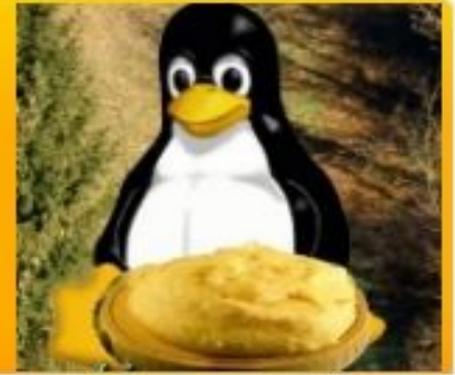




Bglug Valle Seriana



Multimedialità in rete con GNU/Linux

Marco Embyte Balduzzi <embyte@bglug.it>



**Linux Day @ School – Sabato 4 Marzo 2006
Gazzaniga (BG)**

Ogg Vorbis

Codec di compressione audio open-source

Diretto antagonista dello standard MP3

Vantaggi rispetto all'mp3 sono maggiore estensione e pulizia delle alte frequenze e supporto multicanale nativo

Compressione mono/stereo, 44Khz, 16/32 bit

Sviluppato fin dall'epoca dei 486, release di prova 1998,

versione ufficiale 1.0 luglio 2002



XMMS – semplicità e potenza

“X Multimedia System” -> NON è sviluppato con librerie grafiche di un particolare Window Manager (KDE, GNOME)

Player audio OGG, MP3, WAV, CD-Audio, Internet Radio

Personalizzabile attraverso temi e plug-in. Alta portabilità.



AmaroK - player musicale avanzato

Interfaccia intuitiva, ricca di dettagli, evoluta

Gestisce le raccolte musicali per autore, album, titolo.

Importa automagicamente da Internet i testi delle canzoni e
le copertine degli album

Supporto alla ricerche CDDB per i CD-audio

Sincronizzazione con iPOD

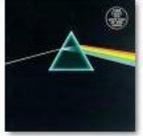
<http://amarok.kde.org/>



Music Lyrics Artist

Search: Filter here

Any Colour You Like - Pink Floyd
Dark Side of the Moon



75 ★★★★★ Track played once
Last played: 5 days ago
First played: 5 days ago

- Favorite Tracks by Pink Floyd**
- Terminal Frost 92 ★★★★★
 - The Dogs of War 92 ★★★★★
 - Another Brick In The Wall - P1 75 ★★★★★
 - Comfortably Numb 75 ★★★★★
 - San Tropez 75 ★★★★★
 - Seamus 75 ★★★★★
 - Shine on You Crazy Diamond, Pts. 6-9 75 ★★★★★
 - Stop 75 ★★★★★
 - Bring The Boys Back Here 75 ★★★★★
 - Empty Spaces 75 ★★★★★

- Albums by Pink Floyd**
- Meddle** 1999 6 Tracks
 - The Division Bell** 1994 12 Tracks
 - Delicate Sound of Thunder (Live) (Disc 1)** 1988 7 Tracks
 - Delicate Sound of Thunder (Live) (Disc 2)** 1988 8 Tracks
 - A Momentary Lapse of Reason** 1987 10 Tracks
 - Pulse (Live) (Disc 1)** 1987 11 Tracks
 - Pulse (Live) (Disk 2)** 1987 13 Tracks
 - The Wall** 1979 26 Tracks
 - The Wall part 1** 1979 13 Tracks
 - Dark Side of the Moon** 1973 9 Tracks

