

# Herrie: a command line music player

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November 29, 2007

# Outline

Introduction to Herrie

Herrie's features

Wrapping up

# Who am I?

- ▶ Student Embedded Systems at Fontys University of Applied Sciences, Eindhoven.
- ▶ Linux/FreeBSD user for almost 5 years.
- ▶ Active within Interlink, the UNIX Users Group at Fontys.
- ▶ Volunteer at TCCN, a youth centre, teaching children to write software.
- ▶ Founder and maintainer of the Herrie project.

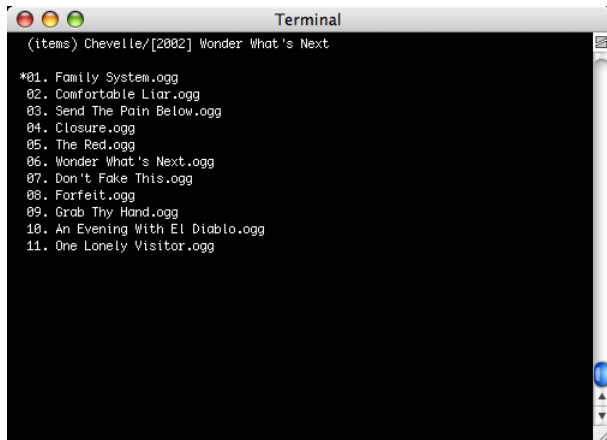
## Why do we need this?

- ▶ Existing CLI music players were not good enough: too simple or too complicated.
- ▶ MP3Blaster isn't user-friendly.
- ▶ Juke missed integration and wasn't stable.
- ▶ MPD, XMMS2 (and C\*Mus) have a client-server architecture, just for playing some MP3's. They lack simplicity.

# MP3Blaster

```
uxterm ( - )
[ 1 ] Select Files      [ 2 ] Add Group        [ 5 ] Set Group Title
[ l ] Load/Add Playlist [ w ] Write Playlist   [ C ] Clear Playlist
[ m ] Move Files After  [ M ] Move Files Before [ / ] Start Search
[ f ] Toggle File Display [ 6 ] Toggle Repeat   [ 7 ] Toggle GroupShuffle
( + )
Global Playback: Play current group, including subgroups
Next Song      : 02 You Dughta Know.mp3
Mpg1 Layer3
44Khz 160kb
Stereo
Threads:500
[Default]
[Alanis Morissette - Jagged Little Pill] [ ] shuffle
[Alanis Morissette - Supposed Former Infatuation Junkie] [ ] repeat
[Bjork - Homogenic] 0:19
[Coldplay - Parachutes] 4:45
[ELO - Time]
[George Michael - Listen Without Prejudice]
[George Michael - Listen Without Prejudice]
[Gerry Rafferty - City To City]
[Granddaddy - The Sophtware Slump]
[Heather Nova - Oyster]
[ t ] Mixer
Vol
[ < +100% > ]
I> Alanis Morissette - All I Really Want
Jagged Little Pill
```

# Juke



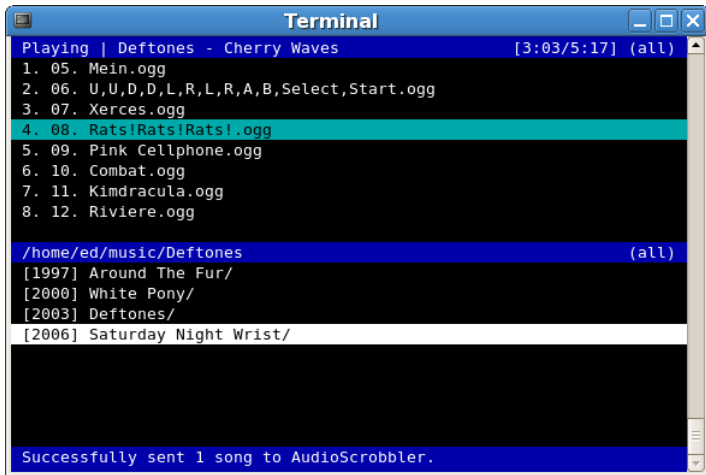
```
Terminal
(items) Chevelle/[2002] Wonder What's Next

*01. Family System.ogg
02. Comfortable Liar.ogg
03. Send The Pain Below.ogg
04. Closure.ogg
05. The Red.ogg
06. Wonder What's Next.ogg
07. Don't Fake This.ogg
08. Forfeit.ogg
09. Grab Thy Hand.ogg
10. An Evening With El Diablo.ogg
11. One Lonely Visitor.ogg
```

