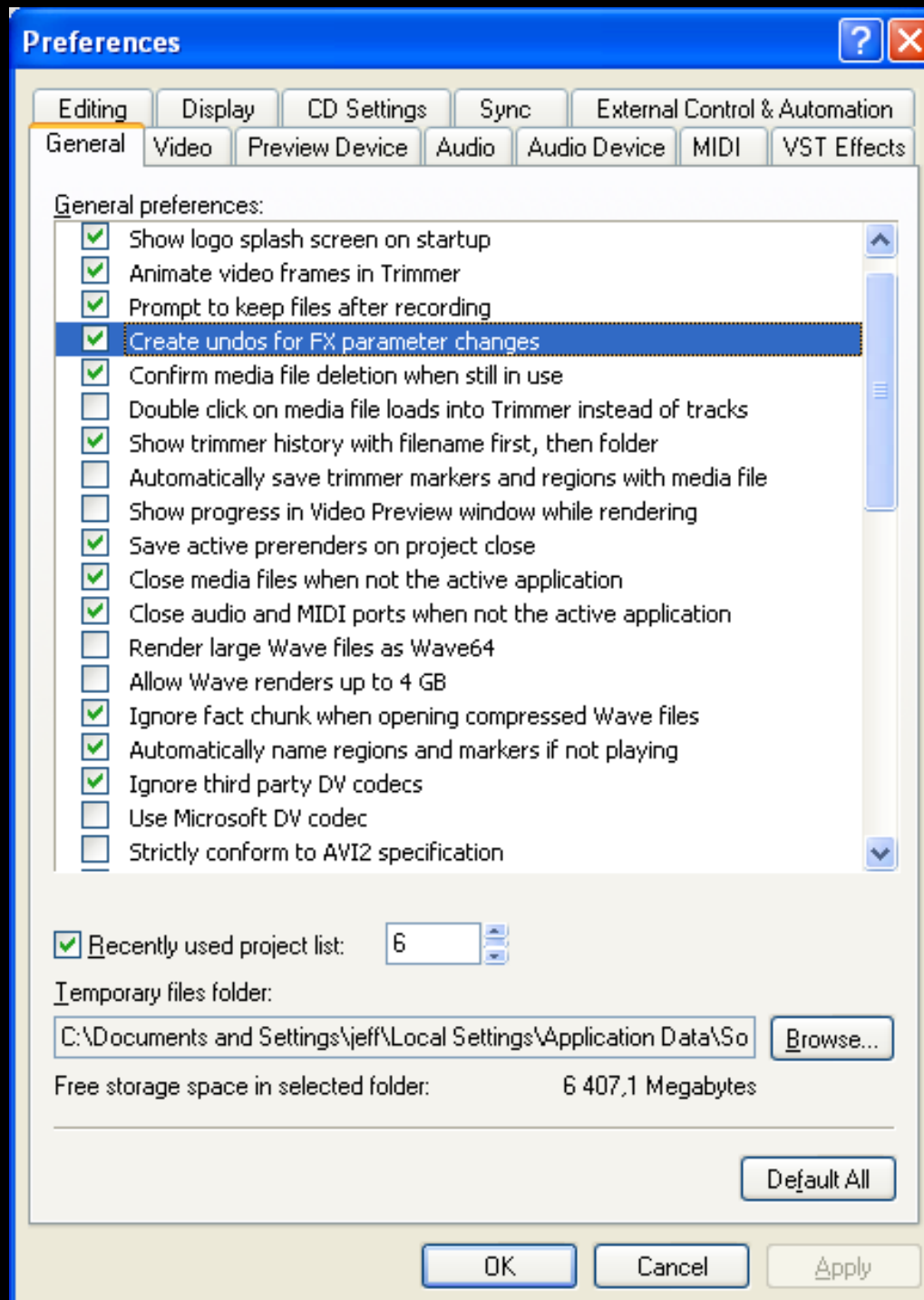


Audio clips:



Fermer

VEGAS: 12 TABS OF THIS SHIT.



REASONS FOR ADDING AN OPTION

- More options can't hurt... *right?*
- « So many options! This is really worth the \$549.95 pricetag! It must be *really* professional! »
- Users asked for them (the *Homer* car)
- Problems solved the lazy way
- **Actual controversial feature that really deserved an option!**



Photo: Hamed Saber <http://flickr.com/photos/hamed/327939900/>

Wow, WHAT A COOL APP!