Title	Artist	Album	Track	Length	Bitrate	Rating	Play
Seville	Pinback	Blue Screen Life	10	4:08	160 kbps		0
West	Pinback	Blue Screen Life	11	3:50	160 kbps		0
Tres	Pinback	Blue Screen Life	12	5:49	160 kbps		0
Another Brick In The Wall - P1	Pink Floyd	Blue Screen Life		3:10	128 kbps		1
Money				6:23	128 kbps		0
Wish you were here				5:17	128 kbps		1
The Wall				7:06	128 kbps		0
Wish You Were Here				5:15	112 kbps		0
Signs of Life		A Momentary Lapse of R...	1	4:24	128 kbps		1
Learning To Fly		A Momentary Lapse of R...	2	4:53	128 kbps		1
The Dogs of War		A Momentary Lapse of R...	3	6:06	128 kbps		3
One Slip		A Momentary Lapse of R...	4	5:10	128 kbps		1
On The Turning Away		A Momentary Lapse of R...	5	5:42	128 kbps		1
Yet Another Movie		A Momentary Lapse of R...	6	7:28	128 kbps		1
A New Machine (Part I)		A Momentary Lapse of R...	7	1:47	128 kbps		1
Terminal Frost		A Momentary Lapse of R...	8	6:17	128 kbps		3
A Machine (Part II)		A Momentary Lapse of R...	9	0:39	128 kbps		1
Sorrow		A Momentary Lapse of R...	10	8:47	128 kbps		1
Speak to Me / Breathe	Pink Floyd	Dark Side of the Moon	1	4:00	718 kbps	★★★★★	1
On the Run	Pink Floyd	Dark Side of the Moon	2	3:32	728 kbps	★★★★★	1
Time	Pink Floyd	Dark Side of the Moon	3	7:06	786 kbps	★★★★★	1
The Great Gig in the Sky	Pink Floyd	Dark Side of the Moon	4	4:44	690 kbps	★★★★★	2
Money	Pink Floyd	Dark Side of the Moon	5	6:32	892 kbps	★★★★★	1
Us and Them	Pink Floyd	Dark Side of the Moon	6	7:40	793 kbps	★★★★★	3
Any Colour You Like	Pink Floyd	Dark Side of the Moon	7	3:25	846 kbps	★★★★★	1
Brain Damage	1 Pink Floyd	Dark Side of the Moon	8	3:50	816 kbps	★★★★★	1
Eclipse	2 Pink Floyd	Dark Side of the Moon	9	2:04	764 kbps	★★★★★	0
Shine On You Crazy Diamond	Pink Floyd	Delicate Sound of Thund...	1	11:53	799 kbps		1
Learning To Fly	Pink Floyd	Delicate Sound of Thund...	2	5:27	895 kbps		1
Yet Another Movie	Pink Floyd	Delicate Sound of Thund...	3	6:21	832 kbps		0
Round And Around	Pink Floyd	Delicate Sound of Thund...	4	0:33	743 kbps		1
Sorrow	Pink Floyd	Delicate Sound of Thund...	5	9:28	813 kbps		0
The Dogs Of War	Pink Floyd	Delicate Sound of Thund...	6	7:18	799 kbps	★★★★★	0
On The Turning Away	Pink Floyd	Delicate Sound of Thund...	7	8:00	777 kbps		0
One Of These Days	Pink Floyd	Delicate Sound of Thund...	1	6:16	779 kbps		0
Time	Pink Floyd	Delicate Sound of Thund...	2	5:16	834 kbps		0
Wish You Were Here	Pink Floyd	Delicate Sound of Thund...	3	4:49	812 kbps		0
Us & Them	Pink Floyd	Delicate Sound of Thund...	4	7:22	764 kbps		0
Money	Pink Floyd	Delicate Sound of Thund...	5	9:52	828 kbps		0
Another Brick In The Wall (Part 2)	Pink Floyd	Delicate Sound of Thund...	6	5:28	868 kbps		1
Comfortably Numb	Pink Floyd	Delicate Sound of Thund...	7	8:56	908 kbps		0
Run Like Hell	Pink Floyd	Delicate Sound of Thund...	8	7:13	834 kbps		0
Fearless	Pink Floyd	Meddle		6:09	96 kbps		0
Seamus	Pink Floyd	Meddle		2:17	96 kbps		1
One of These Days	Pink Floyd	Meddle	1	5:59	96 kbps		0
A Pillow Of Winds	Pink Floyd	Meddle	2	5:11	96 kbps		0
San Tropez	Pink Floyd	Meddle	4	3:45	96 kbps		1
Echoes	Pink Floyd	Meddle	6	23:32	96 kbps		0
Shine On You Crazy Diamond	Pink Floyd	Pulse (Live) (Disc 1)	1	13:34	833 kbps		0