# What is Herrie?

- ▶ Command line music player, running on various UNIX-like platforms.
- ▶ 'Herrie' is the Dutch word for 'clamour' or 'noise'.
- ▶ Should be easy to use for Vim, Mutt and XMMS users.
- ▶ Clean user-interface. Only shows information that is really of interest.
- ▶ Contains some fancy features, but only ones that are used.

# What Herrie looks like



```
Terminal
Playing | Deftones - Cherry Waves [3:03/5:17] (all)
1. 05. Mein.ogg
2. 06. U,U,D,D,L,R,L,R,A,B,Select,Start.ogg
3. 07. Xerces.ogg
4. 08. Rats!Rats!Rats!.ogg
5. 09. Pink Cellphone.ogg
6. 10. Combat.ogg
7. 11. Kimdracula.ogg
8. 12. Riviere.ogg

/home/ed/music/Deftones (all)
[1997] Around The Fur/
[2000] White Pony/
[2003] Deftones/
[2006] Saturday Night Wrist/

Successfully sent 1 song to AudioScrobbler.
```



# Last.fm

- ▶ Last.fm: a social network for music fans.
- ▶ Keeps track of the music you listen to. Finds new artists that interest you.
- ▶ Integrated support for submitting tracks to Last.fm.
- ▶ Feature seems to be used very often and to be robust.

# Security features

- ▶ Herrie can be used at untrusted setups (i.e. parties, public terminals, etc).
- ▶ Integrated support for `chroot()`: confine the application on startup.
- ▶ Can even be used as a user's shell!
- ▶ Originally added for Interlink users.

## Audio/filesystem framework

- ▶ Herrie supports commonly used file formats, such as Ogg Vorbis, FLAC, MP3, modules, Wave.
- ▶ Various output drivers have been written, including OSS, ALSA, Apple CoreAudio, LibAO, PulseAudio, etc.
- ▶ Support for reading and writing PLS, M3U playlists and the XSPF standard.
- ▶ Minimalistic support for HTTP streaming (only MP3 support at this moment).
- ▶ Primitive gapless playback functionality.

## Missing features

- ▶ Support for more file formats (WMA, AAC).
- ▶ CD audio playback.
- ▶ Non-MP3 internet radio streams.
- ▶ ALSA code still incomplete: volume support is missing.
- ▶ Still needs more packages (Debian, Ubuntu, Fedora).
- ▶ Translations (including French).

## The results

- ▶ Herrie's code turned out to be a good example for the kids at TCCN. The code is well documented and easy to explain to them.
- ▶ Herrie is actually being used. It even got shipped with a British Linux magazine!
- ▶ I can now tell my classmates and the kids at TCCN why writing Open Source Software is fun.
- ▶ Presentation at CodeYard next month.

# Conclusion

- ▶ Herrie is already mature enough to be usable, but can still be extended in some ways.
- ▶ Although Herrie has mostly been a solo-effort so far, it has stimulated others to interest themselves in Open Source development as well.

## More information

- ▶ Herrie has its own website: <http://herrie.info/>.
- ▶ Mailing list: [users@herrie.info](mailto:users@herrie.info).
- ▶ IRC channel: [#herrie](#) on [irc.il.fontys.nl](#).

# Questions

Are there any questions?