It is open-source...

It should be ready in a few months, at most.

... RIGHT?

THE PLAN

- Start working on a non-linear video editor project
- ???
- Take the world by surprise!



I'D HIT IT



WITH A
CROWBAR

I'D HIT IT



**WITH TWO
CROWBARS**

I'D HIT IT

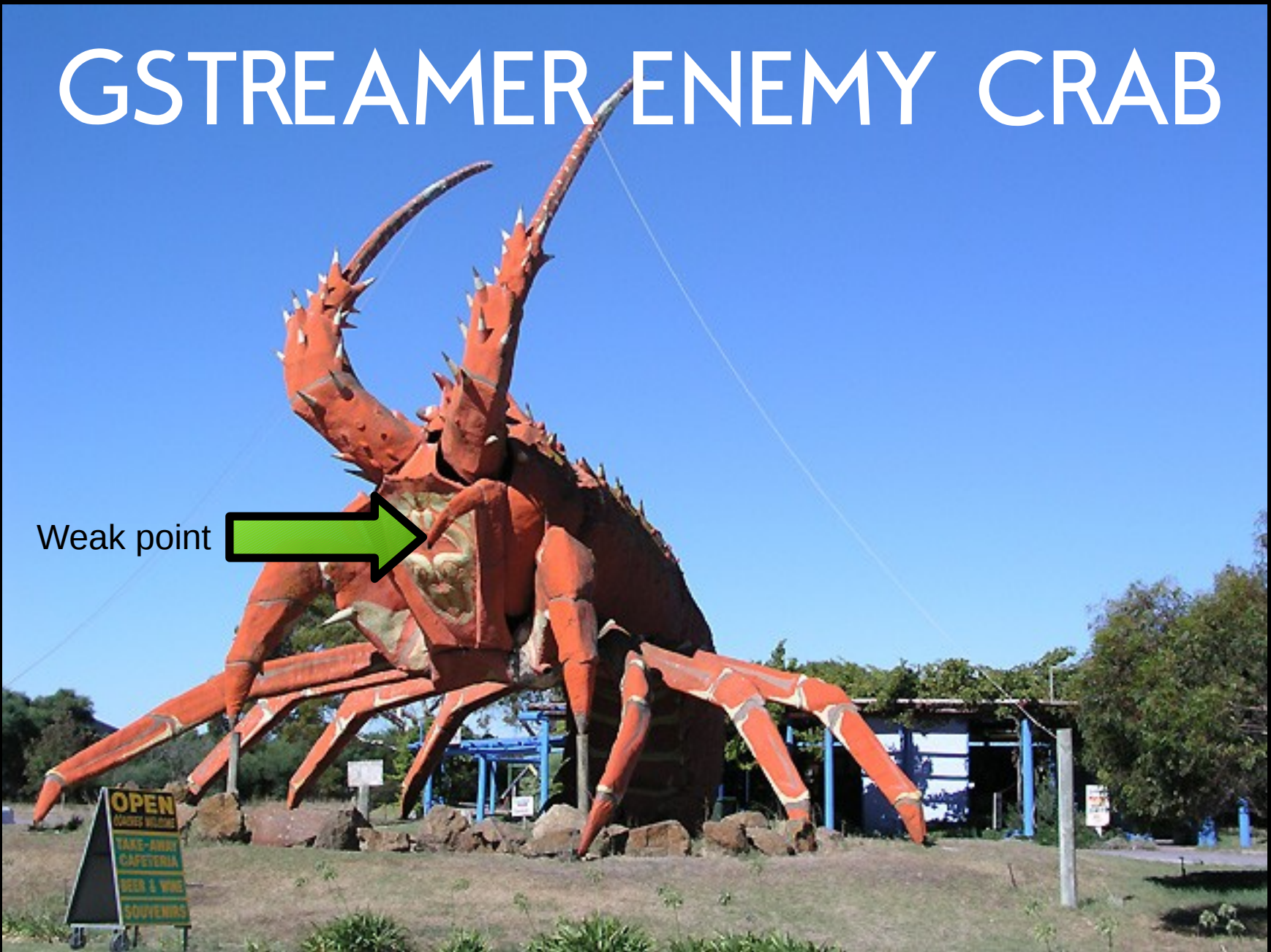


**WITH THREE
CROWBARS**




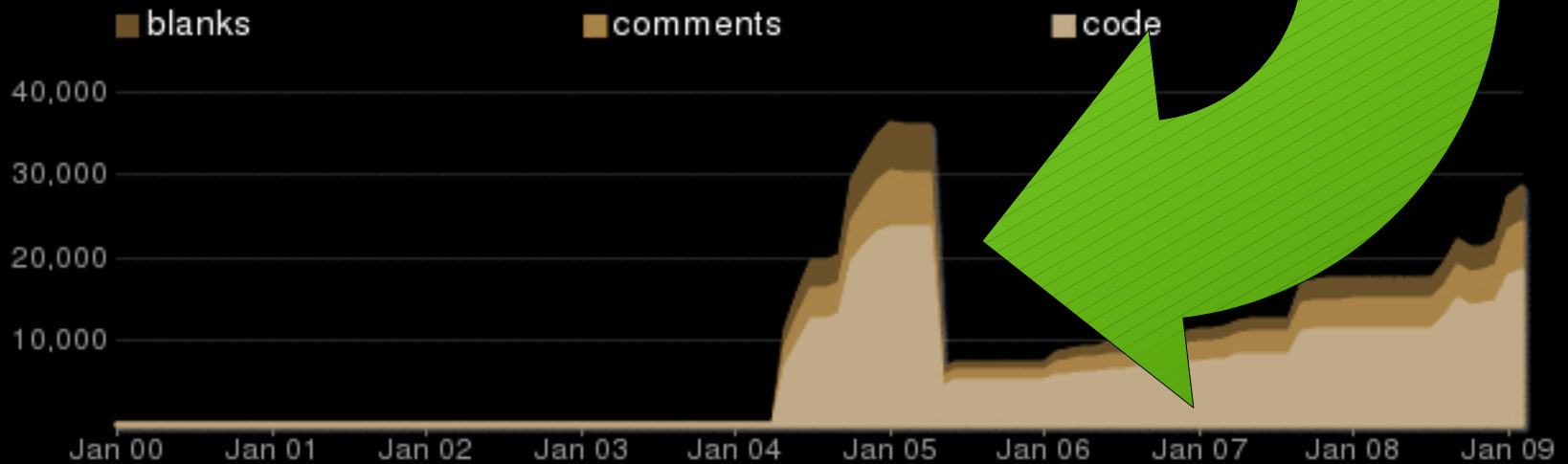
GSTREAMER ENEMY CRAB

Weak point



MASSIVE DAMAGE

Lines of Code 



WHY ALL THE HYPE?