Queue Manager - amaroK

Name

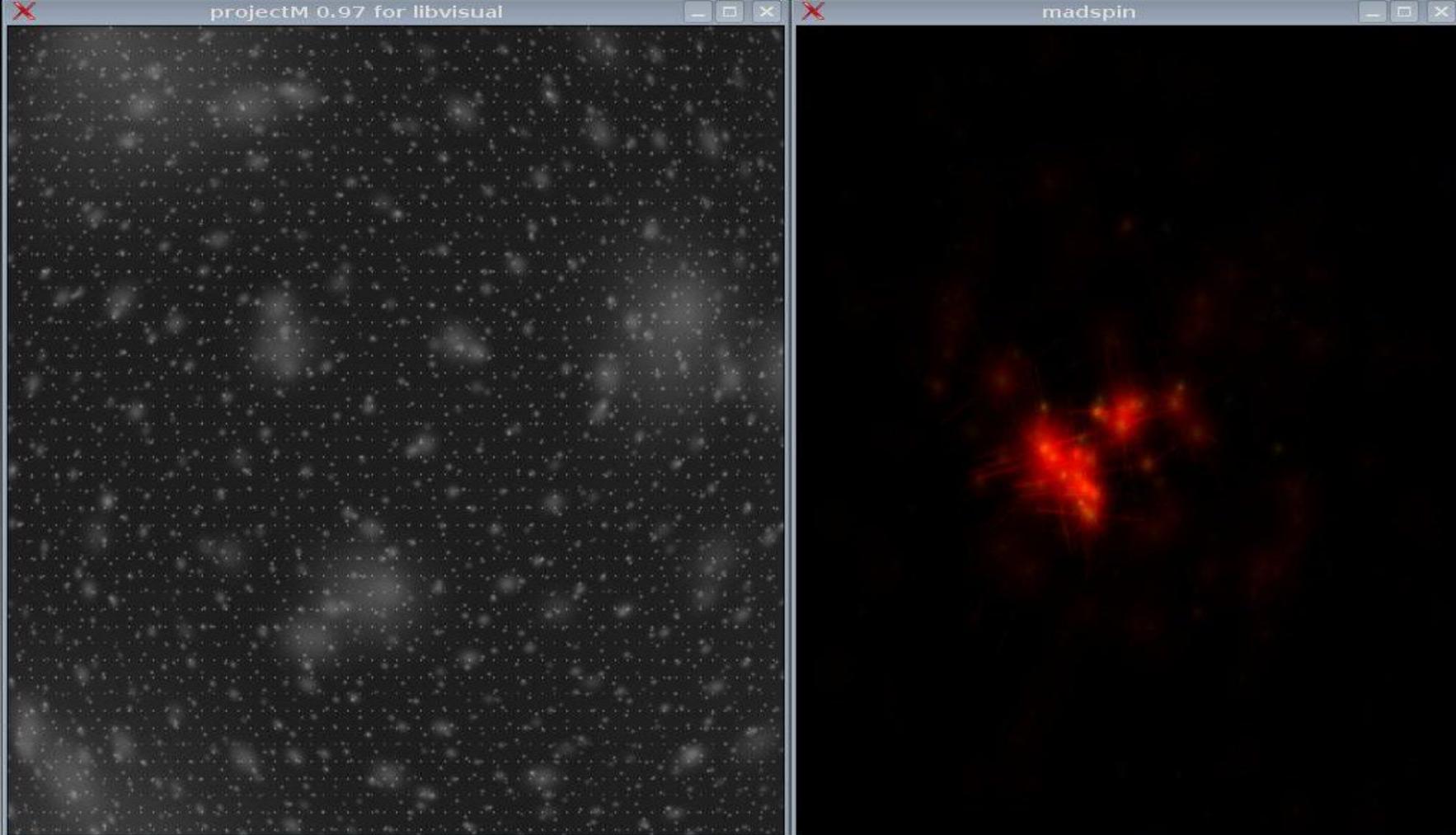
- Pink Floyd - Brain Damage 1
- Pink Floyd - Eclipse 2

OK Cancel

01 Speak to Me / Breathe (4:00)
02 On the Run (3:32)



amarok



Cover Manager - amarok

Filter here...

