

What's next for VLC?



VLC 3.0

Aka wtf did we finally put in 3.0

VLC 2.2.X

- WeatherWax (Terry Pratchett)
- Released end of February 2015
- Only one quick update 2.2.1 (2 weeks in)
- ~ 200m downloads of single version 2.2.1
- Good idea of the user size of VLC on the desktop
- Very stable, few regressions (unlike 2.1.x)
 - Probably the best VLC release ever, with 0.8.6



3.0 numbers

Vetinari

- 17000 commits
 - 3400 Android
 - 2500 WinRT
 - 2000 iOS
- A bit long to come (!)
- One **very** strong release
- Focus on Mobile convergence, as announced, previously
- libVLC, and libVLC++, and bindings
- 1500+ bugs closed



3.0 highlights

- HW decoding on by default everywhere
- 360 video and 3D Audio
- Network shares browsing (+passwords)
- Common codebase
- 10bits / 12bits / HDR support
- Audio HDMI rework passthrough
- HTTP/2
- Lots of new formats (adaptive, subtitles)
- OpenGL and Wayland
- New subtitle rendering stack
- One last thing: Chromecast

MEMCPY IS MURDER!

Måns, 2005



New CTL



libVLC

• Dogfood!

• We use libVLC in Android, iOS, Tizen, UWP ports

• libVLC++

- New bindings in C++11 and C++/CX
- Used in VLMC, webplugins, UWP, medialibrary and more

Other bindings

- libVLCsharp is coming
- Cocoapods and Nuget

• 40 new functions

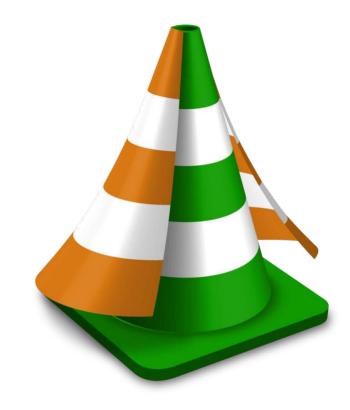
- Memory inputs
- Audio output devices
- Metadata, parsing and preparsing, titles/chapters/types
- Browsing, Media Discovery
- New events for medialist

• ...



Platform support

- Windows
 - XP → 10 RS3
- macOS
 - 10.7 → 10.13 64bits
- Android
 - Android 2.3 (API-10) → 8.0 Oreo (API-4212)
- iOS
 - iOS 7 → iOS 11
- Linux
 - lol



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VLC VR







- 360 video
 - Equirectangular
 - Cubemap
- Platforms
 - OpenGL (Everywhere)
 - D3D11 (but Windows)
- 3D Audio
 - 3rd order ambisonic
 - libspatialaudio
 - Ambisonic + binaural



Headsets integration in VLC Oculus, Vive, and other OpenHMD StarBreeze and Windows HMD Video Format Support - 360 360 Stereo and 3D Virtual Theater (simple mode) Integration for Unity Or Unreal? libVLC FBO

- Otto Chriek
- New video output architecture
- New input/playlist
- Media Library
- Interface
- Dropping old platforms



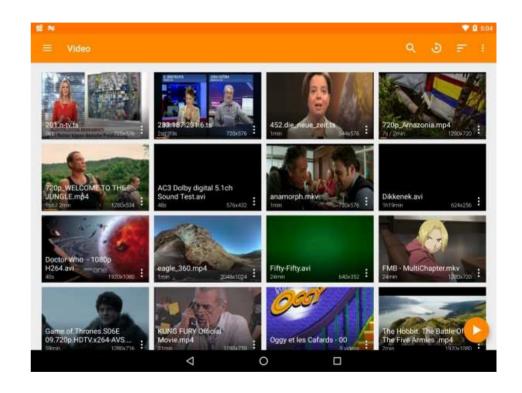
- Video Output changes
 - push instead of pull model
 - HW are now smarter
 - Rewrite of all video outputs :-)
 - More recycling
 - Support for 3D/VR
 - More HDR
- Video Filter API
 - Finally!

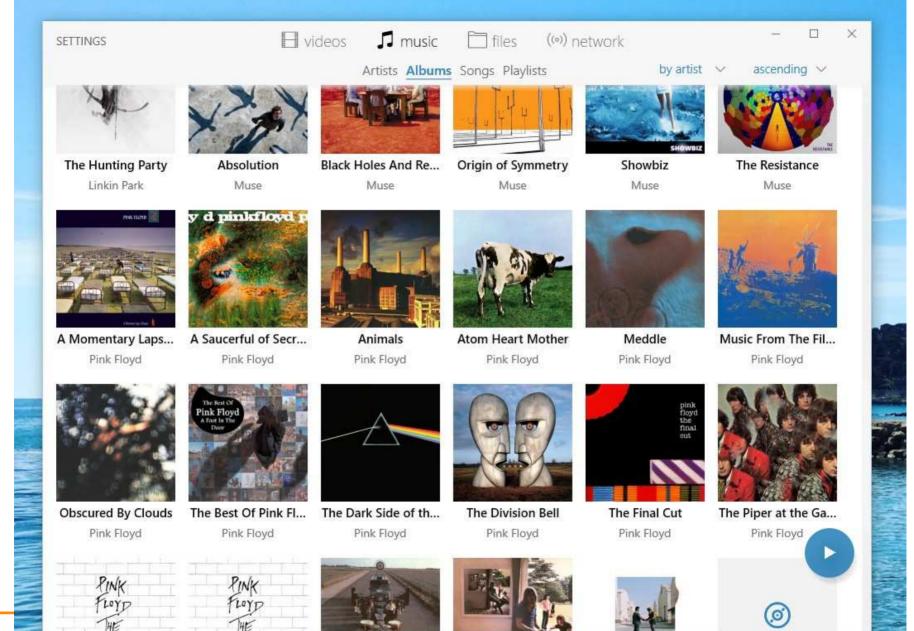
Input Manager

- Split between playlist and input manager
- Owner of Aout and Vout
- Identical for playlist, vlm, libvlc_media_player
- Gapless (?)
- Rewrite of the playlist
 - Simple (flat, fast)
 - 1 ↔ 1 relation with IM

Media Library

- Media Library coming to the desktop
- Details
 - C++ & SQLite
 - Simple & Light
 - Audio + Video





- Windows
 - XP, Vista
- MacOS
 - $-10.7 \rightarrow 10.9$
- Linux
 - OpenGL required

- Android
 - $-2.2 \rightarrow 4.2$
- iOS
 - IOS 7, 8

Research Projects

VLC.js

- Html5 video suxx
- Flash Server + Player was nice
- VLC inside a browser with WebAsm
- Ads, more format support, fast, evolutive

Hardening VLC

- VLC security is hard
- No hardened player
- Better streaming solutions
- Important cost