<neko hayo> just a thought... how do you folks intend to do titling? perhaps it could **bring up inkscape** with custom canvas parameters, **save the SVG** into the pitivi project and **render to PNG** and **treat the title as a still**? or do you have different plans?

<bilboed-pi> neko hayo, for starters, I was just considering using **the available textoverlay plugin** (which uses pango)

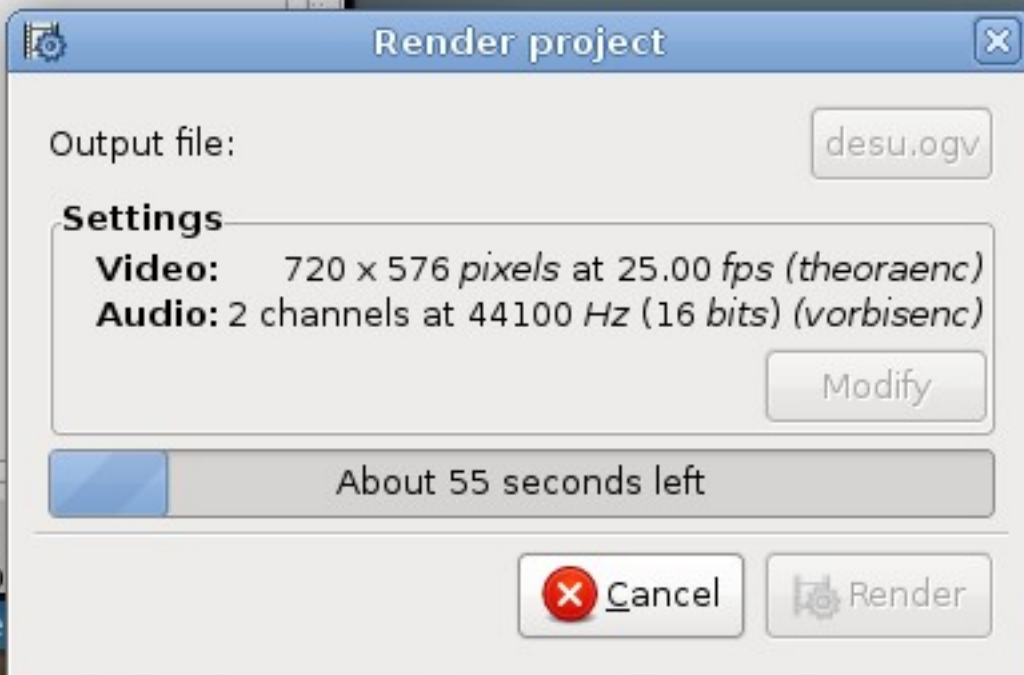
<neko hayo> oh, I thought it would have been harder than that