View Amazon Locale Fetch Missing Covers

Double Allergic	Drive	Eagles - Grea...	Earphoria	Ego Tripping ...	Eight Arms T...
Elephant	Encomium - A...	Ether Song	Eurotrip - OST	Feels Like Ho...	Fight For You...
Fight Test	Goodfella	KMFDM	Silverchair	Silverchair	Le Tigre

251 albums

Xine – Player multimediale

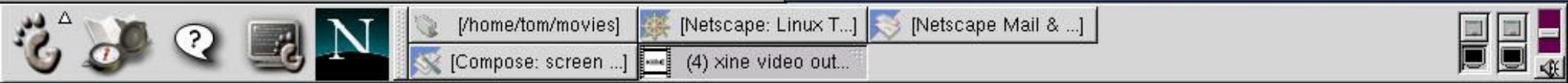
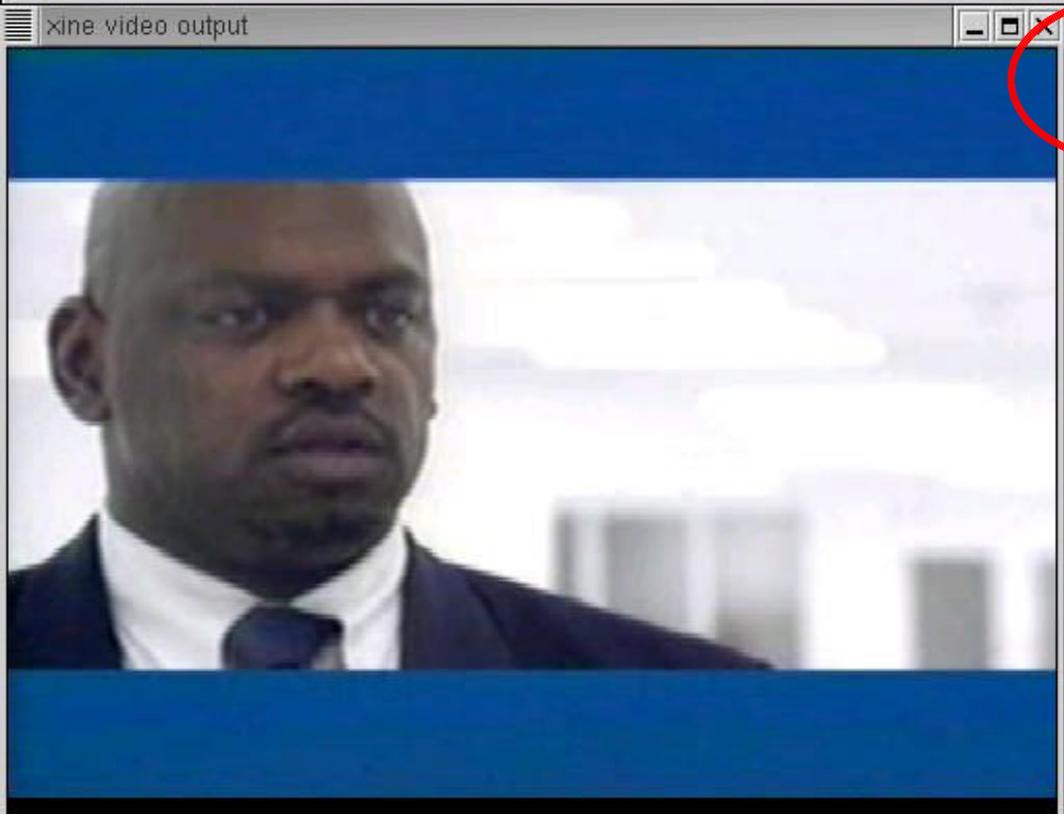
Riproduce DVD, Video-CD, filmati MPEG, AVI, MOV, WMV,
file audio MP3, e radio Internet

Altamente portabile: funziona su Windows, Linux, Unix; sui
normali PC, su server, su console (Playstation, XBOX), etc...

Interfaccia personalizzabile (Gnome, KDE..)

<http://xinehq.de/>





Ce ne son altri molto usati...

