

Part 4: A Short, non Exhaustive List of existing Tools

Vincent Roca and Christoph Neumann
{firstname.name}@inrialpes.fr

Planète project; INRIA Rhône-Alpes
MIPS'03, Napoli, November 2003
Copyright © 2003, INRIA; all rights reserved

Outline

- MPEG4IP
- VideoLan
- Darwin Streaming Server
- Helix
- Envivio

MPEG4IP

- Open Source
- Windows, Mac OSX, Linux, Solaris
- <http://www.sourceforge.net/projects/mpeg4ip>
- player, server, many other tools
- Streaming server: MP4live
 - RTP/RTCP
 - Unicast, multicast

MPEG4IP

- encoding tools:
 - Mp4live
 - Integrated, live encoding to file or network - Linux only
 - Avi2raw
 - Extracts raw audio/video tracks from an AVI file
 - Lboxcro
 - Vertically crops raw video to a new aspect ratio
 - Faac
 - Encodes raw audio into MPEG-4 AAC encoded audio
 - Mp4venc
 - Encodes raw video into MPEG-4 encoded video using ISO codec
 - Mp4creator
 - Creates and hints audio/video tracks to an mp4 file. Can also be used to extract tracks and reconstruct AAC headers
 - Xvidenc
 - Encodes raw video into MPEG-4 encoded video using the Xvid codec
 - Mp4encode
 - Front-end script to the above encoding tools

MPEG4IP

- debugging tools:
 - Mp4extract
 - Utility to extract tracks from an MP4 file (deprecated)
 - Mp4dump
 - Utility to dump MP4 file meta-information in text form
 - Mp4trackdump
 - Utility to dump MP4 file track information in text form
 - Mp4info
 - Utility to display MP4 file summary
 - Avidump
 - Utility to display AVI file summary
 - Yuvdump
 - Utility to display a raw video file on the screen

MPEG4IP

- playback:
 - Gmp4player
 - Simple graphical interface player (client)
 - Mp4player
 - Bare video window with sync'ed audio (client)

MPEG4IP

- Very useful because it offers many tools for basic operations
 - media/file creation/conversion/adaptation/debugging...
- It is always helpful to have MPEG4IP installed on a system!!!

Outline

- MPEG4IP
- VideoLan
- Darwin Streaming Server
- Helix
- Envivio

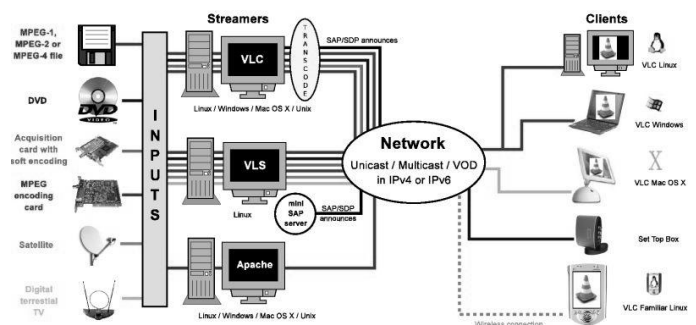


VideoLan

- Open Source, GNU GPL
- Windows, Mac OSX, Linux, Solaris, FreeBSD, BeOS etc.
- <http://www.videolan.org>
- client, server
 - RTP, HTTP
 - Unicast, multicast
 - VIs (server)
 - Vlc (player, can be server, transcoder ...)
 - Plugin architecture (very flexible)



VideoLan



VLC Features

- High number of features
- Supports lots of codecs, file types, stream type etc.
- Supports lots of systems
- Module system
- Can be a server
 - Unicast & Multicast UDP / RTP
 - HTTP
 - Transcoding
 - Send DVD subtitles
 - Send SAP announces
- <http://www.videolan.org/vlc/features.html>

Outline

- MPEG4IP
- VideoLan
- Darwin Streaming Server
- Helix
- Envivio

Darwin Streaming Server



- OpenSource
- Windows, MacOS, Linux, Solaris
- <http://developer.apple.com/darwin/projects/streaming>
- Very popular
- Server, Proxy
 - Web interface for administration
 - RTP/RTCP, HTTP
 - RTSP
 - Unicast, multicast

Outline

- MPEG4IP
- VideoLan
- Darwin Streaming Server
- Helix
- Envivio

Helix DNA



- Open Source
- Windows, Linux, FreeBSD, Solaris, Unix
- <http://www.helixcommunity.org>
- Helix DNA server
 - RTP, HTTP
 - RTSP
 - Unicast, multicast
- Helix DNA player (client)
- Helix DNA producer

- Helix – Commercial product
- <http://www.realnetworks.com/products/server>

Outline

- MPEG4IP
- VideoLan
- Darwin Streaming Server
- Helix
- Envivio

Envivio

Envivio.

- Commercial products
- Windows
- <http://www.envivio.com>
- Server – 4caster SE (realtime compression), 4sight SE
 - RTP/RTCP, HTTP
 - RTSP
 - Unicast, multicast
- Client – EnvivioTV (free, as plugin for WMP, Realplayer, Quicktime)
- Coder – 4coder SE