VideoLAN & VLC

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I'm excited to announce the release of VLC 1.0!

The world's most downloaded video player: VLC: www.videolan.org/vlc
(free and open source)
Ecole Centrale Paris
VIA Centrale Réseaux

- Campus student association
- Internet acces through RENATER
- Token Ring

Network Upgrade

- How to pay for our new network?
- How to justify the needs for a faster network?
- 1995 : let's do video streaming!
VideoLAN

1998 project reboot

- Open Source
- Modularity
- Cross-Platform
- Network oriented
- 2nd year project

2001 license change

- ECP headmaster Agreement
- GPL v2 (or later)
VideoLAN Projects

- VideoLan Client, VLC media player, VLC
- VideoLan Server, VLS (dead)
- VLCS (dead)
- libdvdcss (DVD CSS decryption)
- libdts, libdca (DTS decoding)
- x264 (H.264 encoding)
- libdvbpsi (TS files management)
- libdvdplay (dead)
- libdvbcsa (dvb encryption decoding)
- VLMA (VLC automation)
- VLC Skin designer
- libbluray, libaacs (BluRay playback)
- DVBlast, Multicat (DVB streaming solution)
- VLMC (Video editor)
VideoLAN Streaming Solution

Streamers

INPUTS

Video File
DVD
Acquisition card with soft encoding
MPEG hardware encoding card
Satellite
Digital Terrestrial TV

VLC
VLS
miniSAPserver
VOD Server

Network

Unicast / Multicast / VOD
IPv4 / IPv6

TRANSCODE TRANSRATE

SAP/SDP Announces

Wireless Connection

Clients

VLC for MacOS X
VLC for GNU/Linux
VLC for Windows
Set Top Box
VLC for Familiar Linux

VLC for

Association VideoLAN

Creation
- 2009, decided in the VDD '08

Members
- VLC's core developers
- Important members

Supports
- Hardware for development
- Travel, Servers, Legal
- VideoLAN Dev Days
Collaboration

Contributors

- Core Team: 5~10 people
- 600 over the VLC lifetime
- 150 per year

Collaboration

- Team meeting once per year
- Using git since early 2007
- Use of php, trac, phpBB and mediawiki
- IRC and Mailing Lists
VLC

Support for DVDs
- Region independent
- Prevents forced subtitles (if desired)

... Blu Rays
- By default, non-encrypted only

... network streams
- Unicast, multicast, adaptive streaming

... external hardware
- Cameras, TV input, Satellite, ASI/SDI ...
Download numbers

900 000 dl per day

290 M since 2.0.0

More than 1.2B over life time
Freedom

libVLC license

LGPL
Fully open-source

- Licensed under GNU General Public License version 2 (or later)

VLC engine in LGPL

- Core licensed under GNU Lesser General Public License version 2.1 (or later)
- Most modules are LGPL
- Language Bindings full LGPL
- More modules will come
- The UIs won't be relicensed to prevent scamming
Contribute

Use it!
- Promote to friends, family, groups
- Spread the word

Report bugs

Translations
- New and fixes

Code on VLC
- Extensions
- Modules

Code with libVLC
Architecture

Small Core
- libVLCCore
- Light
- Memory, Network and Thread handling
- Module loading
- Clock / Synchronization

Simple Multimedia Framework
- LibVLC
  - bindings for C++, C#, Objective-C, Java, lua, Perl and Python
Completely modularized

- About 300 modules in a default installation
  - Codecs, IO, outputs, (de)muxers, filters, ...
  - Interested in adding new features? Add a module.

820,000 lines of code

- 120k in the core
- 700k for modules

80 external libraries

- Codecs, Output, Effects, Network
- 7M lines of code
  - 50 % C, 41 % C++
VLC is not a media player
Use cases:

- Automatic subtitle downloads
- Context information from Wikipedia, IMDB or Allociné
- Sharing on Twitter

Highly customizable

- Written in lua
- Publish and get them from addons.videolan.org
What you don't know about VLC

- Transcoding, Streaming
  - latency
- Mosaic/PiP generation
- Wall display
- Screencasting
- TS encryption and decryption (DVB-CSA)
- DVD and CD ripper
- Headless versions
- Karaoke, Midi, hardware decoder
- Scriptable and extensions
- Modules
Service discoveries

Detects media automatically:

- Local files
- Network services
  - UPnP / DLNA
- Internet services
  - Resolves links to YouTube, Dailymotion, Vimeo, Apple Trailers ...

Highly customizable

- Written in lua
- Publish and get them from addons.videolan.org
Content Integration
VLC’s screen casting
Mosaic
Dual webcam with alpha mask:
Wall Filter & netsync

So I suppose my ability to accepting reality is a sign that I've matured.
Karaoke & MIDI

WINDMILL WINDMILL
FOR THE LAND IS
EVERYBODY IN
LAUGHIN' GAS
THESE HAZMATS
FAST CATS
LININ' THEM UP LIKE
A$$ CRACKS
Console & headless

That's to be expected.
Web interface
VLC for Android

- Released as Beta in July 2012
- Available on Google Play
- Plays all the files, streams that VLC for Desktop supports
- Requires Android 2.1 (or later)
- Hardware and multicore decoding
- Gestures and headphone control
VLC for Android

Full audio player

Media Library

- Automatically finds all the files on your device
- Search
- History

Recommended devices:

- Galaxy Nexus, HTC One X, Samsung Galaxy SIII, Nexus 4, Nexus 7
VLC for iOS

- Requires iOS 5.1 or later device
  - iPhone 3GS
  - iPad
  - iPod touch 3rd gen.
- No store
- No support
- Compile it!
VLC for iOS features

- Faster
- Multi-core decoding
- OpenGL shaders
- Retina Display
- Higher audio quality
- 10bits support
Future projects

VLC for Mobile OS

- Win8 / WinRT / WP8
- VLC for Firefox OS
- VLC for Ubuntu Phone ?
- BB10 ?
- Chrome OS ?
Future projects

VLC on the Desktop
- New audio core
- Hardware acceleration on Mac
- DCP / IMF
- Adaptive streaming
- 3D playback (*anaglyph*)
- Media databases
- Device integration

x262 / xvp8
- Free and complete implementation of a MPEG 2 or VP-8 video encoder
- Based upon x264 analysis
Thank You

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