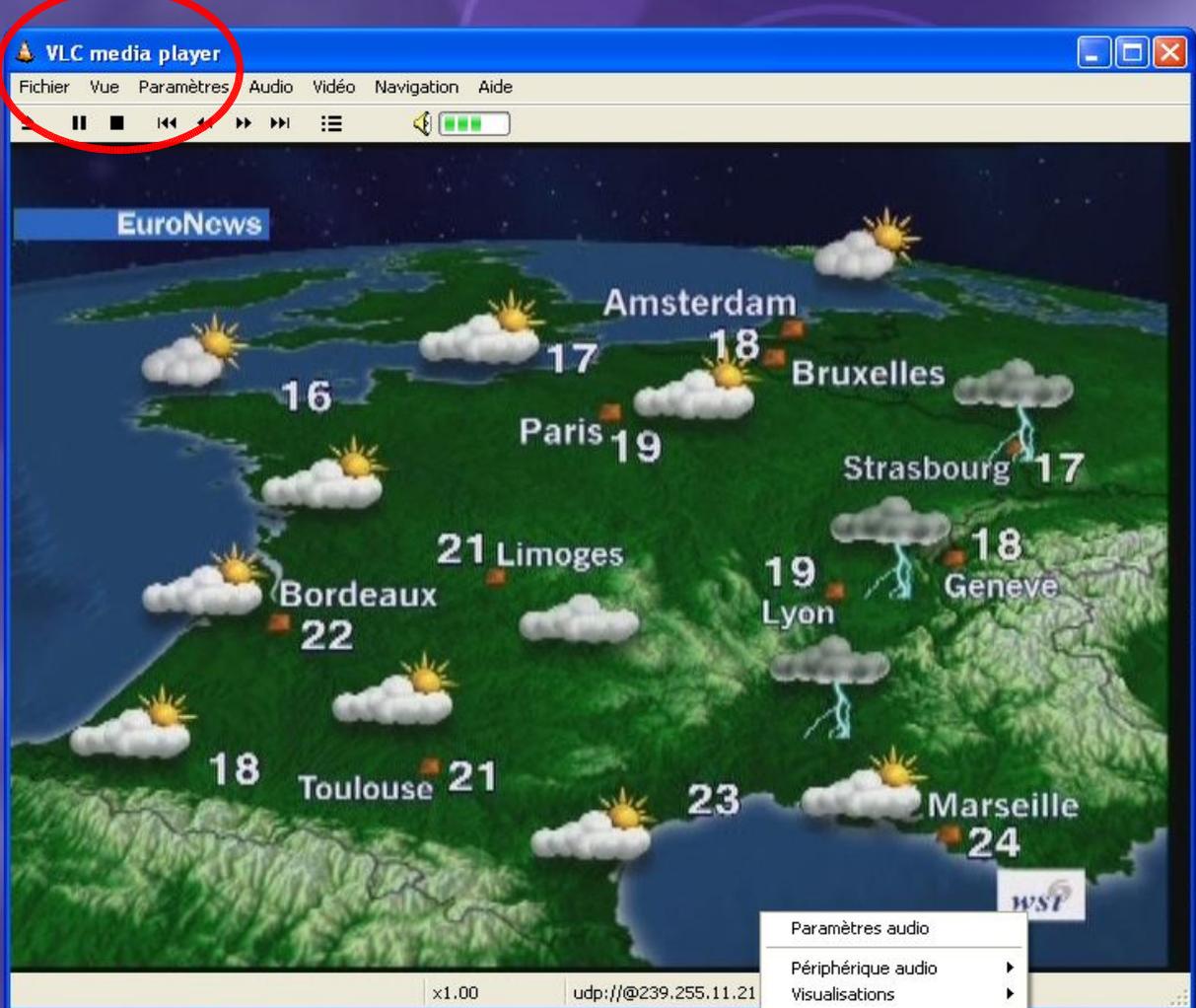
Analogo a xine c'è Mplayer

<http://www.mplayerhq.hu/>

Anche VLC (VideoLAN Client) è molto usato, specialmente la versione per Windows.

<http://www.videolan.org/vlc/> <- 1 download/sec .





Ce ne son altri molto usati...

MPG123 il player audio da console più famoso

```
[~]$ mpg123 musica/Anne\ Lene\ Hägglund\ -\ Forget\ my\ whisper.mp3
```

High Performance MPEG 1.0/2.0/2.5 Audio Player for Layer 1, 2 and 3.

Version 0.59r (1999/Jun/15). Written and copyrights by Michael Hipp.

Uses code from various people. See 'README' for more!

THIS SOFTWARE COMES WITH ABSOLUTELY NO WARRANTY! USE AT YOUR OWN RISK!