<bilboed-pi> nope, **gststreamer does everything for us...** we just need to integrate it properly in pitivi

<neko hayo> that's great to hear



<http://flickr.com/photos/timmygunz/34698267/>



REALITY CHECK

"This is not a one-man job, neither a buddy-created application. It requires at least 10 engineers who know what the hell they are doing, and they are sitting next to each other. Which is why this can only be delivered in any user-friendly fashion by Red Hat/Novell/Ubuntu (or Google, if they want to be more helpful to Linux users).

It will take 2 years to get there, $\$100,000 \times 10 \times 2 = 2$ million USD. That's the *minimum* you need to develop such an app [...]"

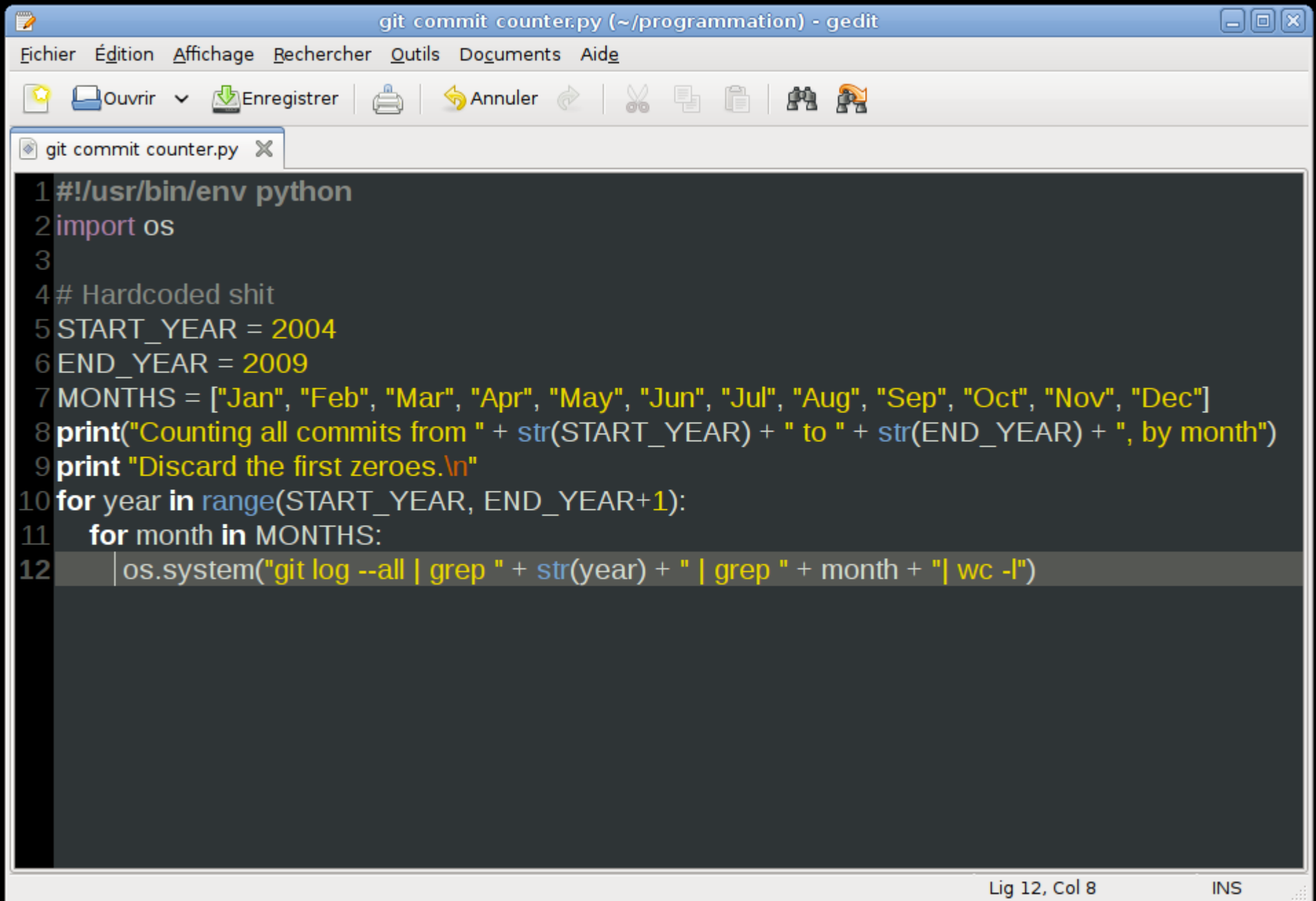
– Eugenia Loli Queru, 2008 ([source](#))