Title : Forget my whisper Artist: Anne Lene Hägglund

Album : Demo Year : 0

Comment: Genre : Unknown

Directory: musica/

Playing MPEG stream from Anne Lene Hägglund - Forget my whisper.mp3 ...

Junk at the beginning 49443304

MPEG 1.0 layer III, 192 kbit/s, 44100 Hz joint-stereo



Ed ora...

Come possiamo ...*condividere* la nostra musica e i nostri video con gli amici? ...*creare un canale di comunicazione alternativo o una radio libera?*

Internet come strumento di libertà digitale

Ognuno di voi può realizzare la propria *radio personale!*

Mah... anche una *propria televisione!*



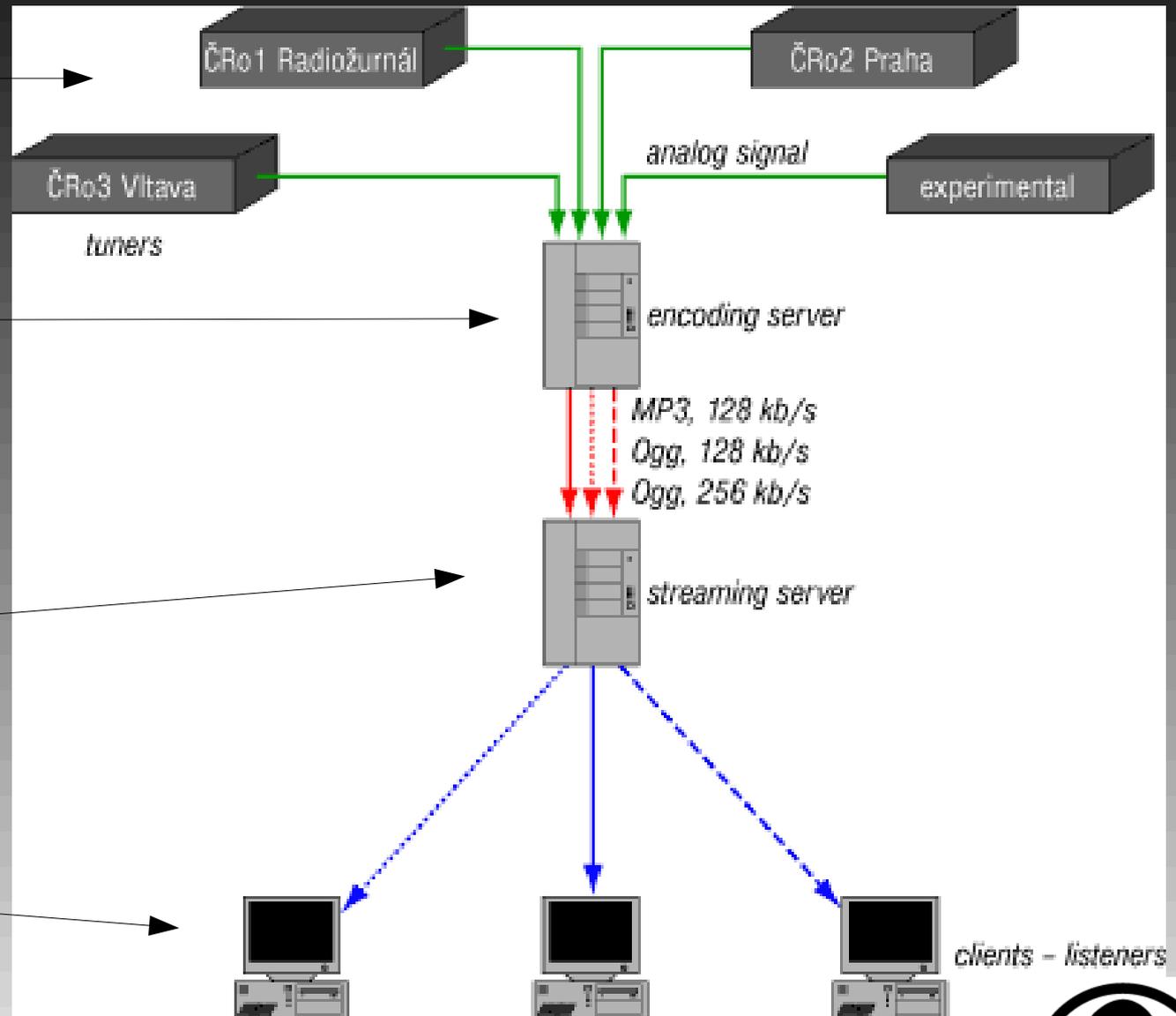
Architettura di una Radio Internet

Sorgente audio generica
microfono, musica
personale, altra radio

Postazione del DJ
(client del DJ)

Server della radio

Ascoltatori con
palmare, pc, radio
(player audio visti prima)



Multimedialità in rete con GNU/Linux



Server della radio

Possiamo scegliere tra due soluzioni simili alternative



Icecast è Free Software

Nullsoft (c) (Winamp), Freeware

Molto personalizzabile

Molto facile da configurare

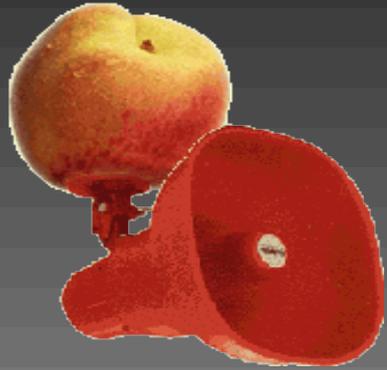
Client del DJ fornito: iceS (2.0 per oggi)-Plug-in di Winamp 5

L'indirizzo radio sarà http://nome_del_server:8000



La postazione del DJ con MuSe

Il DJ manda la sorgente audio al server radio (porta 8001)



MuSe – Multiple Streaming Engine
(<http://muse.dyne.org/>)

Caratteristiche

Encoding, mixing, streaming su server Icecast e Shoutcast

Fino a 6 canali, sorgenti file audio Ogg, Mp3, Internet Radio

Interfaccia intuitiva GTK (Gnome) e Ncurses (da terminale)

DEMO



Jaromil, <http://rastasoft.org>



Multimedialità in rete con GNU/Linux

Yellow pages

Servizio gratuito di indicizzazione della tua radio
in motori di ricerca specifici..

Icecast -> <http://dir.xiph.org>

Shoutcast -> <http://www.shoutcast.com>

Ricerche per “nome radio”, “genere musicale”, “qualità
segnale”, “locazione geografica”



Yellow pages

Listen	Streams	Genre	Audio Info
	RADIO BRENIGES FM 95.6 (FRANCE) - LE PLAISIR PARTAGE		
Ogg Vorbis	Now playing on /live.ogg : RADIO BRENIGES FM 95.6 (FRANCE) - LE PLAISIR PARTAGE	GENERALISTE	48kbps 44100Hz Stereo
	Flash FM 93.7 MHz - The dance station (France) - www.flashfm		
Ogg Vorbis	Now playing on /flash.ogg : Flash FM 93.7 MHz - The dance station (France) - contact@flashfm.fr	Dance, Techno, House	kbps 44100Hz Stereo
	M94,5 - Livestream		
Ogg Vorbis	M94,5 - Livestream powered by LRZ Now playing on /m945-hq.ogg :	Radio	Quality 4 44100Hz Stereo
Ogg Vorbis	M94,5 - Livestream powered by LRZ Now playing on /m945-mq.ogg :	Radio	Quality 1 44100Hz Stereo
Ogg Vorbis	M94,5 - Livestream powered by LRZ Now playing on /m945-lq.ogg :	Radio	Quality -1.00 44100Hz Mono
	RareFM		
Ogg Vorbis	Student Radio from University College London Now playing on /RareFM.ogg : unknown - unknown	Student Radio	96kbps
	--Radio1 - Online--		
Ogg Vorbis	Radio1 - Csak igazi MAI SLAGER megy! Now playing on /radio1.ogg : Radio1 Online - CSAK IGAZI MAI SLAGER MEGY!	RnB	Quality 2.00 44100Hz Mono
	Stampede Pass - Bristol - RailroadRadio.net		
Ogg Vorbis	Stampede Pass Railroad Radio Communications Now playing on /stampede.ogg : unknown - unknown	Railroad Radio Scanner	24kbps
	Lewi-Beats - Black Music		