FUNDING

- Fluendo (until 2007)
- Google Summer of Code (2007, 2008, 2009?)
- Collabora (since December, 2008)
- ?

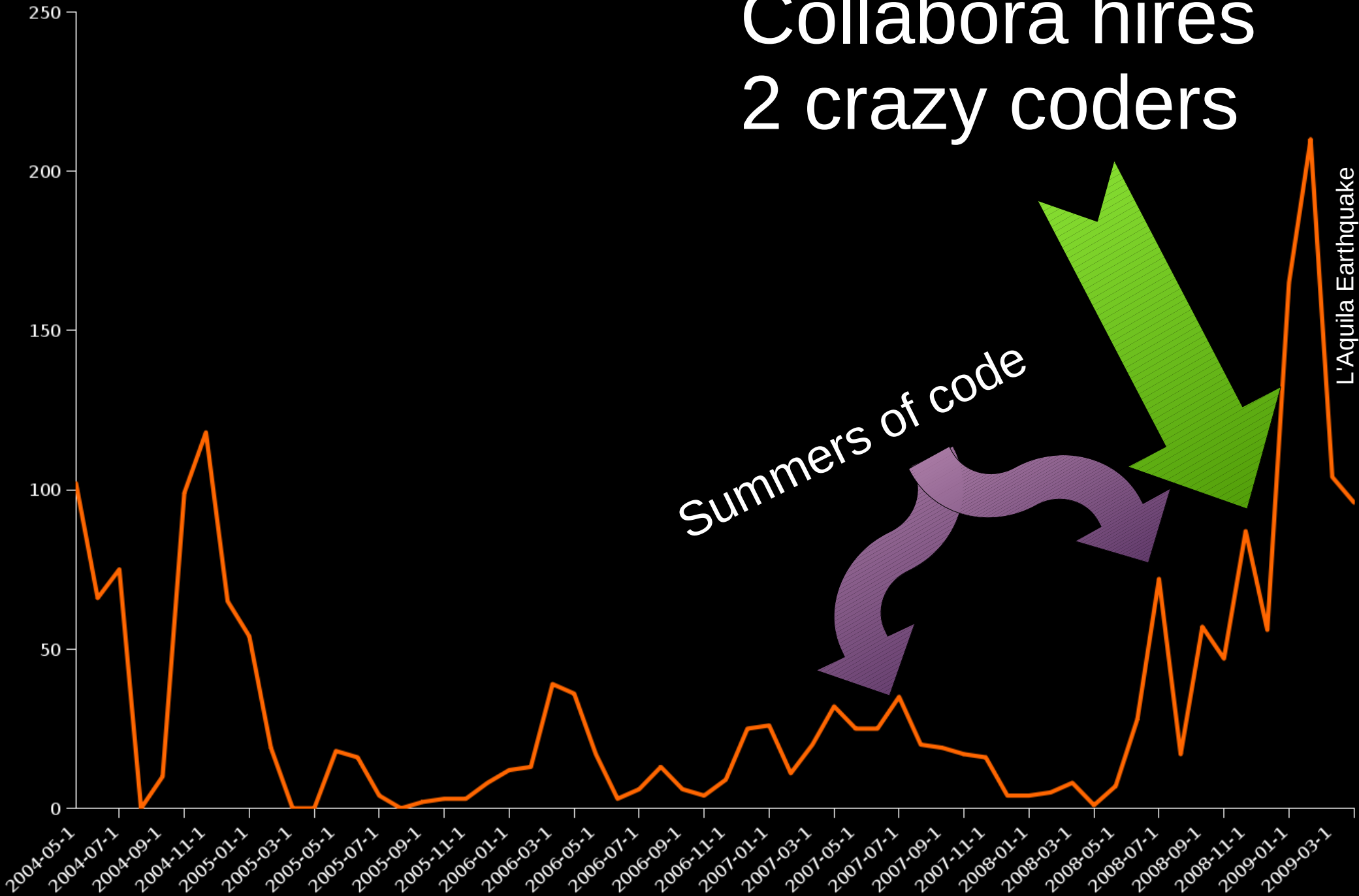
CODING. I'M DOING IT WRONG.



```
git commit counter.py (~/programmation) - gedit
Fichier  Édition  Affichage  Rechercher  Outils  Documents  Aide
Ouvrir  Enregistrer  Annuler
git commit counter.py x
1 #!/usr/bin/env python
2 import os
3
4 # Hardcoded shit
5 START_YEAR = 2004
6 END_YEAR = 2009
7 MONTHS = ["Jan", "Feb", "Mar", "Apr", "May", "Jun", "Jul", "Aug", "Sep", "Oct", "Nov", "Dec"]
8 print("Counting all commits from " + str(START_YEAR) + " to " + str(END_YEAR) + ", by month")
9 print "Discard the first zeroes.\n"
10 for year in range(START_YEAR, END_YEAR+1):
11     for month in MONTHS:
12         os.system("git log --all | grep " + str(year) + " | grep " + month + " | wc -l")
```