Search
Genre

Format Search

Freeform Search

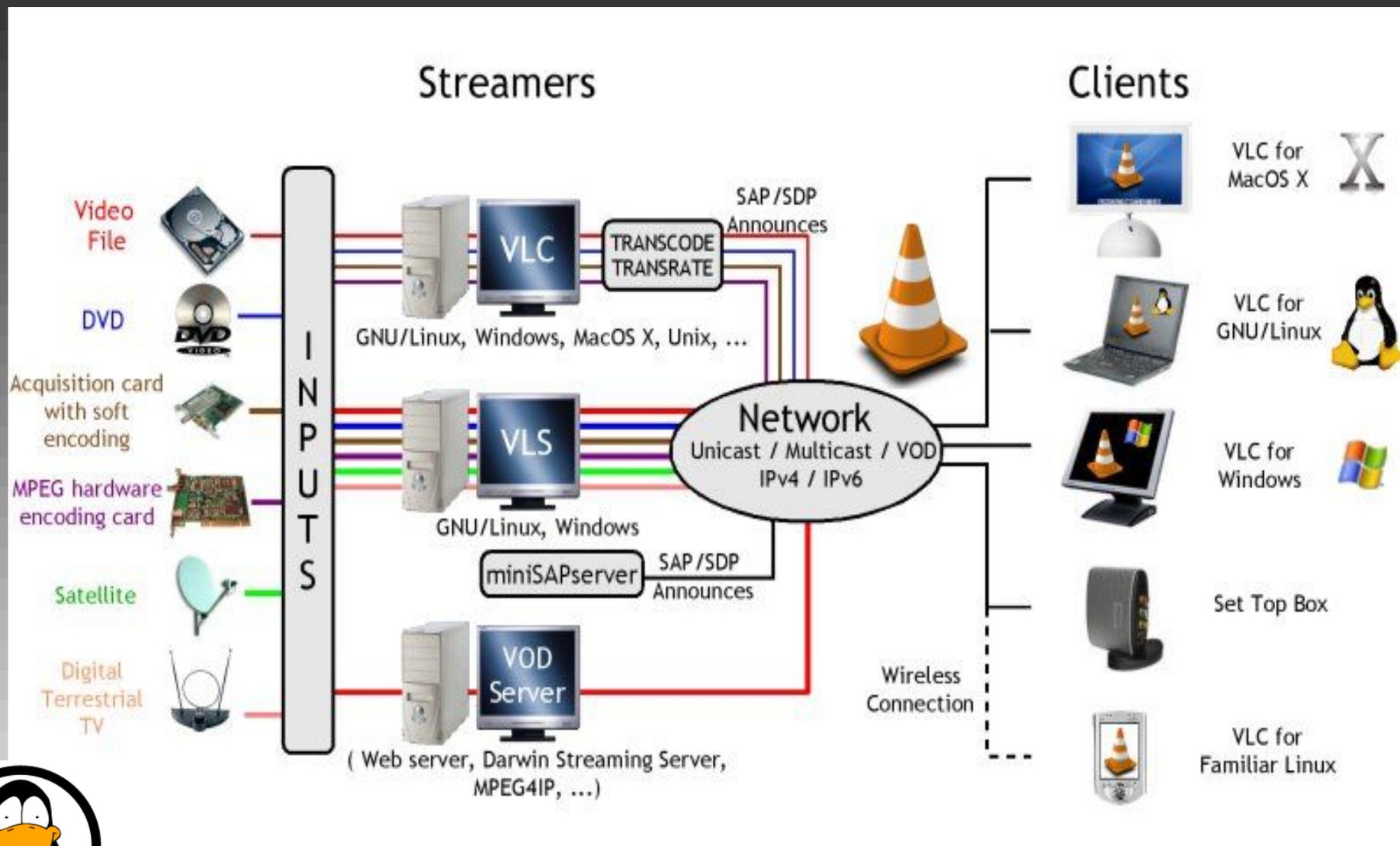
Search

Statistics
Total Servers: 782



La Televisione Internet

In modo analogo è possibile realizzare uno Streaming Video



Multimedia in rete con GNU/Linux

Che cosa abbiamo imparato??

- Ogg Vorbis, il formato audio Libero alternativo all'MP3
- Free Software per la riproduzione Audio e Video
- Architettura e realizzare una Radio Internet
- Accenno allo streaming Video (Televisione Internet)



[Ed ora ascoltate la radio del BgLUG](#)

<http://linuxday.orobiacom.it:8000/>