Lig 12, Col 8 INS

Collabora hires 2 crazy coders



WHY IT'S NEEDED

- The next Killer App
- Open movies, open formats
- Webcams, screencasts, tutorials, demos
- Transcoding
- Editing conference videos? ¬_¬



PiTiVi

The Video Editor

- Screenshots/showcase
- Download
- Documentation [↗](#)
- Contributing [↗](#)
- Bugs?
- Contact

Free and Open Source.

PiTiVi will not ask you for licensing fees or lock you out of your data with [DRM](#). It and will keep improving with each new release.

PiTiVi is mostly written in Python (a flexible, easy to learn high-level programming language), which helps lower barriers of entry to new contributors. [Join us](#) in making PiTiVi a world class video editing suite!

Anything in, anything out.

As long as it is supported by the [GStreamer Multimedia Framework](#), PiTiVi will handle any format you throw at it.

There is no eternal newbie.

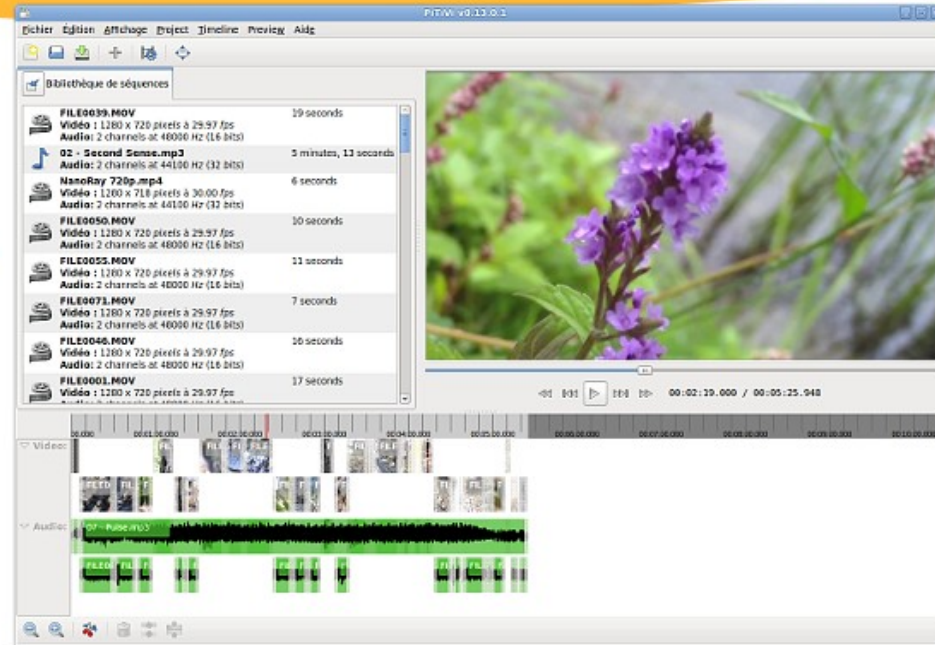
A carefully-crafted user interface can suit both the newcomer and the professional.

Extensible (ponies not included).

A plug-in system allows extending PiTiVi without needing to plunge at its core.

Usability counts.

We have some highly trained designer monkeys that can recite the [GNOME Human Interface Guidelines](#) in their sleep, *backwards*, all for you.

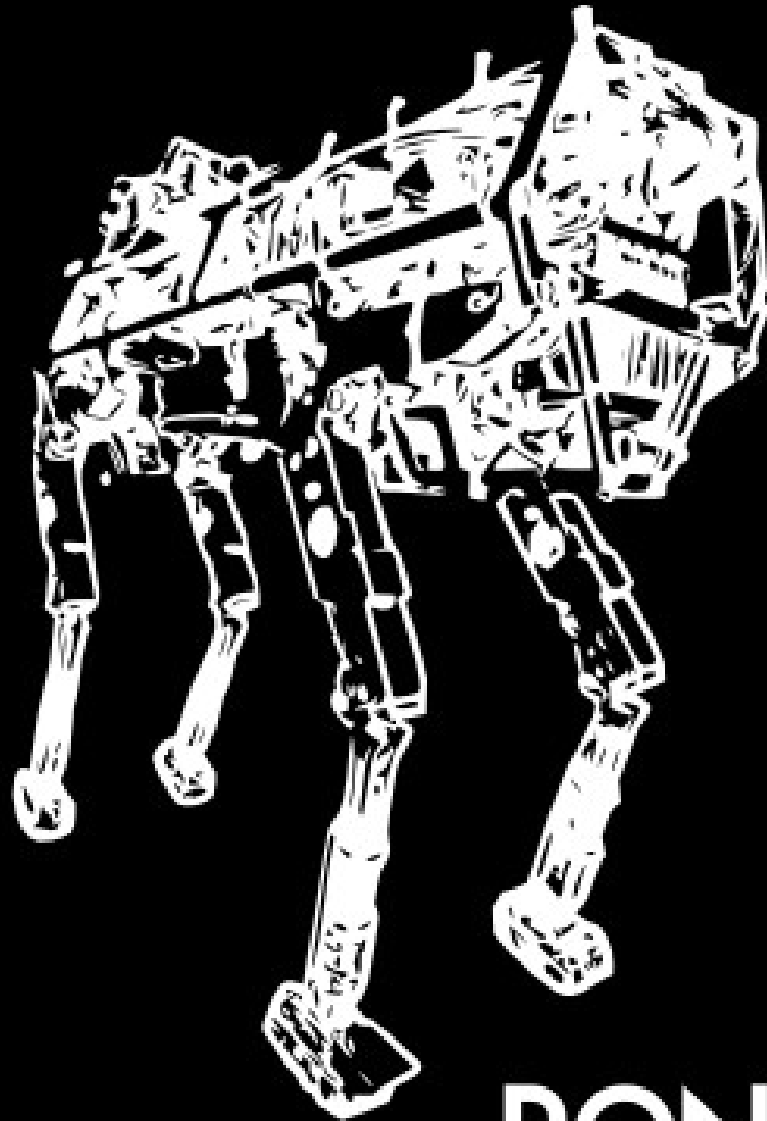




2009: A Workspace Odyssey

In HIGH DEFINITION as CREATIVE COMMONS
BY JEAN-FRANÇOIS FORTIN TAM FROM NANOKRON STUDIOS

YES!
You can have a



PONY!



DEMO & SAMPLE

THANKS!

- Documentation and all that jazz: <http://pitivi.org>
- Contacting me: <http://jeff.ecchi.ca>
- Movies: <http://studios.ecchi.ca>